



2139

Certificate of Analysis

Date: 26/07/2013

Certificate Number: 13-85194

Client: Aitken Laboratories Ltd
Casterhill House
Bank Street
Slamannan
FK1 3EZ

Our Reference: 13-85194

Client Reference: J2742

Contract Title: Barrhill Memorial Hall

Description: 2 soil samples


Date Received: 16 July 2013

Date Started: 16 July 2013

Date Completed: 26 July 2013

Test Procedures: Identified by prefix DETSn (details on request), Asbestos Analysis (DETS 082).

Notes: Observations and interpretations are outside the scope of UKAS accreditation

Approved By: 
Rob Brown, Business Manager

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Information in Support of the Analytical Results

Analysis

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

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

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

Key

- * Denotes test not included in laboratory scope of accreditation
- # Denotes test that holds MCERTS accreditation, however, MCERTS accreditation is only implied if the report carries the MCERTS logo
- \$ Denotes tests completed by an approved subcontractor
- I/S Denotes insufficient sample to carry out test
- U/S Denotes that the sample is not suitable for testing

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month

Liquids - 2 weeks

Asbestos (test portion) - 6 months

Summary of Chemical Analysis

Soil Samples

Our Ref: 13-85194

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				Lab No.	535862	535863
				Sample ID	BH101	BH103
				Depth	0.40	0.30
				Sample Ref		
				Sample Type	SOIL	SOIL
				Sampling Date	10/07/2013	10/07/2013
				Sampling Time		
Test	Units	DETSxx	LOD			
Moisture Content	%	DETS 046*	0.1	30	82	
Mercury	mg/kg	DETSC 2325#	0.05	0.82	0.23	
Arsenic	mg/kg	DETS 042#	0.2	12	13	
Cadmium	mg/kg	DETS 042#	0.1	1.0	1.1	
Chromium	mg/kg	DETS 042#	0.15	57	53	
Copper	mg/kg	DETS 042#	0.2	33	36	
Nickel	mg/kg	DETS 042#	1	46	49	
Lead	mg/kg	DETS 042#	0.3	47	130	
Selenium	mg/kg	DETS 042#	0.5	< 0.5	1.0	
Zinc	mg/kg	DETS 042#	1	150	120	
Boron (water soluble)	mg/kg	DETS 020#	0.2	1.1	1.5	
Cyanide total	mg/kg	DETSC 2130#	0.1	0.3	0.2	
Organic matter	%	DETSC 2002#	0.1	8.2	7.5	
Sulphide	mg/kg	DETSC 2024#	10	< 10.0	16	
Total Sulphate as SO4	%	DETSC 2321#	0.01	0.11	0.18	
pH		DETSC 2008#		6.5	6.2	
Acenaphthene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Acenaphthylene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Anthracene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Benzo(a)anthracene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Benzo(a)pyrene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Benzo(b)fluoranthene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Benzo(k)fluoranthene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Benzo(g,h,i)perylene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Chrysene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Dibenzo(a,h)anthracene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Fluoranthene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Fluorene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Indeno(1,2,3-c,d)pyrene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Naphthalene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Phenanthrene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
Pyrene	mg/kg	DETSC 3301	0.1	< 0.1	< 0.4	
PAH	mg/kg	DETSC 3301	1.6	< 1.6	< 1.6	
C5-C10 Gasoline Range Organics (GRO)	mg/kg	DETS 062*	0.1	< 0.1	< 0.1	
C10-C24 Diesel Range Organics (DRO)	mg/kg	DETSC 3311#	10	29	26	
C24-C40 Lube Oil Range Organics (LORO)	mg/kg	DETSC 3311#	10	180	190	
Phenol - Monohydric	mg/kg	DETSC 2130#	0.3	< 0.3	< 0.3	

Summary of Asbestos Analysis

Soil Samples

Our Ref: 13-85194

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Lab No	Sample Ref	Material Type*	Result	Comment	Analyst
535862	BH101 0.40	Soil	NAD	na	Colin Patrick
535863	BH103 0.30	Soil	NAD	na	Colin Patrick

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. NAD = No Asbestos Detected. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETS 082 using polarised light microscopy in accordance with HSG248 and documented in-house methods. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'.

Sample Comments

DETS cannot be held responsible for the integrity of sample(s) received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating.

Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note "Guidance on Deviating Samples".

All samples received are listed below. However, those samples that have additional comments in relation to hold time and/or inappropriate containers are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations.

If no sampled date (soils) or date/time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters), this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Lab No.	Sample ID	Date Sampled	Containers Received	Deviating due to holding time being exceeded for test(s)	Deviating due to inappropriate container for test(s)	Deviating due to headspace presence in container for test(s)
535862	BH101 0.40 SOIL	10/07/2013	Glass Jar 1 litre (1 litre), Plastic Tub 1 litre (1kg)		BTEX Solid	
535863	BH103 0.30 SOIL	10/07/2013	Glass Jar 1 litre (1 litre), Plastic Tub 1 litre (1kg)		BTEX Solid	