

Information in Support of the Analytical Results

Our Ref 14-18094
Client Ref 141010-98
Contract 141010-98

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
713885	10174370 0.50 SOIL	08/10/14	P(other)		
713886	10174161 0.50 SOIL	08/10/14	P(other)		
713887	10174187 0.30 SOIL	08/10/14	P(other)		
713888	10174614 0.50 SOIL	08/10/14	P(other)		
713889	10174622 0.50 SOIL	08/10/14	P(other)		
713890	10174617 0.50 SOIL	08/10/14	P(other)		
713891	10174570 1.00 SOIL	08/10/14	P(other)		
713892	10174360 0.50 SOIL	08/10/14	P(other)		
713893	10174342 0.50 SOIL	08/10/14	P(other)		
713894	10174618 0.50 SOIL	08/10/14	P(other)		
713895	10174178 0.20 SOIL	08/10/14	P(other)		
713896	10174180 0.50 SOIL	08/10/14	P(other)		
713897	10174171 0.50 SOIL	08/10/14	P(other)		
713898	10174243 0.50 SOIL	08/10/14	P(other)		
713899	10174238 1.50 SOIL	08/10/14	P(other)		
713900	10174350 0.20 SOIL	08/10/14	P(other)		
713901	10174239 0.50 SOIL	08/10/14	P(other)		
713902	10174240 1.50 SOIL	08/10/14	P(other)		
713903	10174365 0.50 SOIL	08/10/14	P(other)		
713904	10174251 1.50 SOIL	08/10/14	P(other)		
713905	10174346 0.50 SOIL	08/10/14	P(other)		
713906	10174590 1.50 SOIL	08/10/14	P(other)		
713907	10174084 0.50 SOIL	08/10/14	P(other)		
713908	10174073 0.50 SOIL	08/10/14	P(other)		
713909	10174020 0.50 SOIL	08/10/14	P(other)		
713910	10174247 0.50 SOIL	08/10/14	P(other)		
713911	10174033 0.40 SOIL	08/10/14	P(other)		
713912	10174035 0.50 SOIL	08/10/14	P(other)		
713913	10174098 0.50 SOIL	08/10/14	P(other)		
713914	10174089 1.50 SOIL	08/10/14	P(other)		
713915	10174094 0.50 SOIL	08/10/14	P(other)		
713916	10174107 1.50 SOIL	08/10/14	P(other)		
713917	10174030 0.50 SOIL	08/10/14	P(other)		
713918	10174028 1.50 SOIL	08/10/14	P(other)		
713919	10174024 0.50 SOIL	08/10/14	P(other)		
713920	10174041 1.50 SOIL	08/10/14	P(other)		

Key: P-Plastic

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time and/or inappropriate containers are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

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



SDG: 141010-98
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0887
Report Number: 292427
Superseded Report:

Appendix General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH₄ by the BRE method, VOC TICS and SVOC TICS.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALcontrol Laboratories reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible. The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP -No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals -total metals must be requested separately.

11. Results relate only to the items tested.

12. LODs for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** -Most of our organic methods include surrogates, the recovery of which is monitored and reported. For EPH, MO, PAH, GRO and VOCs on soils the result is not surrogate corrected, but a percentage recovery is quoted. Acceptable limits for most organic methods are 70 -130 %.

14. **Product analyses** -Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5 -C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

Sample Deviations

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Holding time exceeded before sample received
5	Samples exceeded holding time before preservation was performed
\$	Sampled on date not provided
♦	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to sampled on date
&	Sample Holding Time exceeded - Late arrival of instructions.

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than:
 - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



Atkins Global Ltd
Project Jonah site office
Llan Coed House
Suite 24
Coed Darcy
Llandarcy
SA10 6HJ

Attention: Jack Lowrie

CERTIFICATE OF ANALYSIS

Date: 02 December 2014
Customer: H_ATKINS_LDC
Sample Delivery Group (SDG): 141017-106
Your Reference: Phase 31
Location: Coed Darcy
Report No: 294102

We received 47 samples on Friday October 17, 2014 and 47 of these samples were scheduled for analysis which was completed on Tuesday December 02, 2014. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Approved By:

Sonia McWhan

Operations Manager





SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
10207897	P2TP6		0.50	07/10/2014
10207893	P2TP9		0.50	07/10/2014
10207780	P2TP12		0.20	07/10/2014
10207771	P2TP13		0.50	07/10/2014
10207760	P2TP14		0.30	07/10/2014
10207803	P2TP15		0.30	07/10/2014
10207741	P2TP16		0.30	07/10/2014
10207814	P2TP17		0.30	07/10/2014
10207756	P2TP18		0.50	07/10/2014
10207788	P2TP19		0.20	07/10/2014
10207884	P2TP23		0.50	07/10/2014
10207889	P2TP23		1.50	07/10/2014
10207795	P2TP28		0.20	07/10/2014
10207834	P2TP29		0.50	07/10/2014
10207820	P2TP30		0.30	07/10/2014
10207745	P2TP31		0.30	07/10/2014
10207752	P2TP32		0.30	07/10/2014
10207824	P2TP33		0.30	07/10/2014
10207828	P2TP34		0.30	07/10/2014
10207799	P2TP35		0.50	07/10/2014
10207719	P2TP44		0.50	07/10/2014
10207726	P2TP45		0.30	07/10/2014
10207964	P1TP114		0.50	09/10/2014
10207969	P1TP114		1.50	09/10/2014
10207853	P1TP115		1.50	07/10/2014
10207974	P1TP121		0.50	09/10/2014
10207939	P1TP122		0.50	09/10/2014
10207943	P1TP122		1.50	09/10/2014
10207912	P1TP123		0.20	09/10/2014
10207916	P1TP123		1.00	09/10/2014
10207920	P1TP124		0.50	09/10/2014
10207848	P1TP125		1.50	07/10/2014
10207865	P1TP126		1.00	07/10/2014
10207955	P1TP128		0.50	09/10/2014
10207869	P1TP129		0.50	07/10/2014
10207873	P1TP129		1.50	07/10/2014
10207947	P1TP130		0.50	09/10/2014
10207951	P1TP130		1.50	09/10/2014
10207935	P1TP131		0.50	09/10/2014
10207861	P1TP132		1.00	07/10/2014
10207924	P1TP134		0.50	09/10/2014
10207908	P1TP135		0.50	07/10/2014
10207857	P1TP136		1.00	07/10/2014
10207960	P1TP137		0.50	09/10/2014
10207878	P1TP138		0.50	07/10/2014
10207931	P1TP140		0.50	09/10/2014
10207901	P1TP141		0.30	07/10/2014

Only received samples which have had analysis scheduled will be shown on the following pages.



SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference	AGS Reference	Depth (m)	Container
	10207834		P2TP29		0.50	250g Amber Jar (AL)
	10207795		P2TP28		0.20	60g VOC (ALE215)
	10207889		P2TP23		1.50	400g Tub (ALE214)
	10207884		P2TP23		0.50	250g Amber Jar (AL)
10207884		P2TP23		0.50	60g VOC (ALE215)	
10207788		P2TP19		0.20	400g Tub (ALE214)	
10207788		P2TP19		0.20	60g VOC (ALE215)	
10207756		P2TP18		0.50	250g Amber Jar (AL)	
10207756		P2TP18		0.50	400g Tub (ALE215)	
10207814		P2TP17		0.30	400g Tub (ALE214)	
10207814		P2TP17		0.30	60g VOC (ALE215)	
10207741		P2TP16		0.30	250g Amber Jar (AL)	
10207741		P2TP16		0.30	400g Tub (ALE214)	
10207803		P2TP15		0.30	60g VOC (ALE215)	
10207803		P2TP15		0.30	400g Tub (ALE214)	
10207760		P2TP14		0.30	250g Amber Jar (AL)	
10207760		P2TP14		0.30	400g Tub (ALE215)	
10207771		P2TP13		0.50	60g VOC (ALE215)	
10207771		P2TP13		0.50	400g Tub (ALE214)	
10207780		P2TP12		0.20	250g Amber Jar (AL)	
10207780		P2TP12		0.20	400g Tub (ALE215)	
10207893		P2TP9		0.50	60g VOC (ALE215)	
10207893		P2TP9		0.50	400g Tub (ALE214)	
10207897		P2TP6		0.50	250g Amber Jar (AL)	
10207897		P2TP6		0.50	400g Tub (ALE214)	
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10207897		P2TP				

Author: Coed Darcy
Editor: Atkins Global Ltd
Reviewer: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

X Test

N No Determination Possible

Anions by Kone (soil)	All
Asbestos fibres in Soil*	All
Asbestos Quantification - Full	All
EPH CWG (Aliphatic) GC (S)	All
EPH CWG (Aromatic) GC (S)	All
GRO by GC-FID (S)	All
Metals in solid samples by OES	All
PAH by GCMS	All
pH	All
Sample description	All
Total Organic Carbon	All
TPH CWG GC (S)	All



SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
	10207861	P1TP132		1.00	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207935	P1TP131		0.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207951	P1TP130		1.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207947	P1TP130		0.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207873	P1TP129		1.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207869	P1TP129		0.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207955	P1TP128		0.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207865	P1TP126		1.00	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207848	P1TP125		1.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207920	P1TP124		0.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207916	P1TP123		1.00	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207912	P1TP123		0.20	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207943	P1TP122		1.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
	10207939	P1TP122		0.50	60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL)
Anions by Kone (soil)	All	NDPs: 0 Tests: 12			
Asbestos fibres in Soil*	All	NDPs: 0 Tests: 47			
Asbestos Quantification - Full	All	NDPs: 0 Tests: 31			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 47			
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 47			
GRO by GC-FID (S)	All	NDPs: 0 Tests: 47			
Metals in solid samples by OES	All	NDPs: 0 Tests: 47			
PAH by GCMS	All	NDPs: 0 Tests: 47			
pH	All	NDPs: 0 Tests: 47			
Sample description	All	NDPs: 0 Tests: 47			
Total Organic Carbon	All	NDPs: 0 Tests: 8			
TPH CWG GC (S)	All	NDPs: 0 Tests: 47			

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

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Job: H_ATKINS_LDC-264
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Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions	Inclusions 2
10207897	P2TP6	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207893	P2TP9	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Vegetation
10207780	P2TP12	0.20	Beige	Sandy Clay Loam	0.1 - 2 mm	Brick	Stones
10207771	P2TP13	0.50	Grey	Silt Loam	0.063 - 0.1 mm	Stones	None
10207760	P2TP14	0.30	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207803	P2TP15	0.30	Beige	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207741	P2TP16	0.30	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Brick
10207814	P2TP17	0.30	Beige	Sandy Clay Loam	0.1 - 2 mm	Crushed Brick	Glass & Stones
10207756	P2TP18	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Vegetation	Stones
10207788	P2TP19	0.20	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Brick
10207884	P2TP23	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207889	P2TP23	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
10207795	P2TP28	0.20	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207834	P2TP29	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
10207820	P2TP30	0.30	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Crushed Brick	Stones
10207745	P2TP31	0.30	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Brick
10207752	P2TP32	0.30	Dark Brown	Sand	0.1 - 2 mm	Stones	None
10207824	P2TP33	0.30	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207828	P2TP34	0.30	Dark Brown	Silt Loam	0.063 - 0.1 mm	Vegetation	Stones
10207799	P2TP35	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Vegetation	Stones
10207719	P2TP44	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
10207726	P2TP45	0.30	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
10207964	P1TP114	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207969	P1TP114	1.50	Beige	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207853	P1TP115	1.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
10207974	P1TP121	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Crushed Brick	Stones
10207939	P1TP122	0.50	Light Brown	Silty Clay	0.063 - 0.1 mm	Stones	None
10207943	P1TP122	1.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
10207912	P1TP123	0.20	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10207916	P1TP123	1.00	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207920	P1TP124	0.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10207848	P1TP125	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
10207865	P1TP126	1.00	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	Vegetation
10207955	P1TP128	0.50	Black	Loamy Sand	0.1 - 2 mm	Stones	None
10207869	P1TP129	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Stones
10207873	P1TP129	1.50	Dark Brown	Stone/Soil	0.063 - 0.1 mm	Stones	None
10207947	P1TP130	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
10207951	P1TP130	1.50	Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	None



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			Colour	Description	Grain size	Inclusions	Inclusions 2
10207935	P1TP131	0.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10207861	P1TP132	1.00	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10207924	P1TP134	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
10207908	P1TP135	0.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10207857	P1TP136	1.00	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10207960	P1TP137	0.50	Dark Brown	Stone/Soil	2 - 10 mm	Stones	None
10207878	P1TP138	0.50	Dark Brown	Stone/Soil	0.1 - 2 mm	Stones	None
10207931	P1TP140	0.50	Dark Brown	Silty Clay	0.063 - 0.1 mm	Stones	None
10207901	P1TP141	0.30	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

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TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P2TP6	P2TP9	P2TP12	P2TP13	P2TP14	P2TP15
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 Soil/Solid 07/10/2014	0.50 Soil/Solid 07/10/2014	0.20 Soil/Solid 07/10/2014	0.50 Soil/Solid 07/10/2014	0.30 Soil/Solid 07/10/2014	0.30 Soil/Solid 07/10/2014
aq	Aqueous / settled sample.		17/10/2014 141017-106 10207897	17/10/2014 141017-106 10207893	17/10/2014 141017-106 10207780	17/10/2014 141017-106 10207771	17/10/2014 141017-106 10207760	17/10/2014 141017-106 10207803
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	82 @	87 @	89 @	70 @	81 @	88 @
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176 @ M	<176 @ M	375 @ M	<880 @ M	12000 @ M	<176 @ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @ M	<20 @ M	<100 @ M	<20 @ M	<20 @ M
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @ M	<40 @ M	<200 @ M	<40 @ M	<40 @ M
Toluene	<2 µg/kg	TM089	<8 @ M	<8 @ M	<8 @ M	<40 @ M	<8 @ M	<8 @ M
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<60 @ M	<12 @ M	<12 @ M
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @ M	<24 @ M	<120 @ M	<24 @ M	<24 @ M
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<60 @ M	<12 @ M	<12 @ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<24 @	<24 @	<24 @	<24 @	<24 @
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<200 @	46.6 @	<40 @
Aliphatics >C6-C8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<200 @	334 @	<40 @
Aliphatics >C8-C10	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<200 @	2410 @	<40 @
Aliphatics >C10-C12	<10 µg/kg	TM089	<40 @	45.2 @	158 @	<200 @	4540 @	<40 @
Aliphatics >C12-C16	<100 µg/kg	TM173	<100	<100	107000	13000	284000	9410
Aliphatics >C16-C21	<100 µg/kg	TM173	4030	2910	352000	24400	341000	23900
Aliphatics >C21-C35	<100 µg/kg	TM173	15300	10800	775000	39000	579000	56300
Aliphatics >C35-C44	<100 µg/kg	TM173	5820	<100	119000	4400	89700	21700
Total Aliphatics >C12-C44	<100 µg/kg	TM173	25100	13800	1350000	80800	1290000	111000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<200 @	<40 @	<40 @
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<200 @	<40 @	<40 @
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<200 @	1620 @	<40 @
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40 @	<40 @	105 @	<200 @	3020 @	<40 @
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100	848	4860	1260	11300	504
Aromatics >EC16-EC21	<100 µg/kg	TM173	3350	3410	60600	5170	72200	4790
Aromatics >EC21-EC35	<100 µg/kg	TM173	16300	20700	185000	22100	209000	247000
Aromatics >EC35-EC44	<100 µg/kg	TM173	9620	11000	49200	7670	61400	18600
Aromatics >EC40-EC44	<100 µg/kg	TM173	4260	4420	18300	3000	22500	7790
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	29300	36000	300000	36200	354000	270000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	54400	49900	1650000	118000	1660000	382000



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Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
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TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P2TP16	P2TP17	P2TP18	P2TP19	P2TP23	P2TP23
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.30	0.30	0.50	0.20	0.50	1.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		17/10/2014	17/10/2014	17/10/2014	17/10/2014	17/10/2014	17/10/2014
(F)	Trigger breach confirmed		141017-106	141017-106	141017-106	141017-106	141017-106	141017-106
1-5&\$@	Sample deviation (see appendix)		10207741	10207814	10207756	10207788	10207884	10207889
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	96 @	90 @	81 @	90 @	112 @	82 @
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176 @ M	<176 @ M	3750 @ M	3730 @ M	<176 @ M	2330 @ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M
Toluene	<2 µg/kg	TM089	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<24 @	<24 @	<24 @	<24 @	<24 @
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aliphatics >C6-C8	<10 µg/kg	TM089	<40 @	<40 @	75.1 @	91.1 @	<40 @	91.3 @
Aliphatics >C8-C10	<10 µg/kg	TM089	<40 @	<40 @	442 @	600 @	<40 @	340 @
Aliphatics >C10-C12	<10 µg/kg	TM089	<40 @	<40 @	1740 @	1570 @	<40 @	982 @
Aliphatics >C12-C16	<100 µg/kg	TM173	8680	4990	190000	210000	1500	25000
Aliphatics >C16-C21	<100 µg/kg	TM173	20000	10700	332000	244000	5030	34200
Aliphatics >C21-C35	<100 µg/kg	TM173	43400	26100	704000	359000	18300	76200
Aliphatics >C35-C44	<100 µg/kg	TM173	16000	7820	118000	81600	7630	27100
Total Aliphatics >C12-C44	<100 µg/kg	TM173	88100	49600	1340000	895000	32500	162000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40 @	<40 @	295 @	405 @	<40 @	234 @
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40 @	<40 @	1160 @	1040 @	<40 @	654 @
Aromatics >EC12-EC16	<100 µg/kg	TM173	1860	185	9790	10600	<100	4910
Aromatics >EC16-EC21	<100 µg/kg	TM173	16000	3170	73500	59700	3440	16900
Aromatics >EC21-EC35	<100 µg/kg	TM173	44500	18200	260000	213000	18900	68800
Aromatics >EC35-EC44	<100 µg/kg	TM173	16700	7970	80700	81200	12500	32600
Aromatics >EC40-EC44	<100 µg/kg	TM173	6570	3080	29500	31800	5290	12800
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	79100	29600	424000	364000	34900	123000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	167000	incomplete	1770000	1260000	67400	288000



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P2TP28	P2TP29	P2TP30	P2TP31	P2TP32	P2TP33
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.20 Soil/Solid 07/10/2014	0.50 Soil/Solid 07/10/2014	0.30 Soil/Solid 07/10/2014	0.30 Soil/Solid 07/10/2014	0.30 Soil/Solid 07/10/2014	0.30 Soil/Solid 07/10/2014
aq	Aqueous / settled sample.		17/10/2014 141017-106 10207795	17/10/2014 141017-106 10207834	17/10/2014 141017-106 10207820	17/10/2014 141017-106 10207745	17/10/2014 141017-106 10207752	17/10/2014 141017-106 10207824
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	100 @	95 @	104 @	79 @	86 @	75 @
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	1700 @ M	1050 @ M	<176 @ M	297 @ M	<176 @ M	<176 @ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M
Toluene	<2 µg/kg	TM089	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<24 @	<24 @	<24 @	<24 @	<24 @
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aliphatics >C6-C8	<10 µg/kg	TM089	73.5 @	40.7 @	<40 @	<40 @	<40 @	<40 @
Aliphatics >C8-C10	<10 µg/kg	TM089	116 @	125 @	<40 @	44 @	<40 @	<40 @
Aliphatics >C10-C12	<10 µg/kg	TM089	841 @	461 @	<40 @	113 @	<40 @	<40 @
Aliphatics >C12-C16	<100 µg/kg	TM173	14400	90700	3810	11600	14200	36200
Aliphatics >C16-C21	<100 µg/kg	TM173	77300	176000	17300	22800	27000	76100
Aliphatics >C21-C35	<100 µg/kg	TM173	200000	331000	58200	41300	55600	114000
Aliphatics >C35-C44	<100 µg/kg	TM173	50700	87800	20200	12200	19400	21000
Total Aliphatics >C12-C44	<100 µg/kg	TM173	342000	685000	99500	87900	116000	247000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC8-EC10	<10 µg/kg	TM089	84.8 @	90.2 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC10-EC12	<10 µg/kg	TM089	560 @	307 @	<40 @	75.2 @	<40 @	<40 @
Aromatics >EC12-EC16	<100 µg/kg	TM173	2660	6170	<100	2280	2570	1990
Aromatics >EC16-EC21	<100 µg/kg	TM173	20300	36300	2410	10200	13400	16700
Aromatics >EC21-EC35	<100 µg/kg	TM173	111000	145000	29600	41300	56300	56700
Aromatics >EC35-EC44	<100 µg/kg	TM173	40600	49900	18900	20900	29800	24400
Aromatics >EC40-EC44	<100 µg/kg	TM173	15400	18400	7900	8640	13000	9690
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	175000	238000	50900	74800	102000	99800
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	519000	924000	150000	163000	218000	347000



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P2TP34	P2TP35	P2TP44	P2TP45	P1TP114	P1TP114
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.30 Soil/Solid 07/10/2014	0.50 Soil/Solid 07/10/2014	0.50 Soil/Solid 07/10/2014	0.30 Soil/Solid 07/10/2014	0.50 Soil/Solid 09/10/2014	1.50 Soil/Solid 09/10/2014
aq	Aqueous / settled sample.		17/10/2014 141017-106 10207828	17/10/2014 141017-106 10207799	17/10/2014 141017-106 10207719	17/10/2014 141017-106 10207726	17/10/2014 141017-106 10207964	17/10/2014 141017-106 10207969
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	74 @	21 @	82 @	80 @	85 @	92 @
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	2460 @ M	592 @ M	5730 @ M	2820 @ M	<176 @ M	32900 @ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M
Toluene	<2 µg/kg	TM089	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<36 @	<9 @	<9 @	<9 @	<9 @
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<96 @	<24 @	<24 @	<24 @	<24 @
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	46.8 @
Aliphatics >C6-C8	<10 µg/kg	TM089	95.4 @	<40 @	146 @	47.8 @	<40 @	1560 @
Aliphatics >C8-C10	<10 µg/kg	TM089	327 @	71.8 @	887 @	250 @	<40 @	7920 @
Aliphatics >C10-C12	<10 µg/kg	TM089	1060 @	248 @	2440 @	1390 @	<40 @	10900 @
Aliphatics >C12-C16	<100 µg/kg	TM173	136000	28700	165000	70600	21300	101000
Aliphatics >C16-C21	<100 µg/kg	TM173	209000	45500	185000	128000	45900	88700
Aliphatics >C21-C35	<100 µg/kg	TM173	417000	88200	254000	243000	150000	129000
Aliphatics >C35-C44	<100 µg/kg	TM173	84900	12700	66300	68100	45100	32100
Total Aliphatics >C12-C44	<100 µg/kg	TM173	847000	175000	670000	510000	263000	351000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC8-EC10	<10 µg/kg	TM089	218 @	56.8 @	597 @	183 @	<40 @	5280 @
Aromatics >EC10-EC12	<10 µg/kg	TM089	708 @	165 @	1620 @	927 @	<40 @	7240 @
Aromatics >EC12-EC16	<100 µg/kg	TM173	16000	5260	26800	3630	1610	4790
Aromatics >EC16-EC21	<100 µg/kg	TM173	86900	21900	83100	24600	12900	21100
Aromatics >EC21-EC35	<100 µg/kg	TM173	259000	66400	171000	96000	103000	83700
Aromatics >EC35-EC44	<100 µg/kg	TM173	80600	19700	64200	36800	46200	33200
Aromatics >EC40-EC44	<100 µg/kg	TM173	29700	7530	25500	14000	17800	12000
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	442000	113000	345000	161000	164000	143000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1290000	289000	1020000	674000	426000	527000



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P1TP115	P1TP121	P1TP122	P1TP122	P1TP123	P1TP123
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	1.50	0.50	0.50	1.50	0.20	1.00
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		07/10/2014	09/10/2014	09/10/2014	09/10/2014	09/10/2014	09/10/2014
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.		17/10/2014	17/10/2014	17/10/2014	17/10/2014	17/10/2014	17/10/2014
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		141017-106	141017-106	141017-106	141017-106	141017-106	141017-106
(F)	Trigger breach confirmed		10207853	10207974	10207939	10207943	10207912	10207916
1-5&\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	96 @	90 @	96 @	81 @	92 @	76 @
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	2420 @ M	1040 @ M	1210 @ M	5460 @ M	1190 @ M	8920 @ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M
Toluene	<2 µg/kg	TM089	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M	14.6 @ M
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<24 @	<24 @	<24 @	<24 @	<24 @
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	82.9 @
Aliphatics >C6-C8	<10 µg/kg	TM089	88.9 @	54.8 @	46.8 @	226 @	<40 @	447 @
Aliphatics >C8-C10	<10 µg/kg	TM089	381 @	173 @	197 @	1040 @	194 @	1480 @
Aliphatics >C10-C12	<10 µg/kg	TM089	996 @	405 @	493 @	2090 @	485 @	3550 @
Aliphatics >C12-C16	<100 µg/kg	TM173	29400	12100	7180	109000	7020	486000
Aliphatics >C16-C21	<100 µg/kg	TM173	65600	38700	13600	124000	16100	629000
Aliphatics >C21-C35	<100 µg/kg	TM173	106000	231000	30300	219000	37700	1080000
Aliphatics >C35-C44	<100 µg/kg	TM173	30600	34500	7830	82700	14800	346000
Total Aliphatics >C12-C44	<100 µg/kg	TM173	231000	316000	58900	536000	75600	2540000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC8-EC10	<10 µg/kg	TM089	259 @	120 @	133 @	690 @	129 @	984 @
Aromatics >EC10-EC12	<10 µg/kg	TM089	665 @	270 @	329 @	1390 @	324 @	2360 @
Aromatics >EC12-EC16	<100 µg/kg	TM173	3460	1510	1140	5090	1180	113000
Aromatics >EC16-EC21	<100 µg/kg	TM173	18600	12800	8420	22800	5490	275000
Aromatics >EC21-EC35	<100 µg/kg	TM173	81200	77400	31800	102000	24600	690000
Aromatics >EC35-EC44	<100 µg/kg	TM173	34400	26000	14500	50100	13700	245000
Aromatics >EC40-EC44	<100 µg/kg	TM173	13300	9470	5950	20200	5900	90100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	138000	118000	55900	180000	45000	1320000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	371000	435000	116000	722000	122000	3870000



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P1TP124	P1TP125	P1TP126	P1TP128	P1TP129	P1TP129
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 Soil/Solid 09/10/2014	1.50 Soil/Solid 07/10/2014	1.00 Soil/Solid 07/10/2014	0.50 Soil/Solid 09/10/2014	0.50 Soil/Solid 07/10/2014	1.50 Soil/Solid 07/10/2014
aq	Aqueous / settled sample.		17/10/2014 141017-106 10207920	17/10/2014 141017-106 10207848	17/10/2014 141017-106 10207865	17/10/2014 141017-106 10207955	17/10/2014 141017-106 10207869	17/10/2014 141017-106 10207873
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	73 @	80 @	82 @	83 @	97 @	93 @
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	1150 @ M	1970 @ M	1290 @ M	1180 @ M	80900 @ M	41400 @ #
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ #
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ #
Toluene	<2 µg/kg	TM089	21.9 @ M	<8 @ M	61.3 @ M	<8 @ M	<8 @ M	<8 @ #
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ #
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ #
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ #
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<24 @	61.3 @	<24 @	<24 @	<24 @
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aliphatics >C6-C8	<10 µg/kg	TM089	110 @	76.6 @	74.4 @	<40 @	1060 @	243 @
Aliphatics >C8-C10	<10 µg/kg	TM089	198 @	393 @	187 @	185 @	16000 @	6510 @
Aliphatics >C10-C12	<10 µg/kg	TM089	393 @	735 @	469 @	485 @	31800 @	18200 @
Aliphatics >C12-C16	<100 µg/kg	TM173	15800	19400	36000	7750	926000	164000
Aliphatics >C16-C21	<100 µg/kg	TM173	25000	31800	67000	10100	178000	21700
Aliphatics >C21-C35	<100 µg/kg	TM173	90100	86600	305000	29200	79500	56600
Aliphatics >C35-C44	<100 µg/kg	TM173	20900	31200	121000	10600	14600	12500
Total Aliphatics >C12-C44	<100 µg/kg	TM173	152000	169000	528000	57600	1200000	255000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	61.3 @	<40 @	<40 @	<40 @
Aromatics >EC8-EC10	<10 µg/kg	TM089	140 @	262 @	131 @	127 @	10700 @	4340 @
Aromatics >EC10-EC12	<10 µg/kg	TM089	262 @	490 @	313 @	323 @	21200 @	12100 @
Aromatics >EC12-EC16	<100 µg/kg	TM173	4100	1850	2490	2120	44800	11900
Aromatics >EC16-EC21	<100 µg/kg	TM173	35900	9310	14000	5720	51400	15500
Aromatics >EC21-EC35	<100 µg/kg	TM173	127000	83200	105000	37800	85500	53800
Aromatics >EC35-EC44	<100 µg/kg	TM173	50700	13300	50900	22300	33200	20300
Aromatics >EC40-EC44	<100 µg/kg	TM173	18600	13900	18400	9020	13800	8220
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	217000	108000	172000	68000	215000	101000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	370000	279000	702000	127000	1490000	398000



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P1TP130	P1TP130	P1TP131	P1TP132	P1TP134	P1TP135
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	1.50	0.50	1.00	0.50	0.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		09/10/2014	09/10/2014	09/10/2014	07/10/2014	09/10/2014	07/10/2014
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.		17/10/2014	17/10/2014	17/10/2014	17/10/2014	17/10/2014	17/10/2014
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		141017-106	141017-106	141017-106	141017-106	141017-106	141017-106
(F)	Trigger breach confirmed		10207947	10207951	10207935	10207861	10207924	10207908
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	95	96	79	107	86	87
			@	@	@	@	@	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176	35700	<176	1380	<176	2410
			@ M	@ M	@ M	@ M	@ M	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20
			@ M	@ M	@ M	@ M	@ M	@ M
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			@ M	@ M	@ M	@ M	@ M	@ M
Toluene	<2 µg/kg	TM089	<8	<8	<8	13	<8	<8
			@ M	@ M	@ M	@ M	@ M	@ M
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
			@ M	@ M	@ M	@ M	@ M	@ M
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24
			@ M	@ M	@ M	@ M	@ M	@ M
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
			@ M	@ M	@ M	@ M	@ M	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
			@	@	@	@	@	@
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	<24	<24	<24
			@	@	@	@	@	@
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			@	@	@	@	@	@
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	321	<40	94.4	<40	53.6
			@	@	@	@	@	@
Aliphatics >C8-C10	<10 µg/kg	TM089	<40	3900	<40	269	<40	279
			@	@	@	@	@	@
Aliphatics >C10-C12	<10 µg/kg	TM089	<40	17300	<40	466	<40	1120
			@	@	@	@	@	@
Aliphatics >C12-C16	<100 µg/kg	TM173	2250	296000	1770	4380	1790	27300
Aliphatics >C16-C21	<100 µg/kg	TM173	11200	46100	9880	11900	6030	5110
Aliphatics >C21-C35	<100 µg/kg	TM173	56900	11200	38300	49500	17800	11100
Aliphatics >C35-C44	<100 µg/kg	TM173	16200	<100	12200	16500	7750	1860
Total Aliphatics >C12-C44	<100 µg/kg	TM173	86500	353000	62100	82300	33300	45400
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			@	@	@	@	@	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			@	@	@	@	@	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40	2600	<40	190	<40	186
			@	@	@	@	@	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40	11500	<40	310	<40	749
			@	@	@	@	@	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	715	4260	917	401	<100	1200
Aromatics >EC16-EC21	<100 µg/kg	TM173	2550	6730	5380	3930	2360	3130
Aromatics >EC21-EC35	<100 µg/kg	TM173	25700	7040	34200	34000	15700	15500
Aromatics >EC35-EC44	<100 µg/kg	TM173	14600	1420	17200	19300	12500	9180
Aromatics >EC40-EC44	<100 µg/kg	TM173	5690	436	7080	7850	5430	3820
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	43600	19400	57700	57700	30500	29100
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	130000	408000	120000	141000	63900	76800



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R					
#	ISO17025 accredited.		P1TP136	P1TP137	P1TP138	P1TP140	P1TP141
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	1.00	0.50	0.50	0.50	0.30
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		07/10/2014	09/10/2014	07/10/2014	09/10/2014	07/10/2014
tot.unfilt	Total / unfiltered sample.						
*	Subcontracted test.		17/10/2014	17/10/2014	17/10/2014	17/10/2014	17/10/2014
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		141017-106	141017-106	141017-106	141017-106	141017-106
(F)	Trigger breach confirmed		10207857	10207960	10207878	10207931	10207901
1-5&*\$@	Sample deviation (see appendix)						
Component	LOD/Units	Method					
GRO Surrogate % recovery**	%	TM089	85	124	89	83	82
			@	@	@	@	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	70400	10600	<176	2000	286
			@ M	@ #	@ #	@ M	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20
			@ M	@ #	@ #	@ M	@ M
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40
			@ M	@ #	@ #	@ M	@ M
Toluene	<2 µg/kg	TM089	<8	<8	<8	<8	<8
			@ M	@ #	@ #	@ M	@ M
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12
			@ M	@ #	@ #	@ M	@ M
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24
			@ M	@ #	@ #	@ M	@ M
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12
			@ M	@ #	@ #	@ M	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9
			@	@	@	@	@
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	<24	<24
			@	@	@	@	@
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	<40	<40	<40
			@	@	@	@	@
Aliphatics >C6-C8	<10 µg/kg	TM089	232	122	<40	54.1	43.9
			@	@	@	@	@
Aliphatics >C8-C10	<10 µg/kg	TM089	5190	1820	<40	235	58.9
			@	@	@	@	@
Aliphatics >C10-C12	<10 µg/kg	TM089	36900	4430	<40	915	69.6
			@	@	@	@	@
Aliphatics >C12-C16	<100 µg/kg	TM173	979000	63500	9440	9240	5260
Aliphatics >C16-C21	<100 µg/kg	TM173	54100	17000	4770	3630	18800
Aliphatics >C21-C35	<100 µg/kg	TM173	33500	27200	11200	12100	42900
Aliphatics >C35-C44	<100 µg/kg	TM173	10500	10200	<100	2610	12600
Total Aliphatics >C12-C44	<100 µg/kg	TM173	1080000	118000	25400	27600	79500
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40
			@	@	@	@	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40
			@	@	@	@	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	3460	1210	<40	161	48.2
			@	@	@	@	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	24600	2960	<40	611	46.1
			@	@	@	@	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	11200	3040	1610	708	950
Aromatics >EC16-EC21	<100 µg/kg	TM173	8900	6740	4120	2110	5150
Aromatics >EC21-EC35	<100 µg/kg	TM173	27200	33100	25700	13900	29900
Aromatics >EC35-EC44	<100 µg/kg	TM173	12000	16500	11900	10500	16100
Aromatics >EC40-EC44	<100 µg/kg	TM173	4570	6800	4950	4510	6850
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	59200	59400	43300	27200	52100
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1210000	188000	68800	56800	132000



SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

Asbestos Quantification - Full

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP9 0.50 SOLID 07/10/2014 00:00:00 19/11/2014 14:35:58 141017-106 10207893 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP14 0.30 SOLID 07/10/2014 00:00:00 14/11/2014 08:48:47 141017-106 10207760 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP15 0.30 SOLID 07/10/2014 00:00:00 14/11/2014 08:03:40 141017-106 10207803 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP16 0.30 SOLID 07/10/2014 00:00:00 14/11/2014 09:55:42 141017-106 10207741 TM 304	Crocidolite (#)	Loose fibres	0.0070 (#)	0.0011 (#)	0.0082 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP17 0.30 SOLID 07/10/2014 00:00:00 14/11/2014 07:59:30 141017-106 10207814 TM 304	None (#)	N/C	0.0169 (#)	<0.001 (#)	0.017 (#)



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP18 0.50 SOLID 07/10/2014 00:00:00 14/11/2014 09:59:44 141017-106 10207756 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP19 0.20 SOLID 07/10/2014 00:00:00 12/11/2014 14:06:58 141017-106 10207788 TM 304	Amosite (#)	Loose fibres	0.0013 (#)	<0.001 (#)	0.0015 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP23 0.50 SOLID 07/10/2014 00:00:00 19/11/2014 15:10:24 141017-106 10207884 TM 304	Amosite, crocidolite (Trace, Loose fibres in soil.) (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP23 1.50 SOLID 07/10/2014 00:00:00 19/11/2014 14:30:24 141017-106 10207889 TM 304	Amosite (Loose fibres in soil.) (#)	N/C	<0.001 (#)	<0.001 (#)	0.0014 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP29 0.50 SOLID 07/10/2014 00:00:00 14/11/2014 08:45:31 141017-106 10207834 TM 304	Amosite (Loose fibres in soil.) (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP31 0.30 SOLID 07/10/2014 00:00:00 14/11/2014 10:01:32 141017-106 10207745 TM 304	None (#)	N/C	0.0011 (#)	<0.001 (#)	0.0015 (#)



CERTIFICATE OF ANALYSIS

SDG: 141017-106
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Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP32 0.30 SOLID 07/10/2014 00:00:00 14/11/2014 09:57:57 141017-106 10207752 TM 304	Crocidolite (#)	Loose	0.0068 (#)	<0.001 (#)	0.0073 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP33 0.30 SOLID 07/10/2014 00:00:00 14/11/2014 08:01:36 141017-106 10207824 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP34 0.30 SOLID 07/10/2014 00:00:00 12/11/2014 14:10:22 141017-106 10207828 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP114 0.50 SOLID 09/10/2014 00:00:00 14/11/2014 13:22:39 141017-106 10207964 TM 304	- (#)	-	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP114 1.50 SOLID 09/10/2014 00:00:00 14/11/2014 13:20:19 141017-106 10207969 TM 304	None (#)	N/C	0.0012 (#)	<0.001 (#)	0.0018 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP115 1.50 SOLID 07/10/2014 00:00:00 14/11/2014 11:02:08 141017-106 10207853 TM 304	Amosite and Crocidolite (#)	Loose fibres in soil	<0.001 (#)	<0.001 (#)	<0.001 (#)



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP121 0.50 SOLID 09/10/2014 00:00:00 13/11/2014 10:01:18 141017-106 10207974 TM 304	Amosite (Loose fibres and ACM debris in soil.) (#)	N/C	0.0500 (#)	0.0017 (#)	0.0517 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP122 0.50 SOLID 09/10/2014 00:00:00 14/11/2014 15:02:13 141017-106 10207939 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	0.0013 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP122 1.50 SOLID 09/10/2014 00:00:00 14/11/2014 11:00:05 141017-106 10207943 TM 304	None (#)	N/C	0.0322 (#)	0.0036 (#)	0.0358 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP123 1.00 SOLID 09/10/2014 00:00:00 14/11/2014 10:45:10 141017-106 10207916 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP124 0.50 SOLID 09/10/2014 00:00:00 14/11/2014 10:40:52 141017-106 10207920 TM 304	None (#)	N/C	0.0022 (#)	<0.001 (#)	0.0025 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP125 1.50 SOLID 07/10/2014 00:00:00 14/11/2014 11:13:27 141017-106 10207848 TM 304	None (#)	N/C	0.0015 (#)	<0.001 (#)	0.0022 (#)



CERTIFICATE OF ANALYSIS

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Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP126 1.00 SOLID 07/10/2014 00:00:00 13/11/2014 10:26:29 141017-106 10207865 TM 304	Amosite, crocidolite (Loose fibres in soil.) (#)	N/C	0.0023 (#)	0.0028 (#)	0.0051 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP128 0.50 SOLID 09/10/2014 00:00:00 13/11/2014 10:24:17 141017-106 10207955 TM 304	None (#)	N/C	0.0011 (#)	<0.001 (#)	0.0016 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP129 0.50 SOLID 07/10/2014 00:00:00 14/11/2014 13:14:31 141017-106 10207869 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP129 1.50 SOLID 07/10/2014 00:00:00 14/11/2014 13:17:18 141017-106 10207873 TM 304	None (#)	N/C	0.0019 (#)	<0.001 (#)	0.0025 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP130 0.50 SOLID 09/10/2014 00:00:00 14/11/2014 11:06:13 141017-106 10207947 TM 304	None (#)	N/C	0.0013 (#)	<0.001 (#)	0.0017 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP130 1.50 SOLID 09/10/2014 00:00:00 14/11/2014 10:58:07 141017-106 10207951 TM 304	- (#)	-	<0.001 (#)	<0.001 (#)	<0.001 (#)



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP131 0.50 SOLID 09/10/2014 00:00:00 14/11/2014 15:05:01 141017-106 10207935 TM 304	None (#)	Amphibole fibres found during PCM analysis.	0.0127 (#)	0.0011 (#)	0.0138 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP141 0.30 SOLID 07/10/2014 00:00:00 14/11/2014 10:42:45 141017-106 10207901 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)



SDG:	141017-106	Location:	Coed Darcy	Order Number:	CD0896
Job:	H_ATKINS_LDC-264	Customer:	Atkins Global Ltd	Report Number:	294102
Client Reference:	Phase 31	Attention:	Jack Lowrie	Superseded Report:	

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
ASB_PREP				
PM001		Preparation of Samples for Metals Analysis		
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material		
SUB (ASB)				
TM 304				
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM132	In - house Method	ELTRA CS800 Operators Guide		
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter		
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID		
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES		
TM218	Microwave extraction – EPA method 3546	Microwave extraction - EPA method 3546		
TM243		Mixed Anions In Soils By Kone		

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

Test Completion Dates

Lab Sample No(s)	10207897	10207893	10207780	10207771	10207760	10207803	10207741	10207814	10207756	10207788
Customer Sample Ref.	P2TP6	P2TP9	P2TP12	P2TP13	P2TP14	P2TP15	P2TP16	P2TP17	P2TP18	P2TP19
AGS Ref.										
Depth	0.50	0.50	0.20	0.50	0.30	0.30	0.30	0.30	0.50	0.20
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)							14-Nov-2014		14-Nov-2014	14-Nov-2014
Asbestos fibres in Soil*	31-Oct-2014	31-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014
Asbestos Quantification - Full		28-Nov-2014			27-Nov-2014	27-Nov-2014	28-Nov-2014	28-Nov-2014	28-Nov-2014	28-Nov-2014
EPH CWG (Aliphatic) GC (S)	03-Nov-2014	28-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014
EPH CWG (Aromatic) GC (S)	29-Oct-2014	28-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014
GRO by GC-FID (S)	31-Oct-2014	31-Oct-2014	31-Oct-2014	02-Nov-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	29-Oct-2014
Metals in solid samples by OES	30-Oct-2014	30-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014
PAH by GCMS	01-Nov-2014	01-Nov-2014	31-Oct-2014	02-Nov-2014	02-Nov-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	02-Nov-2014	02-Nov-2014
pH	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	28-Oct-2014	29-Oct-2014	28-Oct-2014	28-Oct-2014	28-Oct-2014
Sample description	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	18-Oct-2014	22-Oct-2014	22-Oct-2014	18-Oct-2014
Total Organic Carbon		30-Oct-2014								30-Oct-2014
TPH CWG GC (S)	03-Nov-2014	31-Oct-2014	31-Oct-2014	02-Nov-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	29-Oct-2014

Lab Sample No(s)	10207884	10207889	10207795	10207834	10207820	10207745	10207752	10207824	10207828	10207799
Customer Sample Ref.	P2TP23	P2TP23	P2TP28	P2TP29	P2TP30	P2TP31	P2TP32	P2TP33	P2TP34	P2TP35
AGS Ref.										
Depth	0.50	1.50	0.20	0.50	0.30	0.30	0.30	0.30	0.30	0.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)		14-Nov-2014		14-Nov-2014				14-Nov-2014		
Asbestos fibres in Soil*	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014
Asbestos Quantification - Full	01-Dec-2014	01-Dec-2014		01-Dec-2014		28-Nov-2014	28-Nov-2014	28-Nov-2014	27-Nov-2014	
EPH CWG (Aliphatic) GC (S)	03-Nov-2014	03-Nov-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	03-Nov-2014	28-Oct-2014
EPH CWG (Aromatic) GC (S)	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	28-Oct-2014
GRO by GC-FID (S)	31-Oct-2014	31-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	30-Oct-2014
Metals in solid samples by OES	31-Oct-2014	30-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014
PAH by GCMS	01-Nov-2014	01-Nov-2014	31-Oct-2014	02-Nov-2014	31-Oct-2014	02-Nov-2014	02-Nov-2014	31-Oct-2014	02-Nov-2014	02-Nov-2014
pH	29-Oct-2014	29-Oct-2014	28-Oct-2014	28-Oct-2014	28-Oct-2014	28-Oct-2014	28-Oct-2014	29-Oct-2014	28-Oct-2014	29-Oct-2014
Sample description	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	18-Oct-2014	18-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
Total Organic Carbon				30-Oct-2014						
TPH CWG GC (S)	03-Nov-2014	03-Nov-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	03-Nov-2014	30-Oct-2014

Lab Sample No(s)	10207719	10207726	10207964	10207969	10207853	10207974	10207939	10207943	10207912	10207916
Customer Sample Ref.	P2TP44	P2TP45	P1TP114	P1TP114	P1TP115	P1TP121	P1TP122	P1TP122	P1TP123	P1TP123
AGS Ref.										
Depth	0.50	0.30	0.50	1.50	1.50	0.50	0.50	1.50	0.20	1.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)			14-Nov-2014	14-Nov-2014	14-Nov-2014					
Asbestos fibres in Soil*	31-Oct-2014	31-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014
Asbestos Quantification - Full			02-Dec-2014	02-Dec-2014	01-Dec-2014	02-Dec-2014	02-Dec-2014	02-Dec-2014		02-Dec-2014
EPH CWG (Aliphatic) GC (S)	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	28-Oct-2014	29-Oct-2014	29-Oct-2014	03-Nov-2014
EPH CWG (Aromatic) GC (S)	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	28-Oct-2014	29-Oct-2014	29-Oct-2014	03-Nov-2014
GRO by GC-FID (S)	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014
Metals in solid samples by OES	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	30-Oct-2014	30-Oct-2014
PAH by GCMS	02-Nov-2014	02-Nov-2014	02-Nov-2014	02-Nov-2014	02-Nov-2014	31-Oct-2014	02-Nov-2014	02-Nov-2014	01-Nov-2014	01-Nov-2014
pH	29-Oct-2014	28-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014
Sample description	18-Oct-2014	18-Oct-2014	20-Oct-2014	20-Oct-2014	22-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
Total Organic Carbon		30-Oct-2014				30-Oct-2014				
TPH CWG GC (S)	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	03-Nov-2014



CERTIFICATE OF ANALYSIS

SDG: 141017-106
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0896
Report Number: 294102
Superseded Report:

Lab Sample No(s)	10207920	10207848	10207865	10207955	10207869	10207873	10207947	10207951	10207935	10207861
Customer Sample Ref.	P1TP124	P1TP125	P1TP126	P1TP128	P1TP129	P1TP129	P1TP130	P1TP130	P1TP131	P1TP132
AGS Ref.										
Depth	0.50	1.50	1.00	0.50	0.50	1.50	0.50	1.50	0.50	1.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)			14-Nov-2014			14-Nov-2014				
Asbestos fibres in Soil*	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014
Asbestos Quantification - Full	02-Dec-2014	01-Dec-2014	01-Dec-2014	02-Dec-2014	01-Dec-2014	01-Dec-2014	02-Dec-2014	01-Dec-2014	02-Dec-2014	
EPH CWG (Aliphatic) GC (S)	28-Oct-2014	29-Oct-2014	29-Oct-2014	03-Nov-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014
EPH CWG (Aromatic) GC (S)	28-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014
GRO by GC-FID (S)	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014
Metals in solid samples by OES	31-Oct-2014	29-Oct-2014	31-Oct-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014
PAH by GCMS	31-Oct-2014	02-Nov-2014	31-Oct-2014	02-Nov-2014	02-Nov-2014	02-Nov-2014	02-Nov-2014	31-Oct-2014	02-Nov-2014	31-Oct-2014
pH	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014
Sample description	22-Oct-2014	22-Oct-2014	21-Oct-2014	22-Oct-2014	20-Oct-2014	22-Oct-2014	22-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014
Total Organic Carbon	30-Oct-2014			31-Oct-2014	30-Oct-2014					
TPH CWG GC (S)	31-Oct-2014	31-Oct-2014	31-Oct-2014	03-Nov-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014

Lab Sample No(s)	10207924	10207908	10207857	10207960	10207878	10207931	10207901
Customer Sample Ref.	P1TP134	P1TP135	P1TP136	P1TP137	P1TP138	P1TP140	P1TP141
AGS Ref.							
Depth	0.50	0.50	1.00	0.50	0.50	0.50	0.30
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)							14-Nov-2014
Asbestos fibres in Soil*	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014	30-Oct-2014
Asbestos Quantification - Full							01-Dec-2014
EPH CWG (Aliphatic) GC (S)	03-Nov-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	28-Oct-2014	29-Oct-2014
EPH CWG (Aromatic) GC (S)	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	28-Oct-2014	29-Oct-2014
GRO by GC-FID (S)	31-Oct-2014	31-Oct-2014	31-Oct-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014
Metals in solid samples by OES	31-Oct-2014	31-Oct-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014
PAH by GCMS	01-Nov-2014	31-Oct-2014	02-Nov-2014	31-Oct-2014	03-Nov-2014	31-Oct-2014	31-Oct-2014
pH	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014	29-Oct-2014
Sample description	22-Oct-2014	22-Oct-2014	22-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
TPH CWG GC (S)	23-Nov-2014	31-Oct-2014	31-Oct-2014	29-Oct-2014	31-Oct-2014	31-Oct-2014	31-Oct-2014



Certificate of Analysis

Certificate Number 14-18689-1

30-Oct-14

Client Alcontrol Laboratories
Units 7 & 8
Hawarden Business Park
Manor Road
Hawarden
Deeside
CH5 3US

Our Reference 14-18689-1

Client Reference 141017-106

Contract Title 141017-106

Description 47 Soil samples.

Date Received 21-Oct-14

Date Started 21-Oct-14

Date Completed 30-Oct-14

Test Procedures Asbestos Analysis DETSC 1101.

Notes **This report supersedes 14-18689. Asbestos comments amended**

Opinions and interpretations are outside the scope of UKAS accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. Observations and interpretations are outside the scope of ISO 17025. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

A handwritten signature in black ink, appearing to read 'Rob Brown'.

Rob Brown
Business Manager



Summary of Asbestos Analysis Soil Samples

Our Ref 14-18689-1
Client Ref 141017-106
Contract Title 141017-106

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
717097	10216436 P1TP114 0.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717098	10216444 P1TP114 1.50	SOIL	Amosite Chrysotile	Bundles of Amosite/Chrysotile present	Andrew Little
717099	10217509 P1TP115 1.50	SOIL	Chrysotile	Clumps Chrysotile fibres present	Andrew Little
717100	10216419 P1TP121 0.50	SOIL	Chrysotile	Clumps Chrysotile fibres present	Andrew Little
717101	10217741 P1TP122 0.50	SOIL	Amosite Chrysotile	Clumps of Amosite/Chrysotile present	Andrew Little
717102	10217504 P1TP122 1.50	SOIL	Amosite Chrysotile	Free Amosite/Chrysotile fibres present	Andrew Little
717103	10217641 P1TP123 0.20	SOIL	NAD	none	Andrew Little
717104	10217658 P1TP123 1.00	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717105	10217661 P1TP124 0.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717106	10217506 P1TP125 1.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717107	10217367 P1TP126 1.00	SOIL	Chrysotile	Bundles Chrysotile fibres present	Andrew Little
717108	10217365 P1TP128 0.50	SOIL	Chrysotile	Bundles Chrysotile fibres present	Andrew Little
717109	10216474 P1TP129 0.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717110	10216454 P1TP129 1.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717111	10217510 P1TP130 0.50	SOIL	Chrysotile Amosite	Clumps of Chrysotile present with free Amosite fibres	Andrew Little
717112	10217501 P1TP130 1.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717113	10217685 P1TP131 0.50	SOIL	Chrysotile	Bundles Chrysotile fibres present	Andrew Little
717114	10217664 P1TP132 1.00	SOIL	NAD	none	Andrew Little
717115	10217653 P1TP134 0.50	SOIL	NAD	none	Andrew Little
717116	10217637 P1TP135 0.50	SOIL	NAD	none	Andrew Little
717117	10217512 P1TP136 1.00	SOIL	NAD	none	Andrew Little
717118	10217374 P1TP137 0.50	SOIL	NAD	none	Andrew Little
717119	10216479 P1TP138 0.50	SOIL	NAD	none	Andrew Little
717120	10217659 P1TP140 0.50	SOIL	NAD	none	Andrew Little
717121	10217662 P1TP141 0.30	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717122	10217835 P2TP12 0.20	SOIL	NAD	none	Andrew Little
717123	10217863 P2TP13 0.50	SOIL	NAD	none	Andrew Little
717124	10217852 P2TP14 0.30	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717125	10217402 P2TP15 0.30	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little

Summary of Asbestos Analysis

Soil Samples

Our Ref 14-18689-1
 Client Ref 141017-106
 Contract Title 141017-106

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
717126	10217588 P2TP16 0.30	SOIL	Chrysotile	Clumps Chrysotile fibres present	Andrew Little
717127	10217385 P2TP17 0.30	SOIL	Chrysotile	Bundles Chrysotile fibres present	Andrew Little
717128	10217579 P2TP18 0.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717129	10217414 P2TP19 0.20	SOIL	Chrysotile	Bundles Chrysotile fibres present	Andrew Little
717130	10217818 P2TP23 0.50	SOIL	Chrysotile	Bundles Chrysotile fibres present	Andrew Little
717131	10217811 P2TP23 1.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717132	10217884 P2TP28 0.20	SOIL	NAD	none	Andrew Little
717133	10217840 P2TP29 0.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717134	10217396 P2TP30 0.30	SOIL	NAD	none	Andrew Little
717135	10217591 P2TP31 0.30	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717136	10217584 P2TP32 0.30	SOIL	Amosite Chrysotile	Clumps of Amosite/Chrysotile present	Andrew Little
717137	10217394 P2TP33 0.30	SOIL	Chrysotile	Bundles Chrysotile fibres present	Andrew Little
717138	10217408 P2TP34 0.30	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little
717139	10217849 P2TP35 0.50	SOIL	NAD	none	Andrew Little
717140	10217593 P2TP44 0.50	SOIL	NAD	none	Andrew Little
717141	10217580 P2TP45 0.30	SOIL	NAD	none	Andrew Little
717142	10217815 P2TP6 0.50	SOIL	NAD	none	Andrew Little
717143	10217829 P2TP9 0.50	SOIL	Chrysotile	Free Chrysotile fibres present	Andrew Little

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. 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'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 14-18689-1
Client Ref 141017-106
Contract 141017-106

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
717097	10216436 0.50 SOIL	09/10/14	PT 500ml		
717098	10216444 1.50 SOIL	09/10/14	PT 500ml		
717099	10217509 1.50 SOIL	07/10/14	PT 500ml		
717100	10216419 0.50 SOIL	09/10/14	PT 500ml		
717101	10217741 0.50 SOIL	09/10/14	PT 500ml		
717102	10217504 1.50 SOIL	09/10/14	PT 500ml		
717103	10217641 0.20 SOIL	09/10/14	PT 500ml		
717104	10217658 1.00 SOIL	09/10/14	PT 500ml		
717105	10217661 0.50 SOIL	09/10/14	PT 500ml		
717106	10217506 1.50 SOIL	07/10/14	PT 500ml		
717107	10217367 1.00 SOIL	07/10/14	PT 500ml		
717108	10217365 0.50 SOIL	09/10/14	PT 500ml		
717109	10216474 0.50 SOIL	07/10/14	PT 500ml		
717110	10216454 1.50 SOIL	07/10/14	PT 500ml		
717111	10217510 0.50 SOIL	09/10/14	PT 500ml		
717112	10217501 1.50 SOIL	09/10/14	PT 500ml		
717113	10217685 0.50 SOIL	09/10/14	PT 500ml		
717114	10217664 1.00 SOIL	07/10/14	PT 500ml		
717115	10217653 0.50 SOIL	09/10/14	PT 500ml		
717116	10217637 0.50 SOIL	07/10/14	PT 500ml		
717117	10217512 1.00 SOIL	07/10/14	PT 500ml		
717118	10217374 0.50 SOIL	09/10/14	PT 500ml		
717119	10216479 0.50 SOIL	07/10/14	PT 500ml		
717120	10217659 0.50 SOIL	09/10/14	PT 500ml		
717121	10217662 0.30 SOIL	07/10/14	PT 500ml		
717122	10217835 0.20 SOIL	07/10/14	PT 500ml		
717123	10217863 0.50 SOIL	07/10/14	PT 500ml		
717124	10217852 0.30 SOIL	07/10/14	PT 500ml		
717125	10217402 0.30 SOIL	07/10/14	PT 500ml		
717126	10217588 0.30 SOIL	07/10/14	PT 500ml		
717127	10217385 0.30 SOIL	07/10/14	PT 500ml		
717128	10217579 0.50 SOIL	07/10/14	PT 500ml		
717129	10217414 0.20 SOIL	07/10/14	PT 500ml		
717130	10217818 0.50 SOIL	07/10/14	PT 500ml		
717131	10217811 1.50 SOIL	07/10/14	PT 500ml		
717132	10217884 0.20 SOIL	07/10/14	PT 500ml		
717133	10217840 0.50 SOIL	07/10/14	PT 500ml		
717134	10217396 0.30 SOIL	07/10/14	PT 500ml		
717135	10217591 0.30 SOIL	07/10/14	PT 500ml		
717136	10217584 0.30 SOIL	07/10/14	PT 500ml		
717137	10217394 0.30 SOIL	07/10/14	PT 500ml		
717138	10217408 0.30 SOIL	07/10/14	PT 500ml		
717139	10217849 0.50 SOIL	07/10/14	PT 500ml		
717140	10217593 0.50 SOIL	07/10/14	PT 500ml		
717141	10217580 0.30 SOIL	07/10/14	PT 500ml		
717142	10217815 0.50 SOIL	07/10/14	PT 500ml		
717143	10217829 0.50 SOIL	07/10/14	PT 500ml		

Information in Support of the Analytical Results

Our Ref 14-18689-1
Client Ref 141017-106
Contract 141017-106

Key: P-Plastic T-Tub

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time and/or inappropriate containers are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

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



SDG:	141017-106	Location:	Coed Darcy	Order Number:	CD0896
Job:	H_ATKINS_LDC-264	Customer:	Atkins Global Ltd	Report Number:	294102
Client Reference:	Phase 31	Attention:	Jack Lowrie	Superseded Report:	

Appendix General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICS and SVOC TICS.
2. Samples will be run in duplicate upon request, but an additional charge may be incurred.
3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALcontrol Laboratories reserve the right to charge for samples received and stored but not analysed.
4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.
5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.
6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible. The quantity of asbestos present is not determined unless specifically requested.
7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.
8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.
9. NDP -No determination possible due to insufficient/unsuitable sample.
10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals -total metals must be requested separately.
11. Results relate only to the items tested.
12. LODs for wet tests reported on a dry weight basis are not corrected for moisture content.
13. **Surrogate recoveries** -Most of our organic methods include surrogates, the recovery of which is monitored and reported. For EPH, MO, PAH, GRO and VOCs on soils the result is not surrogate corrected, but a percentage recovery is quoted. Acceptable limits for most organic methods are 70 -130 %.
14. **Product analyses** -Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.
15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).
16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).
17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.
18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.
19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.
21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.
22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill /made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

Sample Deviations

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Holding time exceeded before sample received
5	Samples exceeded holding time before preservation was performed
\$	Sampled on date not provided
♦	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to sampled on date
&	Sample Holding Time exceeded - Late arrival of instructions.

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than :
- Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



Atkins Global Ltd
Project Jonah site office
Llan Coed House
Suite 24
Coed Darcy
Llandarcy
SA10 6HJ

Attention: Jack Lowrie

CERTIFICATE OF ANALYSIS

Date: 19 November 2014
Customer: H_ATKINS_LDC
Sample Delivery Group (SDG): 141011-7
Your Reference: Phase 31
Location: Coed Darcy
Report No: 292413

We received 21 samples on Friday October 03, 2014 and 21 of these samples were scheduled for analysis which was completed on Wednesday November 19, 2014. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Approved By:

Sonia McWhan

Operations Manager





SDG:	141011-7	Location:	Coed Darcy	Order Number:	CD0926
Job:	H_ATKINS_LDC-264	Customer:	Atkins Global Ltd	Report Number:	292413
Client Reference:	Phase 31	Attention:	Jack Lowrie	Superseded Report:	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
10165151	P2TP77		0.50	
10165154	P2TP77		1.00	
10165153	P2TP78		0.50	
10165150	P2TP78		1.00	
10165149	P2TP79		0.50	
10165146	P2TP79		1.50	
10165145	P2TP80		0.50	
10165148	P2TP80		1.50	
10165133	P2TP83		0.50	
10165142	P2TP83		1.50	
10165132	P2TP84		0.50	
10165138	P2TP84		1.00	
10165137	P2TP85		0.50	
10165144	P2TP85		1.00	
10165134	P2TP86		0.50	
10165139	P2TP86		0.80	
10165140	P2TP86		1.50	
10165143	P2TP87		0.50	
10165141	P2TP87		1.50	
10165136	P2TP88		0.50	
10165135	P2TP88		1.00	

Only received samples which have had analysis scheduled will be shown on the following pages.



SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	10165144	P21P85					1.00		250g Amber Jar (AL)	
	10165137	P21P85					0.50		60g VOC (ALEE215)	
									400g Tub (ALEE214)	
	10165138	P21P84					1.00		250g Amber Jar (AL)	
Anions by Kone (soil)	All	NDPs: 0 Tests: 5							60g VOC (ALEE215)	
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 21							400g Tub (ALEE214)	
Asbestos Quantification - Full	All	NDPs: 0 Tests: 8							250g Amber Jar (AL)	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 21							400g Tub (ALEE214)	
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 21							60g VOC (ALEE215)	
GRO by GC-FID (S)	All	NDPs: 0 Tests: 21							400g Tub (ALEE214)	
Metals in solid samples by OES	All	NDPs: 0 Tests: 21							250g Amber Jar (AL)	
PAH by GCMS	All	NDPs: 0 Tests: 21							60g VOC (ALEE215)	
pH	All	NDPs: 0 Tests: 21							400g Tub (ALEE214)	
Sample description	All	NDPs: 0 Tests: 21							250g Amber Jar (AL)	
TPH CWG GC (S)	All	NDPs: 0 Tests: 21							60g VOC (ALEE215)	

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Order Number: CD0926
Report Number: 292413
Superseded Report:

SOLID

Results Legend

 Test

 No Determination Possible



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
-----------	----------	------	-----------------	--------	-------------	--------	------------	-------------	-------

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions	Inclusions 2
10165151	P2TP77	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Vegetation	Stones
10165154	P2TP77	1.00	Dark Brown	Sandy Loam	0.1 - 2 mm	Vegetation	Stones
10165150	P2TP78	1.00	Dark Brown	Loamy Sand	0.1 - 2 mm	Vegetation	Stones
10165153	P2TP78	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Vegetation	Stones
10165146	P2TP79	1.50	Beige	Sand	0.1 - 2 mm	Stones	None
10165149	P2TP79	0.50	Beige	Sandy Loam	0.1 - 2 mm	Crushed Brick	Stones
10165145	P2TP80	0.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10165148	P2TP80	1.50	Beige	Loamy Sand	0.1 - 2 mm	N/A	Stones
10165133	P2TP83	0.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10165142	P2TP83	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
10165132	P2TP84	0.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10165138	P2TP84	1.00	Dark Brown	Sandy Loam	0.1 - 2 mm	Vegetation	Stones
10165137	P2TP85	0.50	Beige	Sandy Loam	0.1 - 2 mm	Crushed Brick	Stones
10165144	P2TP85	1.00	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10165134	P2TP86	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10165139	P2TP86	0.80	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
10165140	P2TP86	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Vegetation	Stones
10165141	P2TP87	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
10165143	P2TP87	0.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10165135	P2TP88	1.00	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
10165136	P2TP88	0.50	Beige	Sandy Clay Loam	0.1 - 2 mm	Stones	None

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
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Order Number: CD0926
Report Number: 292413
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CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

Results Legend		Customer Sample R	P2TP87			P2TP88			P2TP88					
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	1.50	0.50	1.00								
M	mCERTS accredited.			Soil/Solid	Soil/Solid	Soil/Solid								
aq	Aqueous / settled sample.			-	-	-								
diss.filt	Dissolved / filtered sample.			-	-	-								
tot.unfilt	Total / unfiltered sample.			03/10/2014	03/10/2014	03/10/2014								
*	Subcontracted test.			141011-7	141011-7	141011-7								
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery			10165141	10165136	10165135								
(F)	Trigger breach confirmed													
1-5&*\$@	Sample deviation (see appendix)													
Component	LOD/Units	Method												
Moisture Content Ratio (% of as received sample)	%	PM024	7.5	8.8	9.6									
			\$	\$	\$									
pH	1 pH Units	TM133	8.36	8.2	8.15									
			\$ M	\$ M	\$ M									
Arsenic	<0.6 mg/kg	TM181	17	15.2	16.1									
			\$ M	\$ M	\$ M									
Cadmium	<0.02 mg/kg	TM181	0.217	0.0299	0.174									
			\$ M	\$ M	\$ M									
Chromium	<0.9 mg/kg	TM181	14.8	13.5	15									
			\$ M	\$ M	\$ M									
Copper	<1.4 mg/kg	TM181	38.8	32.3	37.1									
			\$ M	\$ M	\$ M									
Lead	<0.7 mg/kg	TM181	72.6	51.8	68.3									
			\$ M	\$ M	\$ M									
Mercury	<0.14 mg/kg	TM181	0.455	0.194	0.391									
			\$ M	\$ M	\$ M									
Nickel	<0.2 mg/kg	TM181	26.6	26.7	26.8									
			\$ M	\$ M	\$ M									
Selenium	<1 mg/kg	TM181	<1	<1	<1									
			\$ #	\$ #	\$ #									
Vanadium	<0.2 mg/kg	TM181	17.4	16.8	17.8									
			\$ #	\$ #	\$ #									
Zinc	<1.9 mg/kg	TM181	164	125	148									
			\$ M	\$ M	\$ M									
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243	0.173											
			\$ M											

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Order Number: CD0926
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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Results Legend			Customer Sample R	P2TP85	P2TP85	P2TP86	P2TP86	P2TP86	P2TP87
#	ISO17025 accredited.								
M	mCERTS accredited.								
aq	Aqueous / settled sample.								
diss.filt	Dissolved / filtered sample.								
tot.unfilt	Total / unfiltered sample.								
*	Subcontracted test.								
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery								
(F)	Trigger breach confirmed								
1-5&*&@	Sample deviation (see appendix)								
			Depth (m)	0.50	1.00	0.50	0.80	1.50	0.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	-	-	-	-	-	-
			Sample Time	-	-	-	-	-	-
			Date Received	03/10/2014	03/10/2014	03/10/2014	03/10/2014	03/10/2014	03/10/2014
			SDG Ref	141011-7	141011-7	141011-7	141011-7	141011-7	141011-7
			Lab Sample No.(s)	10165137	10165144	10165134	10165139	10165140	10165143
			AGS Reference						
Component	LOD/Units	Method							
Naphthalene-d8 % recovery**	%	TM218	96.9	95.9	98	94.9	100	111	
			\$	\$	\$	\$	\$	\$	
Acenaphthene-d10 % recovery**	%	TM218	94.1	97.3	97.4	94.6	99.8	106	
			\$	\$	\$	\$	\$	\$	
Phenanthrene-d10 % recovery**	%	TM218	90.2	97.1	96.9	94.3	97.3	103	
			\$	\$	\$	\$	\$	\$	
Chrysene-d12 % recovery**	%	TM218	95.1	95.8	90.8	85.2	106	104	
			\$	\$	\$	\$	\$	\$	
Perylene-d12 % recovery**	%	TM218	99.1	110	95.6	91.6	115	103	
			\$	\$	\$	\$	\$	\$	
Naphthalene	<9 µg/kg	TM218	104	85.8	70.8	79	121	69.6	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Acenaphthylene	<12 µg/kg	TM218	32	14.8	34.9	<12	22.1	21.6	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Acenaphthene	<8 µg/kg	TM218	27.5	26.7	24.9	94.7	58.7	30.8	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Fluorene	<10 µg/kg	TM218	93	66.6	62.5	111	88.4	65.4	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Phenanthrene	<15 µg/kg	TM218	294	299	331	317	561	276	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Anthracene	<16 µg/kg	TM218	82.1	74.5	83.4	225	149	58.5	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Fluoranthene	<17 µg/kg	TM218	268	326	366	343	833	258	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Pyrene	<15 µg/kg	TM218	393	466	424	556	845	332	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Benz(a)anthracene	<14 µg/kg	TM218	188	298	258	209	538	208	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Chrysene	<10 µg/kg	TM218	156	420	367	215	637	399	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Benzo(b)fluoranthene	<15 µg/kg	TM218	271	414	453	261	785	356	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Benzo(k)fluoranthene	<14 µg/kg	TM218	123	133	142	91.3	271	118	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Benzo(a)pyrene	<15 µg/kg	TM218	277	346	295	183	614	230	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	158	159	164	91.2	337	152	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	57.7	62	71.4	39.2	125	76.5	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
Benzo(g,h,i)perylene	<24 µg/kg	TM218	209	201	208	115	423	217	
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M	
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	2730	3390	3360	2930	6410	2870	
			\$	\$	\$	\$	\$	\$	

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Report Number: 292413
Superseded Report:

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CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P2TP77	P2TP77	P2TP78	P2TP78	P2TP79	P2TP79
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	1.00	0.50	1.00	0.50	1.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		-	-	-	-	-	-
tot.unfilt	Total / unfiltered sample.		-	-	-	-	-	-
*	Subcontracted test.		03/10/2014	03/10/2014	03/10/2014	03/10/2014	03/10/2014	03/10/2014
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		141011-7	141011-7	141011-7	141011-7	141011-7	141011-7
(F)	Trigger breach confirmed		10165151	10165154	10165153	10165150	10165149	10165146
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	68	69	73	83	77	86
			\$	\$	\$	\$	\$	\$
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	4550	2070	4940	6130	5680	3000
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Toluene	<2 µg/kg	TM089	12	17.3	17.4	14.2	12.1	<8
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Ethylbenzene	<3 µg/kg	TM089	<12	<12	16.3	14.2	23.1	13.1
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
			\$	\$	\$	\$	\$	\$
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	33.7	28.4	35.2	<24
			\$	\$	\$	\$	\$	\$
Aliphatics >C5-C6	<10 µg/kg	TM089	194	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aliphatics >C6-C8	<10 µg/kg	TM089	528	61.7	73.8	90.6	123	75.1
			\$	\$	\$	\$	\$	\$
Aliphatics >C8-C10	<10 µg/kg	TM089	509	210	610	720	886	404
			\$	\$	\$	\$	\$	\$
Aliphatics >C10-C12	<10 µg/kg	TM089	1760	961	2270	2860	2400	1320
			\$	\$	\$	\$	\$	\$
Aliphatics >C12-C16	<100 µg/kg	TM173	66400	103000	146000	159000	241000	76300
			\$	\$	\$	\$	\$	\$
Aliphatics >C16-C21	<100 µg/kg	TM173	93000	147000	176000	176000	439000	152000
			\$	\$	\$	\$	\$	\$
Aliphatics >C21-C35	<100 µg/kg	TM173	173000	285000	311000	304000	881000	239000
			\$	\$	\$	\$	\$	\$
Aliphatics >C35-C44	<100 µg/kg	TM173	55800	92400	90000	101000	146000	38600
			\$	\$	\$	\$	\$	\$
Total Aliphatics >C12-C44	<100 µg/kg	TM173	389000	627000	723000	740000	1710000	505000
			\$	\$	\$	\$	\$	\$
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aromatics >EC8-EC10	<10 µg/kg	TM089	362	152	431	501	620	288
			\$	\$	\$	\$	\$	\$
Aromatics >EC10-EC12	<10 µg/kg	TM089	1180	641	1510	1910	1600	881
			\$	\$	\$	\$	\$	\$
Aromatics >EC12-EC16	<100 µg/kg	TM173	4490	5990	8190	9270	41000	18800
			\$	\$	\$	\$	\$	\$
Aromatics >EC16-EC21	<100 µg/kg	TM173	16500	26500	38500	40700	186000	96800
			\$	\$	\$	\$	\$	\$
Aromatics >EC21-EC35	<100 µg/kg	TM173	68700	108000	130000	127000	467000	227000
			\$	\$	\$	\$	\$	\$
Aromatics >EC35-EC44	<100 µg/kg	TM173	32200	46800	52300	53600	124000	57500
			\$	\$	\$	\$	\$	\$
Aromatics >EC40-EC44	<100 µg/kg	TM173	13100	18200	20900	21400	43900	22200
			\$	\$	\$	\$	\$	\$
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	122000	187000	229000	231000	818000	400000
			\$	\$	\$	\$	\$	\$
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	515000	816000	957000	977000	2530000	908000
			\$	\$	\$	\$	\$	\$



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P2TP80	P2TP80	P2TP83	P2TP83	P2TP84	P2TP84
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	1.50	0.50	1.50	0.50	1.00
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		-	-	-	-	-	-
tot.unfilt	Total / unfiltered sample.		-	-	-	-	-	-
*	Subcontracted test.		03/10/2014	03/10/2014	03/10/2014	03/10/2014	03/10/2014	03/10/2014
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		141011-7	141011-7	141011-7	141011-7	141011-7	141011-7
(F)	Trigger breach confirmed		10165145	10165148	10165133	10165142	10165132	10165138
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	67	74	67	78	73	69
			\$	\$	\$	\$	\$	\$
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	5400	3460	2810	2840	1260	3850
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Toluene	<2 µg/kg	TM089	16.4	14.3	20.9	<8	8.74	17.2
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Ethylbenzene	<3 µg/kg	TM089	25.1	<12	<12	<12	<12	<12
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
			\$	\$	\$	\$	\$	\$
sum of detected BTEX by GC	<24 µg/kg	TM089	41.5	<24	<24	<24	<24	<24
			\$	\$	\$	\$	\$	\$
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aliphatics >C6-C8	<10 µg/kg	TM089	92.8	110	80.3	72.5	60.1	70.1
			\$	\$	\$	\$	\$	\$
Aliphatics >C8-C10	<10 µg/kg	TM089	822	409	340	315	218	385
			\$	\$	\$	\$	\$	\$
Aliphatics >C10-C12	<10 µg/kg	TM089	2320	1570	1270	1320	481	1850
			\$	\$	\$	\$	\$	\$
Aliphatics >C12-C16	<100 µg/kg	TM173	123000	106000	133000	176000	85700	205000
			\$	\$	\$	\$	\$	\$
Aliphatics >C16-C21	<100 µg/kg	TM173	180000	169000	214000	243000	110000	289000
			\$	\$	\$	\$	\$	\$
Aliphatics >C21-C35	<100 µg/kg	TM173	335000	297000	468000	424000	206000	390000
			\$	\$	\$	\$	\$	\$
Aliphatics >C35-C44	<100 µg/kg	TM173	87000	80200	100000	93100	64200	96700
			\$	\$	\$	\$	\$	\$
Total Aliphatics >C12-C44	<100 µg/kg	TM173	725000	652000	915000	936000	466000	981000
			\$	\$	\$	\$	\$	\$
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aromatics >EC8-EC10	<10 µg/kg	TM089	580	282	233	222	148	273
			\$	\$	\$	\$	\$	\$
Aromatics >EC10-EC12	<10 µg/kg	TM089	1550	1040	847	880	321	1230
			\$	\$	\$	\$	\$	\$
Aromatics >EC12-EC16	<100 µg/kg	TM173	8310	20500	17400	28600	9150	9990
			\$	\$	\$	\$	\$	\$
Aromatics >EC16-EC21	<100 µg/kg	TM173	39200	84900	82500	113000	38900	57600
			\$	\$	\$	\$	\$	\$
Aromatics >EC21-EC35	<100 µg/kg	TM173	144000	235000	243000	275000	115000	156000
			\$	\$	\$	\$	\$	\$
Aromatics >EC35-EC44	<100 µg/kg	TM173	48000	94400	62700	71100	32900	51100
			\$	\$	\$	\$	\$	\$
Aromatics >EC40-EC44	<100 µg/kg	TM173	17200	41000	20800	24000	10700	19700
			\$	\$	\$	\$	\$	\$
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	239000	435000	406000	488000	196000	274000
			\$	\$	\$	\$	\$	\$
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	970000	1090000	1320000	1430000	664000	1260000
			\$	\$	\$	\$	\$	\$



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P2TP85	P2TP85	P2TP86	P2TP86	P2TP86	P2TP87
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	1.00	0.50	0.80	1.50	0.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		-	-	-	-	-	-
tot.unfilt	Total / unfiltered sample.		-	-	-	-	-	-
*	Subcontracted test.		03/10/2014	03/10/2014	03/10/2014	03/10/2014	03/10/2014	03/10/2014
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		141011-7	141011-7	141011-7	141011-7	141011-7	141011-7
(F)	Trigger breach confirmed		10165137	10165144	10165134	10165139	10165140	10165143
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	68	70	72	72	78	79
			\$	\$	\$	\$	\$	\$
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	2170	3740	2660	5410	7970	892
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Toluene	<2 µg/kg	TM089	<8	13	15.1	<8	13	10.8
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	17.3	14.1	<12
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
			\$ M	\$ M	\$ M	\$ M	\$ M	\$ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
			\$	\$	\$	\$	\$	\$
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	<24	27.1	<24
			\$	\$	\$	\$	\$	\$
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aliphatics >C6-C8	<10 µg/kg	TM089	63.8	66.2	80.7	85.2	78.9	57.3
			\$	\$	\$	\$	\$	\$
Aliphatics >C8-C10	<10 µg/kg	TM089	222	362	401	741	897	118
			\$	\$	\$	\$	\$	\$
Aliphatics >C10-C12	<10 µg/kg	TM089	1020	1810	1120	2420	3810	366
			\$	\$	\$	\$	\$	\$
Aliphatics >C12-C16	<100 µg/kg	TM173	159000	180000	88400	336000	192000	71100
			\$	\$	\$	\$	\$	\$
Aliphatics >C16-C21	<100 µg/kg	TM173	239000	217000	109000	863000	224000	109000
			\$	\$	\$	\$	\$	\$
Aliphatics >C21-C35	<100 µg/kg	TM173	391000	402000	228000	1890000	382000	248000
			\$	\$	\$	\$	\$	\$
Aliphatics >C35-C44	<100 µg/kg	TM173	72400	121000	72900	279000	89700	80000
			\$	\$	\$	\$	\$	\$
Total Aliphatics >C12-C44	<100 µg/kg	TM173	861000	919000	498000	3370000	888000	508000
			\$	\$	\$	\$	\$	\$
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			\$	\$	\$	\$	\$	\$
Aromatics >EC8-EC10	<10 µg/kg	TM089	160	252	273	519	617	80.1
			\$	\$	\$	\$	\$	\$
Aromatics >EC10-EC12	<10 µg/kg	TM089	679	1210	744	1610	2540	243
			\$	\$	\$	\$	\$	\$
Aromatics >EC12-EC16	<100 µg/kg	TM173	22800	24400	13500	35700	11500	9030
			\$	\$	\$	\$	\$	\$
Aromatics >EC16-EC21	<100 µg/kg	TM173	112000	87800	46900	255000	56500	39100
			\$	\$	\$	\$	\$	\$
Aromatics >EC21-EC35	<100 µg/kg	TM173	308000	225000	136000	510000	140000	135000
			\$	\$	\$	\$	\$	\$
Aromatics >EC35-EC44	<100 µg/kg	TM173	88100	65800	44200	128000	49700	44200
			\$	\$	\$	\$	\$	\$
Aromatics >EC40-EC44	<100 µg/kg	TM173	31300	22600	15100	47700	19900	14900
			\$	\$	\$	\$	\$	\$
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	531000	403000	241000	928000	257000	227000
			\$	\$	\$	\$	\$	\$
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1390000	1330000	741000	4300000	1150000	735000
			\$	\$	\$	\$	\$	\$



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	P2TP87			P2TP88			P2TP88		
#	ISO17025 accredited.		1.50			0.50			1.00		
M	mCERTS accredited.	Depth (m)	Soil/Solid			Soil/Solid			Soil/Solid		
aq	Aqueous / settled sample.		-			-			-		
diss.filt	Dissolved / filtered sample.	Sample Type	-			-			-		
tot.unfilt	Total / unfiltered sample.		-			-			-		
*	Subcontracted test.	Date Sampled	-			-			-		
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		03/10/2014			03/10/2014			03/10/2014		
(F)	Trigger breach confirmed	Sample Time	141011-7			141011-7			141011-7		
1-5&*\$@	Sample deviation (see appendix)		10165141			10165136			10165135		
Component		LOD/Units	Method			Method			Method		
GRO Surrogate % recovery**		%	TM089			TM089			TM089		
GRO TOT (Moisture Corrected)		<44 µg/kg	TM089			TM089			TM089		
Methyl tertiary butyl ether (MTBE)		<5 µg/kg	TM089			TM089			TM089		
Benzene		<10 µg/kg	TM089			TM089			TM089		
Toluene		<2 µg/kg	TM089			TM089			TM089		
Ethylbenzene		<3 µg/kg	TM089			TM089			TM089		
m,p-Xylene		<6 µg/kg	TM089			TM089			TM089		
o-Xylene		<3 µg/kg	TM089			TM089			TM089		
sum of detected mpo xylene by GC		<9 µg/kg	TM089			TM089			TM089		
sum of detected BTEX by GC		<24 µg/kg	TM089			TM089			TM089		
Aliphatics >C5-C6		<10 µg/kg	TM089			TM089			TM089		
Aliphatics >C6-C8		<10 µg/kg	TM089			TM089			TM089		
Aliphatics >C8-C10		<10 µg/kg	TM089			TM089			TM089		
Aliphatics >C10-C12		<10 µg/kg	TM089			TM089			TM089		
Aliphatics >C12-C16		<100 µg/kg	TM173			TM173			TM173		
Aliphatics >C16-C21		<100 µg/kg	TM173			TM173			TM173		
Aliphatics >C21-C35		<100 µg/kg	TM173			TM173			TM173		
Aliphatics >C35-C44		<100 µg/kg	TM173			TM173			TM173		
Total Aliphatics >C12-C44		<100 µg/kg	TM173			TM173			TM173		
Aromatics >EC5-EC7		<10 µg/kg	TM089			TM089			TM089		
Aromatics >EC7-EC8		<10 µg/kg	TM089			TM089			TM089		
Aromatics >EC8-EC10		<10 µg/kg	TM089			TM089			TM089		
Aromatics >EC10-EC12		<10 µg/kg	TM089			TM089			TM089		
Aromatics >EC12-EC16		<100 µg/kg	TM173			TM173			TM173		
Aromatics >EC16-EC21		<100 µg/kg	TM173			TM173			TM173		
Aromatics >EC21-EC35		<100 µg/kg	TM173			TM173			TM173		
Aromatics >EC35-EC44		<100 µg/kg	TM173			TM173			TM173		
Aromatics >EC40-EC44		<100 µg/kg	TM173			TM173			TM173		
Total Aromatics >EC12-EC44		<100 µg/kg	TM173			TM173			TM173		
Total Aliphatics & Aromatics >C5-C44		<100 µg/kg	TM173			TM173			TM173		



SDG:	141011-7	Location:	Coed Darcy	Order Number:	CD0926
Job:	H_ATKINS_LDC-264	Customer:	Atkins Global Ltd	Report Number:	292413
Client Reference:	Phase 31	Attention:	Jack Lowrie	Superseded Report:	

Asbestos Identification - Solid Samples

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP77 0.50 SOLID 17/10/2014 10:05:28 141011-7 10165151 TM048	24/10/14	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP77 0.50 SOLID 17/10/2014 09:57:42 141011-7 10165154 TM048	24/10/14	Paul Fenney	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP78 1.00 SOLID 17/10/2014 09:55:23 141011-7 10165153 TM048	24/10/14	Paul Fenney	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP78 1.00 SOLID 17/10/2014 09:14:54 141011-7 10165150 TM048	24/10/14	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP79 0.50 SOLID 17/10/2014 03:38:25 141011-7 10165149 TM048	24/10/14	Paul Fenney	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP79 1.50 SOLID 17/10/2014 03:29:53 141011-7 10165146 TM048	24/10/14	Paul Fenney	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP80 0.50 SOLID 17/10/2014 20:35:41 141011-7 10165145 TM048	24/10/14	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP80 1.50 SOLID 17/10/2014 03:27:42 141011-7 10165148 TM048	24/10/14	Paul Fenney	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP83 0.50 SOLID 17/10/2014 20:43:43 141011-7 10165133 TM048	24/10/14	Lauren Sargeant	Soil containing ACM debris	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP83 1.50 SOLID 17/10/2014 13:44:48 141011-7 10165142 TM048	24/10/14	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP84 0.50 SOLID 17/10/2014 20:39:53 141011-7 10165132 TM048	24/10/14	Paul Fenney	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP84 1.00 SOLID 17/10/2014 03:47:00 141011-7 10165138 TM048	24/10/14	Paul Fenney	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP85 0.50 SOLID 17/10/2014 03:32:36 141011-7 10165137 TM048	24/10/14	Paul Fenney	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP85 1.00 SOLID 17/10/2014 20:33:42 141011-7 10165144 TM048	24/10/14	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP86 1.00 SOLID 17/10/2014 20:41:44 141011-7 10165134 TM048	24/10/14	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP86 0.80 SOLID 17/10/2014 10:07:45 141011-7 10165139 TM048	24/10/14	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP86 1.50 SOLID 17/10/2014 10:00:23 141011-7 10165140 TM048	24/10/14	Paul Fenney	Loose fibres in soil	Trace (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP87 0.50 SOLID 17/10/2014 20:37:55 141011-7 10165143 TM048	24/10/14	Chris Swindells	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP87 1.50 SOLID 17/10/2014 13:47:36 141011-7 10165141 TM048	24/10/14	Chris Swindells	Loose fibres in soil	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP88 0.50 SOLID 17/10/2014 03:35:12 141011-7 10165136 TM048	24/10/14	Paul Fenney	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP88 1.00 SOLID 17/10/2014 03:25:06 141011-7 10165135 TM048	24/10/14	Paul Fenney	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

Asbestos Quantification - Full

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP77 1.00 SOLID 03/11/2014 17:12:44 141011-7 10165154 TM 304	Chrysotile (Loose fibres in soil.) (#)	N/C	0.0015 (#)	<0.001 (#)	0.0019 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP80 0.50 SOLID 03/11/2014 17:02:50 141011-7 10165145 TM 304	Amosite(Loose fibres in soil.) (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP83 0.50 SOLID 03/11/2014 16:53:05 141011-7 10165133 TM 304	Chrysotile (Loose fibres in soil.) (#)	N/C	0.0051 (#)	<0.001 (#)	0.0057 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP83 1.50 SOLID 03/11/2014 17:03:24 141011-7 10165142 TM 304	None (#)	N/C	0.0015 (#)	<0.001 (#)	0.0021 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP84 1.00 SOLID 03/11/2014 19:09:59 141011-7 10165138 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP86 0.50 SOLID 03/11/2014 16:56:19 141011-7 10165134 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP87 1.50 SOLID 03/11/2014 17:06:46 141011-7 10165141 TM 304	None (#)	N/C	0.0019 (#)	0.0010 (#)	0.0029 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP88 1.00 SOLID 03/11/2014 19:06:30 141011-7 10165135 TM 304	Chrysotile(Loose fibres in soil.) (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)



SDG:	141011-7	Location:	Coed Darcy	Order Number:	CD0926
Job:	H_ATKINS_LDC-264	Customer:	Atkins Global Ltd	Report Number:	292413
Client Reference:	Phase 31	Attention:	Jack Lowrie	Superseded Report:	

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
ASB_PREP				
PM001		Preparation of Samples for Metals Analysis		
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material		
TM 304				
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM132	In - house Method	ELTRA CS800 Operators Guide		
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter		
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID		
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES		
TM218	Microwave extraction – EPA method 3546	Microwave extraction - EPA method 3546		
TM243		Mixed Anions In Soils By Kone		

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



CERTIFICATE OF ANALYSIS

SDG: 141011-7
Job: H_ATKINS_LDC-264
Client Reference: Phase 31

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0926
Report Number: 292413
Superseded Report:

Test Completion Dates

Lab Sample No(s)	10165151	10165154	10165150	10165153	10165146	10165149	10165145	10165148	10165133	10165142
Customer Sample Ref.	P2TP77	P2TP77	P2TP78	P2TP78	P2TP79	P2TP79	P2TP80	P2TP80	P2TP83	P2TP83
AGS Ref.										
Depth	0.50	1.00	1.00	0.50	1.50	0.50	0.50	1.50	0.50	1.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)		17-Nov-2014							18-Nov-2014	
Asbestos ID in Solid Samples	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014
Asbestos Quantification - Full		19-Nov-2014					19-Nov-2014		18-Nov-2014	18-Nov-2014
EPH CWG (Aliphatic) GC (S)	21-Oct-2014	21-Oct-2014	21-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
EPH CWG (Aromatic) GC (S)	21-Oct-2014	21-Oct-2014	21-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
GRO by GC-FID (S)	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014
Metals in solid samples by OES	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	24-Oct-2014
PAH by GCMS	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	26-Oct-2014	27-Oct-2014	27-Oct-2014
pH	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
Sample description	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014
TPH CWG GC (S)	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014

Lab Sample No(s)	10165132	10165138	10165137	10165144	10165134	10165139	10165140	10165141	10165143	10165135
Customer Sample Ref.	P2TP84	P2TP84	P2TP85	P2TP85	P2TP86	P2TP86	P2TP86	P2TP87	P2TP87	P2TP88
AGS Ref.										
Depth	0.50	1.00	0.50	1.00	0.50	0.80	1.50	1.50	0.50	1.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)		17-Nov-2014			17-Nov-2014			18-Nov-2014		
Asbestos ID in Solid Samples	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014
Asbestos Quantification - Full		19-Nov-2014			18-Nov-2014			19-Nov-2014		19-Nov-2014
EPH CWG (Aliphatic) GC (S)	22-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	21-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
EPH CWG (Aromatic) GC (S)	22-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	21-Oct-2014	21-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
GRO by GC-FID (S)	26-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	26-Oct-2014	27-Oct-2014
Metals in solid samples by OES	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	25-Oct-2014	24-Oct-2014	25-Oct-2014	25-Oct-2014
PAH by GCMS	27-Oct-2014	27-Oct-2014	26-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014
pH	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014	22-Oct-2014
Sample description	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014	17-Oct-2014
Total Organic Carbon					24-Oct-2014		24-Oct-2014			
TPH CWG GC (S)	26-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	27-Oct-2014	26-Oct-2014	27-Oct-2014

Lab Sample No(s)	10165136
Customer Sample Ref.	P2TP88
AGS Ref.	
Depth	0.50
Type	SOLID
Asbestos ID in Solid Samples	27-Oct-2014
EPH CWG (Aliphatic) GC (S)	22-Oct-2014
EPH CWG (Aromatic) GC (S)	22-Oct-2014
GRO by GC-FID (S)	27-Oct-2014
Metals in solid samples by OES	25-Oct-2014
PAH by GCMS	27-Oct-2014
pH	22-Oct-2014
Sample description	17-Oct-2014
TPH CWG GC (S)	27-Oct-2014



SDG:	141011-7	Location:	Coed Darcy	Order Number:	CD0926
Job:	H_ATKINS_LDC-264	Customer:	Atkins Global Ltd	Report Number:	292413
Client Reference:	Phase 31	Attention:	Jack Lowrie	Superseded Report:	

Appendix General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICS and SVOC TICS.
2. Samples will be run in duplicate upon request, but an additional charge may be incurred.
3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALcontrol Laboratories reserve the right to charge for samples received and stored but not analysed.
4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.
5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.
6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible. The quantity of asbestos present is not determined unless specifically requested.
7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.
8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.
9. NDP -No determination possible due to insufficient/unsuitable sample.
10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals -total metals must be requested separately.
11. Results relate only to the items tested.
12. LODs for wet tests reported on a dry weight basis are not corrected for moisture content.
13. **Surrogate recoveries** -Most of our organic methods include surrogates, the recovery of which is monitored and reported. For EPH, MO, PAH, GRO and VOCs on soils the result is not surrogate corrected, but a percentage recovery is quoted. Acceptable limits for most organic methods are 70 -130 %.
14. **Product analyses** -Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.
15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).
16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).
17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.
18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.
19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.
21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.
22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill /made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

Sample Deviations

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Holding time exceeded before sample received
5	Samples exceeded holding time before preservation was performed
\$	Sampled on date not provided
♦	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to sampled on date
&	Sample Holding Time exceeded - Late arrival of instructions.

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than :
- Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



Atkins Global Ltd
Project Jonah site office
Llan Coed House
Suite 24
Coed Darcy
Llandarcy
SA10 6HJ

Attention: Jack Lowrie

CERTIFICATE OF ANALYSIS

Date: 17 December 2014
Customer: H_ATKINS_LDC
Sample Delivery Group (SDG): 141105-58
Your Reference: Site Wide Trial Pitting
Location: Coed Darcy
Report No: 296015

We received 14 samples on Wednesday November 05, 2014 and 14 of these samples were scheduled for analysis which was completed on Wednesday December 17, 2014. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Approved By:

Sonia McWhan

Operations Manager





SDG:	141105-58	Location:	Coed Darcy	Order Number:	CD0940
Job:	H_ATKINS_LDC-224	Customer:	Atkins Global Ltd	Report Number:	296015
Client Reference:	Site Wide Trial Pitting	Attention:	Jack Lowrie	Superseded Report:	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
10320167	P1TP001		0.50	03/11/2014
10320171	P1TP001		1.30	03/11/2014
10320177	P1TP021		0.50	03/11/2014
10320184	P1TP021		1.00	03/11/2014
10320118	P1TP110		0.50	03/11/2014
10320153	P1TP110		1.50	03/11/2014
10320158	P1TP111		0.50	03/11/2014
10320162	P1TP111		1.10	03/11/2014
10329620	P2TP001		0.50	04/11/2014
10320190	P2TP005		0.50	03/11/2014
10320126	P2TP005		1.00	03/11/2014
10320131	P2TP008		0.50	03/11/2014
10320137	P2TP008		1.50	03/11/2014
10320149	P2TP008		2.90	03/11/2014

Only received samples which have had analysis scheduled will be shown on the following pages.

Order Number: CD0940
Report Number: 296015
Superseded Report:

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SDG:	141105-58	Location:	Coed Darcy	Order Number:	CD0940
Job:	H_ATKINS_LDC-224	Customer:	Atkins Global Ltd	Report Number:	296015
Client Reference:	Site Wide Trial Pitting	Attention:	Jack Lowrie	Superseded Report:	

SOLID
Results Legend

- X

Test
- N

No Determination Possible

10320149	Lab Sample No(s)	
P2TP008	Customer Sample Reference	
	AGS Reference	
2.90	Depth (m)	
60g VOC (ALE215) 400g Tub (ALE214)	Container	
	All	NDPs: 0 Tests: 14
X		
	All	NDPs: 0 Tests: 14
X		



CERTIFICATE OF ANALYSIS

SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions	Inclusions 2
10320167	P1TP001	0.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
10320171	P1TP001	1.30	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
10320177	P1TP021	0.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
10320184	P1TP021	1.00	Dark Brown	Sand	0.1 - 2 mm	Stones	None
10320118	P1TP110	0.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
10320153	P1TP110	1.50	Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	None
10320158	P1TP111	0.50	Dark Brown	Stone/Soil	2 - 10 mm	None	None
10320162	P1TP111	1.10	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	Brick
10329620	P2TP001	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10320126	P2TP005	1.00	Beige	Sand	0.1 - 2 mm	Stones	None
10320190	P2TP005	0.50	Beige	Sandy Silt Loam	0.1 - 2 mm	Stones	None
10320131	P2TP008	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10320137	P2TP008	1.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
10320149	P2TP008	2.90	Dark Brown	Stone/Soil	2 - 10 mm	Stones	None

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Order Number: CD0940
Report Number: 296015
Superseded Report:

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Order Number: CD0940
Report Number: 296015
Superseded Report:

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CERTIFICATE OF ANALYSIS

SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

Results Legend		Customer Sample R	P2TP008	P2TP008				
#	ISO17025 accredited.							
M	mCERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&*\$@	Sample deviation (see appendix)							
		Depth (m)	1.50	2.90				
		Sample Type	Soil/Solid	Soil/Solid				
		Date Sampled	03/11/2014	03/11/2014				
		Sample Time	.	.				
		Date Received	05/11/2014	05/11/2014				
		SDG Ref	141105-58	141105-58				
		Lab Sample No.(s)	10320137	10320149				
		AGS Reference						
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	14	11				
pH	1 pH Units	TM133	8.25 M	10.3 #				
Arsenic	<0.6 mg/kg	TM181	21.8 M	23.9 #				
Cadmium	<0.02 mg/kg	TM181	0.0345 M	0.365 #				
Chromium	<0.9 mg/kg	TM181	18 M	16.1 #				
Copper	<1.4 mg/kg	TM181	63.5 M	67.7 #				
Lead	<0.7 mg/kg	TM181	71.4 M	294 #				
Mercury	<0.14 mg/kg	TM181	0.347 & M	0.462 & #				
Nickel	<0.2 mg/kg	TM181	26.9 M	23.6 #				
Selenium	<1 mg/kg	TM181	1.21 #	<1 #				
Vanadium	<0.2 mg/kg	TM181	19.8 #	15.6 #				
Zinc	<1.9 mg/kg	TM181	218 M	624 #				
Water Soluble Sulphate as SO4 2:1 Extract	<0.004 g/l	TM243		0.192 #				

Order Number: CD0940
Report Number: 296015
Superseded Report:

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Order Number: CD0940
Report Number: 296015
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Order Number: CD0940
Report Number: 296015
Superseded Report:

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CERTIFICATE OF ANALYSIS

SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P1TP001	P1TP001	P1TP021	P1TP021	P1TP110	P1TP110
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	1.30	0.50	1.00	0.50	1.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		03/11/2014	03/11/2014	03/11/2014	03/11/2014	03/11/2014	03/11/2014
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		05/11/2014	05/11/2014	05/11/2014	05/11/2014	05/11/2014	05/11/2014
(F)	Trigger breach confirmed		141105-58	141105-58	141105-58	141105-58	141105-58	141105-58
1-5&*\$@	Sample deviation (see appendix)		10320167	10320171	10320177	10320184	10320118	10320153
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	88	100	82	73	104	98
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176	7880	<176	6590	263	29100
			M	M	M	M	M	M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	28.6
			M	M	M	M	M	M
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
			M	M	M	M	M	M
Toluene	<2 µg/kg	TM089	13.1	279	8.96	26.5	21.7	<8
			M	M	M	M	M	M
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
			M	M	M	M	M	M
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24
			M	M	M	M	M	M
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
			M	M	M	M	M	M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	279	<24	26.5	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	779	<40	64.7	<40	628
Aliphatics >C8-C10	<10 µg/kg	TM089	<40	1690	<40	399	52	2910
Aliphatics >C10-C12	<10 µg/kg	TM089	<40	2370	<40	3480	49.8	14100
Aliphatics >C12-C16	<100 µg/kg	TM173	3580	52700	6470	27000	14300	2030000
Aliphatics >C16-C21	<100 µg/kg	TM173	11900	39900	17000	37500	50100	2480000
Aliphatics >C21-C35	<100 µg/kg	TM173	43500	159000	65500	251000	133000	4110000
Aliphatics >C35-C44	<100 µg/kg	TM173	15500	42000	41100	125000	36700	470000
Total Aliphatics >C12-C44	<100 µg/kg	TM173	74500	294000	130000	440000	234000	9090000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	279	<40	<40	<40	<40
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40	1130	<40	268	62.8	1940
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40	1580	<40	2320	<40	9420
Aromatics >EC12-EC16	<100 µg/kg	TM173	1410	9300	2140	10500	5130	352000
Aromatics >EC16-EC21	<100 µg/kg	TM173	5900	15400	9710	23400	22800	808000
Aromatics >EC21-EC35	<100 µg/kg	TM173	24500	63100	47100	108000	61000	1080000
Aromatics >EC35-EC44	<100 µg/kg	TM173	12000	22800	41500	46300	21000	185000
Aromatics >EC40-EC44	<100 µg/kg	TM173	5030	8190	18300	16900	8390	40300
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	43800	111000	100000	189000	110000	2420000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	118000	412000	230000	636000	344000	11500000



CERTIFICATE OF ANALYSIS

SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		P1TP111	P1TP111	P2TP001	P2TP005	P2TP005	P2TP008
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	1.10	0.50	0.50	1.00	0.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		03/11/2014	03/11/2014	04/11/2014	03/11/2014	03/11/2014	03/11/2014
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.		05/11/2014	05/11/2014	05/11/2014	05/11/2014	05/11/2014	05/11/2014
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		141105-58	141105-58	141105-58	141105-58	141105-58	141105-58
(F)	Trigger breach confirmed		10320158	10320162	10329620	10320190	10320126	10320131
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	109	95	77	92	77	108
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	876	<176	416	<176	282	<176
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Toluene	<2 µg/kg	TM089	24.2	<8	28.9	<8	8.46	<8
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
m,p-Xylene	<6 µg/kg	TM089	<24	<24	33.3	<24	<24	<24
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	33.3	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	24.2	<24	62.2	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aliphatics >C6-C8	<10 µg/kg	TM089	124	<40	51.1	<40	<40	<40
Aliphatics >C8-C10	<10 µg/kg	TM089	171	<40	55.5	<40	<40	<40
Aliphatics >C10-C12	<10 µg/kg	TM089	221	<40	92.1	<40	111	<40
Aliphatics >C12-C16	<100 µg/kg	TM173	7700	11700	4430	4520	26900	2600
Aliphatics >C16-C21	<100 µg/kg	TM173	22400	31500	15500	30100	33000	10100
Aliphatics >C21-C35	<100 µg/kg	TM173	97700	66200	33000	72300	46600	25400
Aliphatics >C35-C44	<100 µg/kg	TM173	25000	14500	7280	20700	14900	11900
Total Aliphatics >C12-C44	<100 µg/kg	TM173	153000	124000	60200	128000	121000	50000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC8-EC10	<10 µg/kg	TM089	150	<40	87.7	<40	<40	<40
Aromatics >EC10-EC12	<10 µg/kg	TM089	147	<40	61.1	<40	74	<40
Aromatics >EC12-EC16	<100 µg/kg	TM173	3560	2070	1660	367	1670	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173	13100	13700	8070	10800	9610	2510
Aromatics >EC21-EC35	<100 µg/kg	TM173	54200	32900	21400	49900	33300	15800
Aromatics >EC35-EC44	<100 µg/kg	TM173	18900	9340	9030	20000	13300	9700
Aromatics >EC40-EC44	<100 µg/kg	TM173	7510	4030	3820	8000	5220	3940
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	89800	58000	40200	81100	57800	28000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	243000	182000	101000	209000	180000	78000



CERTIFICATE OF ANALYSIS

SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	P2TP008		P2TP008			
#	ISO17025 accredited.		1.50					
M	mCERTS accredited.		Soil/Solid					
aq	Aqueous / settled sample.		03/11/2014					
diss.filt	Dissolved / filtered sample.		05/11/2014					
tot.unfilt	Total / unfiltered sample.		141105-58					
*	Subcontracted test.		10320137					
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery							
(F)	Trigger breach confirmed							
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	103		84			
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	1150		411			
			M		#			
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20		<20			
			M		#			
Benzene	<10 µg/kg	TM089	<40		<40			
			M		#			
Toluene	<2 µg/kg	TM089	<8		<8			
			M		#			
Ethylbenzene	<3 µg/kg	TM089	<12		<12			
			M		#			
m,p-Xylene	<6 µg/kg	TM089	<24		<24			
			M		#			
o-Xylene	<3 µg/kg	TM089	<12		<12			
			M		#			
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9		<9			
sum of detected BTEX by GC	<24 µg/kg	TM089	<24		<24			
Aliphatics >C5-C6	<10 µg/kg	TM089	<40		<40			
Aliphatics >C6-C8	<10 µg/kg	TM089	59.2		41.4			
Aliphatics >C8-C10	<10 µg/kg	TM089	313		78.4			
Aliphatics >C10-C12	<10 µg/kg	TM089	326		119			
Aliphatics >C12-C16	<100 µg/kg	TM173	16000		20400			
Aliphatics >C16-C21	<100 µg/kg	TM173	17900		61000			
Aliphatics >C21-C35	<100 µg/kg	TM173	31200		208000			
Aliphatics >C35-C44	<100 µg/kg	TM173	13800		135000			
Total Aliphatics >C12-C44	<100 µg/kg	TM173	78900		424000			
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40		<40			
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40		<40			
Aromatics >EC8-EC10	<10 µg/kg	TM089	209		70.6			
Aromatics >EC10-EC12	<10 µg/kg	TM089	217		79.5			
Aromatics >EC12-EC16	<100 µg/kg	TM173	1840		5100			
Aromatics >EC16-EC21	<100 µg/kg	TM173	6330		26400			
Aromatics >EC21-EC35	<100 µg/kg	TM173	23000		165000			
Aromatics >EC35-EC44	<100 µg/kg	TM173	17000		188000			
Aromatics >EC40-EC44	<100 µg/kg	TM173	7830		91700			
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	48200		384000			
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	128000		808000			



SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

Asbestos Identification - Solid Samples

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP001 0.50 SOLID 03/11/2014 00:00:00 06/11/2014 08:07:41 141105-58 10320167 TM048	14/11/14	Simon Postlewhite	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP021 0.50 SOLID 03/11/2014 00:00:00 05/11/2014 19:24:53 141105-58 10320177 TM048	14/11/14	Kevin Hughes	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP021 1.00 SOLID 03/11/2014 00:00:00 05/11/2014 19:13:22 141105-58 10320184 TM048	14/11/14	Simon Postlewhite	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP110 0.50 SOLID 03/11/2014 00:00:00 06/11/2014 08:04:20 141105-58 10320118 TM048	14/11/14	Simon Postlewhite	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP111 0.50 SOLID 03/11/2014 00:00:00 05/11/2014 19:21:46 141105-58 10320158 TM048	14/11/14	Simon Postlewhite	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP001 0.50 SOLID 04/11/2014 00:00:00 29/11/2014 09:31:53 141105-58 10329620 TM048	5/12/14	Kevin Gill	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP005 0.50 SOLID 03/11/2014 00:00:00 05/11/2014 19:28:02 141105-58 10320190 TM048	14/11/14	Simon Postlewhite	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP005 1.00 SOLID 03/11/2014 00:00:00 05/11/2014 19:19:15 141105-58 10320126 TM048	14/11/14	Chris Swindells	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP008 0.50 SOLID 03/11/2014 00:00:00 05/11/2014 19:17:01 141105-58 10320131 TM048	17/11/14	Paul Fenney	Loose fibres in soil	Not Detected (#)	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

Asbestos Quantification - Full

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP021 0.50 SOLID 03/11/2014 00:00:00 01/12/2014 08:03:30 141105-58 10320177 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P1TP111 0.50 SOLID 03/11/2014 00:00:00 01/12/2014 08:09:52 141105-58 10320158 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP005 1.00 SOLID 03/11/2014 00:00:00 01/12/2014 08:05:23 141105-58 10320126 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	P2TP008 0.50 SOLID 03/11/2014 00:00:00 01/12/2014 08:07:47 141105-58 10320131 TM 304	Chrysotile, Amosite (Loose fibres in soil.) (#)	N/C	0.0010 (#)	<0.001 (#)	0.0011 (#)



SDG:	141105-58	Location:	Coed Darcy	Order Number:	CD0940
Job:	H_ATKINS_LDC-224	Customer:	Atkins Global Ltd	Report Number:	296015
Client Reference:	Site Wide Trial Pitting	Attention:	Jack Lowrie	Superseded Report:	

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
ASB_PREP				
PM001		Preparation of Samples for Metals Analysis		
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material		
TM 304				
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM132	In - house Method	ELTRA CS800 Operators Guide		
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter		
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID		
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES		
TM218	Microwave extraction – EPA method 3546	Microwave extraction - EPA method 3546		
TM243		Mixed Anions In Soils By Kone		

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



CERTIFICATE OF ANALYSIS

SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

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Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

Test Completion Dates

Lab Sample No(s)	10320167	10320171	10320177	10320184	10320118	10320153	10320158	10320162	10329620	10320126
Customer Sample Ref.	P1TP001	P1TP001	P1TP021	P1TP021	P1TP110	P1TP110	P1TP111	P1TP111	P2TP001	P2TP005
AGS Ref.										
Depth	0.50	1.30	0.50	1.00	0.50	1.50	0.50	1.10	0.50	1.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)		17-Nov-2014								18-Nov-2014
Asbestos ID in Solid Samples	17-Nov-2014		17-Nov-2014	17-Nov-2014	17-Nov-2014		17-Nov-2014		08-Dec-2014	17-Nov-2014
Asbestos Quantification - Full			17-Dec-2014				15-Dec-2014			17-Dec-2014
EPH CWG (Aliphatic) GC (S)	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	08-Dec-2014	18-Nov-2014
EPH CWG (Aromatic) GC (S)	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	08-Dec-2014	18-Nov-2014
GRO by GC-FID (S)	17-Nov-2014	17-Nov-2014	17-Nov-2014	17-Nov-2014	17-Nov-2014	19-Nov-2014	17-Nov-2014	19-Nov-2014	07-Dec-2014	17-Nov-2014
Metals in solid samples by OES	05-Dec-2014	08-Dec-2014	04-Dec-2014	05-Dec-2014	08-Dec-2014	08-Dec-2014	04-Dec-2014	04-Dec-2014	03-Dec-2014	08-Dec-2014
PAH by GCMS	17-Nov-2014	17-Nov-2014	14-Nov-2014	17-Nov-2014	14-Nov-2014	12-Nov-2014	17-Nov-2014	14-Nov-2014	06-Dec-2014	16-Nov-2014
pH	13-Nov-2014	14-Nov-2014	13-Nov-2014	13-Nov-2014	13-Nov-2014	13-Nov-2014	13-Nov-2014	13-Nov-2014	06-Dec-2014	13-Nov-2014
Sample description	06-Nov-2014	06-Nov-2014	06-Nov-2014	06-Nov-2014	06-Nov-2014	06-Nov-2014	06-Nov-2014	06-Nov-2014	29-Nov-2014	05-Nov-2014
Total Organic Carbon	12-Nov-2014		13-Nov-2014		13-Nov-2014				03-Dec-2014	
TPH CWG GC (S)	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014	19-Nov-2014	18-Nov-2014	19-Nov-2014	08-Dec-2014	18-Nov-2014

Lab Sample No(s)	10320190	10320131	10320137	10320149
Customer Sample Ref.	P2TP005	P2TP008	P2TP008	P2TP008
AGS Ref.				
Depth	0.50	0.50	1.50	2.90
Type	SOLID	SOLID	SOLID	SOLID
Anions by Kone (soil)	18-Nov-2014			17-Nov-2014
Asbestos ID in Solid Samples	17-Nov-2014	17-Nov-2014		
Asbestos Quantification - Full		17-Dec-2014		
EPH CWG (Aliphatic) GC (S)	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014
EPH CWG (Aromatic) GC (S)	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014
GRO by GC-FID (S)	17-Nov-2014	17-Nov-2014	17-Nov-2014	17-Nov-2014
Metals in solid samples by OES	05-Dec-2014	08-Dec-2014	05-Dec-2014	05-Dec-2014
PAH by GCMS	16-Nov-2014	16-Nov-2014	17-Nov-2014	17-Nov-2014
pH	13-Nov-2014	13-Nov-2014	13-Nov-2014	13-Nov-2014
Sample description	05-Nov-2014	05-Nov-2014	06-Nov-2014	06-Nov-2014
Total Organic Carbon	12-Nov-2014			
TPH CWG GC (S)	18-Nov-2014	18-Nov-2014	18-Nov-2014	18-Nov-2014



SDG: 141105-58
Job: H_ATKINS_LDC-224
Client Reference: Site Wide Trial Pitting

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Jack Lowrie

Order Number: CD0940
Report Number: 296015
Superseded Report:

Appendix General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH₄ by the BRE method, VOC TICS and SVOC TICS.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALcontrol Laboratories reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible. The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP -No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals -total metals must be requested separately.

11. Results relate only to the items tested.

12. LODs for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** -Most of our organic methods include surrogates, the recovery of which is monitored and reported. For EPH, MO, PAH, GRO and VOCs on soils the result is not surrogate corrected, but a percentage recovery is quoted. Acceptable limits for most organic methods are 70 -130 %.

14. **Product analyses** -Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill /made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

Sample Deviations

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Holding time exceeded before sample received
5	Samples exceeded holding time before preservation was performed
\$	Sampled on date not provided
♦	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to sampled on date
&	Sample Holding Time exceeded - Late arrival of instructions.

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using Alcontrol Laboratories (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than :
 - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

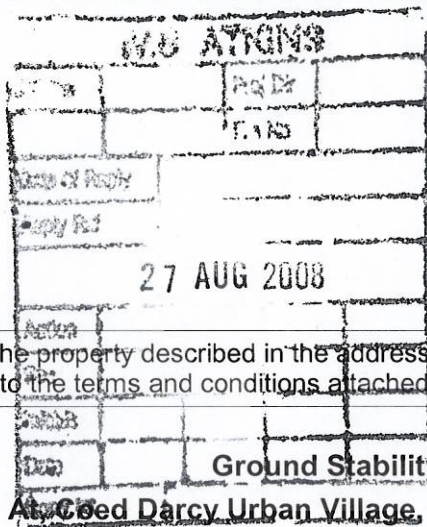
Appendix H



Issued by:

Ground Stability Report Office, 200 LICHFIELD LANE, BERRY HILL, MANSFIELD, NOTTINGHAMSHIRE, NG18 4RG
Website: www.coalminingreports.co.uk - Phone: 0845 762 6848 - DX 716176 MANSFIELD 5

ATKINS,
THE AXIS 10,
HOLLIDAY STREET,
BIRMINGHAM,
WEST MIDLANDS,
B1 1TF



Person dealing with this matter: **Simon Leeming**
Our reference: **00056014-08**
Your reference:
Electronic Ref:
RRUID: 007.00023581370001
Date of your enquiry: **15 August 2008**
Date we received your enquiry: **15 August 2008**
Date of issue:

This report is for the property described in the address below and the attached plan. The report is issued subject to the terms and conditions attached, which you are strongly advised to read.

Ground Stability Report Site At: Cled Darcy Urban Village, Swansea, West Glamorgan

This report is based on and limited to the records in the possession of the Coal Authority; the records and geological interpretation of The British Geological Survey (BGS) and the records of the Cheshire Brine Subsidence Compensation Board, at the time the search is answered.

Coal mining	Yes
Shrinkable clay	Yes
Running sand	Yes
Compressible deposits	Yes
Collapsible deposits	No
Landslide potential	Yes
Soluble rocks	No
Brine extraction	No

Information from the Coal Authority

Underground Coal Mining

Past

The property is in the likely zone of influence from workings in 4 seams of coal at shallow to 180m depth, and last worked in 1914.

Present

The property is not in the likely zone of influence of any present underground coal workings.

Future

The property is not in an area for which the Coal Authority is determining whether to grant a licence to remove coal using underground methods.

The property is not in an area for which a licence has been granted to remove coal using underground methods.

The property is not in an area that is likely to be affected at the surface from any planned future workings.

However reserves of coal exist in the local area which could be worked at some time in the future.

No notice of the risk of the land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine entries

Within, or within 20 metres of, the boundary of the property there are 25 mine entries, the approximate positions of which are shown on the attached plan.

Coal Authority records disclose the following information:

271195-007. This shaft was filled and capped in February 1973 .

272195-004. No treatment details.

272196-007. Shaft plugged with 3m deep concrete mass and capped with reinforced concrete cap 6.2m x 4.2m x 0.5m deep. Underside of plug 3.75m below ground level and foundation depth of cap is 0.75m .Work carried out in 1995 by IMCL for the Coal Authority. .

271195-008. No treatment details.

272195-006. No treatment details.

272196-006. This shaft was plugged and capped in May/June 1995. The dimensions of cap 6.2m x 4.2m x 0.5m .

271194-002. No treatment details.

272195-001. No treatment details.

271195-004. No treatment details.

270195-001. No treatment details.

271195-006. No treatment details.

270195-003. No treatment details.

271195-005. A 6.4m reinforced concrete cap is placed over this filled mine shaft at rockhead. A stainless steel vent pipe has been incorporated through the backfill above the cap. A marker post marks the position of the shaft at the surface. These works were undertaken by Dean and Dyball Constuction Ltd to a design provided by Quadrant Consulting Engineers in accordance with CIRIA gudelines .

271194-005. No treatment details.

270193-009. No treatment details.

272195-003. No treatment details.

272195-005. No treatment details.

272196-001. This shaft was filled to an unknown specification in June 1972. .

271194-006. No treatment details.

270195-002. No treatment details.

270193-010. No treatment details.

270194-001. No treatment details.

271194-003. No treatment details.

271195-009. No treatment details.

271194-004. No treatment details.

Records may be incomplete. Consequently, there may exist in the local area mine entries of which the Coal Authority has no knowledge.

Coal-mining geology

At the surface, there are no known faults or other lines of weakness due to coal mining that have made the property unstable.

Opencast Coal Mining

Past

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

Present

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

Future

The property is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

Coal-mining subsidence

The Coal Authority has not received a damage notice or claim for the property since 1 January 1984. There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority has not received a request to carry out preventive work before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the property.

Hazards related to coal mining

The property has been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

Withdrawal of Support

The property is not in an area for which a notice of entitlement to withdraw support has been published.

The property is not in an area for which a notice has been given under section 41 of the Coal Industry Act 1994, revoking the entitlement to withdraw support.

Working Facilities Orders

The property is not in an area for which an Order has been made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

Payments to Owners of Former Copyhold Land

The property is not in an area for which a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Comments on Coal Authority information

In view of the mining circumstances a prudent developer would seek appropriate technical advice before any works are undertaken.

Therefore if development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply good engineering practice developed for mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or mines of coal without the permission of the Coal Authority. Developers should be aware that the investigation of coal seams/ former mines of coal may have the potential to generate and/or displace underground gases and these risks both under and adjacent to the development should be fully considered in developing any proposals. The need for effective measures to prevent gases entering into public properties either during investigation or after development also needs to be assessed and properly addressed. This is necessary due to the public safety implications of any development in these circumstances.

Information from the British Geological Survey on potential for natural ground movement

Shrinkable Clay

The property is in an area underlain by clay. Clay can swell or shrink if the moisture content changes.

However, the clay deposits in this area are considered to be mainly of "low plasticity". This means it is unlikely that they will cause ground movement.

Running sand

The property is in an area underlain by sand. Some sands, if voids are present, may flow if they come into contact with water.

The nature of the sand deposits in this area means that ground movement could occur.

Deposits which could compress

The property is in an area underlain by natural compressible deposits. When this material is overloaded, or dries out, it can become unstable causing ground movement.

Because of these compressible deposits, ground movement could occur.

Deposits which could collapse

The property is not in an area underlain by deposits which could collapse and cause ground movement.

Natural landslide activity

The property is in an area where the local geology and steepness of slope could combine to create the likelihood of landslide activity.

Because of the nature of the geology in this area landslide activity could occur.

Soluble rocks

The property is not in an area underlain by soluble rocks.

Comments on the British Geological Survey information

These features should not necessarily give cause for concern.

Whether or not a property is affected by ground movement can depend on a number of factors such as its age, type of construction, and on its surroundings and such matters as drainage and nearby trees.

Since 1992 buildings should have been designed and constructed according to buildings regulations to ensure natural ground movement will not cause damage to a building.

However, you should consider the possible consequences before you:

- carry out any building or excavation work;
- alter the ground surface or drainage of surface or ground water; or
- plant or remove large shrubs or trees

Ground movement can cause uneven damage or subsidence to a property.

Developers should always carry out an appropriate risk assessment before starting any work on, or around, a property.

If you own the property and it is damaged by ground movement: You should contact your insurance company and anyone else who has an interest in the property, for example, the mortgage lender.

If you are considering buying the property and BGS has identified that ground movement could occur you should tell your professional advisers.

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

Additional remarks

This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority, British Geological Survey and the Cheshire Brine Subsidence Compensation Board's Terms and Conditions 2006. These are available to view at www.groundstability.com or by contacting the Coal Authority's customer service team on 0845 762 6848 or by email to groundstability@coal.gov.uk. These terms and conditions apply regardless of the method used to order and receive reports. The report is compliant with Home Information Pack and Purchaser Information Pack requirements.

The Coal Authority and British Geological Survey own the copyright in this report. The information we have used to write this report is protected by our database right. All rights are reserved and unauthorised use is prohibited. If we provide a ground stability report for you, this does not mean that the copyright and any other rights will pass to you. However, you can use the report for your own purposes.

Issued by:	The Coal Authority, 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG
Date:	15 Aug 2008
Ground stability report at:	Site At, Coed Darcy Urban Village, Swansea, West Glamorgan
Reference number:	00056014-08
Cost:	£1,974.47
Plus VAT:	£345.53
Total received:	£2,320.00
VAT registration number:	598 5850 68

TERMS

DEFINITIONS

In these Terms the following words have the following meanings:

"BGS" means the British Geological Survey of Kingsley Dunham Centre, Keyworth, Nottingham, NG12 5GG, a component organisation of the Natural Environment Research Council;

"CA" means the Coal Authority of 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG;

"Cheshire Brine" means the Cheshire Brine Subsidence Compensation Board of Sir Henry Doulton House, Forge Lane, Etruria, Stoke on Trent, ST1 5BD;

"Customer" means the person, firm or company placing the Order, either on its own behalf as User or as agent for a User;

"Guidance" means the relevant current version of the Guidance Notes and User Guide for the Report, available on request and displayed on the Website;

"Order" means any request for a Report made by the Customer;

"Property" means the address or location specified by the Customer in the Order;

"Report" means a ground stability report (in printed, electronic or any other form) which combines information on coal mining, brine subsidence claims and natural ground movement which has been prepared by CA in respect of the Property using data from, amongst others, the Suppliers and to which these Terms apply;

"Supplier(s)" means all or any of CA, BGS and/or Cheshire Brine;

"these Terms" means these terms and conditions, incorporating the Guidance (if and to the extent of any conflict between these Terms and the Guidance, the provisions of these Terms will prevail);

"User(s)" means the person or persons so described in Clause 15; and

"Website" means CA's website for the provision of the Reports service (currently www.coalminingreports.gov.uk).

TERMS

1. These Terms apply to the provision of Reports by CA to the Customer and/or the User.
2. The Customer and the User agree that the placing of an Order indicates their acceptance of these Terms.
3. These Terms shall apply to the exclusion of all other terms and conditions.
4. CA reserves the right to change these Terms from time to time with immediate effect and without prior notice. Any changes to these Terms will be displayed on the Website. Placement of Orders after any such variation will be deemed to be an acceptance of these Terms as amended in respect of Reports which are provided in response to Orders placed after the variation is made.
5. Where the Customer is acting as an agent for a User, the Customer will provide a copy of the Report and these Terms to the User.

LIMITATIONS OF THE REPORT

General

6. The Report is prepared with due skill and care, but has a number of limitations which are set out in these Terms which the Customer and the User acknowledge and accept when relying on it.

Sources of Information

7. The Report has been prepared by CA using information held by CA, together with information supplied to it by BGS and Cheshire Brine. The Report is based on, and is limited to:
 - a) the specific features identified in the Report, as more particularly described in the Guidance; and

b) each Supplier's interpretation of the records it holds relating to the particular features for which the Report states that the Supplier is responsible (and, in the case of information from BGS and Cheshire Brine, as provided to CA) at the time the Report is prepared.

The Customer and the User therefore acknowledge and agree that the records used to prepare the Report do not represent an exhaustive or comprehensive list of all records that may exist or may be available for the Property (see further Clause 8). The Customer and the User also acknowledge that no physical inspection of the Property has or will be carried out in the preparation of the Report.

8. Without prejudice to the generality of Clause 7:

a) information from CA is based on records in its possession relating to coal mining activity. There may be information held by others on historical coal mining, and information on other types mining, which is not searched as part of the Report;

b) information from BGS relates solely to the following six natural ground stability hazards: shrinkable clay; running sand; compressible deposits; collapsible deposits; landslide activity; and soluble rocks. It does not cover any other geological hazards, or man-made hazards (such as contaminated land). BGS may hold data on other geological hazards and features that may affect the Property which are not searched as part of the Report and consequently the Report should not be taken as a guarantee that there are no other geological hazards or other issues affecting the Property; and

c) information from BGS is prepared using the BGS GeoSure database which is based on 1:10,000 scale geological mapping reduced to 1:50,000 scale. The Customer and the User therefore acknowledge that BGS may be able to provide a more specific and detailed interpretation relating to the geological conditions and ground stability at the Property than that which is included in the Report. A more detailed interpretation is available via the BGS GeoReports service on BGS's website www.bgs.ac.uk.

9. The information from the Suppliers may be derived from records from a number of disparate sources which vary in age, quantity and quality. Such records may include material donated to the Suppliers by third parties, which may not have been subject to any verification or other quality control process.

10. Raw data used to prepare the Reports may have been transcribed from analogue to digital format, or may have been acquired by means of automated measuring techniques. Although such processes are subjected, where possible, to quality control to ensure reliability, some raw data may have been processed without human intervention and may in consequence contain undetected errors.

11. The records available to the Suppliers are constantly being updated. The Suppliers cannot be responsible to the Customer or Users for any changes in the information on which the Report is based which occur after the date on which the Report is prepared. Where this Report is for a residential property, insurance is included to cover loss in property value caused and arising from these circumstances. The Report includes a policy and key facts summary which outlines the significant features, benefits and limitations of the cover provided. The full terms, conditions and exclusions are shown in the policy document.

Maps

12. The Customer and the User must take all reasonable steps to check that the details in the Order are correct and that the Report provided by CA has been prepared for the correct location and property type, and that the boundaries of the Property as shown in the Report's plan correspond with those of the Property. Any discrepancies between the Order and the Report must be notified to the CA within 28 days after the issue date of the Report and CA will, in the case of error by CA, issue a revised Report free of charge; otherwise a new Report should be ordered with payment of the appropriate fee.

13. The Property has been located using Ordnance Survey ("OS") mapping. The Suppliers do not warrant that the OS information is complete or accurate and accept no liability for the plotted position of the Property as shown on OS maps. Further, the relative position between surface features and coal mining and other geological features may differ between OS maps and the Suppliers' maps used to prepare the Report, depending upon when the Suppliers' maps were prepared.

14. The plan or plans accompanying the Report must not be enlarged otherwise the accuracy will be affected.

RELIANCE ON THE REPORT

Who may rely on the Report

15. Only the following persons ("Users") may rely on the Report:

- a) the owner of the Property at the time the Report is prepared;
- b) any purchaser of the whole of the Property from the owner described in a above; and
- c) any person who provides funding to the persons in a or b above which is secured on the whole of the Property.

Such reliance will be subject to the provisions of Clauses 17 and 24 to 28 (inclusive).

Extent of Reliance

16. The Report has been prepared for use by the Users only and the Report should not be relied upon by any other third party.

17. Customers or Users may not act in reliance upon the Report (either by purchasing the Property, providing funding secured on the Property or carrying out any works on or affecting the Property) more than ninety (90) days after its date of issue.

18. The Report gives an indication of whether ground movement could occur at the Property. This does not necessarily mean that the Property is or will be affected by ground instability. Such an assessment can only be made by inspection of the Property by a qualified professional, such as a surveyor or engineer. The Report DOES NOT therefore:

- a) include any information or warranty relating to the actual state, or the structural or other condition, of the Property;
- b) determine the saleability or value, or the safety, of the Property;
- c) indicate the suitability of the Property for any particular purpose (including, without limitation, its suitability for development (within the meaning of section 55 of the Town and Country Planning Act 1990 as amended) or any building, excavation or landscaping work); or
- d) act as a substitute for any physical inspection, specialist interpretations and/or professional advice.

19. No representations, warranties or terms (whether express or implied by statute, common law, custom, trade usage, course of dealing or otherwise) are given in relation to the Report unless they are expressly set out in these Terms, save to the extent that such terms cannot be excluded by law.

USE OF THE REPORT

20. The Customer and the User acknowledge that the Report is confidential and that it is intended for the purposes of the User only. Accordingly the Customer and the User agree that they are permitted to use and copy the Report for these purposes only.

21. The Customer and the User (or any person who is provided with a copy of the Report) will not:

- a) remove, obliterate or alter any trade mark or any copyright or other proprietary notice which is contained in the Report;
- b) reformat or otherwise change, add to or enhance the Report, or combine it with or incorporate it into any other information, data or materials; or
- c) create any product which is derived directly or indirectly from the data contained in the Report; or
- d) resell the Report (other than in the case of a bona fide legal adviser recharging the cost of the Report as a disbursement) unless this has been specifically authorised in writing by CA.

22. The copyright and all other intellectual property rights in the Report will remain the property of the Suppliers or other third parties (as appropriate). Neither the Customer nor the User will acquire any rights in respect of the Report other than as expressly provided in these Terms.

EVENTS BEYOND THE SUPPLIERS' CONTROL

23. A Supplier will not be liable to the Customer or the User for any delay or failure in performance of its obligations which result from circumstances beyond its reasonable control (including, without limitation, fire, explosion, flood, tempest, unusually adverse weather conditions, war, hostilities, riot, acts of terrorism, failure or shortage of power supplies, telecommunications or processing failure or computer malfunction) or the acts or omissions of any person for which a Supplier is not legally responsible.

LIABILITY

24. The Report has been prepared for the Property on the basis of information on the Property's location and type provided by the Customer and/or the User, and consequently the Suppliers exclude all liability which may arise from any errors or omissions in the information so provided or from any failure to check for discrepancies pursuant to Clause 12.

25. The Report has been prepared specifically for the Property, and on the basis of the property type specified in the Order. Under no circumstances will the Suppliers be liable if a Report is relied on for any other property, or if a Report on a residential property is used for a non-residential or commercial property or for the development of the Property, and vice versa.

26. Except in the circumstances described in Clause 28 the total liability of the Suppliers to the Customer and the User arising from an error in the Report caused by negligence, breach of contract or in any other way will be limited to:

- a) the reasonable costs of carrying out necessary remedial work on the Property reasonably promptly; or
- b) the difference between the true market value of the Property and the market value of the Property on the basis of the Report at the time of reliance on the Report in accordance with these Terms.

27. Except in the circumstances described in Clause 28 or to the extent that a Supplier is found to be liable for the losses described in Clause 26 (a) or (b) arising from an error in the Report, the Supplier will not be liable to the Customer or the User for: loss of business, goodwill, profits or savings, loss of use or opportunity, lost or wasted staff time or for any indirect or consequential loss (whether arising from negligence, breach of contract or in any other way) even if the Customer or User was advised of or knew of the likelihood of that loss or type of loss arising.

28. Nothing in these Terms excludes or limits the liability of the Suppliers for death or personal injury caused by their negligence, or for fraud.

GENERAL

29. The headings in these Terms are for ease of reference only and do not affect their interpretation or construction.

30. Use of the singular includes the plural and vice versa, and use of any gender includes the other genders.

31. The benefit of these Terms cannot be assigned or transferred by the Customer or the User without the Suppliers' prior written consent. The Suppliers may assign any or all of their rights and obligations under these Terms without prior notice.

32. These Terms (together with the Order and the Guidance) represent the entire agreement relating to the supply of the Report and the relationship which that supply creates between the Suppliers and Customers and Users. No prior statement, representation or arrangement of any nature (whether written or oral) will add to, vary or waive terms of this agreement and the Customer and the User acknowledge that they have not relied on any

statement or representation made by or on behalf of CA or any other Supplier in agreeing to enter into this agreement. Nothing in this Clause 32 will operate to limit or exclude liability for fraud.

33. The illegality or invalidity of any part of these Terms will not affect the legality or validity of the remainder of these Terms.

34. Except to the extent that these Terms confer benefits on the Suppliers and the Users, no third party is entitled to the benefit of these Terms under the Contracts (Rights of Third Parties) Act 1999.

35. These Terms are governed by English law. The English courts (where the Property is situated in England or Wales) and the Scottish courts (where the Property is situated in Scotland) have exclusive jurisdiction to deal with any dispute which may arise out of or in connection with them.

**THESE TERMS ARE AVAILABLE IN LARGER PRINT FOR THOSE WITH IMPAIRED VISION OR AT
WWW.COAL.GOV.UK**

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