ALcontrol Laboratories

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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

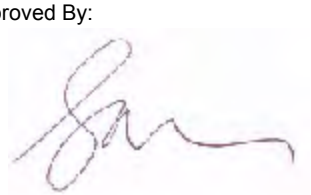
Date:	07 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121017-68
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	200758

We received 3 samples on Tuesday October 16, 2012 and 3 of these samples were scheduled for analysis which was completed on Wednesday November 07, 2012. 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

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CERTIFICATE OF ANALYSIS

SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6355859	CAEM010		1.00	16/10/2012
6355862	CAEM010		1.50	16/10/2012
6355863	CAEM011		1.20	16/10/2012

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

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SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6355859	CAEM010		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6355862	CAEM010		1.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6355863	CAEM011		1.20	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 1		X			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 1	X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 3	X		X		X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 3		X		X		X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 3	X		X		X
	Cadmium	NDPs: 0 Tests: 3	X		X		X
	Chromium	NDPs: 0 Tests: 3	X		X		X
	Copper	NDPs: 0 Tests: 3	X		X		X
	Lead	NDPs: 0 Tests: 3	X		X		X
	Mercury	NDPs: 0 Tests: 3	X		X		X
	Nickel	NDPs: 0 Tests: 3	X		X		X
	Selenium	NDPs: 0 Tests: 3	X		X		X
	Vanadium	NDPs: 0 Tests: 3	X		X		X
	Zinc	NDPs: 0 Tests: 3	X		X		X
PAH by GCMS	All	NDPs: 0 Tests: 3	X		X		X

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SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6355859	CAEM010		1.00	250g Amber Jar (AL)
							400g Tub (ALE214)
							60g VOC (ALE215)
			6355862	CAEM010		1.50	250g Amber Jar (AL)
							400g Tub (ALE214)
							60g VOC (ALE215)
			6355863	CAEM011		1.20	250g Amber Jar (AL)
							400g Tub (ALE214)
							60g VOC (ALE215)
pH	All	NDPs: 0 Tests: 3					X
							X
							X
							X
Sample description	All	NDPs: 0 Tests: 3	X			X	
			X			X	
			X			X	
Total Organic Carbon	All	NDPs: 0 Tests: 3	X			X	
			X			X	
			X			X	
TPH CWG GC (S)	All	NDPs: 0 Tests: 3	X			X	
			X			X	
			X			X	
VOC MS (S)	All	NDPs: 0 Tests: 3					
			X			X	
							X
							X

CERTIFICATE OF ANALYSIS

SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6355859	CAEM010	1.00	Black	Sandy Silt Loam	0.1 - 2 mm	Oil/Petroleum	Tar
6355862	CAEM010	1.50	Grey	Silty Clay	0.063 - 0.1 mm	None	None
6355863	CAEM011	1.20	Dark Brown	Clay	0.063 - 0.1 mm	None	Vegetation

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 ocurring 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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Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM010	CAEM010	CAEM011			
			Depth (m)	1.00	1.50	1.20			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	16/10/2012	16/10/2012	16/10/2012			
			Sample Time	.	.	.			
			Date Received	16/10/2012	16/10/2012	16/10/2012			
			SDG Ref	121017-68	121017-68	121017-68			
			Lab Sample No.(s)	6355859	6355862	6355863			
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		23.6 #	2.74 #	8.41 #			
pH	1 pH Units	TM133		6.48 M	7.21 M	7.44 M			
Arsenic	<0.6 mg/kg	TM181		38.7 M	18.1 M	14.2 M			
Cadmium	<0.02 mg/kg	TM181		1.1 M	0.53 M	1.75 M			
Chromium	<0.9 mg/kg	TM181		13.6 M	13.2 M	9.52 M			
Copper	<1.4 mg/kg	TM181		111 M	8.24 M	51.3 M			
Lead	<0.7 mg/kg	TM181		62.1 M	13.9 M	15.3 M			
Mercury	<0.14 mg/kg	TM181		0.187 M	<0.14 M	<0.14 M			
Nickel	<0.2 mg/kg	TM181		28.4 M	9.43 M	10.9 M			
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #			
Vanadium	<0.2 mg/kg	TM181		27.8 #	14.9 #	9.05 #			
Zinc	<1.9 mg/kg	TM181		156 M	80.8 M	163 M			

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PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
aq	Aqueous / settled sample.
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*	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

Component	LOD/Units	Method	Customer Sample R	CAEM010	CAEM010	CAEM011			
			Depth (m)	1.00	1.50	1.20			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	16/10/2012	16/10/2012	16/10/2012			
			Sample Time	.	.	.			
			Date Received	16/10/2012	16/10/2012	16/10/2012			
			SDG Ref	121017-68	121017-68	121017-68			
			Lab Sample No.(s)	6355859	6355862	6355863			
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		106	105 §	104 §			
Acenaphthene-d10 % recovery**	%	TM218		105	105 §	108 §			
Phenanthrene-d10 % recovery**	%	TM218		99.2	102 §	103 §			
Chrysene-d12 % recovery**	%	TM218		102	87.4 §	94.3 §			
Perylene-d12 % recovery**	%	TM218		101	88.7 §	97 §			
Naphthalene	<9 µg/kg	TM218		776 M	<9 § M	262 § M			
Acenaphthylene	<12 µg/kg	TM218		<24 M	<12 § M	<12 § M			
Acenaphthene	<8 µg/kg	TM218		1490 M	<8 § M	184 § M			
Fluorene	<10 µg/kg	TM218		1360 M	<10 § M	724 § M			
Phenanthrene	<15 µg/kg	TM218		1880 M	<15 § M	1280 § M			
Anthracene	<16 µg/kg	TM218		3270 M	<16 § M	262 § M			
Fluoranthene	<17 µg/kg	TM218		6570 M	<17 § M	83.6 § M			
Pyrene	<15 µg/kg	TM218		6260 M	<15 § M	219 § M			
Benz(a)anthracene	<14 µg/kg	TM218		3660 M	<14 § M	<14 § M			
Chrysene	<10 µg/kg	TM218		2900 M	<10 § M	<10 § M			
Benzo(b)fluoranthene	<15 µg/kg	TM218		4250 M	<15 § M	21.7 § M			
Benzo(k)fluoranthene	<14 µg/kg	TM218		1480 M	<14 § M	<14 § M			
Benzo(a)pyrene	<15 µg/kg	TM218		3360 M	<15 § M	<15 § M			
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		1630 M	<18 § M	<18 § M			
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		573 M	<23 § M	<23 § M			
Benzo(g,h,i)perylene	<24 µg/kg	TM218		1780 M	<24 § M	<24 § M			
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		41200	<118 §	3040 §			

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Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM010	CAEM010	CAEM011			
			Depth (m)	1.00	1.50	1.20			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	16/10/2012	16/10/2012	16/10/2012			
			Sample Time	.	.	.			
			Date Received	16/10/2012	16/10/2012	16/10/2012			
			SDG Ref	121017-68	121017-68	121017-68			
			Lab Sample No.(s)	6355859	6355862	6355863			
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		56	90	72			
GRO >C5-C12	<44 µg/kg	TM089		14800	1370	31000			
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		71.9 #	132 #	<5 #			
Benzene	<10 µg/kg	TM089		55.1 M	21 M	<10 M			
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M			
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M			
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M			
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M			
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	<9			
sum of detected BTEX by GC	<24 µg/kg	TM089		55.1	<24	<24			
Aliphatics >C5-C6	<10 µg/kg	TM089		33.7	31.4	134			
Aliphatics >C6-C8	<10 µg/kg	TM089		3510	553	3820			
Aliphatics >C8-C10	<10 µg/kg	TM089		2000	123	6320			
Aliphatics >C10-C12	<10 µg/kg	TM089		4680	253	9910			
Aliphatics >C12-C16	<100 µg/kg	TM173		638000	<100	140000			
Aliphatics >C16-C21	<100 µg/kg	TM173		2690000	3950	362000			
Aliphatics >C21-C35	<100 µg/kg	TM173		8620000	22300	471000			
Aliphatics >C35-C44	<100 µg/kg	TM173		905000	947	7940			
Total Aliphatics >C12-C44	<100 µg/kg	TM173		12900000	27200	981000			
Aromatics >EC5-EC7	<10 µg/kg	TM089		55.1	21	10			
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10			
Aromatics >EC8-EC10	<10 µg/kg	TM089		1330	85.2	4210			
Aromatics >EC10-EC12	<10 µg/kg	TM089		3120	169	6610			
Aromatics >EC12-EC16	<100 µg/kg	TM173		253000	<100	137000			
Aromatics >EC16-EC21	<100 µg/kg	TM173		1930000	5360	244000			
Aromatics >EC21-EC35	<100 µg/kg	TM173		3260000	51400	519000			
Aromatics >EC35-EC44	<100 µg/kg	TM173		542000	17800	66500			
Aromatics >EC40-EC44	<100 µg/kg	TM173		216000	2110	12400			
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		5980000	74600	967000			
Total Aliphatics >C5-35	<100 µg/kg	TM173		12000000	27200	993000			
Total Aromatics >C5-35	<100 µg/kg	TM173		5450000	57000	911000			
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		17400000	84200	1900000			

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SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM010	CAEM010	CAEM011			
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	1.00	1.50	1.20			
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
diss.filt	Dissolved / filtered sample.	Date Sampled	16/10/2012	16/10/2012	16/10/2012			
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.	.			
*	Subcontracted test.	Date Received	16/10/2012	16/10/2012	16/10/2012			
**	% 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	SDG Ref	121017-68	121017-68	121017-68			
		Lab Sample No.(s)	6355859	6355862	6355863			
(F)	Trigger breach confirmed	AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	18900000	103000	1980000			

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Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
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Component	LOD/Units	Method	Customer Sample R	CAEM010	CAEM010	CAEM011			
			Depth (m)	1.00	1.50	1.20			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	16/10/2012	16/10/2012	16/10/2012			
			Sample Time	.	.	.			
			Date Received	16/10/2012	16/10/2012	16/10/2012			
			SDG Ref	121017-68	121017-68	121017-68			
			Lab Sample No.(s)	6355859	6355862	6355863			
			AGS Reference						
Dibromofluoromethane**	%	TM116		106	101	105			
Toluene-d8**	%	TM116		104	101	102			
4-Bromofluorobenzene**	%	TM116		114	127	108			
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<8 M	<80 M			
Chloromethane	<7 µg/kg	TM116		<140	<14	<140			
Vinyl Chloride	<10 µg/kg	TM116		<200	<20	<200			
Bromomethane	<13 µg/kg	TM116		<260 M	<26 M	<260 M			
Chloroethane	<14 µg/kg	TM116		<280 M	<28 M	<280 M			
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<12 M	<120 M			
1.1-Dichloroethene	<10 µg/kg	TM116		<200 #	<20 #	<200 #			
Carbon Disulphide	<7 µg/kg	TM116		740 M	135 M	<140 M			
Dichloromethane	<10 µg/kg	TM116		<200 #	<20 #	<200 #			
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<22 M	<220 M			
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<220 M	<22 M	<220 M			
1.1-Dichloroethane	<8 µg/kg	TM116		<160 M	<16 M	<160 M			
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<100 M	<10 M	<100 M			
2.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<24 M	<240 M			
Bromochloromethane	<14 µg/kg	TM116		<280 M	<28 M	<280 M			
Chloroform	<8 µg/kg	TM116		<160 M	<16 M	<160 M			
1.1.1-Trichloroethane	<7 µg/kg	TM116		<140 M	<14 M	<140 M			
1.1-Dichloropropene	<11 µg/kg	TM116		<220 M	<22 M	<220 M			
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<28 M	<280 M			
1.2-Dichloroethane	<5 µg/kg	TM116		<100 M	<10 M	<100 M			
Benzene	<9 µg/kg	TM116		<180 M	<18 M	<180 M			
Trichloroethene	<9 µg/kg	TM116		<180 M	<18 M	<180 M			
1.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<24 M	<240 M			
Dibromomethane	<9 µg/kg	TM116		<180 M	<18 M	<180 M			
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<14 M	<140 M			
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<280 M	<28 M	<280 M			
Toluene	<5 µg/kg	TM116		<100 M	<10 M	<100 M			
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<280	<28	<280			
1.1.2-Trichloroethane	<10 µg/kg	TM116		<200 M	<20 M	<200 M			

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Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
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**	% 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
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Component	LOD/Units	Method	Customer Sample R	CAEM010	CAEM010	CAEM011			
			Depth (m)	1.00	1.50	1.20			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	16/10/2012	16/10/2012	16/10/2012			
			Sample Time	.	.	.			
			Date Received	16/10/2012	16/10/2012	16/10/2012			
			SDG Ref	121017-68	121017-68	121017-68			
			Lab Sample No.(s)	6355859	6355862	6355863			
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<140 #	<14 #	<140 #			
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<10 M	<100 M			
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<26 M	<260 M			
1.2-Dibromoethane	<12 µg/kg	TM116		<240 M	<24 M	<240 M			
Chlorobenzene	<5 µg/kg	TM116		<100 M	<10 M	<100 M			
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<20 M	<200 M			
Ethylbenzene	<4 µg/kg	TM116		<80 M	<8 M	<80 M			
p/m-Xylene	<14 µg/kg	TM116		<280 #	<28 #	<280 #			
o-Xylene	<10 µg/kg	TM116		<200 M	<20 M	<200 M			
Styrene	<10 µg/kg	TM116		<200 M	<20 M	<200 M			
Bromoform	<10 µg/kg	TM116		<200 M	<20 M	<200 M			
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<10 M	<100 M			
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<20 #	<200 #			
1.2.3-Trichloropropane	<17 µg/kg	TM116		<340 M	<34 M	<340 M			
Bromobenzene	<10 µg/kg	TM116		<200 M	<20 M	<200 M			
Propylbenzene	<11 µg/kg	TM116		<220 M	<22 M	<220 M			
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<18 M	<180 M			
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<16 #	<160 #			
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<24 M	<240 M			
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<24 #	<240 #			
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<18 #	<180 #			
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<20 M	<200 M			
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<22 M	<220 M			
1.3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<12 M	<120 M			
1.4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<10 M	<100 M			
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<20 M	<200 M			
1.2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<24 M	<240 M			
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<28 M	<280 M			
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<30	<300			
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<12 #	<120 #			
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<24	<240			
Naphthalene	<13 µg/kg	TM116		<260 M	<26 M	<260 M			

CERTIFICATE OF ANALYSIS

SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM010	CAEM010	CAEM011			
			Depth (m)	1.00	1.50	1.20			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	16/10/2012	16/10/2012	16/10/2012			
			Sample Time	.	.	.			
			Date Received	16/10/2012	16/10/2012	16/10/2012			
			SDG Ref	121017-68	121017-68	121017-68			
			Lab Sample No.(s)	6355859	6355862	6355863			
			AGS Reference						
1.2.3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<12 M	<120 M			

CERTIFICATE OF ANALYSIS

SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM010 1.00 SOLID 16/10/2012 00:00:00 121017-68 6355859 TM048	30/10/12	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of Deviating Samples

Sample Number	Customer Sample Ref.	Depth (m)	Matrix	Test Name	Component Name	Comment
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6431787	CAEM010	1.50	SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6431844	CAEM011	1.20	SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded

Note : Test results may be compromised

CERTIFICATE OF ANALYSIS

SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6355859	6355862	6355863
Customer Sample Ref.	CAEM010	CAEM010	CAEM011
AGS Ref.			
Depth	1.00	1.50	1.20
Type	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	31-Oct-2012		
EPH CWG (Aliphatic) GC (S)	24-Oct-2012	24-Oct-2012	24-Oct-2012
EPH CWG (Aromatic) GC (S)	24-Oct-2012	24-Oct-2012	24-Oct-2012
GRO by GC-FID (S)	23-Oct-2012	23-Oct-2012	22-Oct-2012
Metals by iCap-OES (Soil)	23-Oct-2012	23-Oct-2012	23-Oct-2012
PAH by GCMS	07-Nov-2012	06-Nov-2012	06-Nov-2012
pH	22-Oct-2012	19-Oct-2012	19-Oct-2012
Sample description	20-Oct-2012	18-Oct-2012	18-Oct-2012
Total Organic Carbon	31-Oct-2012	22-Oct-2012	22-Oct-2012
TPH CWG GC (S)	24-Oct-2012	24-Oct-2012	24-Oct-2012
VOC MS (S)	23-Oct-2012	23-Oct-2012	23-Oct-2012

SDG:	121017-68	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	200758
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Atkins Global Ltd
Project Jonah site office
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Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

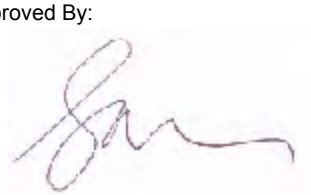
Date:	09 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121011-101
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	201121

We received 10 samples on Thursday October 11, 2012 and 10 of these samples were scheduled for analysis which was completed on Friday November 09, 2012. 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

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6328534	CAEMTP001		0.90	10/10/2012
6328538	CAEMTP001		1.30	10/10/2012
6328532	CAEMTP002		0.50	10/10/2012
6328539	CAEMTP003		0.90	10/10/2012
6328541	CAEMTP003		1.50	10/10/2012
6328527	CASP1			09/10/2012
6328531	CASP2			09/10/2012
6328529	CASP3			09/10/2012
6328528	CASP4			09/10/2012
6328530	CASP5			09/10/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6328534	CAEMTP001		0.90	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328538	CAEMTP001		1.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328527	CASP1			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328532	CAEMTP002		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328531	CASP2			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328539	CAEMTP003		0.90	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328541	CAEMTP003		1.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328529	CASP3			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328528	CASP4			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328530	CASP5			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 8					
Asbestos Quantification - Full	All	NDPs: 0 Tests: 7					
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 10					
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 10					
GRO by GC-FID (S)	All	NDPs: 0 Tests: 10					
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 10					
	Cadmium	NDPs: 0 Tests: 10					
	Chromium	NDPs: 0 Tests: 10					
	Copper	NDPs: 0 Tests: 10					
	Lead	NDPs: 0 Tests: 10					
	Mercury	NDPs: 0 Tests: 10					
	Nickel	NDPs: 0 Tests: 10					
	Selenium	NDPs: 0 Tests: 10					
	Vanadium	NDPs: 0 Tests: 10					
	Zinc	NDPs: 0 Tests: 10					

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6328534	CAEMTP001		0.90	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328538	CAEMTP001		1.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328527	CASP1			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328532	CAEMTP002		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328531	CASP2			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328539	CAEMTP003		0.90	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328541	CAEMTP003		1.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328529	CASP3			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328528	CASP4			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6328530	CASP5			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
PAH by GCMS	All	NDPs: 0 Tests: 10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
pH	All	NDPs: 0 Tests: 10		X		X		X		X		X		X		X		X		X		X		X		X		X
Sample description	All	NDPs: 0 Tests: 10	X		X		X		X		X		X		X		X		X		X		X		X		X	
Total Organic Carbon	All	NDPs: 0 Tests: 2			X												X											
TPH CWG GC (S)	All	NDPs: 0 Tests: 10	X		X		X		X		X		X		X		X		X		X		X		X		X	
VOC MS (S)	All	NDPs: 0 Tests: 10		X		X		X		X		X		X		X		X		X		X		X		X		X

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6328534	CAEMTP001	0.90	Dark Brown	Sand	0.1 - 2 mm	Stones	Concrete/Aggregate
6328538	CAEMTP001	1.30	Dark Brown	Clay Loam	0.063 - 0.1 mm	None	None
6328532	CAEMTP002	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
6328539	CAEMTP003	0.90	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
6328541	CAEMTP003	1.50	Grey	Sandy Clay	0.1 - 2 mm	None	None
6328527	CASP1		Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
6328531	CASP2		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
6328529	CASP3		Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
6328528	CASP4		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
6328530	CASP5		Dark Brown	Sandy 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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP001	CAEMTP001	CAEMTP002	CAEMTP003	CAEMTP003	CASP1
			Depth (m)	0.90	1.30	0.50	0.90	1.50	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	09/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
			SDG Ref	121011-101	121011-101	121011-101	121011-101	121011-101	121011-101
			Lab Sample No.(s)	6328534	6328538	6328532	6328539	6328541	6328527
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		23.8 #				1.62 #	
pH	1 pH Units	TM133	5.31 M	6.42 M	8.15 M	7.6 M	6.2 M	7.81 M	
Arsenic	<0.6 mg/kg	TM181	29.6 M	32.2 M	38.4 M	21.3 M	4.21 M	23.2 M	
Cadmium	<0.02 mg/kg	TM181	2.07 M	0.26 M	1.24 M	1.27 M	<0.02 M	1.25 M	
Chromium	<0.9 mg/kg	TM181	18.3 M	5.47 M	19.2 M	14.4 M	15.8 M	19.3 M	
Copper	<1.4 mg/kg	TM181	152 M	6.66 M	178 M	93.9 M	16.4 M	75.4 M	
Lead	<0.7 mg/kg	TM181	135 M	7.54 M	228 M	98.5 M	14.6 M	94.9 M	
Mercury	<0.14 mg/kg	TM181	0.149 M	<0.14 M	0.368 M	0.716 M	<0.14 M	0.719 M	
Nickel	<0.2 mg/kg	TM181	48.9 M	4.31 M	21.4 M	24.2 M	23 M	30.2 M	
Selenium	<1 mg/kg	TM181	<1 #	1.68 #	<1 #	<1 #	<1 #	<1 #	
Vanadium	<0.2 mg/kg	TM181	45.2 #	6.25 #	28.4 #	18.5 #	18.9 #	25.9 #	
Zinc	<1.9 mg/kg	TM181	610 M	12.4 M	954 M	213 M	54.6 M	254 M	

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CASP2	CASP3	CASP4	CASP5		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/10/2012	09/10/2012	09/10/2012	09/10/2012		
			Sample Time	.	.	.	.		
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012		
			SDG Ref	121011-101	121011-101	121011-101	121011-101		
			Lab Sample No.(s)	6328531	6328529	6328528	6328530		
			AGS Reference						
pH	1 pH Units	TM133		8.09 M	7.95 M	8.09 M	8.03 M		
Arsenic	<0.6 mg/kg	TM181		27.6 M	21 M	19.9 M	26.4 M		
Cadmium	<0.02 mg/kg	TM181		1.22 M	1.03 M	1.14 M	1.22 M		
Chromium	<0.9 mg/kg	TM181		17.1 M	16.5 M	16.6 M	18.7 M		
Copper	<1.4 mg/kg	TM181		68.8 M	67.8 M	71.4 M	87.2 M		
Lead	<0.7 mg/kg	TM181		62.5 M	70.8 M	101 M	66.2 M		
Mercury	<0.14 mg/kg	TM181		0.357 M	0.447 M	0.479 M	0.694 M		
Nickel	<0.2 mg/kg	TM181		25.7 M	23.5 M	25.4 M	26.3 M		
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #		
Vanadium	<0.2 mg/kg	TM181		25.1 #	26 #	24.2 #	38.9 #		
Zinc	<1.9 mg/kg	TM181		157 M	188 M	284 M	209 M		

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP001	CAEMTP001	CAEMTP002	CAEMTP003	CAEMTP003	CASP1
			Depth (m)	0.90	1.30	0.50	0.90	1.50	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	09/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
			SDG Ref	121011-101	121011-101	121011-101	121011-101	121011-101	121011-101
			Lab Sample No.(s)	6328534	6328538	6328532	6328539	6328541	6328527
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		101	99.6	102 §	98.5 §	100	102 §
Acenaphthene-d10 % recovery**	%	TM218		101	99.5	99.1 §	98.7 §	101	99.8 §
Phenanthrene-d10 % recovery**	%	TM218		100	96.9	97.8 §	96 §	99.7	99.4 §
Chrysene-d12 % recovery**	%	TM218		102	90.3	111 §	85.2 §	92.7	109 §
Perylene-d12 % recovery**	%	TM218		110	96.3	119 §	88.1 §	96.5	118 §
Naphthalene	<9 µg/kg	TM218		208 M	36.7 M	48.4 § M	162 § M	13.8 M	81 § M
Acenaphthylene	<12 µg/kg	TM218		<60 M	<12 M	<12 § M	33.7 § M	<12 M	32.2 § M
Acenaphthene	<8 µg/kg	TM218		<40 M	<8 M	13.4 § M	156 § M	<8 M	70.5 § M
Fluorene	<10 µg/kg	TM218		168 M	<10 M	26 § M	221 § M	<10 M	98.8 § M
Phenanthrene	<15 µg/kg	TM218		941 M	<15 M	114 § M	558 § M	<15 M	478 § M
Anthracene	<16 µg/kg	TM218		290 M	<16 M	37.7 § M	253 § M	<16 M	157 § M
Fluoranthene	<17 µg/kg	TM218		497 M	36 M	175 § M	907 § M	<17 M	778 § M
Pyrene	<15 µg/kg	TM218		766 M	39.3 M	187 § M	927 § M	<15 M	834 § M
Benz(a)anthracene	<14 µg/kg	TM218		271 M	28.9 M	146 § M	256 § M	17.8 M	660 § M
Chrysene	<10 µg/kg	TM218		288 M	23.8 M	138 § M	291 § M	<10 M	648 § M
Benzo(b)fluoranthene	<15 µg/kg	TM218		381 M	39.9 M	193 § M	334 § M	26.9 M	889 § M
Benzo(k)fluoranthene	<14 µg/kg	TM218		209 M	<14 M	67.4 § M	105 § M	<14 M	282 § M
Benzo(a)pyrene	<15 µg/kg	TM218		385 M	45 M	163 § M	182 § M	<15 M	672 § M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		177 M	<18 M	107 § M	104 § M	<18 M	399 § M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<115 M	<23 M	39.2 § M	47.3 § M	<23 M	153 § M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		214 M	<24 M	127 § M	128 § M	<24 M	496 § M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		4790	250	1580 §	4660 §	<118	6730 §

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CASP2	CASP3	CASP4	CASP5		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/10/2012	09/10/2012	09/10/2012	09/10/2012		
			Sample Time	.	.	.	.		
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012		
			SDG Ref	121011-101	121011-101	121011-101	121011-101		
			Lab Sample No.(s)	6328531	6328529	6328528	6328530		
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		104	97.4 §	102	101		
Acenaphthene-d10 % recovery**	%	TM218		104	95.6 §	102	103		
Phenanthrene-d10 % recovery**	%	TM218		103	95.4 §	99.9	101		
Chrysene-d12 % recovery**	%	TM218		99.5	103 §	98.1	97.8		
Perylene-d12 % recovery**	%	TM218		98.4	110 §	99.7	99.4		
Naphthalene	<9 µg/kg	TM218		25.7 M	81.1 § M	60.3 M	119 M		
Acenaphthylene	<12 µg/kg	TM218		24 M	25.2 § M	23.9 M	27.2 M		
Acenaphthene	<8 µg/kg	TM218		15.5 M	46 § M	38.3 M	45.6 M		
Fluorene	<10 µg/kg	TM218		22.8 M	113 § M	66 M	152 M		
Phenanthrene	<15 µg/kg	TM218		167 M	529 § M	342 M	598 M		
Anthracene	<16 µg/kg	TM218		40.2 M	166 § M	121 M	172 M		
Fluoranthene	<17 µg/kg	TM218		208 M	604 § M	595 M	418 M		
Pyrene	<15 µg/kg	TM218		205 M	985 § M	673 M	988 M		
Benz(a)anthracene	<14 µg/kg	TM218		155 M	554 § M	450 M	330 M		
Chrysene	<10 µg/kg	TM218		160 M	637 § M	444 M	438 M		
Benzo(b)fluoranthene	<15 µg/kg	TM218		267 M	605 § M	692 M	307 M		
Benzo(k)fluoranthene	<14 µg/kg	TM218		113 M	219 § M	267 M	127 M		
Benzo(a)pyrene	<15 µg/kg	TM218		174 M	477 § M	700 M	265 M		
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		113 M	289 § M	461 M	165 M		
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		48.8 M	132 § M	148 M	84.6 M		
Benzo(g,h,i)perylene	<24 µg/kg	TM218		135 M	373 § M	557 M	242 M		
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		1870	5830 §	5640	4480		

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP001	CAEMTP001	CAEMTP002	CAEMTP003	CAEMTP003	CASP1
			Depth (m)	0.90	1.30	0.50	0.90	1.50	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	09/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
			SDG Ref	121011-101	121011-101	121011-101	121011-101	121011-101	121011-101
			Lab Sample No.(s)	6328534	6328538	6328532	6328539	6328541	6328527
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		10	27	56	40	127	35
GRO >C5-C12	<44 µg/kg	TM089		1420	10000	11200	5910	<44	7260
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Benzene	<10 µg/kg	TM089		<10 M	23.9 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	33.6 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 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	33.6
Aliphatics >C5-C6	<10 µg/kg	TM089		21.8	263	41.5	25.6	<10	20.9
Aliphatics >C6-C8	<10 µg/kg	TM089		173	4720	1370	185	<10	481
Aliphatics >C8-C10	<10 µg/kg	TM089		385	2110	2700	919	<10	1440
Aliphatics >C10-C12	<10 µg/kg	TM089		347	890	3190	2500	<10	2590
Aliphatics >C12-C16	<100 µg/kg	TM173		144000	6260	26100	46700	3050	137000
Aliphatics >C16-C21	<100 µg/kg	TM173		2740000	12000	149000	309000	2010	290000
Aliphatics >C21-C35	<100 µg/kg	TM173		27600000	190000	1570000	2050000	4430	488000
Aliphatics >C35-C44	<100 µg/kg	TM173		761000	13000	291000	188000	<100	151000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		31200000	221000	2040000	2590000	9490	1070000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	23.9	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		257	1410	1800	612	<10	993
Aromatics >EC10-EC12	<10 µg/kg	TM089		231	593	2120	1670	<10	1730
Aromatics >EC12-EC16	<100 µg/kg	TM173		42600	2000	7900	11000	1070	35900
Aromatics >EC16-EC21	<100 µg/kg	TM173		717000	9400	58200	113000	<100	148000
Aromatics >EC21-EC35	<100 µg/kg	TM173		5490000	446000	531000	820000	6320	383000
Aromatics >EC35-EC44	<100 µg/kg	TM173		447000	210000	199000	160000	1630	194000
Aromatics >EC40-EC44	<100 µg/kg	TM173		173000	38800	84800	57800	<100	79000
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		6700000	668000	796000	1100000	9020	761000
Total Aliphatics >C5-35	<100 µg/kg	TM173		30400000	216000	1760000	2400000	9500	920000
Total Aromatics >C5-35	<100 µg/kg	TM173		6250000	460000	601000	947000	7400	569000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		36700000	676000	2360000	3350000	16900	1490000

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMTP001	CAEMTP001	CAEMTP002	CAEMTP003	CAEMTP003	CASP1
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	0.90	1.30	0.50	0.90	1.50	.
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	09/10/2012
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
		SDG Ref	121011-101	121011-101	121011-101	121011-101	121011-101	121011-101
		Lab Sample No.(s)	6328534	6328538	6328532	6328539	6328541	6328527
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	37900000	899000	2850000	3700000	18500	1830000

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CASP2	CASP3	CASP4	CASP5		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	.	.	.	.		
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
diss.filt	Dissolved / filtered sample.	Date Sampled	09/10/2012	09/10/2012	09/10/2012	09/10/2012		
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.	.	.		
*	Subcontracted test.	Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012		
**	% 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	SDG Ref	121011-101	121011-101	121011-101	121011-101		
		Lab Sample No.(s)	6328531	6328529	6328528	6328530		
(F)	Trigger breach confirmed	AGS Reference						
Component	**LOD/Units**	**Method**						
GRO Surrogate % recovery**	%	TM089	69	97	106	44		
GRO >C5-C12	<44 µg/kg	TM089	12000	23600	<44	17800		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5 #	<5 #	<5 #	<5 #		
Benzene	<10 µg/kg	TM089	<10 M	<10 M	<10 M	<10 M		
Toluene	<2 µg/kg	TM089	<2 M	<2 M	4.68 M	<2 M		
Ethylbenzene	<3 µg/kg	TM089	<3 M	<3 M	<3 M	<3 M		
m,p-Xylene	<6 µg/kg	TM089	<6 M	<6 M	<6 M	<6 M		
o-Xylene	<3 µg/kg	TM089	<3 M	<3 M	<3 M	<3 M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9		
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	<24		
Aliphatics >C5-C6	<10 µg/kg	TM089	30.2	26.7	<10	25.3		
Aliphatics >C6-C8	<10 µg/kg	TM089	998	1120	<10	1210		
Aliphatics >C8-C10	<10 µg/kg	TM089	2640	4880	<10	3940		
Aliphatics >C10-C12	<10 µg/kg	TM089	3920	8590	<10	6000		
Aliphatics >C12-C16	<100 µg/kg	TM173	42700	135000	113000	182000		
Aliphatics >C16-C21	<100 µg/kg	TM173	102000	156000	328000	255000		
Aliphatics >C21-C35	<100 µg/kg	TM173	202000	323000	798000	1110000		
Aliphatics >C35-C44	<100 µg/kg	TM173	53400	95600	185000	137000		
Total Aliphatics >C12-C44	<100 µg/kg	TM173	399000	710000	1420000	1690000		
Aromatics >EC5-EC7	<10 µg/kg	TM089	<10	<10	<10	<10		
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10	<10	<10	<10		
Aromatics >EC8-EC10	<10 µg/kg	TM089	1760	3250	<10	2630		
Aromatics >EC10-EC12	<10 µg/kg	TM089	2620	5730	<10	4000		
Aromatics >EC12-EC16	<100 µg/kg	TM173	14000	40100	29900	59600		
Aromatics >EC16-EC21	<100 µg/kg	TM173	51400	103000	155000	166000		
Aromatics >EC21-EC35	<100 µg/kg	TM173	162000	250000	487000	668000		
Aromatics >EC35-EC44	<100 µg/kg	TM173	91100	118000	210000	157000		
Aromatics >EC40-EC44	<100 µg/kg	TM173	39900	47500	84600	57600		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	318000	511000	881000	1050000		
Total Aliphatics >C5-35	<100 µg/kg	TM173	354000	629000	1240000	1560000		
Total Aromatics >C5-35	<100 µg/kg	TM173	232000	402000	671000	900000		
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	585000	1030000	1910000	2460000		

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CASP2	CASP3	CASP4	CASP5		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
tot.unfilt	Total / unfiltered sample.	Date Sampled	09/10/2012	09/10/2012	09/10/2012	09/10/2012		
*	Subcontracted test.	Sample Time	.	.	.	.		
**	% 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	Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012		
		SDG Ref	121011-101	121011-101	121011-101	121011-101		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6328531	6328529	6328528	6328530		
		AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	730000	1240000	2310000	2750000		

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP001	CAEMTP001	CAEMTP002	CAEMTP003	CAEMTP003	CASP1
			Depth (m)	0.90	1.30	0.50	0.90	1.50	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	09/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
			SDG Ref	121011-101	121011-101	121011-101	121011-101	121011-101	121011-101
			Lab Sample No.(s)	6328534	6328538	6328532	6328539	6328541	6328527
			AGS Reference						
Dibromofluoromethane**	%	TM116		102	99.3	102	101	96.4	103
Toluene-d8**	%	TM116		94.3	95.5	97.2	96.7	95	98.1
4-Bromofluorobenzene**	%	TM116		117	119	110	118	127	109
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<4 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<140	<7	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<200	<10	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<13 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<14 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<6 M	<120 M
1.1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<10 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<7 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<10 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<11 M	<220 M
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<11 M	<220 M
1.1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<8 M	<160 M
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<5 M	<100 M
2.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<12 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<14 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<8 M	<160 M
1.1.1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<7 M	<140 M
1.1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<11 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<14 M	<280 M
1.2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<5 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<9 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<9 M	<180 M
1.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<12 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<9 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<7 M	<140 M
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<14 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<5 M	<100 M
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<280	<14	<280
1.1.2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<10 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP001	CAEMTP001	CAEMTP002	CAEMTP003	CAEMTP003	CASP1
			Depth (m)	0.90	1.30	0.50	0.90	1.50	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	09/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
			SDG Ref	121011-101	121011-101	121011-101	121011-101	121011-101	121011-101
			Lab Sample No.(s)	6328534	6328538	6328532	6328539	6328541	6328527
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<140 #	<7 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<5 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<13 M	<260 M
1.2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<12 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<5 M	<100 M
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<10 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<4 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<280 #	<280 #	<14 #	<280 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<10 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<10 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<10 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<5 M	<100 M
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<10 #	<200 #
1.2.3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<340 M	<17 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<10 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<11 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<9 M	<180 M
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<160 #	<160 #	<8 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<12 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<240 #	<12 #	<240 #
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	<180 #	<180 #	<9 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<10 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<11 M	<220 M
1.3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<6 M	<120 M
1.4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<5 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<10 M	<200 M
1.2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<12 M	<240 M
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<14 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<300	<15	<300
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<120 #	<6 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<240	<12	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<13 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMTP001	CAEMTP001	CAEMTP002	CAEMTP003	CAEMTP003	CASP1
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	0.90	1.30	0.50	0.90	1.50	.
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.	Date Sampled	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	09/10/2012
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.	.	.	.	.
*	Subcontracted test.	Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
**	% 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	SDG Ref	121011-101	121011-101	121011-101	121011-101	121011-101	121011-101
		Lab Sample No.(s)	6328534	6328538	6328532	6328539	6328541	6328527
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
1.2.3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M	<120 M	<120 M	<6 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CASP2	CASP3	CASP4	CASP5		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/10/2012	09/10/2012	09/10/2012	09/10/2012		
			Sample Time	.	.	.	.		
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012		
			SDG Ref	121011-101	121011-101	121011-101	121011-101		
			Lab Sample No.(s)	6328531	6328529	6328528	6328530		
			AGS Reference						
Dibromofluoromethane**	%	TM116		103	103	102	102		
Toluene-d8**	%	TM116		98.3	99	98.7	99.2		
4-Bromofluorobenzene**	%	TM116		108	105	108	108		
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M		
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<140		
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<200		
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M		
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M		
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M		
1.1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #		
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M		
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #		
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M		
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M		
1.1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M		
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M		
2.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M		
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M		
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M		
1.1.1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M		
1.1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M		
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M		
1.2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M		
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M		
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M		
1.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M		
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M		
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M		
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M		
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M		
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<280		
1.1.2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M		

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CASP2	CASP3	CASP4	CASP5		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/10/2012	09/10/2012	09/10/2012	09/10/2012		
			Sample Time	.	.	.	.		
			Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012		
			SDG Ref	121011-101	121011-101	121011-101	121011-101		
			Lab Sample No.(s)	6328531	6328529	6328528	6328530		
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<140 #		
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M		
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M		
1.2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M		
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M		
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M		
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M		
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<280 #	<280 #		
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M		
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M		
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M		
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M		
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #		
1.2.3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<340 M		
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M		
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M		
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M		
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<160 #	<160 #		
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M		
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<240 #		
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	<180 #	<180 #		
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M		
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M		
1.3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M		
1.4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M		
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M		
1.2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M		
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M		
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<300		
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<120 #		
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<240		
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M		

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CASP2	CASP3	CASP4	CASP5		
#	ISO17025 accredited.	Depth (m)	.	.	.	.		
M	*m*CERTS accredited.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
§	Deviating sample.	Date Sampled	09/10/2012	09/10/2012	09/10/2012	09/10/2012		
aq	Aqueous / settled sample.	Sample Time	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Date Received	11/10/2012	11/10/2012	11/10/2012	11/10/2012		
tot.unfilt	Total / unfiltered sample.	SDG Ref	121011-101	121011-101	121011-101	121011-101		
*	Subcontracted test.	Lab Sample No.(s)	6328531	6328529	6328528	6328530		
**	% 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	AGS Reference						
(F)	Trigger breach confirmed							
Component		**LOD/Units**	**Method**					
1.2.3-Trichlorobenzene		<6 µg/kg	TM116	<120 M	<120 M	<120 M	<120 M		

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP001 0.90 SOLID 10/10/2012 00:00:00 121011-101 6328534 TM048	23/10/12	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP002 0.50 SOLID 10/10/2012 00:00:00 121011-101 6328532 TM048	23/10/12	Chris Swindells	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP003 0.90 SOLID 10/10/2012 00:00:00 121011-101 6328539 TM048	23/10/12	Chris Swindells	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP1 SOLID 09/10/2012 00:00:00 121011-101 6328527 TM048	22/10/12	Lauren Sargeant	Soil containing loose fibres and ACM debris	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP2 SOLID 09/10/2012 00:00:00 121011-101 6328531 TM048	23/10/12	Chris Swindells	Soil containing material typical of asbestos cement	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP3 SOLID 09/10/2012 00:00:00 121011-101 6328529 TM048	23/10/12	Chris Swindells	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP4 SOLID 09/10/2012 00:00:00 121011-101 6328528 TM048	22/10/12	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP5 SOLID 09/10/2012 00:00:00 121011-101 6328530 TM048	23/10/12	Chris Swindells	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Quantification - Full

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP002 0.50 SOLID 10/10/2012 00:00:00 121011-101 6328532 TM 304	None (#)	-	<0.001 (#)	<0.001 (#)	<0.001 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP003 0.90 SOLID 10/10/2012 00:00:00 121011-101 6328539 TM 304	None (#)	-	<0.001 (#)	<0.001 (#)	<0.001 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP1 SOLID 09/10/2012 00:00:00 121011-101 6328527 TM 304	Amosite (#)	Amosite found during gravimetric analysis (loose fibres)	<0.001 (#)	0.0015 (#)	0.0018 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP2 SOLID 09/10/2012 00:00:00 121011-101 6328531 TM 304	None (#)	Some loose fibres found during gravimetric analysis but too small/few to accurately weigh	<0.001 (#)	<0.001 (#)	<0.001 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP3 SOLID 09/10/2012 00:00:00 121011-101 6328529 TM 304	Amosite (#)	Amosite found during gravimetric analysis (loose fibres)	<0.001 (#)	<0.001 (#)	0.0012 (#)

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP4 SOLID 09/10/2012 00:00:00 121011-101 6328528 TM 304	Amosite (#)	Amosite found during gravimetric analysis (loose fibres).	0.0014 (#)	<0.001 (#)	0.0019 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP5 SOLID 09/10/2012 00:00:00 121011-101 6328530 TM 304	Crocidolite (#)	-	<0.001 (#)	<0.001 (#)	<0.001 (#)

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of Deviating Samples

Sample Number	Customer Sample Ref.	Depth (m)	Matrix	Test Name	Component Name	Comment
6456399	CASP1		SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6456399	CASP1		SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6456415	CASP3		SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Sample Number	Customer Sample Ref.	Depth (m)	Matrix	Test Name	Component Name	Comment
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6456420	CAEMTP002	0.50	SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6471720	CAEMTP003	0.90	SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded

Note : Test results may be compromised

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		

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

CERTIFICATE OF ANALYSIS

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6328534	6328538	6328532	6328539	6328541	6328527	6328531	6328529	6328528	6328530
Customer Sample Ref.	CAEMTP001	CAEMTP001	CAEMTP002	CAEMTP003	CAEMTP003	CASP1	CASP2	CASP3	CASP4	CASP5
AGS Ref.										
Depth	0.90	1.30	0.50	0.90	1.50					
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	24-Oct-2012		24-Oct-2012	24-Oct-2012		22-Oct-2012	24-Oct-2012	24-Oct-2012	22-Oct-2012	24-Oct-2012
Asbestos Quantification - Full			07-Nov-2012	07-Nov-2012		08-Nov-2012	07-Nov-2012	08-Nov-2012	08-Nov-2012	07-Nov-2012
EPH CWG (Aliphatic) GC (S)	23-Oct-2012	18-Oct-2012	23-Oct-2012	23-Oct-2012	18-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012
EPH CWG (Aromatic) GC (S)	23-Oct-2012	18-Oct-2012	23-Oct-2012	23-Oct-2012	18-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012
GRO by GC-FID (S)	19-Oct-2012	19-Oct-2012	19-Oct-2012	19-Oct-2012	18-Oct-2012	19-Oct-2012	18-Oct-2012	18-Oct-2012	19-Oct-2012	18-Oct-2012
Metals by iCap-OES (Soil)	19-Oct-2012	17-Oct-2012	19-Oct-2012	19-Oct-2012	17-Oct-2012	19-Oct-2012	19-Oct-2012	19-Oct-2012	19-Oct-2012	19-Oct-2012
PAH by GCMS	07-Nov-2012	07-Nov-2012	08-Nov-2012	09-Nov-2012	07-Nov-2012	08-Nov-2012	08-Nov-2012	08-Nov-2012	08-Nov-2012	08-Nov-2012
pH	19-Oct-2012	18-Oct-2012	19-Oct-2012	19-Oct-2012	18-Oct-2012	18-Oct-2012	19-Oct-2012	19-Oct-2012	18-Oct-2012	19-Oct-2012
Sample description	17-Oct-2012	12-Oct-2012	17-Oct-2012	17-Oct-2012	12-Oct-2012	17-Oct-2012	17-Oct-2012	17-Oct-2012	17-Oct-2012	17-Oct-2012
Total Organic Carbon		16-Oct-2012			16-Oct-2012					
TPH CWG GC (S)	23-Oct-2012	19-Oct-2012	23-Oct-2012	23-Oct-2012	18-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012	21-Oct-2012
VOC MS (S)	19-Oct-2012	19-Oct-2012	19-Oct-2012	19-Oct-2012	18-Oct-2012	19-Oct-2012	19-Oct-2012	19-Oct-2012	19-Oct-2012	19-Oct-2012

SDG:	121011-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201121
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PEST OCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

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Attention: Selina Bamforth

PRELIMINARY/INTERIM REPORT

Date:	09 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121025-35
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	201103

We received 2 samples on Thursday October 25, 2012 and 2 of these samples were scheduled for analysis which was completed on (tba). 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.

This is a preliminary report which has not had final authorisation.

Approved By:

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6398504	CAEM HOT SPOT 1			24/10/2012
6398505	CAEM HOT SPOT 2			24/10/2012

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

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6398504	6398505
			Customer Sample Reference	CAEM HOT SPOT 1	CAEM HOT SPOT 2
			AGS Reference		
			Depth (m)		
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 2		X		X		
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2	X			X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 2	X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2			X			X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 2	X			X		
	Cadmium	NDPs: 0 Tests: 2	X			X		
	Chromium	NDPs: 0 Tests: 2	X			X		
	Copper	NDPs: 0 Tests: 2	X			X		
	Lead	NDPs: 0 Tests: 2	X			X		
	Mercury	NDPs: 0 Tests: 2	X			X		
	Nickel	NDPs: 0 Tests: 2	X			X		
	Selenium	NDPs: 0 Tests: 2	X			X		
	Vanadium	NDPs: 0 Tests: 2	X			X		
	Zinc	NDPs: 0 Tests: 2	X			X		
PAH by GCMS	All	NDPs: 0 Tests: 2	X			X		

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6398504	6398505
			Customer Sample Reference	CAEM HOT SPOT 1	CAEM HOT SPOT 2
			AGS Reference		
			Depth (m)		
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
pH	All	NDPs: 0 Tests: 2		X			X	
Sample description	All	NDPs: 0 Tests: 2	X			X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 2	X			X		
VOC MS (S)	All	NDPs: 0 Tests: 2			X			X

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6398504	CAEM HOT SPOT 1		Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Oil/Petroleum	Stones
6398505	CAEM HOT SPOT 2		Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Oil/Petroleum	Stones

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 ocurring 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.

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM HOT SPOT 1	CAEM HOT SPOT 2			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	24/10/2012	24/10/2012			
			Sample Time	.	.			
			Date Received	25/10/2012	25/10/2012			
			SDG Ref	121025-35	121025-35			
			Lab Sample No.(s)	6398504	6398505			
			AGS Reference					
pH	1 pH Units	TM133		8.06 M	8.07 M			
Arsenic	<0.6 mg/kg	TM181		9.24 M	27.7 M			
Cadmium	<0.02 mg/kg	TM181		0.0385 M	0.688 M			
Chromium	<0.9 mg/kg	TM181		12.6 M	12.4 M			
Copper	<1.4 mg/kg	TM181		18.5 M	79.3 M			
Lead	<0.7 mg/kg	TM181		20.8 M	41.9 M			
Mercury	<0.14 mg/kg	TM181		0.486 M	0.356 M			
Nickel	<0.2 mg/kg	TM181		7.12 M	9.83 M			
Selenium	<1 mg/kg	TM181		1.66 #	1.78 #			
Vanadium	<0.2 mg/kg	TM181		23.4 #	17.4 #			
Zinc	<1.9 mg/kg	TM181		54.3 M	119 M			

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM HOT SPOT 1	CAEM HOT SPOT 2				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	24/10/2012	24/10/2012				
			Sample Time	.	.				
			Date Received	25/10/2012	25/10/2012				
			SDG Ref	121025-35	121025-35				
			Lab Sample No.(s)	6398504	6398505				
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		99.2	97.9				
Acenaphthene-d10 % recovery**	%	TM218		99.2	96.3				
Phenanthrene-d10 % recovery**	%	TM218		95.5	94.7				
Chrysene-d12 % recovery**	%	TM218		63.6	84.2				
Perylene-d12 % recovery**	%	TM218		83.8	114				
Naphthalene	<9 µg/kg	TM218		68.8 M	159 M				
Acenaphthylene	<12 µg/kg	TM218		22.9 M	20 M				
Acenaphthene	<8 µg/kg	TM218		63.3 M	204 M				
Fluorene	<10 µg/kg	TM218		62.4 M	264 M				
Phenanthrene	<15 µg/kg	TM218		291 M	720 M				
Anthracene	<16 µg/kg	TM218		298 M	624 M				
Fluoranthene	<17 µg/kg	TM218		620 M	879 M				
Pyrene	<15 µg/kg	TM218		1200 M	1430 M				
Benz(a)anthracene	<14 µg/kg	TM218		573 M	738 M				
Chrysene	<10 µg/kg	TM218		453 M	725 M				
Benzo(b)fluoranthene	<15 µg/kg	TM218		907 M	696 M				
Benzo(k)fluoranthene	<14 µg/kg	TM218		379 M	326 M				
Benzo(a)pyrene	<15 µg/kg	TM218		703 M	704 M				
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		452 M	393 M				
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		161 M	129 M				
Benzo(g,h,i)perylene	<24 µg/kg	TM218		515 M	461 M				
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		6770	8470				

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM HOT SPOT 1	CAEM HOT SPOT 2				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	24/10/2012	24/10/2012				
			Sample Time	.	.				
			Date Received	25/10/2012	25/10/2012				
			SDG Ref	121025-35	121025-35				
			Lab Sample No.(s)	6398504	6398505				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		28	56				
GRO >C5-C12	<44 µg/kg	TM089		2250	20800				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #				
Benzene	<10 µg/kg	TM089		<10 M	20.9 M				
Toluene	<2 µg/kg	TM089		<2 M	<2 M				
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M				
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M				
o-Xylene	<3 µg/kg	TM089		<3 M	<3 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		21.6	320				
Aliphatics >C6-C8	<10 µg/kg	TM089		93.6	4390				
Aliphatics >C8-C10	<10 µg/kg	TM089		281	5490				
Aliphatics >C10-C12	<10 µg/kg	TM089		1000	4150				
Aliphatics >C12-C16	<100 µg/kg	TM173		600000	245000				
Aliphatics >C16-C21	<100 µg/kg	TM173		3350000	1100000				
Aliphatics >C21-C35	<100 µg/kg	TM173		8980000	2660000				
Aliphatics >C35-C44	<100 µg/kg	TM173		1590000	581000				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		14500000	4590000				
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	20.9				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089		187	3660				
Aromatics >EC10-EC12	<10 µg/kg	TM089		666	2760				
Aromatics >EC12-EC16	<100 µg/kg	TM173		255000	154000				
Aromatics >EC16-EC21	<100 µg/kg	TM173		2340000	895000				
Aromatics >EC21-EC35	<100 µg/kg	TM173		3710000	1940000				
Aromatics >EC35-EC44	<100 µg/kg	TM173		932000	599000				
Aromatics >EC40-EC44	<100 µg/kg	TM173		418000	269000				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		7230000	3590000				
Total Aliphatics >C5-35	<100 µg/kg	TM173		12900000	4020000				
Total Aromatics >C5-35	<100 µg/kg	TM173		6300000	3000000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		19200000	7020000				

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM HOT SPOT 1	CAEM HOT SPOT 2				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	.	.				
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid				
diss.filt	Dissolved / filtered sample.	Date Sampled	24/10/2012	24/10/2012				
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.				
*	Subcontracted test.	Date Received	25/10/2012	25/10/2012				
**	% 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	SDG Ref	121025-35	121025-35				
		Lab Sample No.(s)	6398504	6398505				
(F)	Trigger breach confirmed	AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	21800000	8200000				

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM HOT SPOT 1	CAEM HOT SPOT 2				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	24/10/2012	24/10/2012				
			Sample Time	.	.				
			Date Received	25/10/2012	25/10/2012				
			SDG Ref	121025-35	121025-35				
			Lab Sample No.(s)	6398504	6398505				
			AGS Reference						
Dibromofluoromethane**	%	TM116		103	102				
Toluene-d8**	%	TM116		94.2	99.7				
4-Bromofluorobenzene**	%	TM116		131	108				
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M				
Chloromethane	<7 µg/kg	TM116		<140	<140				
Vinyl Chloride	<10 µg/kg	TM116		<200	<200				
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M				
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M				
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M				
1.1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #				
Carbon Disulphide	<7 µg/kg	TM116		176 M	<140 M				
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #				
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M				
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M				
1.1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M				
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M				
2.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M				
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M				
Chloroform	<8 µg/kg	TM116		<160 M	<160 M				
1.1.1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M				
1.1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M				
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M				
1.2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M				
Benzene	<9 µg/kg	TM116		<180 M	<180 M				
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M				
1.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M				
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M				
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M				
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M				
Toluene	<5 µg/kg	TM116		<100 M	<100 M				
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<280	<280				
1.1.2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M				

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEM HOT SPOT 1	CAEM HOT SPOT 2				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	.	.				
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid				
diss.filt	Dissolved / filtered sample.	Date Sampled	24/10/2012	24/10/2012				
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.				
*	Subcontracted test.	Date Received	25/10/2012	25/10/2012				
**	% 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	SDG Ref	121025-35	121025-35				
		Lab Sample No.(s)	6398504	6398505				
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
1.3-Dichloropropane	<7 µg/kg	TM116	<140 #	<140 #				
Tetrachloroethene	<5 µg/kg	TM116	<100 M	<100 M				
Dibromochloromethane	<13 µg/kg	TM116	<260 M	<260 M				
1.2-Dibromoethane	<12 µg/kg	TM116	<240 M	<240 M				
Chlorobenzene	<5 µg/kg	TM116	<100 M	<100 M				
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116	<200 M	<200 M				
Ethylbenzene	<4 µg/kg	TM116	<80 M	<80 M				
p/m-Xylene	<14 µg/kg	TM116	<280 #	<280 #				
o-Xylene	<10 µg/kg	TM116	<200 M	<200 M				
Styrene	<10 µg/kg	TM116	<200 M	<200 M				
Bromoform	<10 µg/kg	TM116	<200 M	<200 M				
Isopropylbenzene	<5 µg/kg	TM116	<100 M	<100 M				
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116	<200 #	<200 #				
1.2.3-Trichloropropane	<17 µg/kg	TM116	<340 M	<340 M				
Bromobenzene	<10 µg/kg	TM116	<200 M	<200 M				
Propylbenzene	<11 µg/kg	TM116	<220 M	<220 M				
2-Chlorotoluene	<9 µg/kg	TM116	<180 M	<180 M				
1.3.5-Trimethylbenzene	<8 µg/kg	TM116	<160 #	<160 #				
4-Chlorotoluene	<12 µg/kg	TM116	<240 M	<240 M				
tert-Butylbenzene	<12 µg/kg	TM116	<240 #	<240 #				
1.2.4-Trimethylbenzene	<9 µg/kg	TM116	<180 #	<180 #				
sec-Butylbenzene	<10 µg/kg	TM116	<200 M	<200 M				
4-Isopropyltoluene	<11 µg/kg	TM116	<220 M	<220 M				
1.3-Dichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M				
1.4-Dichlorobenzene	<5 µg/kg	TM116	<100 M	<100 M				
n-Butylbenzene	<10 µg/kg	TM116	<200 M	<200 M				
1.2-Dichlorobenzene	<12 µg/kg	TM116	<240 M	<240 M				
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<280 M	<280 M				
Tert-amyl methyl ether	<15 µg/kg	TM116	<300	<300				
1.2.4-Trichlorobenzene	<6 µg/kg	TM116	<120 #	<120 #				
Hexachlorobutadiene	<12 µg/kg	TM116	<240	<240				
Naphthalene	<13 µg/kg	TM116	<260 M	<260 M				

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEM HOT SPOT 1	CAEM HOT SPOT 2				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	.	.				
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid				
diss.filt	Dissolved / filtered sample.	Date Sampled	24/10/2012	24/10/2012				
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.				
*	Subcontracted test.	Date Received	25/10/2012	25/10/2012				
**	% 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	SDG Ref	121025-35	121025-35				
		Lab Sample No.(s)	6398504	6398505				
(F)	Trigger breach confirmed	AGS Reference						
Component	**LOD/Units**	**Method**						
1.2.3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M				

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM HOT SPOT 1 SOLID 24/10/2012 00:00:00 121025-35 6398504 TM048	8/11/12	Chris Swindells	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM HOT SPOT 2 SOLID 24/10/2012 00:00:00 121025-35 6398505 TM048	8/11/12	Chris Swindells	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		

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

PRELIMINARY/INTERIM REPORT

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6398504	6398505
Customer Sample Ref.	CAEM HOT SPOT 1	CAEM HOT SPOT 2
AGS Ref.		
Depth		
Type	SOLID	SOLID
Asbestos Identification (Soil)	09-Nov-2012	09-Nov-2012
EPH CWG (Aliphatic) GC (S)	01-Nov-2012	01-Nov-2012
EPH CWG (Aromatic) GC (S)	01-Nov-2012	01-Nov-2012
GRO by GC-FID (S)	01-Nov-2012	01-Nov-2012
Metals by iCap-OES (Soil)	31-Oct-2012	31-Oct-2012
PAH by GCMS	06-Nov-2012	06-Nov-2012
pH	31-Oct-2012	31-Oct-2012
Sample description	30-Oct-2012	30-Oct-2012
TPH CWG GC (S)	01-Nov-2012	01-Nov-2012
VOC MS (S)	01-Nov-2012	01-Nov-2012

SDG:	121025-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201103
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Llan Coed House
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Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

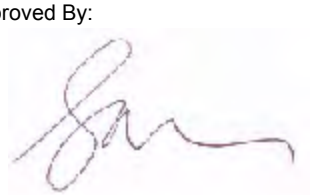
Date:	11 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121103-64
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	201342

We received 6 samples on Saturday November 03, 2012 and 6 of these samples were scheduled for analysis which was completed on Sunday November 11, 2012. 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

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CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6455421	CAEMV001			02/11/2012
6455422	CAEMV002			02/11/2012
6455423	CAEMV003			02/11/2012
6455424	CAEMV004			02/11/2012
6455426	CAEMV005			02/11/2012
6455427	CAEMV006			02/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6455421	CAEMV001			250g Amber Jar (AL
			6455422	CAEMV002			400g Tub (ALE214)
			6455423	CAEMV003			60g VOC (ALE215)
			6455424	CAEMV004			250g Amber Jar (AL
			6455426	CAEMV005			400g Tub (ALE214)
			6455427	CAEMV006			60g VOC (ALE215)
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Cadmium	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Chromium	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Copper	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Lead	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Mercury	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Nickel	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Selenium	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Vanadium	NDPs: 0 Tests: 6	X	X	X	X	X	X
	Zinc	NDPs: 0 Tests: 6	X	X	X	X	X	X
pH	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
Sample description	All	NDPs: 0 Tests: 6	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6455421	CAEMV001			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6455422	CAEMV002			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6455423	CAEMV003			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6455424	CAEMV004			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6455426	CAEMV005			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6455427	CAEMV006			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 6	X	X	X	X	X
Total Organic Carbon	All	NDPs: 0 Tests: 6	X	X	X	X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 6	X	X	X	X	X
VOC MS (S)	All	NDPs: 0 Tests: 6	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6455421	CAEMV001		Dark Brown	Silty Clay	0.063 - 0.1 mm	N/A	N/A
6455422	CAEMV002		Dark Brown	Silty Clay	0.063 - 0.1 mm	N/A	Stones
6455423	CAEMV003		Grey	Silt Loam	0.063 - 0.1 mm	N/A	N/A
6455424	CAEMV004		Light Brown	Silty Clay	0.063 - 0.1 mm	N/A	N/A
6455426	CAEMV005		Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones	N/A
6455427	CAEMV006		Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	N/A	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012
			SDG Ref	121103-64	121103-64	121103-64	121103-64	121103-64	121103-64
			Lab Sample No.(s)	6455421	6455422	6455423	6455424	6455426	6455427
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		1.15 #	1.42 #	0.772 #	0.567 #	1.4 #	1.14 #
pH	1 pH Units	TM133		6.88 M	6.86 M	9.35 M	8.95 M	6.68 M	7.15 M
Arsenic	<0.6 mg/kg	TM181		6.87 M	8.66 M	2.28 M	9.01 M	14.4 M	8.53 M
Cadmium	<0.02 mg/kg	TM181		0.704 M	0.991 M	0.251 M	0.868 M	1.53 M	1.15 M
Chromium	<0.9 mg/kg	TM181		16.7 M	16 M	10.5 M	17.2 M	24.1 M	15.7 M
Copper	<1.4 mg/kg	TM181		12.7 M	20.2 M	3.64 M	8.25 M	80 M	16.3 M
Lead	<0.7 mg/kg	TM181		11.9 M	11.6 M	7.63 M	7.14 M	12.8 M	10.9 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		22.2 M	20.9 M	8.32 M	15.2 M	24.3 M	23.6 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		15.8 #	18 #	12.2 #	17.3 #	32.9 #	18.6 #
Zinc	<1.9 mg/kg	TM181		50.4 M	65.7 M	31.8 M	31.4 M	66.8 M	78.6 M

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012
			SDG Ref	121103-64	121103-64	121103-64	121103-64	121103-64	121103-64
			Lab Sample No.(s)	6455421	6455422	6455423	6455424	6455426	6455427
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012
			SDG Ref	121103-64	121103-64	121103-64	121103-64	121103-64	121103-64
			Lab Sample No.(s)	6455421	6455422	6455423	6455424	6455426	6455427
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	201	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluorene	<100 µg/kg	TM157		<100	<100	<100	159	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		<100	<100	148	238	571	<100
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012
			SDG Ref	121103-64	121103-64	121103-64	121103-64	121103-64	121103-64
			Lab Sample No.(s)	6455421	6455422	6455423	6455424	6455426	6455427
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		80	81	91	116	125	114
GRO >C5-C12	<44 µg/kg	TM089		10800	57000	51400	189000	74600	82000
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<5 #	<25 #	<5 #	<5 #
Benzene	<10 µg/kg	TM089		<10 M	18.2 M	19.7 M	<50 M	43.3 M	28.3 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	<10 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<15 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<30 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<15 M	<3 M	<3 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	43.3	28.3
Aliphatics >C5-C6	<10 µg/kg	TM089		121	451	307	282	834	1620
Aliphatics >C6-C8	<10 µg/kg	TM089		928	3740	6320	8070	16400	12000
Aliphatics >C8-C10	<10 µg/kg	TM089		3120	20300	11800	47100	21800	22100
Aliphatics >C10-C12	<10 µg/kg	TM089		2710	11400	15100	61200	12500	18900
Aliphatics >C12-C16	<100 µg/kg	TM173		15300	38200	62100	48600	107000	62300
Aliphatics >C16-C21	<100 µg/kg	TM173		179000	60800	128000	62600	305000	244000
Aliphatics >C21-C35	<100 µg/kg	TM173		943000	1270000	411000	202000	674000	901000
Aliphatics >C35-C44	<100 µg/kg	TM173		78200	1140000	60400	28000	79700	88200
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1220000	2510000	662000	342000	1170000	1300000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	18.2	19.7	<50	43.3	28.3
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<50	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		2080	13500	7840	31400	14600	14700
Aromatics >EC10-EC12	<10 µg/kg	TM089		1810	7630	10100	40800	8360	12600
Aromatics >EC12-EC16	<100 µg/kg	TM173		16300	25500	49700	35800	77200	40600
Aromatics >EC16-EC21	<100 µg/kg	TM173		129000	42100	85600	45500	217000	128000
Aromatics >EC21-EC35	<100 µg/kg	TM173		661000	629000	310000	150000	482000	523000
Aromatics >EC35-EC44	<100 µg/kg	TM173		78700	497000	62000	29600	80300	77100
Aromatics >EC40-EC44	<100 µg/kg	TM173		27600	174000	15800	9020	24200	21400
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		885000	1190000	507000	260000	856000	768000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1140000	1400000	635000	430000	1140000	1260000
Total Aromatics >C5-35	<100 µg/kg	TM173		810000	717000	463000	303000	798000	719000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1950000	2120000	1100000	733000	1940000	1980000

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.	.	.
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012
		SDG Ref	121103-64	121103-64	121103-64	121103-64	121103-64	121103-64
		Lab Sample No.(s)	6455421	6455422	6455423	6455424	6455426	6455427
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2110000	3760000	1220000	791000	2100000	2150000

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012
			SDG Ref	121103-64	121103-64	121103-64	121103-64	121103-64	121103-64
			Lab Sample No.(s)	6455421	6455422	6455423	6455424	6455426	6455427
			AGS Reference						
Dibromofluoromethane**	%	TM116		107	101	105	102	102	99.6
Toluene-d8**	%	TM116		102	99.2	102	103	101	102
4-Bromofluorobenzene**	%	TM116		123	108	107	103	110	111
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<80 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<7	<140	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<10	<200	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<13 M	<260 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<14 M	<280 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<120 M	<120 M	<120 M	<120 M	<120 M
1.1-Dichloroethene	<10 µg/kg	TM116		<10 #	<200 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		24.1 M	<140 M	<140 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<10 #	<200 #	<200 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<220 M	<220 M	<220 M	<220 M	<220 M
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<11 M	<220 M	<220 M	<220 M	<220 M	<220 M
1.1-Dichloroethane	<8 µg/kg	TM116		<8 M	<160 M	<160 M	<160 M	<160 M	<160 M
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<5 M	<100 M	<100 M	<100 M	<100 M	<100 M
2.2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<14 M	<280 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<8 M	<160 M	<160 M	<160 M	<160 M	<160 M
1.1.1-Trichloroethane	<7 µg/kg	TM116		<7 M	<140 M	<140 M	<140 M	<140 M	<140 M
1.1-Dichloropropene	<11 µg/kg	TM116		<11 M	<220 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<280 M	<280 M	<280 M	<280 M	<280 M
1.2-Dichloroethane	<5 µg/kg	TM116		<5 M	<100 M	<100 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		20.1 M	<180 M	<180 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<9 M	<180 M	<180 M	<180 M	<180 M	<180 M
1.2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<9 M	<180 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<140 M	<140 M	<140 M	<140 M	<140 M
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<14 M	<280 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<5 M	<100 M	<100 M	<100 M	<100 M	<100 M
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<14	<280	<280	<280	<280	<280
1.1.2-Trichloroethane	<10 µg/kg	TM116		<10 M	<200 M	<200 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012
			SDG Ref	121103-64	121103-64	121103-64	121103-64	121103-64	121103-64
			Lab Sample No.(s)	6455421	6455422	6455423	6455424	6455426	6455427
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<7 #	<140 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<100 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<260 M	<260 M	<260 M	<260 M	<260 M
1.2-Dibromoethane	<12 µg/kg	TM116		<12 M	<240 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<100 M	<100 M	<100 M	<100 M
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<200 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		15.1 M	<80 M	<80 M	<80 M	<80 M	850 M
p/m-Xylene	<14 µg/kg	TM116		<14 #	<280 #	<280 #	<280 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<10 M	<200 M	<200 M	<200 M	<200 M	594 M
Styrene	<10 µg/kg	TM116		<10 M	<200 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<10 M	<200 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		12.7 M	219 M	<100 M	363 M	353 M	622 M
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<200 #	<200 #	<200 #	<200 #	<200 #
1.2.3-Trichloropropane	<17 µg/kg	TM116		<17 M	<340 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<10 M	<200 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		20 M	<220 M	<220 M	649 M	497 M	1040 M
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<180 M	<180 M	<180 M	<180 M	<180 M
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		41.1 #	<160 #	526 #	<160 #	441 #	1680 #
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<240 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<240 #	<240 #	<240 #	<240 #	<240 #
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		88.3 #	<180 #	218 #	370 #	1260 #	6540 #
sec-Butylbenzene	<10 µg/kg	TM116		18.1 M	599 M	<200 M	601 M	443 M	681 M
4-Isopropyltoluene	<11 µg/kg	TM116		24.1 M	<220 M	<220 M	<220 M	<220 M	707 M
1.3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<120 M	<120 M	<120 M	<120 M	<120 M
1.4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<200 M	<200 M	<200 M	<200 M	<200 M
1.2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<240 M	<240 M	<240 M	<240 M	<240 M
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<280 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<300	<300	<300	<300	<300
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<120 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<240	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<13 M	<260 M	<260 M	<260 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012	02/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012	03/11/2012
			SDG Ref	121103-64	121103-64	121103-64	121103-64	121103-64	121103-64
			Lab Sample No.(s)	6455421	6455422	6455423	6455424	6455426	6455427
			AGS Reference						
1.2.3-Trichlorobenzene	<6 µg/kg	TM116		<6 M	<120 M	<120 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample [1]	Surrogate Corrected
PM001		Preparation of Samples for Metals Analysis		
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		

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

CERTIFICATE OF ANALYSIS

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6455421	6455422	6455423	6455424	6455426	6455427
Customer Sample Ref.	CAEMV001	CAEMV002	CAEMV003	CAEMV004	CAEMV005	CAEMV006
AGS Ref.						
Depth						
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
EPH CWG (Aliphatic) GC (S)	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012
EPH CWG (Aromatic) GC (S)	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012
GRO by GC-FID (S)	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012
Metals by iCap-OES (Soil)	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012	07-Nov-2012
pH	08-Nov-2012	08-Nov-2012	08-Nov-2012	08-Nov-2012	08-Nov-2012	08-Nov-2012
Sample description	04-Nov-2012	04-Nov-2012	04-Nov-2012	04-Nov-2012	04-Nov-2012	04-Nov-2012
Semi Volatile Organic Compounds	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012
Total Organic Carbon	06-Nov-2012	06-Nov-2012	06-Nov-2012	06-Nov-2012	06-Nov-2012	06-Nov-2012
TPH CWG GC (S)	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012
VOC MS (S)	09-Nov-2012	11-Nov-2012	11-Nov-2012	11-Nov-2012	11-Nov-2012	11-Nov-2012

SDG:	121103-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201342
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

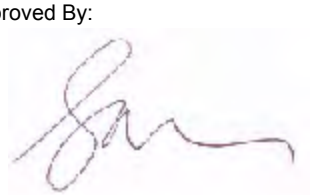
Date:	13 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121016-14
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	201538

We received 6 samples on Tuesday October 16, 2012 and 6 of these samples were scheduled for analysis which was completed on Tuesday November 13, 2012. 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

Alcontrol Laboratories is a trading division of ALcontrol UK Limited
Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No.

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6348378	CAEM005		1.00	15/10/2012
6348380	CAEM005		1.70	15/10/2012
6348381	CAEM006		1.00	15/10/2012
6348382	CAEM006		1.80	15/10/2012
6348383	CAEM008		1.50	15/10/2012
6348384	CAEM009		1.70	15/10/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6348378	CAEM005		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6348380	CAEM005		1.70	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6348381	CAEM006		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6348382	CAEM006		1.80	250g Amber Jar (AL
							400g Tub (ALE214)
			6348383	CAEM008		1.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6348384	CAEM009		1.70	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 3		X			
Asbestos Quantification - Full	All	NDPs: 0 Tests: 3		X			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 6	X		X	X	X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 3			X		X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 6		X		X	X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 6	X		X	X	X
	Cadmium	NDPs: 0 Tests: 6	X		X	X	X
	Chromium	NDPs: 0 Tests: 6	X		X	X	X
	Copper	NDPs: 0 Tests: 6	X		X	X	X
	Lead	NDPs: 0 Tests: 6	X		X	X	X
	Mercury	NDPs: 0 Tests: 6	X		X	X	X
	Nickel	NDPs: 0 Tests: 6	X		X	X	X
	Selenium	NDPs: 0 Tests: 6	X		X	X	X
	Vanadium	NDPs: 0 Tests: 6	X		X	X	X
	Zinc	NDPs: 0 Tests: 6	X		X	X	X

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6348378	CAEM005		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6348380	CAEM005		1.70	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6348381	CAEM006		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6348382	CAEM006		1.80	250g Amber Jar (AL
							400g Tub (ALE214)
			6348383	CAEM008		1.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6348384	CAEM009		1.70	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
PAH by GCMS	All	NDPs: 0 Tests: 6	X		X		X			X			X			X	
pH	All	NDPs: 0 Tests: 6		X		X			X			X			X			X	
Sample description	All	NDPs: 0 Tests: 6	X		X			X			X			X			X		
Total Organic Carbon	All	NDPs: 0 Tests: 3			X						X						X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 6	X		X			X			X			X			X		
VOC MS (S)	All	NDPs: 0 Tests: 6				X			X			X	X			X			X

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6348378	CAEM005	1.00	Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
6348380	CAEM005	1.70	Black	Sandy Loam	0.1 - 2 mm	Stones	N/A
6348381	CAEM006	1.00	Light Brown	Loamy Sand	0.063 - 0.1 mm	Stones	Concrete/Aggregate
6348382	CAEM006	1.80	Light Brown	Sandy Clay	0.1 - 2 mm	Stones	N/A
6348383	CAEM008	1.50	Grey	Gravel	2 - 10 mm	Stones	Concrete/Aggregate
6348384	CAEM009	1.70	Black	Clay	0.1 - 2 mm	Oil/Petroleum	Vegetation

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM005	CAEM005	CAEM006	CAEM006	CAEM008	CAEM009
			Depth (m)	1.00	1.70	1.00	1.80	1.50	1.70
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012
			SDG Ref	121016-14	121016-14	121016-14	121016-14	121016-14	121016-14
			Lab Sample No.(s)	6348378	6348380	6348381	6348382	6348383	6348384
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		47.6 #		0.909 #		23.6 #	
pH	1 pH Units	TM133	6.6 M	6.19 M	8.18 M	7.78 M	11.4 M	8 M	
Arsenic	<0.6 mg/kg	TM181	65.8 M	239 M	25.3 M	8.02 M	1.88 M	177 M	
Cadmium	<0.02 mg/kg	TM181	2.3 M	3.91 M	3.24 M	1.8 M	0.197 M	1.23 M	
Chromium	<0.9 mg/kg	TM181	12.7 M	9.29 M	14.9 M	12.9 M	3.64 M	17.5 M	
Copper	<1.4 mg/kg	TM181	160 M	388 M	53.4 M	<14 M	1.76 M	817 M	
Lead	<0.7 mg/kg	TM181	149 M	168 M	43.9 M	10.2 M	9.33 M	260 M	
Mercury	<0.14 mg/kg	TM181	0.5 M	<0.14 M	0.358 M	<0.14 M	0.249 M	0.294 M	
Nickel	<0.2 mg/kg	TM181	27.3 M	14.2 M	18.9 M	20.5 M	2.07 M	21.2 M	
Selenium	<1 mg/kg	TM181	<1 #	4.2 #	<1 #	<10 #	<1 #	6.59 #	
Vanadium	<0.2 mg/kg	TM181	19.9 #	13.1 #	21.2 #	13.5 #	4.26 #	23.5 #	
Zinc	<1.9 mg/kg	TM181	219 M	98.6 M	1390 M	62.3 M	20.7 M	111 M	

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM005	CAEM005	CAEM006	CAEM006	CAEM008	CAEM009
			Depth (m)	1.00	1.70	1.00	1.80	1.50	1.70
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012
			SDG Ref	121016-14	121016-14	121016-14	121016-14	121016-14	121016-14
			Lab Sample No.(s)	6348378	6348380	6348381	6348382	6348383	6348384
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		102 §	111 §	103	96.4 §	102	103 §
Acenaphthene-d10 % recovery**	%	TM218		103 §	115 §	101	97.1 §	101	106 §
Phenanthrene-d10 % recovery**	%	TM218		101 §	110 §	101	95.8 §	99.9	105 §
Chrysene-d12 % recovery**	%	TM218		96.7 §	102 §	110	94.2 §	106	101 §
Perylene-d12 % recovery**	%	TM218		99.9 §	100 §	117	98.3 §	113	102 §
Naphthalene	<9 µg/kg	TM218		904 § M	11500 § M	199 M	113 § M	178 #	165 § M
Acenaphthylene	<12 µg/kg	TM218		20.4 § M	34.4 § M	51.9 M	13.7 § M	<12 #	<12 § M
Acenaphthene	<8 µg/kg	TM218		28.6 § M	262 § M	70.6 M	28.6 § M	64.3 #	40.3 § M
Fluorene	<10 µg/kg	TM218		115 § M	466 § M	149 M	93.7 § M	96.9 #	95.8 § M
Phenanthrene	<15 µg/kg	TM218		156 § M	103 § M	579 M	119 § M	275 #	196 § M
Anthracene	<16 µg/kg	TM218		65.8 § M	36.5 § M	210 M	25.5 § M	132 #	37.4 § M
Fluoranthene	<17 µg/kg	TM218		259 § M	<17 § M	1570 M	19.9 § M	63.6 #	68 § M
Pyrene	<15 µg/kg	TM218		307 § M	<15 § M	1500 M	24.3 § M	158 #	69.9 § M
Benz(a)anthracene	<14 µg/kg	TM218		126 § M	53.1 § M	1280 M	20.6 § M	38.6 #	49.5 § M
Chrysene	<10 µg/kg	TM218		163 § M	30.4 § M	1080 M	17.1 § M	34.3 #	75.6 § M
Benzo(b)fluoranthene	<15 µg/kg	TM218		220 § M	39.7 § M	1280 M	22 § M	29.3 #	82.1 § M
Benzo(k)fluoranthene	<14 µg/kg	TM218		94.8 § M	<14 § M	579 M	<14 § M	<14 #	<14 § M
Benzo(a)pyrene	<15 µg/kg	TM218		166 § M	37.1 § M	1500 M	<15 § M	18.7 #	36.2 § M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		140 § M	<18 § M	965 M	<18 § M	<18 #	<18 § M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		51.2 § M	<23 § M	289 M	<23 § M	<23 #	<23 § M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		173 § M	<24 § M	1130 M	<24 § M	<24 #	<24 § M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		2990 §	12600 §	12400	498 §	1090	916 §

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM005	CAEM005	CAEM006	CAEM006	CAEM008	CAEM009
			Depth (m)	1.00	1.70	1.00	1.80	1.50	1.70
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012
			SDG Ref	121016-14	121016-14	121016-14	121016-14	121016-14	121016-14
			Lab Sample No.(s)	6348378	6348380	6348381	6348382	6348383	6348384
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		78	47	82	109 §	74	68
GRO >C5-C12	<44 µg/kg	TM089		327000	123000	86000	289000 §	3630	60400
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<25 #	<5 #	<10 #	<25 § #	<5 #	<5 #
Benzene	<10 µg/kg	TM089		<50 M	66 M	<20 M	<50 § M	23.6 M	94.5 M
Toluene	<2 µg/kg	TM089		<10 M	<2 M	<4 M	<10 § M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<15 M	416 M	<6 M	<15 § M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		1590 M	2360 M	<12 M	<30 § M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<15 M	790 M	<6 M	<15 § M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		1590	3150	<9	<9 §	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		1590	3630	<24	<24 §	<24	94.5
Aliphatics >C5-C6	<10 µg/kg	TM089		474	444	<20	54.9 §	62.3	363
Aliphatics >C6-C8	<10 µg/kg	TM089		20600	16100	535	2790 §	319	8010
Aliphatics >C8-C10	<10 µg/kg	TM089		57100	28700	12300	48400 §	619	15600
Aliphatics >C10-C12	<10 µg/kg	TM089		126000	32900	39000	123000 §	1320	15600
Aliphatics >C12-C16	<100 µg/kg	TM173		488000	38100	280000	272000	68700	72800
Aliphatics >C16-C21	<100 µg/kg	TM173		267000	22500	257000	178000	319000	147000
Aliphatics >C21-C35	<100 µg/kg	TM173		826000	230000	350000	21400	1220000	882000
Aliphatics >C35-C44	<100 µg/kg	TM173		536000	46900	77800	3330	124000	277000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		2120000	338000	965000	474000	1730000	1380000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<50	66	<20	<50 §	23.6	94.5
Aromatics >EC7-EC8	<10 µg/kg	TM089		<50	<10	<20	<50 §	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		39700	22700	8180	32300 §	412	10400
Aromatics >EC10-EC12	<10 µg/kg	TM089		83700	21900	26000	82300 §	879	10400
Aromatics >EC12-EC16	<100 µg/kg	TM173		332000	357000	106000	145000	30600	95800
Aromatics >EC16-EC21	<100 µg/kg	TM173		143000	38200	146000	111000	155000	114000
Aromatics >EC21-EC35	<100 µg/kg	TM173		421000	392000	203000	19700	352000	854000
Aromatics >EC35-EC44	<100 µg/kg	TM173		299000	167000	58100	2690	44000	325000
Aromatics >EC40-EC44	<100 µg/kg	TM173		125000	53400	22300	<100	17400	120000
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1200000	954000	513000	279000	581000	1390000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1780000	369000	939000	646000	1610000	1140000
Total Aromatics >C5-35	<100 µg/kg	TM173		1020000	832000	489000	391000	539000	1080000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		2800000	1200000	1430000	1040000	2140000	2230000

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM005	CAEM005	CAEM006	CAEM006	CAEM008	CAEM009
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	1.00	1.70	1.00	1.80	1.50	1.70
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012
		SDG Ref	121016-14	121016-14	121016-14	121016-14	121016-14	121016-14
		Lab Sample No.(s)	6348378	6348380	6348381	6348382	6348383	6348384
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	3640000	1410000	1560000	1040000	2310000	2830000

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM005	CAEM005	CAEM006	CAEM006	CAEM008	CAEM009
			Depth (m)	1.00	1.70	1.00	1.80	1.50	1.70
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012
			SDG Ref	121016-14	121016-14	121016-14	121016-14	121016-14	121016-14
			Lab Sample No.(s)	6348378	6348380	6348381	6348382	6348383	6348384
			AGS Reference						
Dibromofluoromethane**	%	TM116		105	104	105	103	108	98.1
Toluene-d8**	%	TM116		102	97.4	95.2	99.8	102	94.7
4-Bromofluorobenzene**	%	TM116		113	115	124	104	104	130
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<8 M	<80 M	<80 #	<8 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<14	<140	<140	<14
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<20	<200	<200	<20
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<26 M	<260 M	<260 #	<26 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 #	<28 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<12 M	<120 M	<120 #	<12 M
1.1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<200 #	<200 #	<20 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	32.4 M	<140 M	<140 #	508 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<200 #	<200 #	<20 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<220 M	<220 #	<22 M
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<220 M	<220 #	<22 M
1.1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<16 M	<160 M	<160 #	<16 M
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 #	<10 M
2.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 #	<24 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 #	<28 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<16 M	<160 M	<160 #	<16 M
1.1.1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<14 M	<140 M	<140 #	<14 M
1.1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<220 M	<220 #	<22 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 #	<28 M
1.2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 #	<10 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<180 M	241 #	96.7 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<180 M	<180 #	<18 M
1.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 #	<24 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<180 M	<180 #	<18 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<14 M	<140 M	<140 #	<14 M
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 #	<28 M
Toluene	<5 µg/kg	TM116		236 M	<100 M	13.9 M	<100 M	<100 #	<10 M
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<28	<280	<280	<28
1.1.2-Trichloroethane	<10 µg/kg	TM116		656 M	<200 M	<20 M	<200 M	<200 #	<20 M

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM005	CAEM005	CAEM006	CAEM006	CAEM008	CAEM009
			Depth (m)	1.00	1.70	1.00	1.80	1.50	1.70
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012
			SDG Ref	121016-14	121016-14	121016-14	121016-14	121016-14	121016-14
			Lab Sample No.(s)	6348378	6348380	6348381	6348382	6348383	6348384
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<14 #	<140 #	<140 #	<14 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 #	<10 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<26 M	<260 M	<260 #	<26 M
1.2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 #	<24 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 #	<10 M
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 #	<20 M
Ethylbenzene	<4 µg/kg	TM116		450 M	2680 M	25 M	<80 M	<80 #	35.9 M
p/m-Xylene	<14 µg/kg	TM116		2770 #	13300 #	91.8 #	<280 #	<280 #	<28 #
o-Xylene	<10 µg/kg	TM116		906 M	3530 M	22.9 M	<200 M	<200 #	<20 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 #	<20 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 #	<20 M
Isopropylbenzene	<5 µg/kg	TM116		1060 M	4910 M	121 M	<100 M	<100 #	309 M
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<200 #	<200 #	<20 #
1.2.3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<34 M	<340 M	<340 #	<34 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 #	<20 M
Propylbenzene	<11 µg/kg	TM116		1810 M	10900 M	139 M	<220 M	<220 #	414 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<180 M	<180 #	<18 M
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		9340 #	31300 #	26.6 #	<160 #	<160 #	<16 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 #	<24 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<24 #	<240 #	<240 #	<24 #
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		29600 #	127000 #	175 #	<180 #	<180 #	<18 #
sec-Butylbenzene	<10 µg/kg	TM116		3100 M	4820 M	758 M	<200 M	<200 #	322 M
4-Isopropyltoluene	<11 µg/kg	TM116		3150 M	5480 M	<22 M	<220 M	<220 #	<22 M
1.3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<12 M	<120 M	<120 #	<12 M
1.4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 #	<10 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 #	<20 M
1.2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 #	<24 M
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 #	<28 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<30	<300	<300	<30
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<12 #	<120 #	<120 #	<12 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<24	<240	<240	<24
Naphthalene	<13 µg/kg	TM116		9740 M	49600 M	<26 M	<260 M	<260 #	<26 M

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEM005	CAEM005	CAEM006	CAEM006	CAEM008	CAEM009
			Depth (m)	1.00	1.70	1.00	1.80	1.50	1.70
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012	15/10/2012
			Sample Time	.	.	.	.	.	.
			Date Received	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012	16/10/2012
			SDG Ref	121016-14	121016-14	121016-14	121016-14	121016-14	121016-14
			Lab Sample No.(s)	6348378	6348380	6348381	6348382	6348383	6348384
			AGS Reference						
1.2.3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<12 M	<120 M	<120 #	<12 M

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM005 1.00 SOLID 15/10/2012 00:00:00 121016-14 6348378 TM048	27/10/12	Martin Cotterell	Loose fibres in soil	Trace (#)	Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM006 1.00 SOLID 15/10/2012 00:00:00 121016-14 6348381 TM048	27/10/12	Martin Cotterell	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM008 1.50 SOLID 15/10/2012 00:00:00 121016-14 6348383 TM048	27/10/12	Martin Cotterell	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Quantification - Full

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM005 1.00 SOLID 15/10/2012 00:00:00 121016-14 6348378 TM 304	None (#)	-	<0.001 (#)	<0.001 (#)	<0.001 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM006 1.00 SOLID 15/10/2012 00:00:00 121016-14 6348381 TM 304	Chrysotile (#)	Chrysotile found during gravimetric analysis (loose fibres).	<0.001 (#)	0.0011 (#)	0.0019 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM008 1.50 SOLID 15/10/2012 00:00:00 121016-14 6348383 TM 304	None (#)	-	<0.001 (#)	<0.001 (#)	<0.001 (#)

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of Deviating Samples

Sample Number	Customer Sample Ref.	Depth (m)	Matrix	Test Name	Component Name	Comment
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6437842	CAEM005	1.70	SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6437896	CAEM006	1.80	SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Sample Number	Customer Sample Ref.	Depth (m)	Matrix	Test Name	Component Name	Comment
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6437941	CAEM009	1.70	SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Acenaphthene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Acenaphthene-d10 % recovery**	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Acenaphthylene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Anthracene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Benz(a)anthracene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Benzo(a)pyrene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Benzo(b)fluoranthene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Benzo(g,h,i)perylene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Benzo(k)fluoranthene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Chrysene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Chrysene-d12 % recovery**	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Dibenzo(a,h)anthracene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Fluoranthene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Fluorene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Indeno(1,2,3-cd)pyrene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Naphthalene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Naphthalene-d8 % recovery**	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	PAH, Total Detected USEPA 16	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Perylene-d12 % recovery**	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Phenanthrene	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Phenanthrene-d10 % recovery**	Sample holding time exceeded
6489687	CAEM005	1.00	SOLID	PAH by GCMS	Pyrene	Sample holding time exceeded
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Aliphatics >C10-C12	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Aliphatics >C5-C6	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Aliphatics >C6-C8	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Aliphatics >C8-C10	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Aromatics >EC10-EC12	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Aromatics >EC5-EC7	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Aromatics >EC7-EC8	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Aromatics >EC8-EC10	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Benzene	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Ethylbenzene	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	GRO >C5-C12	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	GRO Surrogate % recovery**	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	m,p-Xylene	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Methyl tertiary butyl ether (MTBE)	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	o-Xylene	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	sum of detected BTEX by GC	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	sum of detected mpo xylene by GC	Volatile container not received
6378657	CAEM006	1.80	SOLID	GRO by GC-FID (S)	Toluene	Volatile container not received

Note : Test results may be compromised

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		

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

CERTIFICATE OF ANALYSIS

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6348378	6348380	6348381	6348382	6348383	6348384
Customer Sample Ref.	CAEM005	CAEM005	CAEM006	CAEM006	CAEM008	CAEM009
AGS Ref.						
Depth	1.00	1.70	1.00	1.80	1.50	1.70
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	29-Oct-2012		29-Oct-2012		29-Oct-2012	
Asbestos Quantification - Full	13-Nov-2012		12-Nov-2012		12-Nov-2012	
EPH CWG (Aliphatic) GC (S)	25-Oct-2012	21-Oct-2012	25-Oct-2012	21-Oct-2012	25-Oct-2012	21-Oct-2012
EPH CWG (Aromatic) GC (S)	25-Oct-2012	21-Oct-2012	25-Oct-2012	21-Oct-2012	25-Oct-2012	21-Oct-2012
GRO by GC-FID (S)	22-Oct-2012	22-Oct-2012	22-Oct-2012	22-Oct-2012	22-Oct-2012	22-Oct-2012
Metals by iCap-OES (Soil)	22-Oct-2012	19-Oct-2012	22-Oct-2012	22-Oct-2012	22-Oct-2012	19-Oct-2012
PAH by GCMS	13-Nov-2012	06-Nov-2012	09-Nov-2012	06-Nov-2012	09-Nov-2012	06-Nov-2012
pH	22-Oct-2012	18-Oct-2012	22-Oct-2012	18-Oct-2012	22-Oct-2012	18-Oct-2012
Sample description	20-Oct-2012	16-Oct-2012	20-Oct-2012	16-Oct-2012	20-Oct-2012	16-Oct-2012
Total Organic Carbon		19-Oct-2012		18-Oct-2012		19-Oct-2012
TPH CWG GC (S)	25-Oct-2012	22-Oct-2012	25-Oct-2012	22-Oct-2012	25-Oct-2012	22-Oct-2012
VOC MS (S)	23-Oct-2012	23-Oct-2012	23-Oct-2012	22-Oct-2012	23-Oct-2012	23-Oct-2012

SDG:	121016-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0305
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	201538
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Llandarcy
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Attention: Selina Bamforth

PRELIMINARY/INTERIM REPORT

Date:	16 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121108-95
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	202204

We received 6 samples on Thursday November 08, 2012 and 6 of these samples were scheduled for analysis which was completed on (tba). 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.

This is a preliminary report which has not had final authorisation.

Approved By:

Alcontrol Laboratories is a trading division of ALcontrol UK Limited
Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No.

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6474362	CAEMV16			06/11/2012
6474363	CAEMV17			06/11/2012
6474353	SP55-1			07/11/2012
6474355	SP55-2			07/11/2012
6474358	SP55-3			07/11/2012
6474360	SP55-4			07/11/2012

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

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6474362	CAEMV16			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6474363	CAEMV17			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6474353	SP55-1			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6474355	SP55-2			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6474358	SP55-3			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6474360	SP55-4			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 6					X X X X X X
Asbestos Quantification - Full	All	NDPs: 0 Tests: 5					X X X X X X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 6					X X X X X X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 6					X X X X X X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 6					X X X X X X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 6					X X X X X X
	Cadmium	NDPs: 0 Tests: 6					X X X X X X
	Chromium	NDPs: 0 Tests: 6					X X X X X X
	Copper	NDPs: 0 Tests: 6					X X X X X X
	Lead	NDPs: 0 Tests: 6					X X X X X X
	Mercury	NDPs: 0 Tests: 6					X X X X X X
	Nickel	NDPs: 0 Tests: 6					X X X X X X
	Selenium	NDPs: 0 Tests: 6					X X X X X X
	Zinc	NDPs: 0 Tests: 6					X X X X X X
pH	All	NDPs: 0 Tests: 6					X X X X X X

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

		Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
		6474362	CAEMV16			250g Amber Jar (AL
						400g Tub (ALE214)
						60g VOC (ALE215)
		6474363	CAEMV17			250g Amber Jar (AL
						400g Tub (ALE214)
						60g VOC (ALE215)
		6474353	SP55-1			250g Amber Jar (AL
						400g Tub (ALE214)
						60g VOC (ALE215)
		6474355	SP55-2			250g Amber Jar (AL
						400g Tub (ALE214)
						60g VOC (ALE215)
		6474358	SP55-3			250g Amber Jar (AL
						400g Tub (ALE214)
						60g VOC (ALE215)
		6474360	SP55-4			250g Amber Jar (AL
						400g Tub (ALE214)
						60g VOC (ALE215)
Sample description	All	NDPs: 0 Tests: 6				X X X X X X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 6				X X X X X X
Total Organic Carbon	All	NDPs: 5 Tests: 1				N X N N N N
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 5				X X X X X
TPH CWG GC (S)	All	NDPs: 0 Tests: 6				X X X X X X
VOC MS (S)	All	NDPs: 0 Tests: 6				X X X X X X

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6474362	CAEMV16		Light Brown	Loamy Sand	0.063 - 0.1 mm	Stones	None
6474363	CAEMV17		Grey	Silt Loam	<0.063 mm	Stones	Vegetation
6474353	SP55-1		Light Brown	Sandy Silt Loam	0.1 - 2 mm	Crushed Brick	Stones
6474355	SP55-2		Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
6474358	SP55-3		Dark Brown	Loamy Sand	0.1 - 2 mm	Crushed Brick	Stones
6474360	SP55-4		Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	Brick

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 ocurring 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.

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012
			SDG Ref	121108-95	121108-95	121108-95	121108-95	121108-95	121108-95
			Lab Sample No.(s)	6474362	6474363	6474353	6474355	6474358	6474360
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132			1.09 #				
pH	1 pH Units	TM133		7.91 M	7.77 M	8.16 M	7.67 M	7.54 M	8.17 M
Arsenic	<0.6 mg/kg	TM181		8.92 M	7.83 M	219 M	393 M	342 M	352 M
Cadmium	<0.02 mg/kg	TM181		1.66 M	0.598 M	5.15 M	26.8 M	7.87 M	8.57 M
Chromium	<0.9 mg/kg	TM181		11.7 M	13.4 M	53.4 M	19.6 M	16.4 M	28.8 M
Copper	<1.4 mg/kg	TM181		8.73 M	21.2 M	619 M	2310 M	735 M	989 M
Lead	<0.7 mg/kg	TM181		8.01 M	58.9 M	3050 M	9510 M	7980 M	8060 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	0.286 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		26.1 M	20.6 M	39 M	50.6 M	39.8 M	59.5 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	1.11 #	<1 #	1.12 #	<1 #
Zinc	<1.9 mg/kg	TM181		55.6 M	152 M	7320 M	51800 M	11200 M	12600 M
Soil Organic Matter (SOM)	<0.1 %	TM321		1.28		2.3	2.04	2.67	2.59

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012
			SDG Ref	121108-95	121108-95	121108-95	121108-95	121108-95	121108-95
			Lab Sample No.(s)	6474362	6474363	6474353	6474355	6474358	6474360
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	156
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	120	173
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012
			SDG Ref	121108-95	121108-95	121108-95	121108-95	121108-95	121108-95
			Lab Sample No.(s)	6474362	6474363	6474353	6474355	6474358	6474360
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	130	<100	187	267
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	118	265
Anthracene	<100 µg/kg	TM157		<100	<100	152	<100	211	313
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	820	271	1180	1470
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	954	374	1440	1700
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	702	260	1110	1290
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	970	356	1470	1530
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	611	234	937	970
Chrysene	<100 µg/kg	TM157		<100	<100	996	359	1460	1730
Fluoranthene	<100 µg/kg	TM157		<100	<100	1320	427	1580	2220
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	212
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	428	166	692	718
Phenanthrene	<100 µg/kg	TM157		185	<100	591	272	664	1240
Pyrene	<100 µg/kg	TM157		<100	<100	1080	383	1490	1830
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	122	176
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	195	<100	320	333

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012
			SDG Ref	121108-95	121108-95	121108-95	121108-95	121108-95	121108-95
			Lab Sample No.(s)	6474362	6474363	6474353	6474355	6474358	6474360
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		144	121	36	31	66	62
GRO >C5-C12	<44 µg/kg	TM089		45300	374	103	250	392	476
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Benzene	<10 µg/kg	TM089		38.5 M	<10 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	15 M	<2 M	2.3 M	2.28 M	4.6 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	3.45 M	<3 M	3.45 M	3.42 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	12.7 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	12.7	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		38.5	31.2	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		311	19.6	<10	10.4	13.7	42.6
Aliphatics >C6-C8	<10 µg/kg	TM089		13700	173	27.4	48.3	44.5	150
Aliphatics >C8-C10	<10 µg/kg	TM089		9610	34.5	14.8	35.7	26.2	93.2
Aliphatics >C10-C12	<10 µg/kg	TM089		9140	51.8	22.8	70.2	165	66.7
Aliphatics >C12-C16	<100 µg/kg	TM173		38400	10400	10300	12200	26200	17700
Aliphatics >C16-C21	<100 µg/kg	TM173		54200	23600	19000	27400	70300	50200
Aliphatics >C21-C35	<100 µg/kg	TM173		211000	54800	58600	65600	148000	97200
Aliphatics >C35-C44	<100 µg/kg	TM173		126000	13600	53900	16300	65600	24100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		429000	102000	142000	122000	310000	189000
Aromatics >EC5-EC7	<10 µg/kg	TM089		38.5	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	15	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		6410	41.4	12.5	29.9	27.4	67.9
Aromatics >EC10-EC12	<10 µg/kg	TM089		6100	34.5	14.8	47.2	109	43.7
Aromatics >EC12-EC16	<100 µg/kg	TM173		18100	1760	6480	4910	11600	7530
Aromatics >EC16-EC21	<100 µg/kg	TM173		37700	9510	17400	14000	58000	32600
Aromatics >EC21-EC35	<100 µg/kg	TM173		152000	26600	56800	44400	213000	119000
Aromatics >EC35-EC44	<100 µg/kg	TM173		92700	9830	48600	28300	149000	75100
Aromatics >EC40-EC44	<100 µg/kg	TM173		35900	4470	24900	14300	72400	36400
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		300000	47700	129000	91600	431000	235000
Total Aliphatics >C5-35	<100 µg/kg	TM173		336000	89100	88000	105000	245000	165000
Total Aromatics >C5-35	<100 µg/kg	TM173		220000	38000	80700	63400	282000	160000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		556000	127000	169000	169000	527000	325000

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
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							
		Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	06/11/2012	06/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
		Sample Time	.	.	.	.	.	.
		Date Received	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012
		SDG Ref	121108-95	121108-95	121108-95	121108-95	121108-95	121108-95
		Lab Sample No.(s)	6474362	6474363	6474353	6474355	6474358	6474360
		AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	774000	150000	271000	213000	742000	424000

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012
			SDG Ref	121108-95	121108-95	121108-95	121108-95	121108-95	121108-95
			Lab Sample No.(s)	6474362	6474363	6474353	6474355	6474358	6474360
			AGS Reference						
Dibromofluoromethane**	%	TM116		104	95.4	106	107	103	106
Toluene-d8**	%	TM116		100	101	97.6	97.9	98.7	98.5
4-Bromofluorobenzene**	%	TM116		116	119	108	108	109	109
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<4 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<14	<7	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<20	<10	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<26 M	<13 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<28 M	<14 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<6 M	<120 M	<120 M	<120 M	<120 M
1.1-Dichloroethene	<10 µg/kg	TM116		<20 #	<10 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<14 M	9.53 M	<140 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<20 #	<10 #	<200 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<11 M	<220 M	<220 M	<220 M	<220 M
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<22 M	<11 M	<220 M	<220 M	<220 M	<220 M
1.1-Dichloroethane	<8 µg/kg	TM116		<16 M	<8 M	<160 M	<160 M	<160 M	<160 M
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<10 M	<5 M	<100 M	<100 M	<100 M	<100 M
2.2-Dichloropropane	<12 µg/kg	TM116		<24 M	<12 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<28 M	<14 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<16 M	<8 M	<160 M	<160 M	<160 M	<160 M
1.1.1-Trichloroethane	<7 µg/kg	TM116		<14 M	<7 M	<140 M	<140 M	<140 M	<140 M
1.1-Dichloropropene	<11 µg/kg	TM116		<22 M	<11 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<14 M	<280 M	<280 M	<280 M	<280 M
1.2-Dichloroethane	<5 µg/kg	TM116		<10 M	<5 M	<100 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<18 M	21.1 M	<180 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<18 M	<9 M	<180 M	<180 M	<180 M	<180 M
1.2-Dichloropropane	<12 µg/kg	TM116		<24 M	<12 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<18 M	<9 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<7 M	<140 M	<140 M	<140 M	<140 M
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<28 M	<14 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		12.6 M	18.1 M	<100 M	<100 M	<100 M	<100 M
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<28	<14	<280	<280	<280	<280
1.1.2-Trichloroethane	<10 µg/kg	TM116		<20 M	<10 M	<200 M	<200 M	<200 M	<200 M

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012
			SDG Ref	121108-95	121108-95	121108-95	121108-95	121108-95	121108-95
			Lab Sample No.(s)	6474362	6474363	6474353	6474355	6474358	6474360
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<14 #	<7 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<5 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<13 M	<260 M	<260 M	<260 M	<260 M
1.2-Dibromoethane	<12 µg/kg	TM116		<24 M	<12 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<10 M	<5 M	<100 M	<100 M	<100 M	<100 M
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<10 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<8 M	10.8 M	<80 M	<80 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<28 #	27.5 #	<280 #	<280 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<20 M	<10 M	<200 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<20 M	<10 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<20 M	<10 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		21.7 M	<5 M	<100 M	<100 M	<100 M	<100 M
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<10 #	<200 #	<200 #	<200 #	<200 #
1.2.3-Trichloropropane	<17 µg/kg	TM116		<34 M	<17 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<20 M	<10 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		27.2 M	<11 M	<220 M	<220 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<9 M	<180 M	<180 M	<180 M	<180 M
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	<8 #	<160 #	<160 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<12 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<12 #	<240 #	<240 #	<240 #	<240 #
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	12.8 #	<180 #	<180 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		58.1 M	<10 M	<200 M	<200 M	<200 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<11 M	<220 M	<220 M	<220 M	<220 M
1.3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<6 M	<120 M	<120 M	<120 M	<120 M
1.4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<5 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<10 M	<200 M	<200 M	<200 M	<200 M
1.2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<12 M	<240 M	<240 M	<240 M	<240 M
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<14 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<15	<300	<300	<300	<300
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<6 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<12	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<26 M	<13 M	<260 M	<260 M	<260 M	<260 M

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend								
#	ISO17025 accredited.	**Customer Sample R**	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
M	*m*CERTS accredited.	**Depth (m)**	.	.	.	.	.	.
§	Deviating sample.	**Sample Type**	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.	**Date Sampled**	06/11/2012	06/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
diss.filt	Dissolved / filtered sample.	**Sample Time**	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	**Date Received**	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012	08/11/2012
*	Subcontracted test.	**SDG Ref**	121108-95	121108-95	121108-95	121108-95	121108-95	121108-95
**	% 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	**Lab Sample No.(s)**	6474362	6474363	6474353	6474355	6474358	6474360
(F)	Trigger breach confirmed	**AGS Reference**						
Component	**LOD/Units**	**Method**						
1.2.3-Trichlorobenzene	<6 µg/kg	TM116	<12 M	<6 M	<120 M	<120 M	<120 M	<120 M

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV16 SOLID 06/11/2012 00:00:00 121108-95 6474362 TM048	14/11/12	Tomasz Pawlikowski	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV17 SOLID 06/11/2012 00:00:00 121108-95 6474363 TM048	14/11/12	Tomasz Pawlikowski	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP55-1 SOLID 07/11/2012 00:00:00 121108-95 6474353 TM048	14/11/12	Tomasz Pawlikowski	Loose fibres in soil	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP55-2 SOLID 07/11/2012 00:00:00 121108-95 6474355 TM048	14/11/12	Tomasz Pawlikowski	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP55-3 SOLID 07/11/2012 00:00:00 121108-95 6474358 TM048	15/11/12	Paul Poynton	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP55-4 SOLID 07/11/2012 00:00:00 121108-95 6474360 TM048	14/11/12	Tomasz Pawlikowski	Loose fibres in soil	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Quantification - Full

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV16 SOLID 06/11/2012 00:00:00 121108-95 6474362 TM 304	None (#)	-	<0.001 (#)	<0.001 (#)	<0.001 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP55-1 SOLID 07/11/2012 00:00:00 121108-95 6474353 TM 304	None (#)	Some loose fibres found during gravimetric analysis, but too few/small to accurately weigh.	<0.001 (#)	0.0013 (#)	0.0013 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP55-2 SOLID 07/11/2012 00:00:00 121108-95 6474355 TM 304	None (#)	-	<0.001 (#)	0.0010 (#)	0.0011 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP55-3 SOLID 07/11/2012 00:00:00 121108-95 6474358 TM 304	None (#)	Chrysotile found during PCM analysis. Loose fibres found during gravimetric analysis but to small/few to accurately weigh.	<0.001 (#)	0.0011 (#)	0.0011 (#)
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP55-4 SOLID 07/11/2012 00:00:00 121108-95 6474360 TM 304	None (#)	-	<0.001 (#)	0.0017 (#)	0.0018 (#)

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of NDPs (No determination possible)

Date Received : 08/11/2012 14:12:34

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6474353	SP55-1		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6474355	SP55-2		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6474358	SP55-3		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6474360	SP55-4		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6474362	CAEMV16		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

PRELIMINARY/INTERIM REPORT

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6474362	6474363	6474353	6474355	6474358	6474360
Customer Sample Ref.	CAEMV16	CAEMV17	SP55-1	SP55-2	SP55-3	SP55-4
AGS Ref.						
Depth						
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	15-Nov-2012	15-Nov-2012	15-Nov-2012	15-Nov-2012	15-Nov-2012	15-Nov-2012
Asbestos Quantification - Full	14-Nov-2012		14-Nov-2012	14-Nov-2012	15-Nov-2012	14-Nov-2012
EPH CWG (Aliphatic) GC (S)	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
EPH CWG (Aromatic) GC (S)	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
GRO by GC-FID (S)	13-Nov-2012	12-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012
Metals by iCap-OES (Soil)	13-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
pH	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012
Sample description	10-Nov-2012	10-Nov-2012	10-Nov-2012	10-Nov-2012	10-Nov-2012	10-Nov-2012
Semi Volatile Organic Compounds	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
Total Organic Carbon		16-Nov-2012				
Total Organic Carbon (Asb)	16-Nov-2012		16-Nov-2012	16-Nov-2012	16-Nov-2012	16-Nov-2012
TPH CWG GC (S)	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
VOC MS (S)	13-Nov-2012	12-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012

SDG:	121108-95	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202204
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

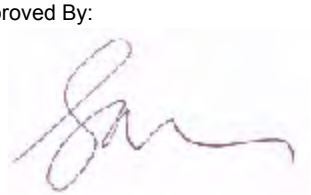
Date:	19 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121106-35
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	202386

We received 8 samples on Tuesday November 06, 2012 and 8 of these samples were scheduled for analysis which was completed on Monday November 19, 2012. 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

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Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No.

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6461633	CAEMv008			05/11/2012
6461634	CAEMv009			05/11/2012
6461635	CAEMv010			05/11/2012
6461636	CAEMv011			05/11/2012
6461640	CAEMv012			05/11/2012
6461639	CAEMv014		1.00	05/11/2012
6461637	CAEMv014		2.40	05/11/2012
6461632	CAEMvoo7			05/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 8	6461633	CAEMv008			250g Amber Jar (AL)
			6461633	CAEMv008			400g Tub (ALE214)
			6461633	CAEMv008			60g VOC (ALE215)
			6461634	CAEMv009			250g Amber Jar (AL)
			6461634	CAEMv009			400g Tub (ALE214)
			6461634	CAEMv009			60g VOC (ALE215)
			6461635	CAEMv010			250g Amber Jar (AL)
			6461635	CAEMv010			400g Tub (ALE214)
			6461635	CAEMv010			60g VOC (ALE215)
			6461636	CAEMv011			250g Amber Jar (AL)
			6461636	CAEMv011			400g Tub (ALE214)
			6461636	CAEMv011			60g VOC (ALE215)
			6461640	CAEMv012			250g Amber Jar (AL)
			6461640	CAEMv012			400g Tub (ALE214)
			6461640	CAEMv012			60g VOC (ALE215)
			6461639	CAEMv014		1.00	250g Amber Jar (AL)
			6461639	CAEMv014		1.00	400g Tub (ALE214)
			6461639	CAEMv014		1.00	60g VOC (ALE215)
			6461637	CAEMv014		2.40	250g Amber Jar (AL)
			6461637	CAEMv014		2.40	400g Tub (ALE214)
			6461637	CAEMv014		2.40	60g VOC (ALE215)
			6461632	CAEMv007			250g Amber Jar (AL)
			6461632	CAEMv007			400g Tub (ALE214)
			6461632	CAEMv007			60g VOC (ALE215)
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 8					
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 8					
GRO by GC-FID (S)	All	NDPs: 0 Tests: 8					
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 8					
	Cadmium	NDPs: 0 Tests: 8					
	Chromium	NDPs: 0 Tests: 8					
	Copper	NDPs: 0 Tests: 8					
	Lead	NDPs: 0 Tests: 8					
	Mercury	NDPs: 0 Tests: 8					
	Nickel	NDPs: 0 Tests: 8					
	Selenium	NDPs: 0 Tests: 8					
	Zinc	NDPs: 0 Tests: 8					
pH	All	NDPs: 0 Tests: 8					
Sample description	All	NDPs: 0 Tests: 8					

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 8	6461633	CAEMv008			250g Amber Jar (AL)
			6461634	CAEMv009			400g Tub (ALE214)
			6461635	CAEMv010			60g VOC (ALE215)
			6461636	CAEMv011			250g Amber Jar (AL)
			6461640	CAEMv012			400g Tub (ALE214)
			6461639	CAEMv014		1.00	60g VOC (ALE215)
			6461637	CAEMv014		2.40	250g Amber Jar (AL)
			6461632	CAEMvoo7			400g Tub (ALE214)
							60g VOC (ALE215)
Total Organic Carbon	All	NDPs: 0 Tests: 7					
TPH CWG GC (S)	All	NDPs: 0 Tests: 8					
VOC MS (S)	All	NDPs: 0 Tests: 8					

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6461633	CAEMv008		Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
6461634	CAEMv009		Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
6461635	CAEMv010		Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones	Oil/Petroleum
6461636	CAEMv011		Light Brown	Sandy Silt Loam	<0.063 mm	Oil/Petroleum	None
6461640	CAEMv012		Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	None
6461637	CAEMv014	2.40	Light Brown	Silt Loam	<0.063 mm	None	None
6461639	CAEMv014	1.00	Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones	Crystalline Material
6461632	CAEMvoo7		Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014
			Depth (m)	.	.	.	.	.	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			SDG Ref	121106-35	121106-35	121106-35	121106-35	121106-35	121106-35
			Lab Sample No.(s)	6461633	6461634	6461635	6461636	6461640	6461639
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		1.12 #	1.47 #	1.27 #	2.09 #	1.11 #	
pH	1 pH Units	TM133		7.65 M	6.99 M	7.15 M	7.34 M	8.72 M	7.76 M
Arsenic	<0.6 mg/kg	TM181		8.48 M	7.4 M	8.92 M	4.38 M	6.71 M	22 M
Cadmium	<0.02 mg/kg	TM181		1.06 M	1.16 M	1.19 M	0.227 M	0.984 M	1.15 M
Chromium	<0.9 mg/kg	TM181		11.9 M	14.8 M	16.8 M	6.13 M	11.7 M	14.2 M
Copper	<1.4 mg/kg	TM181		11.5 M	14.8 M	11.7 M	11 M	11.5 M	82 M
Lead	<0.7 mg/kg	TM181		11.4 M	14.3 M	10.7 M	12.8 M	10.7 M	112 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	0.354 M
Nickel	<0.2 mg/kg	TM181		21.8 M	26.1 M	17.3 M	3.9 M	26 M	22.7 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	1.32 #
Zinc	<1.9 mg/kg	TM181		71.2 M	68.5 M	40.6 M	29.8 M	61.6 M	599 M

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv014	CAEMvoo7				
			Depth (m)	2.40	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	05/11/2012	05/11/2012				
			Sample Time	.	.				
			Date Received	06/11/2012	06/11/2012				
			SDG Ref	121106-35	121106-35				
			Lab Sample No.(s)	6461637	6461632				
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		2.34 #	0.691 #				
pH	1 pH Units	TM133		7.3 M	9.65 M				
Arsenic	<0.6 mg/kg	TM181		9.3 M	5.4 M				
Cadmium	<0.02 mg/kg	TM181		0.706 M	0.655 M				
Chromium	<0.9 mg/kg	TM181		17.4 M	11.9 M				
Copper	<1.4 mg/kg	TM181		12.5 M	7.31 M				
Lead	<0.7 mg/kg	TM181		19.1 M	7.11 M				
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M				
Nickel	<0.2 mg/kg	TM181		19 M	16.4 M				
Selenium	<1 mg/kg	TM181		<1 #	1.17 #				
Zinc	<1.9 mg/kg	TM181		47.8 M	34.5 M				

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014
			Depth (m)	.	.	.	.	.	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			SDG Ref	121106-35	121106-35	121106-35	121106-35	121106-35	121106-35
			Lab Sample No.(s)	6461633	6461634	6461635	6461636	6461640	6461639
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	142
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	199
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014
			Depth (m)	.	.	.	.	.	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			SDG Ref	121106-35	121106-35	121106-35	121106-35	121106-35	121106-35
			Lab Sample No.(s)	6461633	6461634	6461635	6461636	6461640	6461639
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	841	<100	830	268	146
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	386
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	360
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1040
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	836
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1110
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	660
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1260
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1820
Fluorene	<100 µg/kg	TM157		<100	322	<100	1050	<100	295
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	454
Phenanthrene	<100 µg/kg	TM157		<100	373	225	1370	<100	1340
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1540
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	179	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	202

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv014	CAEMvoo7				
			Depth (m)	2.40	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	05/11/2012	05/11/2012				
			Sample Time	.	.				
			Date Received	06/11/2012	06/11/2012				
			SDG Ref	121106-35	121106-35				
			Lab Sample No.(s)	6461637	6461632				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv014	CAEMvoo7				
			Depth (m)	2.40	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	05/11/2012	05/11/2012				
			Sample Time	.	.				
			Date Received	06/11/2012	06/11/2012				
			SDG Ref	121106-35	121106-35				
			Lab Sample No.(s)	6461637	6461632				
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157		<100	518				
Acenaphthylene	<100 µg/kg	TM157		<100	<100				
Acenaphthene	<100 µg/kg	TM157		<100	<100				
Anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100				
Chrysene	<100 µg/kg	TM157		<100	<100				
Fluoranthene	<100 µg/kg	TM157		<100	<100				
Fluorene	<100 µg/kg	TM157		<100	<100				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100				
Phenanthrene	<100 µg/kg	TM157		<100	144				
Pyrene	<100 µg/kg	TM157		<100	<100				
Naphthalene	<100 µg/kg	TM157		<100	131				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014
			Depth (m)	.	.	.	.	.	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			SDG Ref	121106-35	121106-35	121106-35	121106-35	121106-35	121106-35
			Lab Sample No.(s)	6461633	6461634	6461635	6461636	6461640	6461639
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		127	72	99	99	97	56
GRO >C5-C12	<44 µg/kg	TM089		3490	362000	26600	820000	28100	2860
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<50 #	<5 #	<50 #	<5 #	<5 #
Benzene	<10 µg/kg	TM089		18.6 M	115 M	<10 M	<100 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		33.6 M	<20 M	<2 M	<20 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		27.8 M	<30 M	<3 M	<30 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		24.4 M	<60 M	<6 M	<60 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		25.5 M	<30 M	<3 M	<30 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		49.9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		130	115	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		70.8	1500	49	2280	35	16.6
Aliphatics >C6-C8	<10 µg/kg	TM089		299	39600	1160	121000	918	99.8
Aliphatics >C8-C10	<10 µg/kg	TM089		619	125000	6930	229000	5970	518
Aliphatics >C10-C12	<10 µg/kg	TM089		1170	67900	8290	189000	10300	1130
Aliphatics >C12-C16	<100 µg/kg	TM173		32600	195000	46100	772000	109000	108000
Aliphatics >C16-C21	<100 µg/kg	TM173		85900	186000	62700	659000	93800	250000
Aliphatics >C21-C35	<100 µg/kg	TM173		1000000	604000	796000	1050000	317000	631000
Aliphatics >C35-C44	<100 µg/kg	TM173		91500	154000	291000	197000	47900	132000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1210000	1140000	1200000	2670000	567000	1120000
Aromatics >EC5-EC7	<10 µg/kg	TM089		18.6	115	<10	<100	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		33.6	<100	<10	<100	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		491	83200	4620	153000	3980	346
Aromatics >EC10-EC12	<10 µg/kg	TM089		783	45300	5530	126000	6890	754
Aromatics >EC12-EC16	<100 µg/kg	TM173		15000	69300	22000	288000	33000	32900
Aromatics >EC16-EC21	<100 µg/kg	TM173		70100	86700	43400	300000	51200	129000
Aromatics >EC21-EC35	<100 µg/kg	TM173		704000	303000	651000	669000	173000	401000
Aromatics >EC35-EC44	<100 µg/kg	TM173		91500	75500	288000	170000	28600	113000
Aromatics >EC40-EC44	<100 µg/kg	TM173		26900	23500	115000	59400	9510	43800
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		881000	535000	1000000	1430000	286000	676000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1120000	1220000	922000	3020000	536000	991000
Total Aromatics >C5-35	<100 µg/kg	TM173		791000	588000	726000	1540000	268000	564000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1910000	1810000	1650000	4560000	805000	1550000

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.	.	1.00
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
		SDG Ref	121106-35	121106-35	121106-35	121106-35	121106-35	121106-35
		Lab Sample No.(s)	6461633	6461634	6461635	6461636	6461640	6461639
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2100000	2040000	2230000	4920000	881000	1800000

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv014	CAEMvoo7				
			Depth (m)	2.40	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	05/11/2012	05/11/2012				
			Sample Time	.	.				
			Date Received	06/11/2012	06/11/2012				
			SDG Ref	121106-35	121106-35				
			Lab Sample No.(s)	6461637	6461632				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		127	125				
GRO >C5-C12	<44 µg/kg	TM089		113000	34000				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		32.2 #	<5 #				
Benzene	<10 µg/kg	TM089		27.3 M	<10 M				
Toluene	<2 µg/kg	TM089		<4 M	<2 M				
Ethylbenzene	<3 µg/kg	TM089		<6 M	<3 M				
m,p-Xylene	<6 µg/kg	TM089		<12 M	<6 M				
o-Xylene	<3 µg/kg	TM089		<6 M	<3 M				
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9				
sum of detected BTEX by GC	<24 µg/kg	TM089		27.3	<24				
Aliphatics >C5-C6	<10 µg/kg	TM089		28.5	35.7				
Aliphatics >C6-C8	<10 µg/kg	TM089		7450	1880				
Aliphatics >C8-C10	<10 µg/kg	TM089		36000	8270				
Aliphatics >C10-C12	<10 µg/kg	TM089		27100	11000				
Aliphatics >C12-C16	<100 µg/kg	TM173		57200	21700				
Aliphatics >C16-C21	<100 µg/kg	TM173		38400	28600				
Aliphatics >C21-C35	<100 µg/kg	TM173		99500	110000				
Aliphatics >C35-C44	<100 µg/kg	TM173		18600	14900				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		214000	175000				
Aromatics >EC5-EC7	<10 µg/kg	TM089		27.3	<10				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<20	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089		24000	5510				
Aromatics >EC10-EC12	<10 µg/kg	TM089		18100	7300				
Aromatics >EC12-EC16	<100 µg/kg	TM173		16800	9610				
Aromatics >EC16-EC21	<100 µg/kg	TM173		15200	16900				
Aromatics >EC21-EC35	<100 µg/kg	TM173		68500	64500				
Aromatics >EC35-EC44	<100 µg/kg	TM173		22600	11800				
Aromatics >EC40-EC44	<100 µg/kg	TM173		9780	3080				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		123000	103000				
Total Aliphatics >C5-35	<100 µg/kg	TM173		266000	182000				
Total Aromatics >C5-35	<100 µg/kg	TM173		143000	104000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		408000	285000				

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMv014	CAEMvoo7				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	2.40	.				
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid				
diss.filt	Dissolved / filtered sample.	Date Sampled	05/11/2012	05/11/2012				
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.				
*	Subcontracted test.	Date Received	06/11/2012	06/11/2012				
**	% 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	SDG Ref	121106-35	121106-35				
		Lab Sample No.(s)	6461637	6461632				
(F)	Trigger breach confirmed	AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	450000	312000				

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014
			Depth (m)	.	.	.	.	.	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			SDG Ref	121106-35	121106-35	121106-35	121106-35	121106-35	121106-35
			Lab Sample No.(s)	6461633	6461634	6461635	6461636	6461640	6461639
			AGS Reference						
Dibromofluoromethane**	%	TM116		115	108	108	106	109	108
Toluene-d8**	%	TM116		99.2	99.7	96.5	99.4	98.3	98.2
4-Bromofluorobenzene**	%	TM116		112	114	120	118	109	110
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<80 M	<8 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<14	<140	<14	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<20	<200	<20	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<26 M	<260 M	<26 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<120 M	<12 M	<120 M	<120 M	<120 M
1.1-Dichloroethene	<10 µg/kg	TM116		<20 #	<200 #	<20 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		24.5 M	<140 M	<14 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<20 #	<200 #	<20 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<220 M	<22 M	<220 M	<220 M	<220 M
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<22 M	<220 M	<22 M	<220 M	<220 M	<220 M
1.1-Dichloroethane	<8 µg/kg	TM116		<16 M	<160 M	<16 M	<160 M	<160 M	<160 M
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<100 M	<100 M	<100 M
2.2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<16 M	<160 M	<16 M	<160 M	<160 M	<160 M
1.1.1-Trichloroethane	<7 µg/kg	TM116		<14 M	<140 M	<14 M	<140 M	<140 M	<140 M
1.1-Dichloropropene	<11 µg/kg	TM116		<22 M	<220 M	<22 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<280 M	<280 M	<280 M
1.2-Dichloroethane	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		37.1 M	<180 M	<18 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<18 M	<180 M	<18 M	<180 M	<180 M	<180 M
1.2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<18 M	<180 M	<18 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<140 M	<14 M	<140 M	<140 M	<140 M
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		55.8 M	<100 M	<10 M	<100 M	<100 M	<100 M
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<28	<280	<28	<280	<280	<280
1.1.2-Trichloroethane	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014
			Depth (m)	.	.	.	.	.	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			SDG Ref	121106-35	121106-35	121106-35	121106-35	121106-35	121106-35
			Lab Sample No.(s)	6461633	6461634	6461635	6461636	6461640	6461639
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<14 #	<140 #	<14 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<260 M	<26 M	<260 M	<260 M	<260 M
1.2-Dibromoethane	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<100 M	<100 M	<100 M
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		27.4 M	<80 M	<8 M	<80 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<28 #	<280 #	<28 #	<280 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<10 M	2420 M	49.9 M	708 M	<100 M	<100 M
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<200 #	<20 #	<200 #	<200 #	<200 #
1.2.3-Trichloropropane	<17 µg/kg	TM116		<34 M	<340 M	<34 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<22 M	2410 M	32.2 M	686 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<180 M	<18 M	<180 M	<180 M	<180 M
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	<160 #	<16 #	2290 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<240 #	<24 #	<240 #	<240 #	<240 #
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	<180 #	<18 #	285 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<20 M	2270 M	62.5 M	1350 M	<200 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<220 M	<22 M	<220 M	<220 M	<220 M
1.3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M	<12 M	<120 M	<120 M	<120 M
1.4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<20 M	1850 M	<20 M	<200 M	<200 M	<200 M
1.2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<240 M	<240 M	<240 M
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<300	<30	<300	<300	<300
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<120 #	<12 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<240	<24	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<26 M	<260 M	<26 M	<260 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014
			Depth (m)	.	.	.	.	.	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012	05/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			SDG Ref	121106-35	121106-35	121106-35	121106-35	121106-35	121106-35
			Lab Sample No.(s)	6461633	6461634	6461635	6461636	6461640	6461639
			AGS Reference						
1.2.3-Trichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M	<12 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv014	CAEMvoo7				
			Depth (m)	2.40	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	05/11/2012	05/11/2012				
			Sample Time	.	.				
			Date Received	06/11/2012	06/11/2012				
			SDG Ref	121106-35	121106-35				
			Lab Sample No.(s)	6461637	6461632				
			AGS Reference						
Dibromofluoromethane**	%	TM116		106	96.8				
Toluene-d8**	%	TM116		98	99.6				
4-Bromofluorobenzene**	%	TM116		116	127				
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<4 M				
Chloromethane	<7 µg/kg	TM116		<14	<7				
Vinyl Chloride	<10 µg/kg	TM116		<20	<10				
Bromomethane	<13 µg/kg	TM116		<26 M	<13 M				
Chloroethane	<14 µg/kg	TM116		<28 M	<14 M				
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<6 M				
1.1-Dichloroethene	<10 µg/kg	TM116		<20 #	<10 #				
Carbon Disulphide	<7 µg/kg	TM116		<14 M	23.8 M				
Dichloromethane	<10 µg/kg	TM116		<20 #	<10 #				
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<11 M				
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<22 M	<11 M				
1.1-Dichloroethane	<8 µg/kg	TM116		<16 M	<8 M				
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<10 M	<5 M				
2.2-Dichloropropane	<12 µg/kg	TM116		<24 M	<12 M				
Bromochloromethane	<14 µg/kg	TM116		<28 M	<14 M				
Chloroform	<8 µg/kg	TM116		<16 M	<8 M				
1.1.1-Trichloroethane	<7 µg/kg	TM116		<14 M	<7 M				
1.1-Dichloropropene	<11 µg/kg	TM116		<22 M	<11 M				
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<14 M				
1.2-Dichloroethane	<5 µg/kg	TM116		<10 M	82.2 M				
Benzene	<9 µg/kg	TM116		<18 M	<9 M				
Trichloroethene	<9 µg/kg	TM116		<18 M	<9 M				
1.2-Dichloropropane	<12 µg/kg	TM116		<24 M	<12 M				
Dibromomethane	<9 µg/kg	TM116		<18 M	<9 M				
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<7 M				
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<28 M	<14 M				
Toluene	<5 µg/kg	TM116		<10 M	8.02 M				
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<28	<14				
1.1.2-Trichloroethane	<10 µg/kg	TM116		<20 M	<10 M				

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv014	CAEMvoo7				
			Depth (m)	2.40	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	05/11/2012	05/11/2012				
			Sample Time	.	.				
			Date Received	06/11/2012	06/11/2012				
			SDG Ref	121106-35	121106-35				
			Lab Sample No.(s)	6461637	6461632				
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<14 #	<7 #				
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<5 M				
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<13 M				
1.2-Dibromoethane	<12 µg/kg	TM116		<24 M	<12 M				
Chlorobenzene	<5 µg/kg	TM116		<10 M	<5 M				
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<10 M				
Ethylbenzene	<4 µg/kg	TM116		<8 M	<4 M				
p/m-Xylene	<14 µg/kg	TM116		<28 #	<14 #				
o-Xylene	<10 µg/kg	TM116		<20 M	<10 M				
Styrene	<10 µg/kg	TM116		<20 M	<10 M				
Bromoform	<10 µg/kg	TM116		<20 M	<10 M				
Isopropylbenzene	<5 µg/kg	TM116		79 M	<5 M				
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<10 #				
1.2.3-Trichloropropane	<17 µg/kg	TM116		<34 M	<17 M				
Bromobenzene	<10 µg/kg	TM116		<20 M	<10 M				
Propylbenzene	<11 µg/kg	TM116		63.6 M	<11 M				
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<9 M				
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	<8 #				
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<12 M				
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<12 #				
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	47.5 #				
sec-Butylbenzene	<10 µg/kg	TM116		131 M	79.7 M				
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<11 M				
1.3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<6 M				
1.4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<5 M				
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<10 M				
1.2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<12 M				
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<14 M				
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<15				
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<6 #				
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<12				
Naphthalene	<13 µg/kg	TM116		<26 M	74.9 M				

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMv014	CAEMvoo7			
			Depth (m)	2.40	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	05/11/2012	05/11/2012			
			Sample Time	.	.			
			Date Received	06/11/2012	06/11/2012			
			SDG Ref	121106-35	121106-35			
			Lab Sample No.(s)	6461637	6461632			
			AGS Reference					
1.2.3-Trichlorobenzene	<6 µg/kg	TM116		<12 M	<6 M			

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMv008 SOLID 05/11/2012 00:00:00 121106-35 6461633 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMv009 SOLID 05/11/2012 00:00:00 121106-35 6461634 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMv010 SOLID 05/11/2012 00:00:00 121106-35 6461635 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMv011 SOLID 05/11/2012 00:00:00 121106-35 6461636 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMv012 SOLID 05/11/2012 00:00:00 121106-35 6461640 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMv014 1.00 SOLID 05/11/2012 00:00:00 121106-35 6461639 TM048	16/11/12	Kevin Bowron	Loose fibres in soil	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMv014 2.40 SOLID 05/11/2012 00:00:00 121106-35 6461637 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMvoo7 SOLID 05/11/2012 00:00:00 121106-35 6461632 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6461633	6461634	6461635	6461636	6461640	6461637	6461639	6461632
Customer Sample Ref.	CAEMv008	CAEMv009	CAEMv010	CAEMv011	CAEMv012	CAEMv014	CAEMv014	CAEMvoo7
AGS Ref.								
Depth						2.40	1.00	
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	16-Nov-2012	16-Nov-2012	16-Nov-2012	16-Nov-2012	16-Nov-2012	16-Nov-2012	16-Nov-2012	16-Nov-2012
EPH CWG (Aliphatic) GC (S)	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
EPH CWG (Aromatic) GC (S)	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
GRO by GC-FID (S)	12-Nov-2012	14-Nov-2012	12-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	12-Nov-2012
Metals by iCap-OES (Soil)	13-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	13-Nov-2012	14-Nov-2012	13-Nov-2012	13-Nov-2012
pH	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012
Sample description	10-Nov-2012	10-Nov-2012	10-Nov-2012	10-Nov-2012	10-Nov-2012	10-Nov-2012	10-Nov-2012	10-Nov-2012
Semi Volatile Organic Compounds	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
Total Organic Carbon	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012		19-Nov-2012
TPH CWG GC (S)	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012
VOC MS (S)	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	12-Nov-2012

SDG:	121106-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202386
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PEST OCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

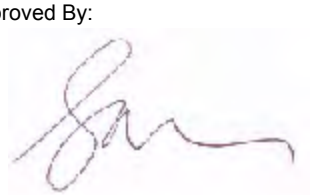
Date:	19 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121107-40
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	202365

We received 9 samples on Wednesday November 07, 2012 and 9 of these samples were scheduled for analysis which was completed on Monday November 19, 2012. 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

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Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No.

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6465469	CAEMTP015		0.50	06/11/2012
6465471	CAEMTP015		1.40	06/11/2012
6465473	CAEMTP016		1.40	06/11/2012
6465474	CAEMTP017		1.30	06/11/2012
6465475	CAEMTP018		1.00	06/11/2012
6465478	CAEMTP019		0.50	06/11/2012
6465466	CAEMV013			06/11/2012
6465467	CAEMV014			06/11/2012
6465468	CAEMV015			06/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

		Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 9				
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 9				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 9				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 9				
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 9				
	Cadmium	NDPs: 0 Tests: 9				
	Chromium	NDPs: 0 Tests: 9				
	Copper	NDPs: 0 Tests: 9				
	Lead	NDPs: 0 Tests: 9				
	Mercury	NDPs: 0 Tests: 9				
	Nickel	NDPs: 0 Tests: 9				
	Selenium	NDPs: 0 Tests: 9				
	Zinc	NDPs: 0 Tests: 9				
pH	All	NDPs: 0 Tests: 9				
Sample description	All	NDPs: 0 Tests: 9				

Lab Sample No(s)	Customer Sample Reference	Depth (m)	Container
6465469	CAEMTP015	0.50	250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)
6465471	CAEMTP015	1.40	250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)
6465473	CAEMTP016	1.40	250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)
6465474	CAEMTP017	1.30	250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)
6465475	CAEMTP018	1.00	250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)
6465478	CAEMTP019	0.50	250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)
6465466	CAEMV013		250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)
6465467	CAEMV014		250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)
6465468	CAEMV015		250g Amber Jar (AL
			400g Tub (ALE214)
			60g VOC (ALE215)

Test	Analysis	Result
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 9
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 9
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 9
GRO by GC-FID (S)	All	NDPs: 0 Tests: 9
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 9
	Cadmium	NDPs: 0 Tests: 9
	Chromium	NDPs: 0 Tests: 9
	Copper	NDPs: 0 Tests: 9
	Lead	NDPs: 0 Tests: 9
	Mercury	NDPs: 0 Tests: 9
	Nickel	NDPs: 0 Tests: 9
	Selenium	NDPs: 0 Tests: 9
	Zinc	NDPs: 0 Tests: 9
pH	All	NDPs: 0 Tests: 9
Sample description	All	NDPs: 0 Tests: 9

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

		Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 9				
Total Organic Carbon	All	NDPs: 0 Tests: 9				
TPH CWG GC (S)	All	NDPs: 0 Tests: 9				
VOC MS (S)	All	NDPs: 0 Tests: 9				

Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Semi Volatile Organic Compounds	Total Organic Carbon	TPH CWG GC (S)	VOC MS (S)
6465469	CAEMTP015		0.50	250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X
6465471	CAEMTP015		1.40	250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X
6465473	CAEMTP016		1.40	250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X
6465474	CAEMTP017		1.30	250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X
6465475	CAEMTP018		1.00	250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X
6465478	CAEMTP019		0.50	250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X
6465466	CAEMV013			250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X
6465467	CAEMV014			250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X
6465468	CAEMV015			250g Amber Jar (AL	X	X	X	
				400g Tub (ALE214)				
				60g VOC (ALE215)				X

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6465469	CAEMTP015	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	None	Stones
6465471	CAEMTP015	1.40	Dark Brown	Clay	0.063 - 0.1 mm	None	Stones
6465473	CAEMTP016	1.40	Dark Brown	Clay	0.063 - 0.1 mm	None	Stones
6465474	CAEMTP017	1.30	Grey	Clay	0.063 - 0.1 mm	None	Stones
6465475	CAEMTP018	1.00	Dark Brown	Clay	0.063 - 0.1 mm	None	Stones
6465478	CAEMTP019	0.50	Dark Brown	Clay	0.063 - 0.1 mm	None	Stones
6465466	CAEMV013		Black	Silty Clay	0.063 - 0.1 mm	None	Stones
6465467	CAEMV014		Grey	N/A	0.1 - 2 mm	None	Stones
6465468	CAEMV015		Dark Brown	Sandy Clay	0.063 - 0.1 mm	None	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019
			Depth (m)	0.50	1.40	1.40	1.30	1.00	0.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			SDG Ref	121107-40	121107-40	121107-40	121107-40	121107-40	121107-40
			Lab Sample No.(s)	6465469	6465471	6465473	6465474	6465475	6465478
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		2.26 #	1.47 #	1.1 #	1.22 #	1.55 #	3.93 #
pH	1 pH Units	TM133		8.83 M	7.37 M	9.42 M	8.56 M	4.47 M	8.06 M
Arsenic	<0.6 mg/kg	TM181		6.2 M	15.2 M	6.76 M	10.2 M	11.5 M	18.4 M
Cadmium	<0.02 mg/kg	TM181		0.394 M	1.13 M	0.95 M	1.34 M	1.06 M	1.16 M
Chromium	<0.9 mg/kg	TM181		11.3 M	13.3 M	12.2 M	28.2 M	18.3 M	12.5 M
Copper	<1.4 mg/kg	TM181		16.7 M	27.9 M	11.9 M	66.3 M	17.8 M	97.2 M
Lead	<0.7 mg/kg	TM181		41.3 M	13.7 M	11.2 M	14.6 M	13.6 M	90.7 M
Mercury	<0.14 mg/kg	TM181		0.339 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	0.394 M
Nickel	<0.2 mg/kg	TM181		8.52 M	24.6 M	28.7 M	28.4 M	21.9 M	22.5 M
Selenium	<1 mg/kg	TM181		1.35 #	<1 #	<1 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181		179 M	77 M	68.6 M	71.5 M	53 M	139 M

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV013	CAEMV014	CAEMV015			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/11/2012	06/11/2012	06/11/2012			
			Sample Time	.	.	.			
			Date Received	07/11/2012	07/11/2012	07/11/2012			
			SDG Ref	121107-40	121107-40	121107-40			
			Lab Sample No.(s)	6465466	6465467	6465468			
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		18.8 #	0.636 #	1.11 #			
pH	1 pH Units	TM133		6.21 M	10.6 #	7.74 M			
Arsenic	<0.6 mg/kg	TM181		149 M	5.4 #	6.05 M			
Cadmium	<0.02 mg/kg	TM181		3.6 M	<0.02 #	0.839 M			
Chromium	<0.9 mg/kg	TM181		10.9 M	13.7 #	14.9 M			
Copper	<1.4 mg/kg	TM181		544 M	<1.4 #	12.2 M			
Lead	<0.7 mg/kg	TM181		118 M	2.15 #	14.4 M			
Mercury	<0.14 mg/kg	TM181		0.272 M	0.228 #	<0.14 M			
Nickel	<0.2 mg/kg	TM181		13.1 M	1.29 #	24.7 M			
Selenium	<1 mg/kg	TM181		2.95 #	2.74 #	<1 #			
Zinc	<1.9 mg/kg	TM181		212 M	8.51 #	62.7 M			

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019
			Depth (m)	0.50	1.40	1.40	1.30	1.00	0.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			SDG Ref	121107-40	121107-40	121107-40	121107-40	121107-40	121107-40
			Lab Sample No.(s)	6465469	6465471	6465473	6465474	6465475	6465478
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		555	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019
			Depth (m)	0.50	1.40	1.40	1.30	1.00	0.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			SDG Ref	121107-40	121107-40	121107-40	121107-40	121107-40	121107-40
			Lab Sample No.(s)	6465469	6465471	6465473	6465474	6465475	6465478
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		341	<100	<100	<100	<100	159
Benzo(b)fluoranthene	<100 µg/kg	TM157		412	<100	<100	<100	<100	156
Benzo(k)fluoranthene	<100 µg/kg	TM157		281	<100	<100	<100	<100	129
Benzo(a)pyrene	<100 µg/kg	TM157		452	<100	<100	<100	<100	158
Benzo(g,h,i)perylene	<100 µg/kg	TM157		308	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		387	<100	<100	<100	<100	225
Fluoranthene	<100 µg/kg	TM157		475	<100	<100	<100	<100	356
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		179	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		232	<100	<100	<100	<100	360
Pyrene	<100 µg/kg	TM157		439	<100	<100	<100	<100	319
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV013	CAEMV014	CAEMV015			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/11/2012	06/11/2012	06/11/2012			
			Sample Time	.	.	.			
			Date Received	07/11/2012	07/11/2012	07/11/2012			
			SDG Ref	121107-40	121107-40	121107-40			
			Lab Sample No.(s)	6465466	6465467	6465468			
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100			
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100			
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100			
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100			
Isophorone	<100 µg/kg	TM157		<100	<100	<100			
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100			
Carbazole	<100 µg/kg	TM157		<100	<100	<100			
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100			
Azobenzene	<100 µg/kg	TM157		<100	<100	<100			
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend									
#	ISO17025 accredited.		Customer Sample R	CAEMV013	CAEMV014	CAEMV015			
M	*m*CERTS accredited.								
§	Deviating sample.		Depth (m)	.	.	.			
aq	Aqueous / settled sample.		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
diss.filt	Dissolved / filtered sample.		Date Sampled	06/11/2012	06/11/2012	06/11/2012			
tot.unfilt	Total / unfiltered sample.		Sample Time	.	.	.			
*	Subcontracted test.		Date Received	07/11/2012	07/11/2012	07/11/2012			
**	% 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		SDG Ref	121107-40	121107-40	121107-40			
			Lab Sample No.(s)	6465466	6465467	6465468			
(F)	Trigger breach confirmed		AGS Reference						
Component		**LOD/Units**	**Method**						
2-Chlorophenol		<100 µg/kg	TM157	<100	<100	<100			
2,6-Dinitrotoluene		<100 µg/kg	TM157	<100	<100	<100			
2,4-Dinitrotoluene		<100 µg/kg	TM157	<100	<100	<100			
2,4-Dimethylphenol		<100 µg/kg	TM157	<100	<100	<100			
2,4-Dichlorophenol		<100 µg/kg	TM157	<100	<100	<100			
2,4,6-Trichlorophenol		<100 µg/kg	TM157	<100	<100	<100			
2,4,5-Trichlorophenol		<100 µg/kg	TM157	<100	<100	<100			
1,4-Dichlorobenzene		<100 µg/kg	TM157	<100	<100	<100			
1,3-Dichlorobenzene		<100 µg/kg	TM157	<100	<100	<100			
1,2-Dichlorobenzene		<100 µg/kg	TM157	<100	<100	<100			
2-Chloronaphthalene		<100 µg/kg	TM157	<100	<100	<100			
2-Methylnaphthalene		<100 µg/kg	TM157	1710	<100	<100			
Acenaphthylene		<100 µg/kg	TM157	<100	<100	<100			
Acenaphthene		<100 µg/kg	TM157	<100	<100	<100			
Anthracene		<100 µg/kg	TM157	179	<100	<100			
Benzo(a)anthracene		<100 µg/kg	TM157	369	<100	<100			
Benzo(b)fluoranthene		<100 µg/kg	TM157	170	<100	<100			
Benzo(k)fluoranthene		<100 µg/kg	TM157	<100	<100	<100			
Benzo(a)pyrene		<100 µg/kg	TM157	<100	<100	<100			
Benzo(g,h,i)perylene		<100 µg/kg	TM157	<100	<100	<100			
Chrysene		<100 µg/kg	TM157	1020	<100	<100			
Fluoranthene		<100 µg/kg	TM157	352	<100	<100			
Fluorene		<100 µg/kg	TM157	1640	<100	<100			
Indeno(1,2,3-cd)pyrene		<100 µg/kg	TM157	<100	<100	<100			
Phenanthrene		<100 µg/kg	TM157	2630	128	<100			
Pyrene		<100 µg/kg	TM157	952	<100	<100			
Naphthalene		<100 µg/kg	TM157	<100	<100	<100			
Dibenzo(a,h)anthracene		<100 µg/kg	TM157	<100	<100	<100			

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019
			Depth (m)	0.50	1.40	1.40	1.30	1.00	0.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			SDG Ref	121107-40	121107-40	121107-40	121107-40	121107-40	121107-40
			Lab Sample No.(s)	6465469	6465471	6465473	6465474	6465475	6465478
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		94	96	116	116	100	69
GRO >C5-C12	<44 µg/kg	TM089		2680	2030	1290	13600	3550	5350
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<5 #	<5 #	<5 #	<5 #
Benzene	<10 µg/kg	TM089		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	3.33 M	96.1 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	<9	96.1	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	<24	96.1	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		10.2	14.8	25.5	17	10.3	<10
Aliphatics >C6-C8	<10 µg/kg	TM089		62.2	59.3	807	394	152	116
Aliphatics >C8-C10	<10 µg/kg	TM089		281	155	64.4	2860	788	753
Aliphatics >C10-C12	<10 µg/kg	TM089		1280	1020	204	5010	1250	2380
Aliphatics >C12-C16	<100 µg/kg	TM173		21900	56700	3530	48600	29700	108000
Aliphatics >C16-C21	<100 µg/kg	TM173		87600	33100	4850	41300	77200	153000
Aliphatics >C21-C35	<100 µg/kg	TM173		241000	177000	12000	62600	735000	574000
Aliphatics >C35-C44	<100 µg/kg	TM173		71300	28100	4660	5570	152000	428000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		422000	295000	25100	158000	993000	1260000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		188	103	47.7	2000	526	502
Aromatics >EC10-EC12	<10 µg/kg	TM089		854	681	137	3340	831	1590
Aromatics >EC12-EC16	<100 µg/kg	TM173		5650	17300	2940	12500	11700	36800
Aromatics >EC16-EC21	<100 µg/kg	TM173		37200	23400	3920	15500	57400	92400
Aromatics >EC21-EC35	<100 µg/kg	TM173		106000	100000	11100	38200	588000	293000
Aromatics >EC35-EC44	<100 µg/kg	TM173		29500	16800	4140	5380	116000	117000
Aromatics >EC40-EC44	<100 µg/kg	TM173		12400	5010	1440	1420	29900	40500
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		178000	158000	22100	71500	773000	538000
Total Aliphatics >C5-35	<100 µg/kg	TM173		353000	268000	21500	161000	844000	838000
Total Aromatics >C5-35	<100 µg/kg	TM173		150000	142000	18200	71500	658000	424000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		502000	410000	39700	232000	1500000	1260000

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	0.50	1.40	1.40	1.30	1.00	0.50
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
		SDG Ref	121107-40	121107-40	121107-40	121107-40	121107-40	121107-40
		Lab Sample No.(s)	6465469	6465471	6465473	6465474	6465475	6465478
(F)	Trigger breach confirmed	AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	603000	455000	48500	243000	1770000	1810000

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV013	CAEMV014	CAEMV015			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/11/2012	06/11/2012	06/11/2012			
			Sample Time	.	.	.			
			Date Received	07/11/2012	07/11/2012	07/11/2012			
			SDG Ref	121107-40	121107-40	121107-40			
			Lab Sample No.(s)	6465466	6465467	6465468			
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		23	123	79			
GRO >C5-C12	<44 µg/kg	TM089		72400	4080	58400			
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<5 #			
Benzene	<10 µg/kg	TM089		21.3 M	<10 #	40.3 M			
Toluene	<2 µg/kg	TM089		<2 M	2.38 #	<2 M			
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 #	<3 M			
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 #	<6 M			
o-Xylene	<3 µg/kg	TM089		<3 M	<3 #	<3 M			
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	<9			
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	40.3			
Aliphatics >C5-C6	<10 µg/kg	TM089		92.7	<10	291			
Aliphatics >C6-C8	<10 µg/kg	TM089		8110	55.9	7290			
Aliphatics >C8-C10	<10 µg/kg	TM089		22100	520	15900			
Aliphatics >C10-C12	<10 µg/kg	TM089		16400	1890	14600			
Aliphatics >C12-C16	<100 µg/kg	TM173		1950000	5670	151000			
Aliphatics >C16-C21	<100 µg/kg	TM173		1160000	14100	112000			
Aliphatics >C21-C35	<100 µg/kg	TM173		6260000	37800	336000			
Aliphatics >C35-C44	<100 µg/kg	TM173		968000	10900	50100			
Total Aliphatics >C12-C44	<100 µg/kg	TM173		10300000	68400	649000			
Aromatics >EC5-EC7	<10 µg/kg	TM089		21.3	<10	40.3			
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10			
Aromatics >EC8-EC10	<10 µg/kg	TM089		14700	346	10600			
Aromatics >EC10-EC12	<10 µg/kg	TM089		10900	1260	9740			
Aromatics >EC12-EC16	<100 µg/kg	TM173		522000	4210	40000			
Aromatics >EC16-EC21	<100 µg/kg	TM173		751000	8040	57900			
Aromatics >EC21-EC35	<100 µg/kg	TM173		3310000	16900	199000			
Aromatics >EC35-EC44	<100 µg/kg	TM173		532000	7720	27600			
Aromatics >EC40-EC44	<100 µg/kg	TM173		155000	2750	6970			
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		5110000	36800	324000			
Total Aliphatics >C5-35	<100 µg/kg	TM173		9410000	60000	637000			
Total Aromatics >C5-35	<100 µg/kg	TM173		4610000	30700	317000			
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		14000000	90700	954000			

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV013	CAEMV014	CAEMV015			
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.			
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
tot.unfilt	Total / unfiltered sample.	Date Sampled	06/11/2012	06/11/2012	06/11/2012			
*	Subcontracted test.	Sample Time	.	.	.			
**	% 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	Date Received	07/11/2012	07/11/2012	07/11/2012			
		SDG Ref	121107-40	121107-40	121107-40			
		Lab Sample No.(s)	6465466	6465467	6465468			
(F)	Trigger breach confirmed	AGS Reference						
Component		**LOD/Units**	**Method**					
Total Aliphatics & Aromatics >C5-C44		<100 µg/kg	TM173	15500000	109000	1030000			

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019
			Depth (m)	0.50	1.40	1.40	1.30	1.00	0.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			SDG Ref	121107-40	121107-40	121107-40	121107-40	121107-40	121107-40
			Lab Sample No.(s)	6465469	6465471	6465473	6465474	6465475	6465478
			AGS Reference						
Dibromofluoromethane**	%	TM116		106	111	105	105	110	109
Toluene-d8**	%	TM116		96.3	97.6	95	97.4	96.9	96.7
4-Bromofluorobenzene**	%	TM116		123	119	129	122	121	114
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<4 M	<4 M	<4 M	<8 M	<80 M
Chloromethane	<7 µg/kg	TM116		<14	<7	<7	<7	<14	<140
Vinyl Chloride	<10 µg/kg	TM116		<20	<10	<10	<10	<20	<200
Bromomethane	<13 µg/kg	TM116		<26 M	<13 M	<13 M	<13 M	<26 M	<260 M
Chloroethane	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<14 M	<28 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<6 M	<6 M	<6 M	<12 M	<120 M
1.1-Dichloroethene	<10 µg/kg	TM116		<20 #	<10 #	<10 #	<10 #	<20 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<14 M	12.6 M	<7 M	23.1 M	<14 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<20 #	<10 #	84.5 #	<10 #	<20 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<11 M	<22 M	<220 M
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<11 M	<22 M	<220 M
1.1-Dichloroethane	<8 µg/kg	TM116		<16 M	<8 M	<8 M	<8 M	<16 M	<160 M
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<5 M	<10 M	<100 M
2.2-Dichloropropane	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<12 M	<24 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<14 M	<28 M	<280 M
Chloroform	<8 µg/kg	TM116		<16 M	<8 M	<8 M	<8 M	<16 M	<160 M
1.1.1-Trichloroethane	<7 µg/kg	TM116		<14 M	<7 M	<7 M	<7 M	<14 M	<140 M
1.1-Dichloropropene	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<11 M	<22 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<14 M	<28 M	<280 M
1.2-Dichloroethane	<5 µg/kg	TM116		<10 M	<5 M	10600 M	<5 M	<10 M	<100 M
Benzene	<9 µg/kg	TM116		<18 M	<9 M	<9 M	<9 M	<18 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<18 M	<9 M	<9 M	<9 M	<18 M	<180 M
1.2-Dichloropropane	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<12 M	<24 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<18 M	<9 M	<9 M	<9 M	<18 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<7 M	<7 M	<7 M	<14 M	<140 M
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<14 M	<28 M	<280 M
Toluene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<5 M	<10 M	<100 M
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<28	<14	<14	<14	<28	<280
1.1.2-Trichloroethane	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<10 M	<20 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019
			Depth (m)	0.50	1.40	1.40	1.30	1.00	0.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012
			SDG Ref	121107-40	121107-40	121107-40	121107-40	121107-40	121107-40
			Lab Sample No.(s)	6465469	6465471	6465473	6465474	6465475	6465478
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<14 #	<7 #	<7 #	<7 #	<14 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<5 M	<10 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<13 M	<13 M	<13 M	<26 M	<260 M
1.2-Dibromoethane	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<12 M	<24 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<5 M	<10 M	<100 M
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<10 M	<20 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<8 M	<4 M	<4 M	64.6 M	<8 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<28 #	<14 #	<14 #	<14 #	<28 #	<280 #
o-Xylene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<10 M	<20 M	<200 M
Styrene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<10 M	<20 M	<200 M
Bromoform	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<10 M	<20 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<5 M	<10 M	<100 M
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<10 #	<10 #	<10 #	<20 #	<200 #
1.2.3-Trichloropropane	<17 µg/kg	TM116		<34 M	<17 M	<17 M	<17 M	<34 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<10 M	<20 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<11 M	<22 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<9 M	<9 M	<9 M	<18 M	<180 M
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	<8 #	<8 #	<8 #	39.5 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<12 M	<24 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<12 #	<12 #	<12 #	<24 #	<240 #
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	<9 #	<9 #	<9 #	95 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	30.1 M	<20 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<11 M	<22 M	<220 M
1.3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<6 M	<6 M	<6 M	<12 M	<120 M
1.4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<5 M	<10 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<10 M	<20 M	<200 M
1.2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<12 M	<24 M	<240 M
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<14 M	<28 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<15	<15	<15	<30	<300
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<6 #	<6 #	<6 #	<12 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<12	<12	<12	<24	<240
Naphthalene	<13 µg/kg	TM116		<26 M	<13 M	<13 M	<13 M	<26 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend									
#	ISO17025 accredited.	**Customer Sample R**	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019	
M	*m*CERTS accredited.	**Depth (m)**	0.50	1.40	1.40	1.30	1.00	0.50	
§	Deviating sample.	**Sample Type**	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	
aq	Aqueous / settled sample.	**Date Sampled**	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	06/11/2012	
diss.filt	Dissolved / filtered sample.	**Sample Time**	.	.	.	.	.	.	
tot.unfilt	Total / unfiltered sample.	**Date Received**	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	07/11/2012	
*	Subcontracted test.	**SDG Ref**	121107-40	121107-40	121107-40	121107-40	121107-40	121107-40	
**	% 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	**Lab Sample No.(s)**	6465469	6465471	6465473	6465474	6465475	6465478	
(F)	Trigger breach confirmed	**AGS Reference**							
Component		**LOD/Units**	**Method**						
1.2.3-Trichlorobenzene		<6 µg/kg	TM116	<12 M	<6 M	<6 M	<6 M	<12 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV013	CAEMV014	CAEMV015			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/11/2012	06/11/2012	06/11/2012			
			Sample Time	.	.	.			
			Date Received	07/11/2012	07/11/2012	07/11/2012			
			SDG Ref	121107-40	121107-40	121107-40			
			Lab Sample No.(s)	6465466	6465467	6465468			
			AGS Reference						
Dibromofluoromethane**	%	TM116		108	82	106			
Toluene-d8**	%	TM116		95.4	96.7	97.8			
4-Bromofluorobenzene**	%	TM116		128	114	112			
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 #	<80 M			
Chloromethane	<7 µg/kg	TM116		<140	<7	<140			
Vinyl Chloride	<10 µg/kg	TM116		<200	<10	<200			
Bromomethane	<13 µg/kg	TM116		<260 M	<13 #	<260 M			
Chloroethane	<14 µg/kg	TM116		<280 M	<14 #	<280 M			
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 #	<120 M			
1.1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #	<200 #			
Carbon Disulphide	<7 µg/kg	TM116		<140 M	30.1 #	<140 M			
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #			
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 #	<220 M			
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 #	<220 M			
1.1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 #	<160 M			
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 #	<100 M			
2.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 #	<240 M			
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 #	<280 M			
Chloroform	<8 µg/kg	TM116		<160 M	<8 #	<160 M			
1.1.1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 #	<140 M			
1.1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 #	<220 M			
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 #	<280 M			
1.2-Dichloroethane	<5 µg/kg	TM116		<100 M	96.4 #	<100 M			
Benzene	<9 µg/kg	TM116		<180 M	<9 #	<180 M			
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 #	<180 M			
1.2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 #	<240 M			
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 #	<180 M			
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 #	<140 M			
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 #	<280 M			
Toluene	<5 µg/kg	TM116		<100 M	11.7 #	<100 M			
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<280	<14	<280			
1.1.2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 #	<200 M			

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV013	CAEMV014	CAEMV015			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/11/2012	06/11/2012	06/11/2012			
			Sample Time	.	.	.			
			Date Received	07/11/2012	07/11/2012	07/11/2012			
			SDG Ref	121107-40	121107-40	121107-40			
			Lab Sample No.(s)	6465466	6465467	6465468			
			AGS Reference						
1.3-Dichloropropane	<7 µg/kg	TM116		<140 #	<7 #	<140 #			
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<5 #	<100 M			
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<13 #	<260 M			
1.2-Dibromoethane	<12 µg/kg	TM116		<240 M	<12 #	<240 M			
Chlorobenzene	<5 µg/kg	TM116		<100 M	<5 #	<100 M			
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<10 #	<200 M			
Ethylbenzene	<4 µg/kg	TM116		<80 M	<4 #	<80 M			
p/m-Xylene	<14 µg/kg	TM116		<280 #	<14 #	<280 #			
o-Xylene	<10 µg/kg	TM116		<200 M	<10 #	<200 M			
Styrene	<10 µg/kg	TM116		<200 M	<10 #	<200 M			
Bromoform	<10 µg/kg	TM116		<200 M	<10 #	<200 M			
Isopropylbenzene	<5 µg/kg	TM116		581 M	<5 #	<100 M			
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #			
1.2.3-Trichloropropane	<17 µg/kg	TM116		<340 M	<17 #	<340 M			
Bromobenzene	<10 µg/kg	TM116		<200 M	<10 #	<200 M			
Propylbenzene	<11 µg/kg	TM116		728 M	<11 #	<220 M			
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<9 #	<180 M			
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<8 #	<160 #			
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<12 #	<240 M			
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<12 #	<240 #			
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<9 #	<180 #			
sec-Butylbenzene	<10 µg/kg	TM116		714 M	<10 #	469 M			
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<11 #	<220 M			
1.3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<6 #	<120 M			
1.4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<5 #	<100 M			
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<10 #	<200 M			
1.2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<12 #	<240 M			
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<14 #	<280 M			
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<15	<300			
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<6 #	<120 #			
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<12	<240			
Naphthalene	<13 µg/kg	TM116		<260 M	<13 #	<260 M			

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV013	CAEMV014	CAEMV015			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/11/2012	06/11/2012	06/11/2012			
			Sample Time	.	.	.			
			Date Received	07/11/2012	07/11/2012	07/11/2012			
			SDG Ref	121107-40	121107-40	121107-40			
			Lab Sample No.(s)	6465466	6465467	6465468			
			AGS Reference						
1.2.3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<6 #	<120 M			

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP015 0.50 SOLID 06/11/2012 00:00:00 121107-40 6465469 TM048	16/11/12	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP015 1.40 SOLID 06/11/2012 00:00:00 121107-40 6465471 TM048	16/11/12	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP016 1.40 SOLID 06/11/2012 00:00:00 121107-40 6465473 TM048	16/11/12	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP017 1.30 SOLID 06/11/2012 00:00:00 121107-40 6465474 TM048	16/11/12	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP018 1.00 SOLID 06/11/2012 00:00:00 121107-40 6465475 TM048	16/11/12	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMTP019 0.50 SOLID 06/11/2012 00:00:00 121107-40 6465478 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV013 SOLID 06/11/2012 00:00:00 121107-40 6465466 TM048	16/11/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV014 SOLID 06/11/2012 00:00:00 121107-40 6465467 TM048	16/11/12	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Customer Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV015 SOLID 06/11/2012 00:00:00 121107-40 6465468 TM048	16/11/12	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6465469	6465471	6465473	6465474	6465475	6465478	6465466	6465467	6465468
Customer Sample Ref.	CAEMTP015	CAEMTP015	CAEMTP016	CAEMTP017	CAEMTP018	CAEMTP019	CAEMV013	CAEMV014	CAEMV015
AGS Ref.									
Depth	0.50	1.40	1.40	1.30	1.00	0.50			
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012
EPH CWG (Aliphatic) GC (S)	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	14-Nov-2012	13-Nov-2012	13-Nov-2012
EPH CWG (Aromatic) GC (S)	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	14-Nov-2012	13-Nov-2012	13-Nov-2012
GRO by GC-FID (S)	12-Nov-2012	12-Nov-2012	12-Nov-2012	12-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	12-Nov-2012	12-Nov-2012
Metals by iCap-OES (Soil)	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012
pH	12-Nov-2012	12-Nov-2012	12-Nov-2012	12-Nov-2012	12-Nov-2012	12-Nov-2012	12-Nov-2012	12-Nov-2012	12-Nov-2012
Sample description	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012	09-Nov-2012
Semi Volatile Organic Compounds	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012
Total Organic Carbon	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012
TPH CWG GC (S)	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	13-Nov-2012	14-Nov-2012	13-Nov-2012	13-Nov-2012
VOC MS (S)	14-Nov-2012	12-Nov-2012	14-Nov-2012	12-Nov-2012	14-Nov-2012	14-Nov-2012	14-Nov-2012	12-Nov-2012	14-Nov-2012

SDG:	121107-40	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	202365
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PEST OCP OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Atkins Global Ltd
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Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

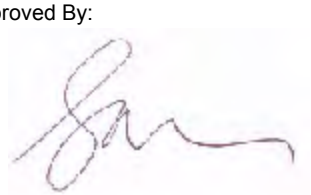
Date:	22 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121116-23
Your Reference:	Weekly Samples
Location:	Coed Darcy Urban Village
Report No:	202808

We received 4 samples on Friday November 16, 2012 and 4 of these samples were scheduled for analysis which was completed on Thursday November 22, 2012. 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

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Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No.

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6509077	36"			13/11/2012
6509081	BIOPAD LAGOON			13/11/2012
6509078	NSR IN			13/11/2012
6509080	NSR OUT			13/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

LEACH

Results Legend

X Test

N No Determination Possible

	Lab Sample No(s)		6509077					6509081						6509078					6509080				
	Customer Sample Reference		36"					BIOPAD LAGOON						NSR IN					NSR OUT				
	AGS Reference																						
	Depth (m)																						
	Container		1l green glass bottle	1lplastic (ALE221)	H2SO4 (ALE244)	NaOH (ALE245)	Vial (ALE297)	1l green glass bottle	1lplastic (ALE221)	H2SO4 (ALE244)	HNO3 Filtered (ALE	NaOH (ALE245)	Vial (ALE297)	1l green glass bottle	1lplastic (ALE221)	H2SO4 (ALE244)	NaOH (ALE245)	Vial (ALE297)	1l green glass bottle	1lplastic (ALE221)	H2SO4 (ALE244)	NaOH (ALE245)	Vial (ALE297)
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 4			X					X						X					X		
Anions by Kone (w)	All	NDPs: 0 Tests: 4		X					X						X					X			
BOD True Total	All	NDPs: 0 Tests: 4		X					X						X					X			
COD Unfiltered	All	NDPs: 0 Tests: 4		X					X						X					X			
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 4		X					X						X					X			
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 4		X							X				X					X			
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 4	X					X						X					X				
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 4	X					X						X					X				
GRO by GC-FID (W)	All	NDPs: 0 Tests: 4					X						X					X					X
Mercury Dissolved	All	NDPs: 0 Tests: 1						X															
Nitrite by Kone (w)	All	NDPs: 0 Tests: 4				X						X					X					X	
pH Value	All	NDPs: 0 Tests: 4		X					X						X					X			
Phenols by HPLC (W)	All	NDPs: 0 Tests: 4			X					X						X					X		
Suspended Solids	All	NDPs: 0 Tests: 4		X					X						X					X			
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 4	X					X						X					X				

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

LEACH

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6509077	36"			1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)
			6509081	BIOPAD LAGOON			1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
			6509078	NSR IN			1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)
			6509080	NSR OUT			1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)
TPH CWG (W)	All	NDPs: 0 Tests: 4	X				1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)
			X				1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)
			X				1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)
VOC MS (W)	All	NDPs: 0 Tests: 4					1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)
			X				1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							HNO3 Filtered (ALE
							NaOH (ALE245)
							Vial (ALE297)
			X				1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)
			X				1l green glass bottle
							1lplastic (ALE221)
							H2SO4 (ALE244)
							NaOH (ALE245)
							Vial (ALE297)

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	36"	BIOPAD LAGOON	NSR IN	NSR OUT		
			Depth (m)	.	.	.	.		
			Sample Type	Saline A	Saline A	Saline A	Saline A		
			Date Sampled	13/11/2012	13/11/2012	13/11/2012	13/11/2012		
			Sample Time	.	.	.	.		
			Date Received	16/11/2012	16/11/2012	16/11/2012	16/11/2012		
			SDG Ref	121116-23	121116-23	121116-23	121116-23		
			Lab Sample No.(s)	6509077	6509081	6509078	6509080		
			AGS Reference						
Suspended solids, Total	<2 mg/l	TM022		11	10.5	11	6		
BOD, unfiltered	<1 mg/l	TM045		3.54	2.04	<2	<2		
Ammoniacal Nitrogen as NH4	<0.3 mg/l	TM099		<0.3 #	<0.3 #	<0.3 #	<0.3 #		
COD, unfiltered	<7 mg/l	TM107		31.9	83	26.9	27.4		
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120		0.339 #	1.16 #	0.464 #	0.326 #		
Arsenic (diss.filt)	<0.12 µg/l	TM152			3.01				
Cadmium (diss.filt)	<0.1 µg/l	TM152			0.202				
Chromium (diss.filt)	<0.22 µg/l	TM152			0.575				
Copper (diss.filt)	<0.85 µg/l	TM152			10.6				
Lead (diss.filt)	<0.02 µg/l	TM152			0.45				
Nickel (diss.filt)	<0.15 µg/l	TM152			7.28				
Selenium (diss.filt)	<0.39 µg/l	TM152			10.3				
Vanadium (diss.filt)	<0.24 µg/l	TM152		0.588	1.28	1.37	0.513		
Zinc (diss.filt)	<0.41 µg/l	TM152			16.8				
Mercury (diss.filt)	<0.01 µg/l	TM183			<0.01				
Nitrite as NO2	<0.05 mg/l	TM184		<0.05	<0.05	0.054	<0.05		
Phosphate (ortho) as PO4	<0.05 mg/l	TM184		<0.05	<0.05	<0.05	<0.05		
Nitrate as NO3	<0.3 mg/l	TM184		1.6	<0.3	1.31	1.64		
pH	<1 pH Units	TM256		8.12	7.95	8.33	8.16		
Phenols, Total Detected monohydric	<0.016 mg/l	TM259		<0.016	<0.016	<0.016	<0.016		

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	36"	BIOPAD LAGOON	NSR IN	NSR OUT		
			Depth (m)	.	.	.	.		
			Sample Type	Saline A	Saline A	Saline A	Saline A		
			Date Sampled	13/11/2012	13/11/2012	13/11/2012	13/11/2012		
			Sample Time	.	.	.	.		
			Date Received	16/11/2012	16/11/2012	16/11/2012	16/11/2012		
			SDG Ref	121116-23	121116-23	121116-23	121116-23		
			Lab Sample No.(s)	6509077	6509081	6509078	6509080		
			AGS Reference						
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2,4-Dichlorophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2,4-Dimethylphenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2-Chloronaphthalene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2-Chlorophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2-Methylnaphthalene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2-Methylphenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2-Nitroaniline (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
2-Nitrophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
3-Nitroaniline (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Bromophenylphenylether (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Chloroaniline (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Methylphenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Nitrophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Nitroaniline (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
Azobenzene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
Acenaphthylene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
Acenaphthene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
Anthracene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176		<2	<2	<2	<2		
Benzo(a)anthracene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend		Customer Sample R	36"	BIOPAD LAGOON	NSR IN	NSR OUT		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Sample Type	Saline A	Saline A	Saline A	Saline A		
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/11/2012	13/11/2012	13/11/2012	13/11/2012		
*	Subcontracted test.	Sample Time	.	.	.	.		
**	% 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	Date Received	16/11/2012	16/11/2012	16/11/2012	16/11/2012		
		SDG Ref	121116-23	121116-23	121116-23	121116-23		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6509077	6509081	6509078	6509080		
		AGS Reference						

Component	LOD/Units	Method						
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Carbazole (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Chrysene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Dibenzofuran (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	<1	<1	1.05	<1		
Diethyl phthalate (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Dimethyl phthalate (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<5	<5	<5	<5		
Fluoranthene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Fluorene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Hexachlorobenzene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Pentachlorophenol (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Phenol (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Hexachloroethane (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Nitrobenzene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Naphthalene (aq)	<1 µg/l	TM176	<1	<1	<1	1.41		
Isophorone (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Phenanthrene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		
Pyrene (aq)	<1 µg/l	TM176	<1	<1	<1	<1		

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	36"	BIOPAD LAGOON	NSR IN	NSR OUT		
			Depth (m)	.	.	.	.		
			Sample Type	Saline A	Saline A	Saline A	Saline A		
			Date Sampled	13/11/2012	13/11/2012	13/11/2012	13/11/2012		
			Sample Time	.	.	.	.		
			Date Received	16/11/2012	16/11/2012	16/11/2012	16/11/2012		
			SDG Ref	121116-23	121116-23	121116-23	121116-23		
			Lab Sample No.(s)	6509077	6509081	6509078	6509080		
			AGS Reference						
GRO Surrogate % recovery**	%	TM245		74	93	82	106		
GRO >C5-C12	<50 µg/l	TM245		<50	<50	<50	<50		
Methyl tertiary butyl ether (MTBE)	<3 µg/l	TM245		<3	<3	<3	<3		
Benzene	<7 µg/l	TM245		<7	<7	<7	<7		
Toluene	<4 µg/l	TM245		<4	<4	<4	<4		
Ethylbenzene	<5 µg/l	TM245		<5	<5	<5	<5		
m,p-Xylene	<8 µg/l	TM245		<8	<8	<8	<8		
o-Xylene	<3 µg/l	TM245		<3	<3	<3	<3		
Sum of detected Xylenes	<11 µg/l	TM245		<11	<11	<11	<11		
Sum of detected BTEX	<28 µg/l	TM245		<28	<28	<28	<28		
Aliphatics >C5-C6	<10 µg/l	TM245		<10	<10	<10	<10		
Aliphatics >C6-C8	<10 µg/l	TM245		18	<10	<10	<10		
Aliphatics >C8-C10	<10 µg/l	TM245		<10	<10	<10	<10		
Aliphatics >C10-C12	<10 µg/l	TM245		<10	<10	<10	<10		
Aliphatics >C12-C16 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aliphatics >C16-C21 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aliphatics >C21-C35 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Total Aliphatics >C12-C35 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aromatics >EC5-EC7	<10 µg/l	TM245		<10	<10	<10	<10		
Aromatics >EC7-EC8	<10 µg/l	TM245		<10	<10	<10	<10		
Aromatics >EC8-EC10	<10 µg/l	TM245		<10	<10	<10	<10		
Aromatics >EC10-EC12	<10 µg/l	TM245		<10	<10	<10	<10		
Aromatics >EC12-EC16 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aromatics >EC16-EC21 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aromatics >EC21-EC35 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Total Aromatics >EC12-EC35 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Total Aliphatics & Aromatics >C5-35 (aq)	<10 µg/l	TM174		26	<10	<10	<10		

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	36"	BIOPAD LAGOON	NSR IN	NSR OUT		
			Depth (m)	.	.	.	.		
			Sample Type	Saline A	Saline A	Saline A	Saline A		
			Date Sampled	13/11/2012	13/11/2012	13/11/2012	13/11/2012		
			Sample Time	.	.	.	.		
			Date Received	16/11/2012	16/11/2012	16/11/2012	16/11/2012		
			SDG Ref	121116-23	121116-23	121116-23	121116-23		
			Lab Sample No.(s)	6509077	6509081	6509078	6509080		
			AGS Reference						
Dibromofluoromethane**	%	TM208		110	108	111	109		
Toluene-d8**	%	TM208		102	100	100	102		
4-Bromofluorobenzene**	%	TM208		99.5	97.5	98.9	99		
Dichlorodifluoromethane	<1 µg/l	TM208		<1	<1	<1	<1		
Chloromethane	<1 µg/l	TM208		<1	<1	<1	<1		
Vinyl chloride	<1 µg/l	TM208		<1	<1	<1	<1		
Bromomethane	<1 µg/l	TM208		<1	<1	<1	<1		
Chloroethane	<1 µg/l	TM208		<1	<1	<1	<1		
Trichlorofluoromethane	<1 µg/l	TM208		<1	<1	<1	<1		
1,1-Dichloroethene	<1 µg/l	TM208		<1	<1	<1	<1		
Carbon disulphide	<1 µg/l	TM208		<1	<1	<1	<1		
Dichloromethane	<3 µg/l	TM208		<3	<3	<3	<3		
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208		<1	<1	<1	<1		
trans-1,2-Dichloroethene	<1 µg/l	TM208		<1	<1	<1	<1		
1,1-Dichloroethane	<1 µg/l	TM208		<1	<1	<1	<1		
cis-1,2-Dichloroethene	<1 µg/l	TM208		<1	<1	<1	<1		
2,2-Dichloropropane	<1 µg/l	TM208		<1	<1	<1	<1		
Bromochloromethane	<1 µg/l	TM208		<1	<1	<1	<1		
Chloroform	<1 µg/l	TM208		<1	<1	<1	<1		
1,1,1-Trichloroethane	<1 µg/l	TM208		<1	<1	<1	<1		
1,1-Dichloropropene	<1 µg/l	TM208		<1	<1	<1	<1		
Carbontetrachloride	<1 µg/l	TM208		<1	<1	<1	<1		
1,2-Dichloroethane	<1 µg/l	TM208		<1	10	<1	<1		
Benzene	<1 µg/l	TM208		<1	<1	<1	<1		
Trichloroethene	<1 µg/l	TM208		<1	<1	<1	<1		
1,2-Dichloropropane	<1 µg/l	TM208		<1	<1	<1	<1		
Dibromomethane	<1 µg/l	TM208		<1	<1	<1	<1		
Bromodichloromethane	<1 µg/l	TM208		<1	<1	<1	<1		
cis-1,3-Dichloropropene	<1 µg/l	TM208		<1	<1	<1	<1		
Toluene	<1 µg/l	TM208		<1	<1	<1	<1		
trans-1,3-Dichloropropene	<1 µg/l	TM208		<1	<1	<1	<1		
1,1,2-Trichloroethane	<1 µg/l	TM208		<1	<1	<1	<1		

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend		Customer Sample R	36"	BIOPAD LAGOON	NSR IN	NSR OUT		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Sample Type	Saline A	Saline A	Saline A	Saline A		
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/11/2012	13/11/2012	13/11/2012	13/11/2012		
*	Subcontracted test.	Sample Time	.	.	.	.		
**	% 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	Date Received	16/11/2012	16/11/2012	16/11/2012	16/11/2012		
		SDG Ref	121116-23	121116-23	121116-23	121116-23		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6509077	6509081	6509078	6509080		
		AGS Reference						

Component	LOD/Units	Method						
1,3-Dichloropropane	<1 µg/l	TM208	<1	<1	<1	<1		
Tetrachloroethene	<1 µg/l	TM208	<1	<1	<1	<1		
Dibromochloromethane	<1 µg/l	TM208	<1	<1	<1	<1		
1,2-Dibromoethane	<1 µg/l	TM208	<1	<1	<1	<1		
Chlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1	<1	<1	<1		
Ethylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
m,p-Xylene	<1 µg/l	TM208	<1	<1	<1	<1		
o-Xylene	<1 µg/l	TM208	<1	<1	<1	<1		
Styrene	<1 µg/l	TM208	<1	<1	<1	<1		
Bromoform	<1 µg/l	TM208	<1	<1	<1	<1		
Isopropylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1	<1	<1	<1		
1,2,3-Trichloropropane	<1 µg/l	TM208	<1	<1	<1	<1		
Bromobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
Propylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
2-Chlorotoluene	<1 µg/l	TM208	<1	<1	<1	<1		
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
4-Chlorotoluene	<1 µg/l	TM208	<1	<1	<1	<1		
tert-Butylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
sec-Butylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
4-iso-Propyltoluene	<1 µg/l	TM208	<1	<1	<1	<1		
1,3-Dichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
1,4-Dichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
n-Butylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
1,2-Dichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
1,2-Dibromo-3-chloroprop ane	<1 µg/l	TM208	<1	<1	<1	<1		
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
Hexachlorobutadiene	<1 µg/l	TM208	<1	<1	<1	<1		
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1	<1	<1	<1		
Naphthalene	<1 µg/l	TM208	<1	<1	<1	<1		

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend		Customer Sample R	36"	BIOPAD LAGOON	NSR IN	NSR OUT		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Sample Type	Saline A	Saline A	Saline A	Saline A		
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/11/2012	13/11/2012	13/11/2012	13/11/2012		
*	Subcontracted test.	Sample Time	.	.	.	.		
**	% 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	Date Received	16/11/2012	16/11/2012	16/11/2012	16/11/2012		
		SDG Ref	121116-23	121116-23	121116-23	121116-23		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6509077	6509081	6509078	6509080		
		AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample [1]	Surrogate Corrected
TM022	Method 2540D, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part120 1981;BS EN 872	Determination of total suspended solids in waters		
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids		
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)		
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser		
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit		
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter		
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS		
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID		
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS		
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry		
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers		
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters		
TM245	By GC-FID	Determination of GRO by Headspace in waters		
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter		
TM259	by HPLC	Determination of Phenols in Waters and Leachates by HPLC		

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

CERTIFICATE OF ANALYSIS

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6509077	6509081	6509078	6509080
Customer Sample Ref.	36"	BIOPAD LAGOON	NSR IN	NSR OUT
AGS Ref.				
Depth				
Type	SALINE_A	SALINE_A	SALINE_A	SALINE_A
Ammoniacal Nitrogen	20-Nov-2012	20-Nov-2012	20-Nov-2012	20-Nov-2012
Anions by Kone (w)	22-Nov-2012	22-Nov-2012	22-Nov-2012	22-Nov-2012
BOD True Total	22-Nov-2012	22-Nov-2012	22-Nov-2012	22-Nov-2012
COD Unfiltered	18-Nov-2012	18-Nov-2012	18-Nov-2012	18-Nov-2012
Conductivity (at 20 deg.C)	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012
Dissolved Metals by ICP-MS	20-Nov-2012	21-Nov-2012	20-Nov-2012	20-Nov-2012
EPH CWG (Aliphatic) Aqueous GC (W)	21-Nov-2012	21-Nov-2012	21-Nov-2012	21-Nov-2012
EPH CWG (Aromatic) Aqueous GC (W)	21-Nov-2012	21-Nov-2012	21-Nov-2012	21-Nov-2012
GRO by GC-FID (W)	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012
Mercury Dissolved		21-Nov-2012		
Nitrite by Kone (w)	20-Nov-2012	20-Nov-2012	20-Nov-2012	20-Nov-2012
pH Value	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012
Phenols by HPLC (W)	22-Nov-2012	22-Nov-2012	22-Nov-2012	22-Nov-2012
Suspended Solids	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012
SVOC MS (W) - Aqueous	20-Nov-2012	20-Nov-2012	20-Nov-2012	21-Nov-2012
TPH CWG (W)	21-Nov-2012	21-Nov-2012	21-Nov-2012	21-Nov-2012
VOC MS (W)	19-Nov-2012	19-Nov-2012	19-Nov-2012	19-Nov-2012

SDG:	121116-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202808
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Project Jonah site office
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Suite 24
Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

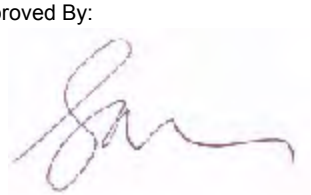
Date:	22 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121116-123
Your Reference:	Weekly Samples
Location:	Coed Darcy Urban Village
Report No:	202752

We received 2 samples on Friday November 16, 2012 and 2 of these samples were scheduled for analysis which was completed on Thursday November 22, 2012. 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

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CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6509083	CAEMV019			13/11/2012
6509084	CAEMV020			13/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6509083	6509084				
			Customer Sample Reference	CAEMV019	CAEMV020				
			AGS Reference						
			Depth (m)						
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2		X			X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 2		X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2				X			X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 2		X			X		
	Cadmium	NDPs: 0 Tests: 2		X			X		
	Chromium	NDPs: 0 Tests: 2		X			X		
	Copper	NDPs: 0 Tests: 2		X			X		
	Lead	NDPs: 0 Tests: 2		X			X		
	Mercury	NDPs: 0 Tests: 2		X			X		
	Nickel	NDPs: 0 Tests: 2		X			X		
	Selenium	NDPs: 0 Tests: 2		X			X		
	Zinc	NDPs: 0 Tests: 2		X			X		
pH	All	NDPs: 0 Tests: 2			X			X	
Sample description	All	NDPs: 0 Tests: 2		X			X		
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2		X			X		

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6509083	6509084
			Customer Sample Reference	CAEMV019	CAEMV020
			AGS Reference		
			Depth (m)		
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Total Organic Carbon	All	NDPs: 0 Tests: 2		X		X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 2		X		X		
VOC MS (S)	All	NDPs: 0 Tests: 2			X			X

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**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
6509083	CAEMV019		Dark Brown	Sandy Clay	0.1 - 2 mm	None	None
6509084	CAEMV020		Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV019	CAEMV020			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	13/11/2012	13/11/2012			
			Sample Time	.	.			
			Date Received	16/11/2012	16/11/2012			
			SDG Ref	121116-123	121116-123			
			Lab Sample No.(s)	6509083	6509084			
			AGS Reference					
Soil Organic Matter (SOM)	<0.35 %	TM132		2.43 #	5.03 #			
pH	1 pH Units	TM133		7.21 M	7.99 M			
Arsenic	<0.6 mg/kg	TM181		17.7 M	7.05 M			
Cadmium	<0.02 mg/kg	TM181		0.575 M	0.463 M			
Chromium	<0.9 mg/kg	TM181		15.2 M	8.22 M			
Copper	<1.4 mg/kg	TM181		20.4 M	9.52 M			
Lead	<0.7 mg/kg	TM181		16.4 M	12.5 M			
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M			
Nickel	<0.2 mg/kg	TM181		17.3 M	9.16 M			
Selenium	<1 mg/kg	TM181		<1 #	<1 #			
Zinc	<1.9 mg/kg	TM181		58.5 M	51.8 M			

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV019	CAEMV020				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	13/11/2012	13/11/2012				
			Sample Time	.	.				
			Date Received	16/11/2012	16/11/2012				
			SDG Ref	121116-123	121116-123				
			Lab Sample No.(s)	6509083	6509084				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV019	CAEMV020				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	13/11/2012	13/11/2012				
			Sample Time	.	.				
			Date Received	16/11/2012	16/11/2012				
			SDG Ref	121116-123	121116-123				
			Lab Sample No.(s)	6509083	6509084				
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100				
Acenaphthylene	<100 µg/kg	TM157		<100	<100				
Acenaphthene	<100 µg/kg	TM157		<100	<100				
Anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100				
Chrysene	<100 µg/kg	TM157		<100	<100				
Fluoranthene	<100 µg/kg	TM157		<100	<100				
Fluorene	<100 µg/kg	TM157		<100	196				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100				
Phenanthrene	<100 µg/kg	TM157		<100	290				
Pyrene	<100 µg/kg	TM157		<100	<100				
Naphthalene	<100 µg/kg	TM157		<100	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV019	CAEMV020				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	13/11/2012	13/11/2012				
			Sample Time	.	.				
			Date Received	16/11/2012	16/11/2012				
			SDG Ref	121116-123	121116-123				
			Lab Sample No.(s)	6509083	6509084				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		101	46				
GRO >C5-C12	<44 µg/kg	TM089		579	18000				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #				
Benzene	<10 µg/kg	TM089		<10 M	<10 M				
Toluene	<2 µg/kg	TM089		<2 M	<2 M				
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M				
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M				
o-Xylene	<3 µg/kg	TM089		3.72 M	<3 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		28.5	139				
Aliphatics >C6-C8	<10 µg/kg	TM089		381	2860				
Aliphatics >C8-C10	<10 µg/kg	TM089		75.6	3570				
Aliphatics >C10-C12	<10 µg/kg	TM089		19.8	5450				
Aliphatics >C12-C16	<100 µg/kg	TM173		3080	114000				
Aliphatics >C16-C21	<100 µg/kg	TM173		7550	289000				
Aliphatics >C21-C35	<100 µg/kg	TM173		15300	517000				
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	51200				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		26000	971000				
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089		54.6	2380				
Aromatics >EC10-EC12	<10 µg/kg	TM089		12.4	3630				
Aromatics >EC12-EC16	<100 µg/kg	TM173		34000	106000				
Aromatics >EC16-EC21	<100 µg/kg	TM173		20600	205000				
Aromatics >EC21-EC35	<100 µg/kg	TM173		35100	492000				
Aromatics >EC35-EC44	<100 µg/kg	TM173		19300	83200				
Aromatics >EC40-EC44	<100 µg/kg	TM173		4340	20100				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		109000	886000				
Total Aliphatics >C5-35	<100 µg/kg	TM173		26500	932000				
Total Aromatics >C5-35	<100 µg/kg	TM173		89800	809000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		116000	1740000				

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV019	CAEMV020				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
aq	Aqueous / settled sample.	Depth (m)	.	.				
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid				
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/11/2012	13/11/2012				
*	Subcontracted test.	Sample Time	.	.				
**	% 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	Date Received	16/11/2012	16/11/2012				
		SDG Ref	121116-123	121116-123				
		Lab Sample No.(s)	6509083	6509084				
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	136000	1880000				

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV019	CAEMV020				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	13/11/2012	13/11/2012				
			Sample Time	.	.				
			Date Received	16/11/2012	16/11/2012				
			SDG Ref	121116-123	121116-123				
			Lab Sample No.(s)	6509083	6509084				
			AGS Reference						
Dibromofluoromethane**	%	TM116		96.8	103				
Toluene-d8**	%	TM116		96.1	96.9				
4-Bromofluorobenzene**	%	TM116		127	99.6				
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<80 M				
Chloromethane	<7 µg/kg	TM116		<7	<140				
Vinyl Chloride	<10 µg/kg	TM116		<10	<200				
Bromomethane	<13 µg/kg	TM116		<13 M	<260 M				
Chloroethane	<14 µg/kg	TM116		<14 M	<280 M				
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<120 M				
1,1-Dichloroethene	<10 µg/kg	TM116			<200 #				
1.1-Dichloroethene	<10 µg/kg	TM116		<10 #					
Carbon Disulphide	<7 µg/kg	TM116		<7 M	<140 M				
Dichloromethane	<10 µg/kg	TM116		<10 #	<200 #				
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<220 M				
trans-1,2-Dichloroethene	<11 µg/kg	TM116			<220 M				
trans-1-2-Dichloroethene	<11 µg/kg	TM116		<11 M					
1,1-Dichloroethane	<8 µg/kg	TM116			<160 M				
1.1-Dichloroethane	<8 µg/kg	TM116		<8 M					
cis-1,2-Dichloroethene	<5 µg/kg	TM116			<100 M				
cis-1-2-Dichloroethene	<5 µg/kg	TM116		<5 M					
2,2-Dichloropropane	<12 µg/kg	TM116			<240 M				
2.2-Dichloropropane	<12 µg/kg	TM116		<12 M					
Bromochloromethane	<14 µg/kg	TM116		<14 M	<280 M				
Chloroform	<8 µg/kg	TM116		<8 M	<160 M				
1,1,1-Trichloroethane	<7 µg/kg	TM116			<140 M				
1.1.1-Trichloroethane	<7 µg/kg	TM116		<7 M					
1,1-Dichloropropene	<11 µg/kg	TM116			<220 M				
1.1-Dichloropropene	<11 µg/kg	TM116		<11 M					
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<280 M				
1,2-Dichloroethane	<5 µg/kg	TM116			<100 M				
1.2-Dichloroethane	<5 µg/kg	TM116		<5 M					
Benzene	<9 µg/kg	TM116		<9 M	<180 M				

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV019	CAEMV020				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	13/11/2012	13/11/2012				
			Sample Time	.	.				
			Date Received	16/11/2012	16/11/2012				
			SDG Ref	121116-123	121116-123				
			Lab Sample No.(s)	6509083	6509084				
			AGS Reference						
Trichloroethene	<9 µg/kg	TM116		<9 M	<180 M				
1,2-Dichloropropane	<12 µg/kg	TM116			<240 M				
1.2-Dichloropropane	<12 µg/kg	TM116		<12 M					
Dibromomethane	<9 µg/kg	TM116		<9 M	<180 M				
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<140 M				
cis-1,3-Dichloropropene	<14 µg/kg	TM116			<280 M				
cis-1-3-Dichloropropene	<14 µg/kg	TM116		<14 M					
Toluene	<5 µg/kg	TM116		<5 M	<100 M				
trans-1,3-Dichloropropene	<14 µg/kg	TM116			<280				
trans-1-3-Dichloropropene	<14 µg/kg	TM116		<14					
1,1,2-Trichloroethane	<10 µg/kg	TM116			<200 M				
1.1.2-Trichloroethane	<10 µg/kg	TM116		<10 M					
1,3-Dichloropropane	<7 µg/kg	TM116			<140 #				
1.3-Dichloropropane	<7 µg/kg	TM116		<7 #					
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<100 M				
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<260 M				
1,2-Dibromoethane	<12 µg/kg	TM116			<240 M				
1.2-Dibromoethane	<12 µg/kg	TM116		<12 M					
Chlorobenzene	<5 µg/kg	TM116		<5 M	<100 M				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116			<200 M				
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116		<10 M					
Ethylbenzene	<4 µg/kg	TM116		<4 M	<80 M				
p/m-Xylene	<14 µg/kg	TM116		<14 #	<280 #				
o-Xylene	<10 µg/kg	TM116		<10 M	<200 M				
Styrene	<10 µg/kg	TM116		<10 M	<200 M				
Bromoform	<10 µg/kg	TM116		<10 M	<200 M				
Isopropylbenzene	<5 µg/kg	TM116		<5 M	<100 M				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116			<200 #				
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116		<10 #					
1,2,3-Trichloropropane	<17 µg/kg	TM116			<340 M				
1.2.3-Trichloropropane	<17 µg/kg	TM116		<17 M					
Bromobenzene	<10 µg/kg	TM116		<10 M	<200 M				

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV019	CAEMV020				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	13/11/2012	13/11/2012				
			Sample Time	.	.				
			Date Received	16/11/2012	16/11/2012				
			SDG Ref	121116-123	121116-123				
			Lab Sample No.(s)	6509083	6509084				
			AGS Reference						
Propylbenzene	<11 µg/kg	TM116		<11 M	<220 M				
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<180 M				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116			<160 #				
1.3.5-Trimethylbenzene	<8 µg/kg	TM116		<8 #					
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<240 M				
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<240 #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116			<180 #				
1.2.4-Trimethylbenzene	<9 µg/kg	TM116		<9 #					
sec-Butylbenzene	<10 µg/kg	TM116		<10 M	<200 M				
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<220 M				
1,3-Dichlorobenzene	<6 µg/kg	TM116			<120 M				
1.3-Dichlorobenzene	<6 µg/kg	TM116		<6 M					
1,4-Dichlorobenzene	<5 µg/kg	TM116			<100 M				
1.4-Dichlorobenzene	<5 µg/kg	TM116		<5 M					
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<200 M				
1,2-Dichlorobenzene	<12 µg/kg	TM116			<240 M				
1.2-Dichlorobenzene	<12 µg/kg	TM116		<12 M					
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116			<280 M				
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M					
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<300				
1,2,4-Trichlorobenzene	<6 µg/kg	TM116			<120 #				
1.2.4-Trichlorobenzene	<6 µg/kg	TM116		<6 #					
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<240				
Naphthalene	<13 µg/kg	TM116		<13 M	<260 M				
1,2,3-Trichlorobenzene	<6 µg/kg	TM116			<120 M				
1.2.3-Trichlorobenzene	<6 µg/kg	TM116		<6 M					

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample [1]	Surrogate Corrected
PM001		Preparation of Samples for Metals Analysis		
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		

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

CERTIFICATE OF ANALYSIS

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6509083	6509084
Customer Sample Ref.	CAEMV019	CAEMV020
AGS Ref.		
Depth		
Type	SOLID	SOLID
EPH CWG (Aliphatic) GC (S)	21-Nov-2012	21-Nov-2012
EPH CWG (Aromatic) GC (S)	21-Nov-2012	21-Nov-2012
GRO by GC-FID (S)	21-Nov-2012	21-Nov-2012
Metals by iCap-OES (Soil)	21-Nov-2012	21-Nov-2012
pH	19-Nov-2012	19-Nov-2012
Sample description	17-Nov-2012	17-Nov-2012
Semi Volatile Organic Compounds	21-Nov-2012	21-Nov-2012
Total Organic Carbon	21-Nov-2012	21-Nov-2012
TPH CWG GC (S)	21-Nov-2012	21-Nov-2012
VOC MS (S)	22-Nov-2012	22-Nov-2012

SDG:	121116-123	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	202752
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

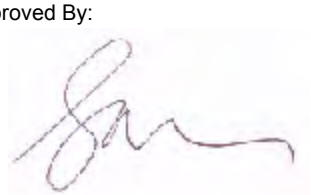
Date:	29 November 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121115-83
Your Reference:	Weekly Samples
Location:	Coed Darcy Urban Village
Report No:	203869

We received 2 samples on Wednesday November 14, 2012 and 2 of these samples were scheduled for analysis which was completed on Thursday November 29, 2012. 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

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6504914	36"			13/11/2012
6504915	CAEM018			09/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	
			6504914	36"			1iplastic (ALE221)	Vial (ALE297)
pH Value	All	NDPs: 0 Tests: 1					X	
Suspended Solids	All	NDPs: 0 Tests: 1					X	
VOC MS (W)	All	NDPs: 0 Tests: 1						X

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6504915	CAEM018			250g Amber Jar (AL / 400g Tub (ALE214) / 60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 1					X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 1	X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 1	X				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 1					X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 1	X				
	Cadmium	NDPs: 0 Tests: 1	X				
	Chromium	NDPs: 0 Tests: 1	X				
	Copper	NDPs: 0 Tests: 1	X				
	Lead	NDPs: 0 Tests: 1	X				
	Mercury	NDPs: 0 Tests: 1	X				
	Nickel	NDPs: 0 Tests: 1	X				
	Selenium	NDPs: 0 Tests: 1	X				
	Zinc	NDPs: 0 Tests: 1	X				
pH	All	NDPs: 0 Tests: 1					X
Sample description	All	NDPs: 0 Tests: 1	X				

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container		
			6504915	CAEM018			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 1					X		
Total Organic Carbon	All	NDPs: 0 Tests: 1					X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 1					X		
VOC MS (S)	All	NDPs: 0 Tests: 1							X

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**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
6504915	CAEM018		Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	N/A

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	36"	CAEM018
			Depth (m)	.	.
			Sample Type	Water(GW/SW)	Soil/Solid
			Date Sampled	13/11/2012	09/11/2012
			Sample Time	.	.
			Date Received	14/11/2012	14/11/2012
			SDG Ref	121115-83	121115-83
			Lab Sample No.(s)	6504914	6504915
			AGS Reference		
Suspended solids, Total	<2 mg/l	TM022		41.5 #	
pH	<1 pH Units	TM256		7.94 #	
Soil Organic Matter (SOM)	<0.35 %	TM132			1.3 #
pH	1 pH Units	TM133			7.19 M
Arsenic	<0.6 mg/kg	TM181			9.14 M
Cadmium	<0.02 mg/kg	TM181			0.542 M
Chromium	<0.9 mg/kg	TM181			12.9 M
Copper	<1.4 mg/kg	TM181			10.6 M
Lead	<0.7 mg/kg	TM181			9.12 M
Mercury	<0.14 mg/kg	TM181			<0.14 M
Nickel	<0.2 mg/kg	TM181			27.7 M
Selenium	<1 mg/kg	TM181			<1 #
Zinc	<1.9 mg/kg	TM181			61.7 M

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R					
			CAEM018					
			Depth (m)					
			.					
			Sample Type					
			Soil/Solid					
			Date Sampled					
			09/11/2012					
			Sample Time					
			.					
			Date Received					
			14/11/2012					
			SDG Ref					
			121115-83					
			Lab Sample No.(s)					
			6504915					
			AGS Reference					
Phenol	<100 µg/kg	TM157	<100					
Pentachlorophenol	<100 µg/kg	TM157	<100					
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157	<100					
Nitrobenzene	<100 µg/kg	TM157	<100					
Isophorone	<100 µg/kg	TM157	<100					
Hexachloroethane	<100 µg/kg	TM157	<100					
Hexachlorocyclopentadiene	<100 µg/kg	TM157	<100					
Hexachlorobutadiene	<100 µg/kg	TM157	<100					
Hexachlorobenzene	<100 µg/kg	TM157	<100					
n-Dioctyl phthalate	<100 µg/kg	TM157	<100					
Dimethyl phthalate	<100 µg/kg	TM157	<100					
Diethyl phthalate	<100 µg/kg	TM157	<100					
n-Dibutyl phthalate	<100 µg/kg	TM157	<100					
Dibenzofuran	<100 µg/kg	TM157	<100					
Carbazole	<100 µg/kg	TM157	<100					
Butylbenzyl phthalate	<100 µg/kg	TM157	<100					
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157	<100					
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157	<100					
bis(2-Chloroethyl)ether	<100 µg/kg	TM157	<100					
Azobenzene	<100 µg/kg	TM157	<100					
4-Nitrophenol	<100 µg/kg	TM157	<100					
4-Nitroaniline	<100 µg/kg	TM157	<100					
4-Methylphenol	<100 µg/kg	TM157	<100					
4-Chlorophenylphenylether	<100 µg/kg	TM157	<100					
4-Chloroaniline	<100 µg/kg	TM157	<100					
4-Chloro-3-methylphenol	<100 µg/kg	TM157	<100					
4-Bromophenylphenylether	<100 µg/kg	TM157	<100					
3-Nitroaniline	<100 µg/kg	TM157	<100					
2-Nitrophenol	<100 µg/kg	TM157	<100					
2-Nitroaniline	<100 µg/kg	TM157	<100					
2-Methylphenol	<100 µg/kg	TM157	<100					
1,2,4-Trichlorobenzene	<100 µg/kg	TM157	<100					

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Customer Sample R			CAEM018					
Depth (m)			.					
Sample Type			Soil/Solid					
Date Sampled			09/11/2012					
Sample Time			.					
Date Received			14/11/2012					
SDG Ref			121115-83					
Lab Sample No.(s)			6504915					
AGS Reference								
Component	**LOD/Units**	**Method**						
2-Chlorophenol	<100 µg/kg	TM157	<100					
2,6-Dinitrotoluene	<100 µg/kg	TM157	<100					
2,4-Dinitrotoluene	<100 µg/kg	TM157	<100					
2,4-Dimethylphenol	<100 µg/kg	TM157	<100					
2,4-Dichlorophenol	<100 µg/kg	TM157	<100					
2,4,6-Trichlorophenol	<100 µg/kg	TM157	<100					
2,4,5-Trichlorophenol	<100 µg/kg	TM157	<100					
1,4-Dichlorobenzene	<100 µg/kg	TM157	<100					
1,3-Dichlorobenzene	<100 µg/kg	TM157	<100					
1,2-Dichlorobenzene	<100 µg/kg	TM157	<100					
2-Chloronaphthalene	<100 µg/kg	TM157	<100					
2-Methylnaphthalene	<100 µg/kg	TM157	<100					
Acenaphthylene	<100 µg/kg	TM157	<100					
Acenaphthene	<100 µg/kg	TM157	<100					
Anthracene	<100 µg/kg	TM157	<100					
Benzo(a)anthracene	<100 µg/kg	TM157	<100					
Benzo(b)fluoranthene	<100 µg/kg	TM157	<100					
Benzo(k)fluoranthene	<100 µg/kg	TM157	<100					
Benzo(a)pyrene	<100 µg/kg	TM157	<100					
Benzo(g,h,i)perylene	<100 µg/kg	TM157	<100					
Chrysene	<100 µg/kg	TM157	<100					
Fluoranthene	<100 µg/kg	TM157	<100					
Fluorene	<100 µg/kg	TM157	<100					
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157	<100					
Phenanthrene	<100 µg/kg	TM157	<100					
Pyrene	<100 µg/kg	TM157	<100					
Naphthalene	<100 µg/kg	TM157	<100					
Dibenzo(a,h)anthracene	<100 µg/kg	TM157	<100					

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R					
			CAEM018					
			Depth (m)					
			.					
			Sample Type					
			Soil/Solid					
			Date Sampled					
			09/11/2012					
			Sample Time					
			.					
			Date Received					
			14/11/2012					
			SDG Ref					
			121115-83					
			Lab Sample No.(s)					
			6504915					
			AGS Reference					
GRO Surrogate % recovery**	%	TM089	101					
GRO >C5-C12	<44 µg/kg	TM089	1570					
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5 #					
Benzene	<10 µg/kg	TM089	<10 M					
Toluene	<2 µg/kg	TM089	<2 M					
Ethylbenzene	<3 µg/kg	TM089	<3 M					
m,p-Xylene	<6 µg/kg	TM089	<6 M					
o-Xylene	<3 µg/kg	TM089	<3 M					
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9					
sum of detected BTEX by GC	<24 µg/kg	TM089	<24					
Aliphatics >C5-C6	<10 µg/kg	TM089	18.7					
Aliphatics >C6-C8	<10 µg/kg	TM089	161					
Aliphatics >C8-C10	<10 µg/kg	TM089	297					
Aliphatics >C10-C12	<10 µg/kg	TM089	535					
Aliphatics >C12-C16	<100 µg/kg	TM173	5410					
Aliphatics >C16-C21	<100 µg/kg	TM173	20400					
Aliphatics >C21-C35	<100 µg/kg	TM173	83200					
Aliphatics >C35-C44	<100 µg/kg	TM173	62400					
Total Aliphatics >C12-C44	<100 µg/kg	TM173	171000					
Aromatics >EC5-EC7	<10 µg/kg	TM089	<10					
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10					
Aromatics >EC8-EC10	<10 µg/kg	TM089	198					
Aromatics >EC10-EC12	<10 µg/kg	TM089	357					
Aromatics >EC12-EC16	<100 µg/kg	TM173	2100					
Aromatics >EC16-EC21	<100 µg/kg	TM173	11900					
Aromatics >EC21-EC35	<100 µg/kg	TM173	58800					
Aromatics >EC35-EC44	<100 µg/kg	TM173	69600					
Aromatics >EC40-EC44	<100 µg/kg	TM173	33900					
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	142000					
Total Aliphatics >C5-35	<100 µg/kg	TM173	110000					
Total Aromatics >C5-35	<100 µg/kg	TM173	73300					
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	183000					

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM018
#	ISO17025 accredited.		
M	*m*CERTS accredited.		
§	Deviating sample.	Depth (m)	.
aq	Aqueous / settled sample.	Sample Type	Soil/Solid
diss.filt	Dissolved / filtered sample.	Date Sampled	09/11/2012
tot.unfilt	Total / unfiltered sample.	Sample Time	.
*	Subcontracted test.	Date Received	14/11/2012
**	% 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	SDG Ref	121115-83
		Lab Sample No.(s)	6504915
(F)	Trigger breach confirmed	AGS Reference	

Component	LOD/Units	Method	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	315000

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R					
			CAEM018					
			Depth (m) .					
			Sample Type Soil/Solid					
			Date Sampled 09/11/2012					
			Sample Time .					
			Date Received 14/11/2012					
			SDG Ref 121115-83					
			Lab Sample No.(s) 6504915					
			AGS Reference					
Dibromofluoromethane**	%	TM116	100					
Toluene-d8**	%	TM116	97.4					
4-Bromofluorobenzene**	%	TM116	118					
Dichlorodifluoromethane	<4 µg/kg	TM116	<4 M					
Chloromethane	<7 µg/kg	TM116	<7					
Vinyl Chloride	<10 µg/kg	TM116	<10					
Bromomethane	<13 µg/kg	TM116	<13 M					
Chloroethane	<14 µg/kg	TM116	<14 M					
Trichlorofluorormethane	<6 µg/kg	TM116	<6 M					
1.1-Dichloroethene	<10 µg/kg	TM116	<10 #					
Carbon Disulphide	<7 µg/kg	TM116	<7 M					
Dichloromethane	<10 µg/kg	TM116	<10 #					
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116	<11 M					
trans-1-2-Dichloroethene	<11 µg/kg	TM116	<11 M					
1.1-Dichloroethane	<8 µg/kg	TM116	<8 M					
cis-1-2-Dichloroethene	<5 µg/kg	TM116	<5 M					
2.2-Dichloropropane	<12 µg/kg	TM116	<12 M					
Bromochloromethane	<14 µg/kg	TM116	<14 M					
Chloroform	<8 µg/kg	TM116	<8 M					
1.1.1-Trichloroethane	<7 µg/kg	TM116	<7 M					
1.1-Dichloropropene	<11 µg/kg	TM116	<11 M					
Carbontetrachloride	<14 µg/kg	TM116	<14 M					
1.2-Dichloroethane	<5 µg/kg	TM116	<5 M					
Benzene	<9 µg/kg	TM116	11.5 M					
Trichloroethene	<9 µg/kg	TM116	<9 M					
1.2-Dichloropropane	<12 µg/kg	TM116	<12 M					
Dibromomethane	<9 µg/kg	TM116	<9 M					
Bromodichloromethane	<7 µg/kg	TM116	<7 M					
cis-1-3-Dichloropropene	<14 µg/kg	TM116	<14 M					
Toluene	<5 µg/kg	TM116	<5 M					
trans-1-3-Dichloropropene	<14 µg/kg	TM116	<14					
1.1.2-Trichloroethane	<10 µg/kg	TM116	<10 M					

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Customer Sample R			CAEM018
Depth (m)			.
Sample Type			Soil/Solid
Date Sampled			09/11/2012
Sample Time			.
Date Received			14/11/2012
SDG Ref			121115-83
Lab Sample No.(s)			6504915
AGS Reference			
Component	**LOD/Units**	**Method**	
1.3-Dichloropropane	<7 µg/kg	TM116	<7 #
Tetrachloroethene	<5 µg/kg	TM116	<5 M
Dibromochloromethane	<13 µg/kg	TM116	<13 M
1.2-Dibromoethane	<12 µg/kg	TM116	<12 M
Chlorobenzene	<5 µg/kg	TM116	<5 M
1.1.1.2-Tetrachloroethane	<10 µg/kg	TM116	<10 M
Ethylbenzene	<4 µg/kg	TM116	<4 M
p/m-Xylene	<14 µg/kg	TM116	<14 #
o-Xylene	<10 µg/kg	TM116	<10 M
Styrene	<10 µg/kg	TM116	<10 M
Bromoform	<10 µg/kg	TM116	<10 M
Isopropylbenzene	<5 µg/kg	TM116	<5 M
1.1.2.2-Tetrachloroethane	<10 µg/kg	TM116	<10 #
1.2.3-Trichloropropane	<17 µg/kg	TM116	<17 M
Bromobenzene	<10 µg/kg	TM116	<10 M
Propylbenzene	<11 µg/kg	TM116	<11 M
2-Chlorotoluene	<9 µg/kg	TM116	<9 M
1.3.5-Trimethylbenzene	<8 µg/kg	TM116	<8 #
4-Chlorotoluene	<12 µg/kg	TM116	<12 M
tert-Butylbenzene	<12 µg/kg	TM116	<12 #
1.2.4-Trimethylbenzene	<9 µg/kg	TM116	<9 #
sec-Butylbenzene	<10 µg/kg	TM116	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116	<11 M
1.3-Dichlorobenzene	<6 µg/kg	TM116	<6 M
1.4-Dichlorobenzene	<5 µg/kg	TM116	<5 M
n-Butylbenzene	<10 µg/kg	TM116	<10 M
1.2-Dichlorobenzene	<12 µg/kg	TM116	<12 M
1.2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116	<15
1.2.4-Trichlorobenzene	<6 µg/kg	TM116	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116	<12
Naphthalene	<13 µg/kg	TM116	<13 M

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEM018
#	ISO17025 accredited.		
M	*m*CERTS accredited.		
§	Deviating sample.	Depth (m)	.
aq	Aqueous / settled sample.	Sample Type	Soil/Solid
diss.filt	Dissolved / filtered sample.	Date Sampled	09/11/2012
tot.unfilt	Total / unfiltered sample.	Sample Time	.
*	Subcontracted test.	Date Received	14/11/2012
**	% 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	SDG Ref	121115-83
		Lab Sample No.(s)	6504915
(F)	Trigger breach confirmed	AGS Reference	

Component	LOD/Units	Method	
1.2.3-Trichlorobenzene	<6 µg/kg	TM116	<6 M

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Customer Sample R	36"
Depth (m)	.
Sample Type	Water(GW/SW)
Date Sampled	13/11/2012
Sample Time	.
Date Received	14/11/2012
SDG Ref	121115-83
Lab Sample No.(s)	6504914
AGS Reference	

Component	LOD/Units	Method	
Dibromofluoromethane**	%	TM208	109
Toluene-d8**	%	TM208	99.6
4-Bromofluorobenzene**	%	TM208	99.1
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #
Chloromethane	<1 µg/l	TM208	<1 #
Vinyl chloride	<1 µg/l	TM208	<1 #
Bromomethane	<1 µg/l	TM208	<1 #
Chloroethane	<1 µg/l	TM208	<1 #
Trichlorofluoromethane	<1 µg/l	TM208	<1 #
1,1-Dichloroethene	<1 µg/l	TM208	<1 #
Carbon disulphide	<1 µg/l	TM208	<1 #
Dichloromethane	<3 µg/l	TM208	<3 #
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 #
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #
1,1-Dichloroethane	<1 µg/l	TM208	<1 #
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 #
2,2-Dichloropropane	<1 µg/l	TM208	<1
Bromochloromethane	<1 µg/l	TM208	<1 #
Chloroform	<1 µg/l	TM208	<1 #
1,1,1-Trichloroethane	<1 µg/l	TM208	<1 #
1,1-Dichloropropene	<1 µg/l	TM208	<1 #
Carbontetrachloride	<1 µg/l	TM208	<1 #
1,2-Dichloroethane	<1 µg/l	TM208	3.73
Benzene	<1 µg/l	TM208	<1 #
Trichloroethene	<1 µg/l	TM208	<1 #
1,2-Dichloropropane	<1 µg/l	TM208	<1 #
Dibromomethane	<1 µg/l	TM208	<1 #
Bromodichloromethane	<1 µg/l	TM208	<1 #
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 #
Toluene	<1 µg/l	TM208	<1 #
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 #
1,1,2-Trichloroethane	<1 µg/l	TM208	<1 #

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Customer Sample R	36"
Depth (m)	.
Sample Type	Water(GW/SW)
Date Sampled	13/11/2012
Sample Time	.
Date Received	14/11/2012
SDG Ref	121115-83
Lab Sample No.(s)	6504914
AGS Reference	

Component	LOD/Units	Method	
1,3-Dichloropropane	<1 µg/l	TM208	<1 #
Tetrachloroethene	<1 µg/l	TM208	<1 #
Dibromochloromethane	<1 µg/l	TM208	<1 #
1,2-Dibromoethane	<1 µg/l	TM208	<1 #
Chlorobenzene	<1 µg/l	TM208	<1 #
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1 #
Ethylbenzene	<1 µg/l	TM208	<1 #
m,p-Xylene	<1 µg/l	TM208	<1 #
o-Xylene	<1 µg/l	TM208	<1 #
Styrene	<1 µg/l	TM208	<1 #
Bromoform	<1 µg/l	TM208	<1 #
Isopropylbenzene	<1 µg/l	TM208	<1 #
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1
1,2,3-Trichloropropane	<1 µg/l	TM208	<1 #
Bromobenzene	<1 µg/l	TM208	<1 #
Propylbenzene	<1 µg/l	TM208	<1 #
2-Chlorotoluene	<1 µg/l	TM208	<1 #
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 #
4-Chlorotoluene	<1 µg/l	TM208	<1 #
tert-Butylbenzene	<1 µg/l	TM208	<1 #
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1 #
sec-Butylbenzene	<1 µg/l	TM208	<1 #
4-iso-Propyltoluene	<1 µg/l	TM208	<1 #
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 #
1,4-Dichlorobenzene	<1 µg/l	TM208	<1 #
n-Butylbenzene	<1 µg/l	TM208	<1 #
1,2-Dichlorobenzene	<1 µg/l	TM208	<1
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1 #
Hexachlorobutadiene	<1 µg/l	TM208	<1 #
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #
Naphthalene	<1 µg/l	TM208	<1 #

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

			Customer Sample R	36"
			Depth (m)	.
			Sample Type	Water(GW/SW)
			Date Sampled	13/11/2012
			Sample Time	.
			Date Received	14/11/2012
			SDG Ref	121115-83
			Lab Sample No.(s)	6504914
			AGS Reference	
Component	**LOD/Units**	**Method**		
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1 #	
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<1	

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEM018 SOLID 09/11/2012 00:00:00 121115-83 6504915 TM048	28/11/12	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**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		
TM022	Method 2540D, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part120 1981;BS EN 872	Determination of total suspended solids in waters		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters		
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6504914	6504915
Customer Sample Ref.	36"	CAEM018
AGS Ref.		
Depth		
Type	LIQUID	SOLID
Asbestos Identification (Soil)		28-Nov-2012
EPH CWG (Aliphatic) GC (S)		19-Nov-2012
EPH CWG (Aromatic) GC (S)		19-Nov-2012
GRO by GC-FID (S)		19-Nov-2012
Metals by iCap-OES (Soil)		19-Nov-2012
pH		16-Nov-2012
pH Value	19-Nov-2012	
Sample description		15-Nov-2012
Semi Volatile Organic Compounds		20-Nov-2012
Suspended Solids	19-Nov-2012	
Total Organic Carbon		29-Nov-2012
TPH CWG GC (S)		19-Nov-2012
VOC MS (S)		16-Nov-2012
VOC MS (W)	16-Nov-2012	

SDG:	121115-83	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0319
Job:	H_ATKINS_LDC-105	**Customer:**	Atkins Global Ltd	**Report Number:**	203869
Client Reference:	Weekly Samples	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Atkins Global Ltd
Project Jonah site office
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Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

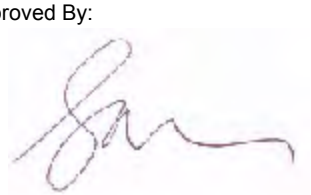
Date:	05 December 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121122-64
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	204404

We received 5 samples on Thursday November 22, 2012 and 4 of these samples were scheduled for analysis which was completed on Wednesday December 05, 2012. 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

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6541128	CAEMV021			15/11/2012
6541130	CAEMV022			16/11/2012
6541131	CAEMV023			16/11/2012
6541132	CAEMV024			16/11/2012
6541133	DMW2-3			09/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6541128	CAEMV021			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6541130	CAEMV022			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6541131	CAEMV023			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6541132	CAEMV024			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 4					
				X			
				X			
				X			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 4					
			X				
			X				
			X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 4					
			X				
			X				
			X				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 4					
				X			
			X				
			X				
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 4					
			X				
			X				
			X				
	Cadmium	NDPs: 0 Tests: 4					
			X				
			X				
			X				
	Chromium	NDPs: 0 Tests: 4					
			X				
			X				
			X				
	Copper	NDPs: 0 Tests: 4					
			X				
			X				
			X				
	Lead	NDPs: 0 Tests: 4					
			X				
			X				
			X				
	Mercury	NDPs: 0 Tests: 4					
			X				
			X				
			X				
	Nickel	NDPs: 0 Tests: 4					
			X				
			X				
			X				
	Selenium	NDPs: 0 Tests: 4					
			X				
			X				
			X				
	Zinc	NDPs: 0 Tests: 4					
			X				
			X				
			X				
pH	All	NDPs: 0 Tests: 4					
				X			
			X				
			X				
Sample description	All	NDPs: 0 Tests: 4					
			X				
			X				
			X				

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6541128	CAEMV021			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6541130	CAEMV022			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6541131	CAEMV023			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6541132	CAEMV024			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 4	X		X		X
Total Organic Carbon	All	NDPs: 0 Tests: 3			X		X
TPH CWG GC (S)	All	NDPs: 0 Tests: 4	X		X		X
VOC MS (S)	All	NDPs: 0 Tests: 4		X		X	X

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6541128	CAEMV021		Black	N/A	0.1 - 2 mm	Oil/Petroleum	Stones
6541130	CAEMV022		Dark Brown	Sandy Silt Loam	<0.063 mm	Brick	Stones
6541131	CAEMV023		Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones	N/A
6541132	CAEMV024		Black	Silty Clay Loam	<0.063 mm	Vegetation	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV021	CAEMV022	CAEMV023	CAEMV024		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	15/11/2012	16/11/2012	16/11/2012	16/11/2012		
			Sample Time	.	.	.	.		
			Date Received	22/11/2012	22/11/2012	22/11/2012	22/11/2012		
			SDG Ref	121122-64	121122-64	121122-64	121122-64		
			Lab Sample No.(s)	6541128	6541130	6541131	6541132		
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		10 #	11.5 #	23.1 #			
pH	1 pH Units	TM133	8.86 #	6.74 M	6.77 M	7.33 M			
Arsenic	<0.6 mg/kg	TM181	66.9 #	22.1 M	44.4 M	61.7 M			
Cadmium	<0.02 mg/kg	TM181	1.62 #	2.26 M	1.02 M	1.4 M			
Chromium	<0.9 mg/kg	TM181	127 #	15.8 M	17.1 M	11.3 M			
Copper	<1.4 mg/kg	TM181	78 #	98.6 M	146 M	148 M			
Lead	<0.7 mg/kg	TM181	88.6 #	71.4 M	64.4 M	105 M			
Mercury	<0.14 mg/kg	TM181	1.51 #	1.23 M	<0.14 M	0.319 M			
Nickel	<0.2 mg/kg	TM181	33.8 #	29.2 M	19 M	19.9 M			
Selenium	<1 mg/kg	TM181	1.8 #	<1 #	<1 #	1.3 #			
Zinc	<1.9 mg/kg	TM181	141 #	208 M	113 M	158 M			

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV021	CAEMV022	CAEMV023	CAEMV024		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	15/11/2012	16/11/2012	16/11/2012	16/11/2012		
			Sample Time	.	.	.	.		
			Date Received	22/11/2012	22/11/2012	22/11/2012	22/11/2012		
			SDG Ref	121122-64	121122-64	121122-64	121122-64		
			Lab Sample No.(s)	6541128	6541130	6541131	6541132		
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100		
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100		
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100		
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100		
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		449	<100	<100	<100		
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100		
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloroaniline	<100 µg/kg	TM157		6380	<100	<100	<100		
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV021	CAEMV022	CAEMV023	CAEMV024		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	15/11/2012	16/11/2012	16/11/2012	16/11/2012		
			Sample Time	.	.	.	.		
			Date Received	22/11/2012	22/11/2012	22/11/2012	22/11/2012		
			SDG Ref	121122-64	121122-64	121122-64	121122-64		
			Lab Sample No.(s)	6541128	6541130	6541131	6541132		
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylnaphthalene	<100 µg/kg	TM157		19100	<100	<100	6780		
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100		
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Anthracene	<100 µg/kg	TM157		407	<100	<100	<100		
Benzo(a)anthracene	<100 µg/kg	TM157		451	<100	<100	<100		
Benzo(b)fluoranthene	<100 µg/kg	TM157		398	<100	<100	<100		
Benzo(k)fluoranthene	<100 µg/kg	TM157		289	<100	<100	<100		
Benzo(a)pyrene	<100 µg/kg	TM157		382	<100	<100	<100		
Benzo(g,h,i)perylene	<100 µg/kg	TM157		185	<100	<100	<100		
Chrysene	<100 µg/kg	TM157		625	<100	<100	<100		
Fluoranthene	<100 µg/kg	TM157		1060	<100	<100	<100		
Fluorene	<100 µg/kg	TM157		2260	<100	<100	167		
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		134	<100	<100	<100		
Phenanthrene	<100 µg/kg	TM157		2820	<100	<100	212		
Pyrene	<100 µg/kg	TM157		1300	<100	<100	<100		
Naphthalene	<100 µg/kg	TM157		9410	<100	<100	5280		
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV021	CAEMV022	CAEMV023	CAEMV024		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	15/11/2012	16/11/2012	16/11/2012	16/11/2012		
			Sample Time	.	.	.	.		
			Date Received	22/11/2012	22/11/2012	22/11/2012	22/11/2012		
			SDG Ref	121122-64	121122-64	121122-64	121122-64		
			Lab Sample No.(s)	6541128	6541130	6541131	6541132		
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		109	45	89	61		
GRO >C5-C12	<44 µg/kg	TM089		1510000	2660	143000	8250		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<50 #	<5 #	<25 #	<5 #		
Benzene	<10 µg/kg	TM089		462 #	<10 M	<50 M	<10 M		
Toluene	<2 µg/kg	TM089		<20 #	2.74 M	<10 M	<2 M		
Ethylbenzene	<3 µg/kg	TM089		<30 #	<3 M	<15 M	<3 M		
m,p-Xylene	<6 µg/kg	TM089		3120 #	<6 M	<30 M	13.6 M		
o-Xylene	<3 µg/kg	TM089		<30 #	5.48 M	<15 M	22.7 M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089		3120	<9	<9	36.3		
sum of detected BTEX by GC	<24 µg/kg	TM089		3580	<24	<24	36.3		
Aliphatics >C5-C6	<10 µg/kg	TM089		27000	37	80.6	180		
Aliphatics >C6-C8	<10 µg/kg	TM089		316000	164	26400	2090		
Aliphatics >C8-C10	<10 µg/kg	TM089		345000	218	55800	1210		
Aliphatics >C10-C12	<10 µg/kg	TM089		352000	1250	14200	2350		
Aliphatics >C12-C16	<100 µg/kg	TM173		1630000	78700	44800	181000		
Aliphatics >C16-C21	<100 µg/kg	TM173		690000	381000	75700	132000		
Aliphatics >C21-C35	<100 µg/kg	TM173		1070000	583000	275000	336000		
Aliphatics >C35-C44	<100 µg/kg	TM173		225000	85900	100000	110000		
Total Aliphatics >C12-C44	<100 µg/kg	TM173		3620000	1130000	496000	759000		
Aromatics >EC5-EC7	<10 µg/kg	TM089		462	<10	61.2	<10		
Aromatics >EC7-EC8	<10 µg/kg	TM089		<100	<10	<50	<10		
Aromatics >EC8-EC10	<10 µg/kg	TM089		233000	156	37200	844		
Aromatics >EC10-EC12	<10 µg/kg	TM089		235000	830	9450	1570		
Aromatics >EC12-EC16	<100 µg/kg	TM173		657000	53400	114000	179000		
Aromatics >EC16-EC21	<100 µg/kg	TM173		359000	339000	58700	93200		
Aromatics >EC21-EC35	<100 µg/kg	TM173		473000	364000	141000	291000		
Aromatics >EC35-EC44	<100 µg/kg	TM173		111000	83500	89300	152000		
Aromatics >EC40-EC44	<100 µg/kg	TM173		38400	30800	34900	42600		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1600000	840000	403000	716000		
Total Aliphatics >C5-35	<100 µg/kg	TM173		4440000	1040000	492000	655000		
Total Aromatics >C5-35	<100 µg/kg	TM173		1960000	757000	360000	566000		
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		6390000	1800000	852000	1220000		

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV021	CAEMV022	CAEMV023	CAEMV024		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	.	.	.	.		
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
diss.filt	Dissolved / filtered sample.	Date Sampled	15/11/2012	16/11/2012	16/11/2012	16/11/2012		
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.	.	.		
*	Subcontracted test.	Date Received	22/11/2012	22/11/2012	22/11/2012	22/11/2012		
**	% 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	SDG Ref	121122-64	121122-64	121122-64	121122-64		
		Lab Sample No.(s)	6541128	6541130	6541131	6541132		
(F)	Trigger breach confirmed	AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	6730000	1970000	1040000	1480000		

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV021	CAEMV022	CAEMV023	CAEMV024		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	15/11/2012	16/11/2012	16/11/2012	16/11/2012		
			Sample Time	.	.	.	.		
			Date Received	22/11/2012	22/11/2012	22/11/2012	22/11/2012		
			SDG Ref	121122-64	121122-64	121122-64	121122-64		
			Lab Sample No.(s)	6541128	6541130	6541131	6541132		
			AGS Reference						
Dibromofluoromethane**	%	TM116		95.5	106	109	109		
Toluene-d8**	%	TM116		115	99.3	100	96.1		
4-Bromofluorobenzene**	%	TM116		84.5	117	120	123		
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 #	<80 M	<8 M	<80 M		
Chloromethane	<7 µg/kg	TM116		<7	<140	<14	<140		
Vinyl Chloride	<10 µg/kg	TM116		<10	<200	<20	<200		
Bromomethane	<13 µg/kg	TM116		<13 #	<260 M	<26 M	<260 M		
Chloroethane	<14 µg/kg	TM116		<14 #	<280 M	<28 M	<280 M		
Trichlorofluorormethane	<6 µg/kg	TM116		<6 #	<120 M	<12 M	<120 M		
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<200 #	<20 #	<200 #		
Carbon Disulphide	<7 µg/kg	TM116		111 #	<140 M	37 M	<140 M		
Dichloromethane	<10 µg/kg	TM116		<10 #	<200 #	<20 #	<200 #		
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 #	<220 M	<22 M	<220 M		
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 #	<220 M	<22 M	<220 M		
1,1-Dichloroethane	<8 µg/kg	TM116		<8 #	<160 M	<16 M	<160 M		
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 #	<100 M	<10 M	<100 M		
2,2-Dichloropropane	<12 µg/kg	TM116		<12 #	<240 M	<24 M	<240 M		
Bromochloromethane	<14 µg/kg	TM116		<14 #	<280 M	<28 M	<280 M		
Chloroform	<8 µg/kg	TM116		<8 #	<160 M	<16 M	<160 M		
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 #	<140 M	<14 M	<140 M		
1,1-Dichloropropene	<11 µg/kg	TM116		<11 #	<220 M	<22 M	<220 M		
Carbontetrachloride	<14 µg/kg	TM116		<14 #	<280 M	<28 M	<280 M		
1,2-Dichloroethane	<5 µg/kg	TM116		<5 #	<100 M	<10 M	<100 M		
Benzene	<9 µg/kg	TM116		630 #	<180 M	<18 M	<180 M		
Trichloroethene	<9 µg/kg	TM116		<9 #	<180 M	<18 M	<180 M		
1,2-Dichloropropane	<12 µg/kg	TM116		<12 #	<240 M	<24 M	<240 M		
Dibromomethane	<9 µg/kg	TM116		<9 #	<180 M	<18 M	<180 M		
Bromodichloromethane	<7 µg/kg	TM116		<7 #	<140 M	<14 M	<140 M		
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 #	<280 M	<28 M	<280 M		
Toluene	<5 µg/kg	TM116		828 #	<100 M	<10 M	<100 M		
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<280	<28	<280		
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 #	<200 M	<20 M	<200 M		

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMV021	CAEMV022	CAEMV023	CAEMV024		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	15/11/2012	16/11/2012	16/11/2012	16/11/2012		
			Sample Time	.	.	.	.		
			Date Received	22/11/2012	22/11/2012	22/11/2012	22/11/2012		
			SDG Ref	121122-64	121122-64	121122-64	121122-64		
			Lab Sample No.(s)	6541128	6541130	6541131	6541132		
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<140 #	<14 #	<140 #		
Tetrachloroethene	<5 µg/kg	TM116		<5 #	<100 M	<10 M	<100 M		
Dibromochloromethane	<13 µg/kg	TM116		<13 #	<260 M	<26 M	<260 M		
1,2-Dibromoethane	<12 µg/kg	TM116		<12 #	<240 M	<24 M	<240 M		
Chlorobenzene	<5 µg/kg	TM116		<5 #	<100 M	<10 M	<100 M		
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<200 M	<20 M	<200 M		
Ethylbenzene	<4 µg/kg	TM116		671 #	<80 M	<8 M	3610 M		
p/m-Xylene	<14 µg/kg	TM116		5110 #	<280 #	<28 #	3300 #		
o-Xylene	<10 µg/kg	TM116		1520 #	<200 M	<20 M	860 M		
Styrene	<10 µg/kg	TM116		<10 #	<200 M	<20 M	<200 M		
Bromoform	<10 µg/kg	TM116		<10 #	<200 M	<20 M	<200 M		
Isopropylbenzene	<5 µg/kg	TM116		2760 #	<100 M	116 M	6710 M		
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<200 #	<20 #	<200 #		
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 #	<340 M	<34 M	<340 M		
Bromobenzene	<10 µg/kg	TM116		<10 #	<200 M	<20 M	<200 M		
Propylbenzene	<11 µg/kg	TM116		3670 #	<220 M	80.2 M	10200 M		
2-Chlorotoluene	<9 µg/kg	TM116		<9 #	<180 M	<18 M	<180 M		
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		3550 #	<160 #	<16 #	5840 #		
4-Chlorotoluene	<12 µg/kg	TM116		<12 #	<240 M	<24 M	<240 M		
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<240 #	<24 #	<240 #		
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		15100 #	<180 #	<18 #	29700 #		
sec-Butylbenzene	<10 µg/kg	TM116		3690 #	<200 M	281 M	3880 M		
4-Isopropyltoluene	<11 µg/kg	TM116		2320 #	<220 M	<22 M	2220 M		
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 #	<120 M	<12 M	<120 M		
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 #	<100 M	<10 M	<100 M		
n-Butylbenzene	<10 µg/kg	TM116		<10 #	<200 M	<20 M	<200 M		
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 #	<240 M	<24 M	<240 M		
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 #	<280 M	<28 M	<280 M		
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<300	<30	<300		
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<120 #	<12 #	<120 #		
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<240	<24	<240		
Naphthalene	<13 µg/kg	TM116		3370 #	<260 M	<26 M	30400 M		

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMV021	CAEMV022	CAEMV023	CAEMV024		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.	Depth (m)	.	.	.	.		
aq	Aqueous / settled sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
diss.filt	Dissolved / filtered sample.	Date Sampled	15/11/2012	16/11/2012	16/11/2012	16/11/2012		
tot.unfilt	Total / unfiltered sample.	Sample Time	.	.	.	.		
*	Subcontracted test.	Date Received	22/11/2012	22/11/2012	22/11/2012	22/11/2012		
**	% 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	SDG Ref	121122-64	121122-64	121122-64	121122-64		
		Lab Sample No.(s)	6541128	6541130	6541131	6541132		
(F)	Trigger breach confirmed	AGS Reference						
Component	**LOD/Units**	**Method**						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 #	<120 M	<12 M	<120 M		

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV021 SOLID 15/11/2012 00:00:00 121122-64 6541128 TM048	3/12/12	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 Receieved SDG Original Sample Method Number	CAEMV022 SOLID 16/11/2012 00:00:00 121122-64 6541130 TM048	3/12/12	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV023 SOLID 16/11/2012 00:00:00 121122-64 6541131 TM048	3/12/12	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV024 SOLID 16/11/2012 00:00:00 121122-64 6541132 TM048	3/12/12	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6541128	6541130	6541131	6541132
Customer Sample Ref.	CAEMV021	CAEMV022	CAEMV023	CAEMV024
AGS Ref.				
Depth				
Type	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	04-Dec-2012	04-Dec-2012	04-Dec-2012	04-Dec-2012
EPH CWG (Aliphatic) GC (S)	28-Nov-2012	28-Nov-2012	28-Nov-2012	28-Nov-2012
EPH CWG (Aromatic) GC (S)	28-Nov-2012	28-Nov-2012	28-Nov-2012	28-Nov-2012
GRO by GC-FID (S)	28-Nov-2012	28-Nov-2012	28-Nov-2012	28-Nov-2012
Metals by iCap-OES (Soil)	27-Nov-2012	27-Nov-2012	27-Nov-2012	27-Nov-2012
pH	27-Nov-2012	27-Nov-2012	27-Nov-2012	27-Nov-2012
Sample description	26-Nov-2012	26-Nov-2012	26-Nov-2012	26-Nov-2012
Semi Volatile Organic Compounds	28-Nov-2012	27-Nov-2012	27-Nov-2012	27-Nov-2012
Total Organic Carbon		04-Dec-2012	04-Dec-2012	04-Dec-2012
TPH CWG GC (S)	28-Nov-2012	28-Nov-2012	28-Nov-2012	28-Nov-2012
VOC MS (S)	28-Nov-2012	28-Nov-2012	28-Nov-2012	28-Nov-2012

CERTIFICATE OF ANALYSIS

SDG:	121122-64	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	204404
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

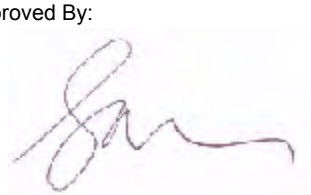
Date:	10 December 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121129-66
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	205150

We received 6 samples on Thursday November 29, 2012 and 6 of these samples were scheduled for analysis which was completed on Monday December 10, 2012. 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

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CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6577584	CAEMUO25			27/11/2012
6577585	CAEMUO26			27/11/2012
6577586	CAEMUO27			27/11/2012
6577587	CAEMUO28			27/11/2012
6577588	CAEMUO29			27/11/2012
6577589	CAEMUO30			28/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6577584	CAEMUO25			250g Amber Jar (AL
			6577584	CAEMUO25			400g Tub (ALE214)
			6577584	CAEMUO25			60g VOC (ALE215)
			6577585	CAEMUO26			250g Amber Jar (AL
			6577585	CAEMUO26			400g Tub (ALE214)
			6577585	CAEMUO26			60g VOC (ALE215)
			6577586	CAEMUO27			250g Amber Jar (AL
			6577586	CAEMUO27			400g Tub (ALE214)
			6577586	CAEMUO27			60g VOC (ALE215)
			6577587	CAEMUO28			250g Amber Jar (AL
			6577587	CAEMUO28			400g Tub (ALE214)
			6577587	CAEMUO28			60g VOC (ALE215)
			6577588	CAEMUO29			250g Amber Jar (AL
			6577588	CAEMUO29			400g Tub (ALE214)
			6577588	CAEMUO29			60g VOC (ALE215)
			6577589	CAEMUO30			250g Amber Jar (AL
			6577589	CAEMUO30			400g Tub (ALE214)
			6577589	CAEMUO30			60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 6					X X X X X X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 6	X X X X X X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 6	X X X X X X				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 6	X X X X X X				
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 6	X X X X X X				
	Cadmium	NDPs: 0 Tests: 6	X X X X X X				
	Chromium	NDPs: 0 Tests: 6	X X X X X X				
	Copper	NDPs: 0 Tests: 6	X X X X X X				
	Lead	NDPs: 0 Tests: 6	X X X X X X				
	Mercury	NDPs: 0 Tests: 6	X X X X X X				
	Nickel	NDPs: 0 Tests: 6	X X X X X X				
	Selenium	NDPs: 0 Tests: 6	X X X X X X				
	Zinc	NDPs: 0 Tests: 6	X X X X X X				
pH	All	NDPs: 0 Tests: 6	X X X X X X				
Sample description	All	NDPs: 0 Tests: 6	X X X X X X				

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6577584	CAEMUO25			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6577585	CAEMUO26			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6577586	CAEMUO27			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6577587	CAEMUO28			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6577588	CAEMUO29			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6577589	CAEMUO30			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
Total Organic Carbon	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 6	X	X	X	X	X	X
VOC MS (S)	All	NDPs: 0 Tests: 6	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6577584	CAEMUO25		Grey	Sandy Loam	0.1 - 2 mm	Vegetation	None
6577585	CAEMUO26		Dark Brown	Clay	<0.063 mm	None	None
6577586	CAEMUO27		Dark Brown	Clay Loam	0.063 - 0.1 mm	Vegetation	None
6577587	CAEMUO28		Dark Brown	Sandy Clay	0.063 - 0.1 mm	None	None
6577588	CAEMUO29		Grey	Silty Clay	0.1 - 2 mm	None	None
6577589	CAEMUO30		Dark Brown	Clay	<0.063 mm	None	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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	27/11/2012	27/11/2012	27/11/2012	27/11/2012	27/11/2012	28/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			SDG Ref	121129-66	121129-66	121129-66	121129-66	121129-66	121129-66
			Lab Sample No.(s)	6577584	6577585	6577586	6577587	6577588	6577589
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		1.51 #	1.83 #	1.62 #	1.47 #	7.46 #	6.21 #
pH	1 pH Units	TM133		7.16 M	7.41 M	7.18 M	7.38 M	7.56 M	6.67 M
Arsenic	<0.6 mg/kg	TM181		5.96 M	3.84 M	4.64 M	3.61 M	4.98 M	5.15 M
Cadmium	<0.02 mg/kg	TM181		0.241 M	0.264 M	0.33 M	0.415 M	0.651 M	0.768 M
Chromium	<0.9 mg/kg	TM181		14.3 M	16 M	17.9 M	13.3 M	4.07 M	11.6 M
Copper	<1.4 mg/kg	TM181		14.4 M	7.31 M	11.4 M	10.3 M	36.1 M	23.9 M
Lead	<0.7 mg/kg	TM181		13.8 M	14 M	15.3 M	11.6 M	7.43 M	13.1 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		17.6 M	14.4 M	16.1 M	13.3 M	12.2 M	10.7 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181		33.9 M	30.5 M	34.4 M	30.6 M	41.7 M	36.8 M

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	27/11/2012	27/11/2012	27/11/2012	27/11/2012	27/11/2012	28/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			SDG Ref	121129-66	121129-66	121129-66	121129-66	121129-66	121129-66
			Lab Sample No.(s)	6577584	6577585	6577586	6577587	6577588	6577589
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	375	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	500	1540	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	27/11/2012	27/11/2012	27/11/2012	27/11/2012	27/11/2012	28/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			SDG Ref	121129-66	121129-66	121129-66	121129-66	121129-66	121129-66
			Lab Sample No.(s)	6577584	6577585	6577586	6577587	6577588	6577589
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	491	1300	14100	3380
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	2000	3910	8140	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluorene	<100 µg/kg	TM157		470	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		292	<100	<100	<100	<100	<100
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Naphthalene	<100 µg/kg	TM157		<100	<100	153	1790	3550	151
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	27/11/2012	27/11/2012	27/11/2012	27/11/2012	27/11/2012	28/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			SDG Ref	121129-66	121129-66	121129-66	121129-66	121129-66	121129-66
			Lab Sample No.(s)	6577584	6577585	6577586	6577587	6577588	6577589
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		106	116	113	105	73	61
GRO >C5-C12	<44 µg/kg	TM089		631000	702000	20000	156000	132000	53900
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<50 #	<50 #	<5 #	<25 #	<25 #	<5 #
Benzene	<10 µg/kg	TM089		<100 M	<100 M	38.1 M	85.9 M	123 M	188 M
Toluene	<2 µg/kg	TM089		<20 M	<20 M	39.3 M	<10 M	<10 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<30 M	<30 M	46.4 M	348 M	1180 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<60 M	<60 M	456 M	1120 M	2510 M	<6 M
o-Xylene	<3 µg/kg	TM089		<30 M	<30 M	169 M	<15 M	214 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	625	1120	2720	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	749	1550	4020	188
Aliphatics >C5-C6	<10 µg/kg	TM089		150	493	32.1	238	1760	5210
Aliphatics >C6-C8	<10 µg/kg	TM089		10400	25400	753	4370	17800	34300
Aliphatics >C8-C10	<10 µg/kg	TM089		78900	90100	3340	20900	22000	7100
Aliphatics >C10-C12	<10 µg/kg	TM089		293000	315000	7730	68700	40900	1450
Aliphatics >C12-C16	<100 µg/kg	TM173		483000	398000	11300	107000	137000	3660
Aliphatics >C16-C21	<100 µg/kg	TM173		70300	22600	5610	13900	21600	1980
Aliphatics >C21-C35	<100 µg/kg	TM173		16600	40300	<100	11500	38300	22100
Aliphatics >C35-C44	<100 µg/kg	TM173		7820	12100	<100	<100	4390	1060
Total Aliphatics >C12-C44	<100 µg/kg	TM173		577000	473000	16900	132000	201000	28800
Aromatics >EC5-EC7	<10 µg/kg	TM089		<100	<100	38.1	85.9	123	188
Aromatics >EC7-EC8	<10 µg/kg	TM089		<100	<100	39.3	<50	<50	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		52600	60100	2900	15400	18600	4730
Aromatics >EC10-EC12	<10 µg/kg	TM089		196000	210000	5150	45800	27300	964
Aromatics >EC12-EC16	<100 µg/kg	TM173		249000	172000	12700	43500	128000	5210
Aromatics >EC16-EC21	<100 µg/kg	TM173		46500	18000	6760	10500	17500	4260
Aromatics >EC21-EC35	<100 µg/kg	TM173		17700	27300	9490	16500	157000	121000
Aromatics >EC35-EC44	<100 µg/kg	TM173		7900	7570	<100	<100	31100	18200
Aromatics >EC40-EC44	<100 µg/kg	TM173		3130	2510	<100	<100	9770	5200
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		321000	225000	28900	70500	333000	148000
Total Aliphatics >C5-35	<100 µg/kg	TM173		952000	892000	28800	226000	279000	75800
Total Aromatics >C5-35	<100 µg/kg	TM173		561000	487000	37000	132000	348000	136000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1510000	1380000	65800	358000	627000	212000

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
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	Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	27/11/2012	27/11/2012	27/11/2012	27/11/2012	27/11/2012	28/11/2012
		Sample Time	.	.	.	.	.	.
		Date Received	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
		SDG Ref	121129-66	121129-66	121129-66	121129-66	121129-66	121129-66
		Lab Sample No.(s)	6577584	6577585	6577586	6577587	6577588	6577589
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1530000	1400000	65800	358000	663000	231000

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	27/11/2012	27/11/2012	27/11/2012	27/11/2012	27/11/2012	28/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			SDG Ref	121129-66	121129-66	121129-66	121129-66	121129-66	121129-66
			Lab Sample No.(s)	6577584	6577585	6577586	6577587	6577588	6577589
			AGS Reference						
Dibromofluoromethane**	%	TM116		105	105	99.3	106	103	102
Toluene-d8**	%	TM116		103	103	102	99.6	101	100
4-Bromofluorobenzene**	%	TM116		112	109	121	112	117	116
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<4 M	<8 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	240	<7	<14	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<10	<20	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<26 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<28 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<12 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<20 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	20.7 M	23.4 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<20 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<22 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<22 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<8 M	<16 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<10 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<24 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<28 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<8 M	<16 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<14 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<22 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<28 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<10 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	300 M	75.1 M	121 M	<180 M	770 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<18 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<24 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<18 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<14 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<28 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	48 M	49.5 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<14	<28	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<20 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
§	Deviating sample.
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

Component	LOD/Units	Method	Customer Sample R	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	27/11/2012	27/11/2012	27/11/2012	27/11/2012	27/11/2012	28/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			SDG Ref	121129-66	121129-66	121129-66	121129-66	121129-66	121129-66
			Lab Sample No.(s)	6577584	6577585	6577586	6577587	6577588	6577589
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	197 #	<7 #	<14 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<10 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<26 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<24 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<10 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<20 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	115 M	36.9 M	88.4 M	914 M	136 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	477 #	220 #	3490 #	1390 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	140 M	62 M	708 M	288 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<20 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<20 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		1800 M	1160 M	254 M	69.3 M	1600 M	1080 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<20 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<17 M	<34 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	7740 M	<10 M	<20 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		3660 M	1960 M	388 M	141 M	2270 M	983 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	311 M	<9 M	<18 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	209 #	209 #	285 #	3590 #	457 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<24 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<12 #	<24 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	1210 #	1740 #	16700 #	3430 #
sec-Butylbenzene	<10 µg/kg	TM116		3550 M	1750 M	229 M	109 M	1660 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	84.3 M	87.1 M	957 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<12 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<10 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		5750 M	1020 M	<10 M	<20 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<24 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<28 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<15	<30	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<6 #	<12 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<12	<24	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<13 M	839 M	5860 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
§	Deviating sample.							
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	Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	27/11/2012	27/11/2012	27/11/2012	27/11/2012	27/11/2012	28/11/2012
		Sample Time	.	.	.	.	.	.
		Date Received	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
		SDG Ref	121129-66	121129-66	121129-66	121129-66	121129-66	121129-66
		Lab Sample No.(s)	6577584	6577585	6577586	6577587	6577588	6577589
(F)	Trigger breach confirmed	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M	<6 M	<12 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMUO25 SOLID 27/11/2012 00:00:00 121129-66 6577584 TM048	7/12/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMUO26 SOLID 27/11/2012 00:00:00 121129-66 6577585 TM048	7/12/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMUO27 SOLID 27/11/2012 00:00:00 121129-66 6577586 TM048	7/12/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMUO28 SOLID 27/11/2012 00:00:00 121129-66 6577587 TM048	7/12/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMUO29 SOLID 27/11/2012 00:00:00 121129-66 6577588 TM048	7/12/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEMUO30 SOLID 28/11/2012 00:00:00 121129-66 6577589 TM048	7/12/12	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6577584	6577585	6577586	6577587	6577588	6577589
Customer Sample Ref.	CAEMUO25	CAEMUO26	CAEMUO27	CAEMUO28	CAEMUO29	CAEMUO30
AGS Ref.						
Depth						
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	10-Dec-2012	10-Dec-2012	10-Dec-2012	10-Dec-2012	10-Dec-2012	10-Dec-2012
EPH CWG (Aliphatic) GC (S)	05-Dec-2012	06-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	06-Dec-2012
EPH CWG (Aromatic) GC (S)	05-Dec-2012	06-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	06-Dec-2012
GRO by GC-FID (S)	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012
Metals by iCap-OES (Soil)	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012
pH	04-Dec-2012	04-Dec-2012	04-Dec-2012	04-Dec-2012	04-Dec-2012	04-Dec-2012
Sample description	03-Dec-2012	03-Dec-2012	03-Dec-2012	03-Dec-2012	03-Dec-2012	03-Dec-2012
Semi Volatile Organic Compounds	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012
Total Organic Carbon	10-Dec-2012	10-Dec-2012	10-Dec-2012	10-Dec-2012	10-Dec-2012	10-Dec-2012
TPH CWG GC (S)	05-Dec-2012	06-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	06-Dec-2012
VOC MS (S)	04-Dec-2012	04-Dec-2012	05-Dec-2012	04-Dec-2012	04-Dec-2012	05-Dec-2012

SDG:	121129-66	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205150
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point, 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 2 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 Dimethyphenol, 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.

SOLID MATRICES EXTRACTION SUMMARY

ANALYSIS	D&C OR WET	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
SOLVENT EXTRACTABLE MATTER	D&C	DCM	SOXTHERM	GRAVIMETRIC
CYCLOHEXANE EXT. MATTER	D&C	CYCLOHEXANE	SOXTHERM	GRAVIMETRIC
ELEMENTAL SULPHUR	D&C	DCM	SOXTHERM	HPLC
PHENOLS BY GCMS	WET	DCM	SOXTHERM	GC-MS
HERBICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
PESTICIDES	D&C	HEXANE:ACETONE	SOXTHERM	GC-MS
EPH (DRO)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (MIN OIL)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH (CLEANED UP)	D&C	HEXANE:ACETONE	END OVER END	GC-FID
EPH CWG BY GC	D&C	HEXANE:ACETONE	END OVER END	GC-FID
PCB AROCLOR 1254 / PCB CON	D&C	HEXANE:ACETONE	END OVER END	GC-MS
POLYAROMATIC HYDROCARBONS (MS)	WET	HEXANE:ACETONE	MICROWAVE TM218.	GC-MS
>C6-C40	WET	HEXANE:ACETONE	SHAKER	GC-FID
POLYAROMATIC HYDROCARBONS RAPID GC	WET	HEXANE:ACETONE	SHAKER	GC-FID
SEMI VOLATILE ORGANIC COMPOUNDS	WET	DCM:ACETONE	SONICATE	GC-MS

LIQUID MATRICES EXTRACTION SUMMARY

ANALYSIS	EXTRACTION SOLVENT	EXTRACTION METHOD	ANALYSIS
PAH MS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
EPH	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
EPH CWG	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
MINERAL OIL	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC FID
PCB 7 CONGENERS	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
PCB AROCLOR 1254	HEXANE	STIRRED EXTRACTION (STIR-BAR)	GC MS
SVOC	DCM	LIQUID/LIQUID SHAKE	GC MS
FREE SULPHUR	DCM	SOLID PHASE EXTRACTION	HPLC
PESTOCP/OPP	DCM	LIQUID/LIQUID SHAKE	GC MS
TRIAZINE HERBS	DCM	LIQUID/LIQUID SHAKE	GC MS
PHENOLS MS	ACETONE	SOLID PHASE EXTRACTION	GC MS
TPH by INFRARED (IR)	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
MINERAL OIL by IR	TCE	STIRRED EXTRACTION (STIR-BAR)	IR
GLYCOLS	NONE	DIRECT INJECTION	GC FID

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials or those identified as potentially asbestos containing during sample description 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.

ALcontrol Laboratories

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Atkins Global Ltd
Project Jonah site office
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Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

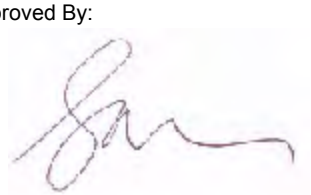
Date:	13 December 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121203-32
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	205639

We received 12 samples on Saturday December 01, 2012 and 12 of these samples were scheduled for analysis which was completed on Thursday December 13, 2012. 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

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CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6594435	CAEM Slag Back fill 1			30/11/2012
6594436	CAEM Slag Back fill 2			30/11/2012
6594421	CAEMVO31			29/11/2012
6594422	CAEMVO32			29/11/2012
6594425	CAEMVO33			29/11/2012
6594426	CAEMVO34			29/11/2012
6594427	CAEMVO35			29/11/2012
6594429	CAEMVO36			29/11/2012
6594430	CAEMVO37			29/11/2012
6594431	CAEMVO38			29/11/2012
6594432	CAEMVO39			30/11/2012
6594434	CAEMVO40			30/11/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X Test

N No Determination Possible

Lab Sample No(s)	Customer Sample Reference	Depth (m)	Container	NDPs / Tests	6594435	6594436	6594421	6594422	6594425	6594426	6594427	6594429	6594430	6594431	6594432	6594434
	CAEM Slag Back fill 1		400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEM Slag Back fill 2		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO31		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO32		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO33		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO34		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO35		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO36		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO37		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO38		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO39		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
	CAEMVO40		250g Amber Jar (AL													
			400g Tub (ALE214)													
			60g VOC (ALE215)													
Asbestos Identification (Soil)	All			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
EPH CWG (Aliphatic) GC (S)	All			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
EPH CWG (Aromatic) GC (S)	All			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
GRO by GC-FID (S)	All			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
Metals by iCap-OES (Soil)	Arsenic			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
	Cadmium			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
	Chromium			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
	Copper			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
	Lead			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
	Mercury			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
	Nickel			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
	Selenium			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
	Zinc			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
pH	All			NDPs: 0 Tests: 12	X	X	X	X	X	X	X	X	X	X	X	X
Sample description	All			NDPs: 0 Tests: 10	X	X	X	X	X	X	X	X		X	X	X

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6594435	CAEM Slag Back fill 1			400g Tub (ALE214)
			6594435	CAEM Slag Back fill 1			60g VOC (ALE215)
			6594435	CAEM Slag Back fill 1			250g Amber Jar (AL
			6594436	CAEM Slag Back fill 2			400g Tub (ALE214)
			6594436	CAEM Slag Back fill 2			60g VOC (ALE215)
			6594436	CAEM Slag Back fill 2			250g Amber Jar (AL
			6594421	CAEMVO31			400g Tub (ALE214)
			6594421	CAEMVO31			60g VOC (ALE215)
			6594421	CAEMVO31			250g Amber Jar (AL
			6594422	CAEMVO32			400g Tub (ALE214)
			6594422	CAEMVO32			60g VOC (ALE215)
			6594422	CAEMVO32			250g Amber Jar (AL
			6594425	CAEMVO33			400g Tub (ALE214)
			6594425	CAEMVO33			60g VOC (ALE215)
			6594425	CAEMVO33			250g Amber Jar (AL
			6594426	CAEMVO34			400g Tub (ALE214)
			6594426	CAEMVO34			60g VOC (ALE215)
			6594426	CAEMVO34			250g Amber Jar (AL
			6594427	CAEMVO35			400g Tub (ALE214)
			6594427	CAEMVO35			60g VOC (ALE215)
			6594427	CAEMVO35			250g Amber Jar (AL
			6594429	CAEMVO36			400g Tub (ALE214)
			6594429	CAEMVO36			60g VOC (ALE215)
			6594429	CAEMVO36			250g Amber Jar (AL
			6594430	CAEMVO37			400g Tub (ALE214)
			6594430	CAEMVO37			60g VOC (ALE215)
			6594430	CAEMVO37			250g Amber Jar (AL
			6594431	CAEMVO38			400g Tub (ALE214)
			6594431	CAEMVO38			60g VOC (ALE215)
			6594431	CAEMVO38			250g Amber Jar (AL
			6594432	CAEMVO39			400g Tub (ALE214)
			6594432	CAEMVO39			60g VOC (ALE215)
			6594432	CAEMVO39			250g Amber Jar (AL
			6594434	CAEMVO40			400g Tub (ALE214)
			6594434	CAEMVO40			60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 12	X	X	X	X	X
Total Organic Carbon	All	NDPs: 4 Tests: 8	N	N	X	X	X
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 4	X	X	X	X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 12	X	X	X	X	X
VOC MS (S)	All	NDPs: 0 Tests: 12	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6594435	CAEM Slag Back fill 1		Dark Brown	Loamy Sand	2 - 10 mm	Stones	None
6594436	CAEM Slag Back fill 2		Light Brown	Sandy Loam	0.1 - 2 mm	Stones	None
6594421	CAEMVO31		Light Brown	Silt Loam	0.063 - 0.1 mm	None	None
6594422	CAEMVO32		Light Brown	Silt Loam	0.063 - 0.1 mm	None	None
6594425	CAEMVO33		Light Brown	Loamy Sand	0.1 - 2 mm	Oil/Petroleum	None
6594426	CAEMVO34		Light Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	Oil/Petroleum
6594427	CAEMVO35		Light Brown	Loamy Sand	0.1 - 2 mm	None	None
6594429	CAEMVO36		Light Brown	Sandy Silt Loam	0.1 - 2 mm	None	None
6594430	CAEMVO37		Light Brown	Silt Loam	0.063 - 0.1 mm	None	None
6594431	CAEMVO38		Light Brown	Silt Loam	0.063 - 0.1 mm	None	None
6594432	CAEMVO39		Light Brown	Sandy Loam	0.1 - 2 mm	Stones	None
6594434	CAEMVO40		Light Brown	Sandy 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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	30/11/2012	30/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594435	6594436	6594421	6594422	6594425	6594426
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132			7.74 #	1.95 #	1.37 #	1.67 #
pH	1 pH Units	TM133	10.6 M	10.5 M	6.36 M	6.42 M	6.52 M	7.24 M
Arsenic	<0.6 mg/kg	TM181	7.88 M	8.85 M	3.04 M	11 M	3.43 M	5.28 M
Cadmium	<0.02 mg/kg	TM181	0.198 M	0.305 M	1.11 M	3.19 M	0.441 M	0.522 M
Chromium	<0.9 mg/kg	TM181	12.5 M	12.6 M	8.86 M	8.93 M	16.4 M	14.2 M
Copper	<1.4 mg/kg	TM181	20.2 M	27.2 M	10.6 M	66 M	13 M	15.7 M
Lead	<0.7 mg/kg	TM181	276 M	70.6 M	11.4 M	17 M	18.2 M	22.5 M
Mercury	<0.14 mg/kg	TM181	0.246 M	0.375 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181	6.7 M	7.88 M	7.37 M	10.4 M	26.4 M	30.8 M
Selenium	<1 mg/kg	TM181	1.11 #	1.09 #	<1 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181	123 M	143 M	46.7 M	336 M	53.4 M	67.3 M
Soil Organic Matter (SOM)	<0.1 %	TM321	2.7	2.13				

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38	CAEMVO39	CAEMVO40
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	29/11/2012	29/11/2012	29/11/2012	29/11/2012	30/11/2012	30/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594427	6594429	6594430	6594431	6594432	6594434
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		1.19 #	1.27 #	5.02 #	2.83 #		
pH	1 pH Units	TM133		6.71 M	7.08 M	8.12 M	6.79 M	7.86 M	8.7 M
Arsenic	<0.6 mg/kg	TM181		2.71 M	2.76 M	7.44 M	5.47 M	51 M	16.4 M
Cadmium	<0.02 mg/kg	TM181		0.238 M	0.3 M	0.397 M	0.261 M	2.3 M	0.525 M
Chromium	<0.9 mg/kg	TM181		10.2 M	17.3 M	16.2 M	16 M	23.6 M	10.6 M
Copper	<1.4 mg/kg	TM181		5.64 M	8.55 M	20.9 M	17.8 M	148 M	51.1 M
Lead	<0.7 mg/kg	TM181		11.6 M	16.5 M	25.6 M	25 M	347 M	84.6 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	11 M	0.515 M
Nickel	<0.2 mg/kg	TM181		10.4 M	17.1 M	10.3 M	13.2 M	36.3 M	10.7 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	1.37 #	<1 #
Zinc	<1.9 mg/kg	TM181		23.6 M	38.8 M	44.7 M	52.2 M	655 M	238 M
Soil Organic Matter (SOM)	<0.1 %	TM321						3.46	1.63

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	30/11/2012	30/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594435	6594436	6594421	6594422	6594425	6594426
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		455	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	30/11/2012	30/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594435	6594436	6594421	6594422	6594425	6594426
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		308	<100	<100	<100	326	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		346	255	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		323	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		231	247	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		196	257	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		128	160	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		183	212	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		539	530	<100	<100	<100	<100
Fluoranthene	<100 µg/kg	TM157		448	419	<100	<100	<100	<100
Fluorene	<100 µg/kg	TM157		511	459	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		1420	1190	<100	<100	<100	<100
Pyrene	<100 µg/kg	TM157		1090	1060	<100	<100	<100	<100
Naphthalene	<100 µg/kg	TM157		147	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38	CAEMVO39	CAEMVO40
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	29/11/2012	29/11/2012	29/11/2012	29/11/2012	30/11/2012	30/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594427	6594429	6594430	6594431	6594432	6594434
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	39600
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	139	<200
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	399	<200
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1600
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38	CAEMVO39	CAEMVO40
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	29/11/2012	29/11/2012	29/11/2012	29/11/2012	30/11/2012	30/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594427	6594429	6594430	6594431	6594432	6594434
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	1330	<100	343	<200
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	196	<200
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	788	<200
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	3900	<200
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	3410	<200
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	2890	<200
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	4470	<200
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	2100	<200
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	3480	343
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	4150	<200
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	198	<200
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	1540	<200
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	<100	2200	257
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	4090	<200
Naphthalene	<100 µg/kg	TM157		<100	<100	682	<100	357	<200
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	545	<200

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	30/11/2012	30/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594435	6594436	6594421	6594422	6594425	6594426
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		29	26	64	127	111	119
GRO >C5-C12	<44 µg/kg	TM089		5350	4790	112000	79800	481000	18300
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<5 #	<5 #	<100 #	<5 #
Benzene	<10 µg/kg	TM089		<10 M	<10 M	1520 M	<10 M	420 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	74.8 M	<2 M	<40 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<60 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<6 M	<120 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	93.8 M	<3 M	<60 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	93.8	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	1690	<24	420	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		38.8	35.3	19200	3650	9980	420
Aliphatics >C6-C8	<10 µg/kg	TM089		593	455	81000	61700	176000	7520
Aliphatics >C8-C10	<10 µg/kg	TM089		842	779	5150	7660	112000	3680
Aliphatics >C10-C12	<10 µg/kg	TM089		1990	1800	981	1000	64600	2550
Aliphatics >C12-C16	<100 µg/kg	TM173		419000	482000	8690	25200	52700	9790
Aliphatics >C16-C21	<100 µg/kg	TM173		1880000	2110000	1740	994	12400	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		3980000	4670000	27000	9920	22200	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		411000	568000	<100	658	3140	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		6690000	7830000	37400	36800	90300	9790
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	1520	<10	420	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	74.8	<10	<200	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		562	519	3530	5110	74800	2450
Aromatics >EC10-EC12	<10 µg/kg	TM089		1330	1200	654	668	43100	1700
Aromatics >EC12-EC16	<100 µg/kg	TM173		250000	208000	3390	5060	10800	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		1220000	1110000	2730	2290	6210	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		1880000	1770000	120000	34100	17000	9320
Aromatics >EC35-EC44	<100 µg/kg	TM173		330000	361000	34400	12900	3880	4400
Aromatics >EC40-EC44	<100 µg/kg	TM173		132000	143000	6890	2330	1310	1990
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		3690000	3450000	161000	54400	37900	13700
Total Aliphatics >C5-35	<100 µg/kg	TM173		6280000	7270000	144000	110000	450000	24000
Total Aromatics >C5-35	<100 µg/kg	TM173		3360000	3090000	132000	47300	152000	13500
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		9640000	10400000	276000	157000	602000	37400

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34
#	ISO17025 accredited.							
M	*m*CERTS 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							
1-4&+§@	Sample deviation (see appendix)							
		Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	30/11/2012	30/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
		Sample Time	.	.	.	.	.	.
		Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
		SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
		Lab Sample No.(s)	6594435	6594436	6594421	6594422	6594425	6594426
		AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	10400000	11300000	310000	171000	609000	41800

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38	CAEMVO39	CAEMVO40
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	29/11/2012	29/11/2012	29/11/2012	29/11/2012	30/11/2012	30/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594427	6594429	6594430	6594431	6594432	6594434
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		83	112	353	134	85	91
GRO >C5-C12	<44 µg/kg	TM089		119000	13000	5450000 3	428000	157000	21500
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<25 #	<5 #	<100 #	<50 #	<25 #	<5 #
Benzene	<10 µg/kg	TM089		147 M	30.7 M	8240 M	326 M	<50 M	13.7 M
Toluene	<2 µg/kg	TM089		<10 M	<2 M	<40 M	<20 M	<10 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<15 M	<3 M	90800 M	<30 M	<15 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<30 M	<6 M	284000 M	<60 M	<30 M	<6 M
o-Xylene	<3 µg/kg	TM089		<15 M	<3 M	<60 M	<30 M	<15 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	284000	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		147	30.7	383000	326	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		2150	314	142000	5750	60.5	98
Aliphatics >C6-C8	<10 µg/kg	TM089		42700	5140	2820000	210000	4640	4290
Aliphatics >C8-C10	<10 µg/kg	TM089		20200	3250	983000	83500	42300	5300
Aliphatics >C10-C12	<10 µg/kg	TM089		23900	1250	277000	43900	49200	4980
Aliphatics >C12-C16	<100 µg/kg	TM173		28900	<100	253000	6710	217000	34300
Aliphatics >C16-C21	<100 µg/kg	TM173		12500	<100	13700	5400	121000	170000
Aliphatics >C21-C35	<100 µg/kg	TM173		39400	3790	23400	43000	396000	212000
Aliphatics >C35-C44	<100 µg/kg	TM173		11200	<100	1340	1360	40500	29300
Total Aliphatics >C12-C44	<100 µg/kg	TM173		92000	3790	292000	56400	773000	445000
Aromatics >EC5-EC7	<10 µg/kg	TM089		147	30.7	8240	326	<50	13.7
Aromatics >EC7-EC8	<10 µg/kg	TM089		<50	<10	<200	<100	<50	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		13500	2170	1030000	55700	28200	3530
Aromatics >EC10-EC12	<10 µg/kg	TM089		15900	835	185000	29300	32800	3320
Aromatics >EC12-EC16	<100 µg/kg	TM173		10000	<100	46000	9620	33500	14200
Aromatics >EC16-EC21	<100 µg/kg	TM173		7610	<100	4470	2340	59000	52400
Aromatics >EC21-EC35	<100 µg/kg	TM173		23800	6160	69200	52300	278000	109000
Aromatics >EC35-EC44	<100 µg/kg	TM173		8500	1460	17700	11100	68700	34500
Aromatics >EC40-EC44	<100 µg/kg	TM173		2880	<100	1660	476	24900	13500
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		49900	7620	137000	75400	439000	210000
Total Aliphatics >C5-35	<100 µg/kg	TM173		170000	13800	4520000	398000	829000	431000
Total Aromatics >C5-35	<100 µg/kg	TM173		71000	9190	1340000	150000	431000	183000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		241000	22900	5860000	547000	1260000	613000

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38	CAEMVO39	CAEMVO40
#	ISO17025 accredited.							
M	*m*CERTS 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							
1-4&+§@	Sample deviation (see appendix)							
		Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	29/11/2012	29/11/2012	29/11/2012	29/11/2012	30/11/2012	30/11/2012
		Sample Time	.	.	.	.	.	.
		Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
		SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
		Lab Sample No.(s)	6594427	6594429	6594430	6594431	6594432	6594434
		AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	260000	24400	5880000	560000	1370000	677000

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	30/11/2012	30/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594435	6594436	6594421	6594422	6594425	6594426
			AGS Reference						
Dibromofluoromethane**	%	TM116		109	107	103	98.6	98.1	100
Toluene-d8**	%	TM116		97.3	97.3	99.8	100	103	101
4-Bromofluorobenzene**	%	TM116		113	120	108	131	121	126
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<4 M	<4 M	<4 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<7	<7	<7
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<10	<10	<10
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<13 M	<13 M	<13 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<14 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<6 M	<6 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<10 #	<10 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	12.3 M	<7 M	<7 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<10 #	394 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<11 M	<11 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<11 M	<11 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<8 M	<8 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<5 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<12 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<14 M	<14 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<8 M	<8 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<7 M	<7 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<11 M	<11 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<14 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<5 M	<5 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	1750 M	<9 M	327 M	<9 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<9 M	<9 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<12 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<9 M	<9 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<7 M	<7 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<14 M	<14 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<5 M	<5 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<14	<14	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<10 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	30/11/2012	30/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594435	6594436	6594421	6594422	6594425	6594426
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<7 #	<7 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<5 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<13 M	<13 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<12 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<5 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<10 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<4 M	28.9 M	<4 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<280 #	42.1 #	513 #	<14 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<10 M	<10 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<10 M	<10 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<10 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	738 M	498 M	254 M	17.9 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<10 #	<10 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<17 M	<17 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<10 M	<10 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	822 M	333 M	243 M	<11 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<9 M	<9 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<160 #	<8 #	174 #	<8 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<12 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<12 #	<12 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	2330 #	1550 #	1310 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	52.2 M	52.2 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<11 M	<11 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<6 M	<6 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<5 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<10 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<12 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<14 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<15	<15	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<6 #	<6 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<12	<12	<12
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<13 M	158 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	30/11/2012	30/11/2012	29/11/2012	29/11/2012	29/11/2012	29/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594435	6594436	6594421	6594422	6594425	6594426
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<6 M	<6 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38	CAEMVO39	CAEMVO40
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	29/11/2012	29/11/2012	29/11/2012	29/11/2012	30/11/2012	30/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594427	6594429	6594430	6594431	6594432	6594434
			AGS Reference						
Dibromofluoromethane**	%	TM116		106	98	98.3	106	107	121
Toluene-d8**	%	TM116		100	98.1	104	102	102	99.3
4-Bromofluorobenzene**	%	TM116		111	115	115	104	108	131
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 M	<80 M	<80 M	<80 M	<4 M
Chloromethane	<7 µg/kg	TM116		<140	<7	<140	<140	<140	<7
Vinyl Chloride	<10 µg/kg	TM116		<200	<10	<200	<200	<200	<10
Bromomethane	<13 µg/kg	TM116		<260 M	<13 M	<260 M	<260 M	<260 M	<13 M
Chloroethane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<120 M	<120 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<200 #	<200 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	10.9 M	<140 M	<140 M	<140 M	29.5 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<200 #	<200 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<220 M	<220 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<220 M	<220 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 M	<160 M	<160 M	<160 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<14 M
Chloroform	<8 µg/kg	TM116		<160 M	<8 M	<160 M	<160 M	<160 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 M	<140 M	<140 M	<140 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<220 M	<220 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<5 M
Benzene	<9 µg/kg	TM116		<180 M	82.1 M	3060 M	<180 M	<180 M	24.5 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<180 M	<180 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<180 M	<180 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 M	<140 M	<140 M	<140 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<14 M
Toluene	<5 µg/kg	TM116		<100 M	12.7 M	<100 M	<100 M	<100 M	37 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<14	<280	<280	<280	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38	CAEMVO39	CAEMVO40
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	29/11/2012	29/11/2012	29/11/2012	29/11/2012	30/11/2012	30/11/2012
			Sample Time	.	.	.	.	.	.
			Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
			SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
			Lab Sample No.(s)	6594427	6594429	6594430	6594431	6594432	6594434
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<7 #	<140 #	<140 #	<140 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<13 M	<260 M	<260 M	<260 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	9.57 M	32200 M	<80 M	<80 M	17.6 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	116 #	148000 #	<280 #	<280 #	77.1 #
o-Xylene	<10 µg/kg	TM116		<200 M	13.7 M	2780 M	<200 M	<200 M	17.2 M
Styrene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<10 M
Bromoform	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		1460 M	39 M	7630 M	1550 M	381 M	<5 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<200 #	<200 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<17 M	<340 M	<340 M	<340 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<10 M
Propylbenzene	<11 µg/kg	TM116		2260 M	106 M	7220 M	3820 M	886 M	<11 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<180 M	<180 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<8 #	10600 #	<160 #	<160 #	<8 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<12 #	<240 #	<240 #	<240 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	33.9 #	31800 #	<180 #	<180 #	63.9 #
sec-Butylbenzene	<10 µg/kg	TM116		1100 M	25 M	1240 M	420 M	766 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<220 M	<220 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<120 M	<120 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		1060 M	<10 M	<200 M	1810 M	<200 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<15	<300	<300	<300	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<6 #	<120 #	<120 #	<120 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<12	<240	<240	<240	<12
Naphthalene	<13 µg/kg	TM116		<260 M	<13 M	1110 M	<260 M	<260 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38	CAEMVO39	CAEMVO40
#	ISO17025 accredited.							
M	*m*CERTS 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	Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	29/11/2012	29/11/2012	29/11/2012	29/11/2012	30/11/2012	30/11/2012
		Sample Time	.	.	.	.	.	.
		Date Received	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012	01/12/2012
		SDG Ref	121203-32	121203-32	121203-32	121203-32	121203-32	121203-32
(F)	Trigger breach confirmed	Lab Sample No.(s)	6594427	6594429	6594430	6594431	6594432	6594434
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<6 M	<120 M	<120 M	<120 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEM Slag Back fill 1 SOLID 30/11/2012 00:00:00 121203-32 6594435 TM048	12/12/12	Tomasz Pawlikowski	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 Receieved SDG Original Sample Method Number	CAEM Slag Back fill 2 SOLID 30/11/2012 00:00:00 121203-32 6594436 TM048	12/12/12	Tomasz Pawlikowski	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 Receieved SDG Original Sample Method Number	CAEMVO31 SOLID 29/11/2012 00:00:00 121203-32 6594421 TM048	12/12/12	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 Receieved SDG Original Sample Method Number	CAEMVO32 SOLID 29/11/2012 00:00:00 121203-32 6594422 TM048	12/12/12	Tomasz Pawlikowski	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMVO33 SOLID 29/11/2012 00:00:00 121203-32 6594425 TM048	12/12/12	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEMVO34 SOLID 29/11/2012 00:00:00 121203-32 6594426 TM048	12/12/12	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 Receieved SDG Original Sample Method Number	CAEMVO35 SOLID 29/11/2012 00:00:00 121203-32 6594427 TM048	12/12/12	Tomasz Pawlikowski	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMVO36 SOLID 29/11/2012 00:00:00 121203-32 6594429 TM048	12/12/12	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 Receieved SDG Original Sample Method Number	CAEMVO37 SOLID 29/11/2012 00:00:00 121203-32 6594430 TM048	12/12/12	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 Receieved SDG Original Sample Method Number	CAEMVO38 SOLID 29/11/2012 00:00:00 121203-32 6594431 TM048	12/12/12	Tomasz Pawlikowski	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMVO39 SOLID 30/11/2012 00:00:00 121203-32 6594432 TM048	12/12/12	Tomasz Pawlikowski	Loose fibres in soil	Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEMVO40 SOLID 30/11/2012 00:00:00 121203-32 6594434 TM048	12/12/12	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of NDPs (No determination possible)

Date Received : 03/12/2012 11:14:51

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6594432	CAEMVO39		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6594434	CAEMVO40		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6594435	CAEM Slag Back fill 1		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6594436	CAEM Slag Back fill 2		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6594435	6594436	6594421	6594422	6594425	6594426	6594427	6594429	6594430	6594431
Customer Sample Ref.	CAEM Slag Back fill 1	CAEM Slag Back fill 2	CAEMVO31	CAEMVO32	CAEMVO33	CAEMVO34	CAEMVO35	CAEMVO36	CAEMVO37	CAEMVO38
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012
EPH CWG (Aliphatic) GC (S)	10-Dec-2012	10-Dec-2012	10-Dec-2012	07-Dec-2012	07-Dec-2012	10-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012
EPH CWG (Aromatic) GC (S)	10-Dec-2012	10-Dec-2012	10-Dec-2012	07-Dec-2012	07-Dec-2012	10-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012
GRO by GC-FID (S)	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	06-Dec-2012	07-Dec-2012	07-Dec-2012
Metals by iCap-OES (Soil)	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012
pH	06-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012
Sample description	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012	05-Dec-2012
Semi Volatile Organic Compounds	07-Dec-2012	10-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012
Total Organic Carbon			13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012
Total Organic Carbon (Asb)	13-Dec-2012	13-Dec-2012								
TPH CWG GC (S)	10-Dec-2012	10-Dec-2012	10-Dec-2012	07-Dec-2012	07-Dec-2012	10-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012	07-Dec-2012
VOC MS (S)	07-Dec-2012	07-Dec-2012	07-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012	06-Dec-2012	07-Dec-2012	06-Dec-2012	07-Dec-2012

Lab Sample No(s)	6594432	6594434
Customer Sample Ref.	CAEMVO39	CAEMVO40
AGS Ref.		
Depth		
Type	SOLID	SOLID
Asbestos Identification (Soil)	13-Dec-2012	13-Dec-2012
EPH CWG (Aliphatic) GC (S)	10-Dec-2012	10-Dec-2012
EPH CWG (Aromatic) GC (S)	10-Dec-2012	10-Dec-2012
GRO by GC-FID (S)	07-Dec-2012	07-Dec-2012
Metals by iCap-OES (Soil)	07-Dec-2012	07-Dec-2012
pH	06-Dec-2012	06-Dec-2012
Sample description	05-Dec-2012	05-Dec-2012
Semi Volatile Organic Compounds	07-Dec-2012	10-Dec-2012
Total Organic Carbon (Asb)	13-Dec-2012	13-Dec-2012
TPH CWG GC (S)	10-Dec-2012	10-Dec-2012
VOC MS (S)	06-Dec-2012	06-Dec-2012

SDG:	121203-32	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	205639
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

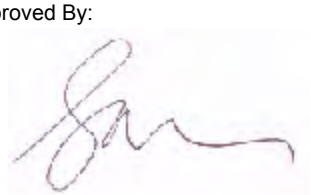
Date:	20 December 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121207-101
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	206620

We received 5 samples on Friday December 07, 2012 and 5 of these samples were scheduled for analysis which was completed on Thursday December 20, 2012. 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

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CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6624973	CAEMU041		0.00 - 0.00	04/12/2012
6624974	CAEMU042		0.00 - 0.00	05/12/2012
6624975	CAEMU043		0.00 - 0.00	05/12/2012
6624976	CAEMU044		0.00 - 0.00	05/12/2012
6624977	CAEMU045		0.00 - 0.00	05/12/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6624973	CAEMU041		0.00 - 0.00	250g Amber Jar (AL
			6624973	CAEMU041		0.00 - 0.00	400g Tub (ALE214)
			6624973	CAEMU041		0.00 - 0.00	60g VOC (ALE215)
			6624974	CAEMU042		0.00 - 0.00	250g Amber Jar (AL
			6624974	CAEMU042		0.00 - 0.00	400g Tub (ALE214)
			6624974	CAEMU042		0.00 - 0.00	60g VOC (ALE215)
			6624975	CAEMU043		0.00 - 0.00	250g Amber Jar (AL
			6624975	CAEMU043		0.00 - 0.00	400g Tub (ALE214)
			6624975	CAEMU043		0.00 - 0.00	60g VOC (ALE215)
			6624976	CAEMU044		0.00 - 0.00	250g Amber Jar (AL
			6624976	CAEMU044		0.00 - 0.00	400g Tub (ALE214)
			6624976	CAEMU044		0.00 - 0.00	60g VOC (ALE215)
			6624977	CAEMU045		0.00 - 0.00	250g Amber Jar (AL
			6624977	CAEMU045		0.00 - 0.00	400g Tub (ALE214)
			6624977	CAEMU045		0.00 - 0.00	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 5		X			X		X		X		X		
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 5	X		X		X		X		X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 5	X		X		X		X		X				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 5		X		X		X		X		X			
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 5	X		X		X		X		X				
	Cadmium	NDPs: 0 Tests: 5	X		X		X		X		X				
	Chromium	NDPs: 0 Tests: 5	X		X		X		X		X				
	Copper	NDPs: 0 Tests: 5	X		X		X		X		X				
	Lead	NDPs: 0 Tests: 5	X		X		X		X		X				
	Mercury	NDPs: 0 Tests: 5	X		X		X		X		X				
	Nickel	NDPs: 0 Tests: 5	X		X		X		X		X				
	Selenium	NDPs: 0 Tests: 5	X		X		X		X		X				
	Vanadium	NDPs: 0 Tests: 5	X		X		X		X		X				
	Zinc	NDPs: 0 Tests: 5	X		X		X		X		X				
PAH by GCMS	All	NDPs: 0 Tests: 5	X		X		X		X		X				

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6624973	CAEMU041		0.00 - 0.00	250g Amber Jar (AL
			6624973	CAEMU041		0.00 - 0.00	400g Tub (ALE214)
			6624973	CAEMU041		0.00 - 0.00	60g VOC (ALE215)
			6624974	CAEMU042		0.00 - 0.00	250g Amber Jar (AL
			6624974	CAEMU042		0.00 - 0.00	400g Tub (ALE214)
			6624974	CAEMU042		0.00 - 0.00	60g VOC (ALE215)
			6624975	CAEMU043		0.00 - 0.00	250g Amber Jar (AL
			6624975	CAEMU043		0.00 - 0.00	400g Tub (ALE214)
			6624975	CAEMU043		0.00 - 0.00	60g VOC (ALE215)
			6624976	CAEMU044		0.00 - 0.00	250g Amber Jar (AL
			6624976	CAEMU044		0.00 - 0.00	400g Tub (ALE214)
			6624976	CAEMU044		0.00 - 0.00	60g VOC (ALE215)
			6624977	CAEMU045		0.00 - 0.00	250g Amber Jar (AL
			6624977	CAEMU045		0.00 - 0.00	400g Tub (ALE214)
			6624977	CAEMU045		0.00 - 0.00	60g VOC (ALE215)
pH	All	NDPs: 0 Tests: 5		X			X
Sample description	All	NDPs: 0 Tests: 5	X		X		X
Total Organic Carbon	All	NDPs: 0 Tests: 5	X		X		X
TPH CWG GC (S)	All	NDPs: 0 Tests: 5	X		X		X
VOC MS (S)	All	NDPs: 0 Tests: 5		X		X	

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6624973	CAEMU041	0.00 - 0.00	Black	Silt Loam	<0.063 mm	Vegetation	None
6624974	CAEMU042	0.00 - 0.00	Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	None	None
6624975	CAEMU043	0.00 - 0.00	Dark Brown	Silt Loam	<0.063 mm	Oil/Petroleum	Vegetation
6624976	CAEMU044	0.00 - 0.00	Light Brown	Silt Loam	<0.063 mm	Oil/Petroleum	None
6624977	CAEMU045	0.00 - 0.00	Dark Brown	Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU041	CAEMU042	CAEMU043	CAEMU044	CAEMU045
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/12/2012	05/12/2012	05/12/2012	05/12/2012	05/12/2012
			Sample Time	.	.	.	.	.
			Date Received	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012
			SDG Ref	121207-101	121207-101	121207-101	121207-101	121207-101
			Lab Sample No.(s)	6624973	6624974	6624975	6624976	6624977
			AGS Reference					
Soil Organic Matter (SOM)	<0.35 %	TM132		36 #	1.44 #	6.4 #	1.44 #	8.31 #
pH	1 pH Units	TM133		6.38 M	9.93 M	7.35 M	6.74 M	7.01 M
Arsenic	<0.6 mg/kg	TM181		12.7 M	3.38 M	24.6 M	6.47 M	18.9 M
Cadmium	<0.02 mg/kg	TM181		1.56 M	0.057 M	0.326 M	0.105 M	1.12 M
Chromium	<0.9 mg/kg	TM181		6.44 M	20.6 M	18.6 M	18.7 M	8.4 M
Copper	<1.4 mg/kg	TM181		18.3 M	19.5 M	210 M	12.4 M	33.1 M
Lead	<0.7 mg/kg	TM181		7.18 M	16.9 M	32.9 M	12 M	29.3 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		13.4 M	23.1 M	8.85 M	19.6 M	7.67 M
Selenium	<1 mg/kg	TM181		1.66 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		6.84 #	21.9 #	26.6 #	21.8 #	10.2 #
Zinc	<1.9 mg/kg	TM181		65.4 M	48.6 M	36.1 M	60 M	57.8 M

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU041	CAEMU042	CAEMU043	CAEMU044	CAEMU045
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/12/2012	05/12/2012	05/12/2012	05/12/2012	05/12/2012
			Sample Time	.	.	.	.	.
			Date Received	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012
			SDG Ref	121207-101	121207-101	121207-101	121207-101	121207-101
			Lab Sample No.(s)	6624973	6624974	6624975	6624976	6624977
			AGS Reference					
Naphthalene-d8 % recovery**	%	TM218		106	94.1	101	99.6	99.1
Acenaphthene-d10 % recovery**	%	TM218		91.1	91.2	90.5	93.5	94.1
Phenanthrene-d10 % recovery**	%	TM218		87.1	93.3	88.8	92.7	92
Chrysene-d12 % recovery**	%	TM218		81.6	85.2	83.8	86.6	82.3
Perylene-d12 % recovery**	%	TM218		86.8	90.2	92.8	94.8	89
Naphthalene	<9 µg/kg	TM218		50000 M	12.1 M	3750 M	5700 M	3130 M
Acenaphthylene	<12 µg/kg	TM218		232 M	<12 M	60.7 M	64.9 M	182 M
Acenaphthene	<8 µg/kg	TM218		247 M	<8 M	182 M	95.2 M	334 M
Fluorene	<10 µg/kg	TM218		707 M	<10 M	352 M	209 M	846 M
Phenanthrene	<15 µg/kg	TM218		139 M	<15 M	532 M	296 M	1110 M
Anthracene	<16 µg/kg	TM218		<16 M	<16 M	86.5 M	72.8 M	178 M
Fluoranthene	<17 µg/kg	TM218		<17 M	<17 M	150 M	21.8 M	77 M
Pyrene	<15 µg/kg	TM218		<15 M	<15 M	151 M	40 M	134 M
Benz(a)anthracene	<14 µg/kg	TM218		29.8 M	<14 M	78.9 M	25.7 M	28.3 M
Chrysene	<10 µg/kg	TM218		17.8 M	<10 M	63.8 M	<10 M	35.8 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 M	<15 M	54.2 M	<15 M	22.4 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 M	<14 M	<14 M	<14 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218		<15 M	<15 M	46.2 M	<15 M	<15 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 M	<18 M	<18 M	<18 M	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 M	<23 M	<23 M	<23 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 M	<24 M	<24 M	<24 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		51400	<118	5500	6530	6080

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
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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
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1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU041	CAEMU042	CAEMU043	CAEMU044	CAEMU045
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/12/2012	05/12/2012	05/12/2012	05/12/2012	05/12/2012
			Sample Time	.	.	.	.	.
			Date Received	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012
			SDG Ref	121207-101	121207-101	121207-101	121207-101	121207-101
			Lab Sample No.(s)	6624973	6624974	6624975	6624976	6624977
			AGS Reference					
GRO Surrogate % recovery**	%	TM089		84	101	154	117	106
GRO >C5-C12	<44 µg/kg	TM089		603000	853	2080000	1320000	1120000
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<50 #	<5 #	<100 #	<100 #	<100 #
Benzene	<10 µg/kg	TM089		1220 M	50.8 M	714 M	744 M	1040 M
Toluene	<2 µg/kg	TM089		<20 M	5.08 M	<40 M	<40 M	<40 M
Ethylbenzene	<3 µg/kg	TM089		3170 M	11.4 M	<60 M	<60 M	<60 M
m,p-Xylene	<6 µg/kg	TM089		31700 M	45.7 M	49900 M	<120 M	<120 M
o-Xylene	<3 µg/kg	TM089		<30 M	44.5 M	<60 M	<60 M	<60 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		31700	90.2	49900	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		36100	157	50600	744	1040
Aliphatics >C5-C6	<10 µg/kg	TM089		30800	20.3	26400	14100	10700
Aliphatics >C6-C8	<10 µg/kg	TM089		203000	155	543000	264000	324000
Aliphatics >C8-C10	<10 µg/kg	TM089		92400	138	556000	252000	188000
Aliphatics >C10-C12	<10 µg/kg	TM089		107000	173	323000	373000	285000
Aliphatics >C12-C16	<100 µg/kg	TM173		160000	7550	570000	229000	268000
Aliphatics >C16-C35	<100 µg/kg	TM173		64700	17600	167000	308000	1310000
Aliphatics >C35-C44	<100 µg/kg	TM173		9950	3740	2020	79300	256000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		234000	28900	740000	616000	1840000
Aromatics >EC5-EC7	<10 µg/kg	TM089		1220	50.8	714	744	1040
Aromatics >EC7-EC8	<10 µg/kg	TM089		<100	<10	<200	<200	<200
Aromatics >EC8-EC10	<10 µg/kg	TM089		96500	194	421000	168000	125000
Aromatics >EC10-EC12	<10 µg/kg	TM089		71600	116	215000	249000	190000
Aromatics >EC12-EC16	<100 µg/kg	TM173		443000	<100	102000	119000	341000
Aromatics >EC16-EC21	<100 µg/kg	TM173		22600	<100	39200	45800	211000
Aromatics >EC21-EC35	<100 µg/kg	TM173		217000	16800	71900	109000	408000
Aromatics >EC35-EC44	<100 µg/kg	TM173		106000	7410	24800	47800	119000
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		789000	24200	238000	321000	1080000
Total Aliphatics >C5-35	<100 µg/kg	TM173		658000	25700	2190000	1440000	2390000
Total Aromatics >C5-35	<100 µg/kg	TM173		852000	17100	849000	691000	1280000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1510000	42800	3040000	2130000	3660000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		1630000	53900	3060000	2260000	4040000

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
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1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU041	CAEMU042	CAEMU043	CAEMU044	CAEMU045
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/12/2012	05/12/2012	05/12/2012	05/12/2012	05/12/2012
			Sample Time	.	.	.	.	.
			Date Received	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012
			SDG Ref	121207-101	121207-101	121207-101	121207-101	121207-101
			Lab Sample No.(s)	6624973	6624974	6624975	6624976	6624977
			AGS Reference					
Dibromofluoromethane**	%	TM116		99.1	112	99.7	100	99.7
Toluene-d8**	%	TM116		95.4	100	99.1	98.5	97.4
4-Bromofluorobenzene**	%	TM116		125	117	116	114	121
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 M	<80 M	<8 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<7	<140	<14	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<10	<200	<20	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<13 M	<260 M	<26 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<28 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<12 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<20 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	19.7 M	<140 M	<14 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<20 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<22 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<22 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 M	<160 M	<16 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<10 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<24 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<28 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<8 M	<160 M	<16 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 M	<140 M	<14 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<22 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<28 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<10 M	<100 M
Benzene	<9 µg/kg	TM116		579 M	224 M	328 M	102 M	326 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<18 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<24 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<18 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 M	<140 M	<14 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<28 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	39.2 M	2510 M	34.4 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<14	<280	<28	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<20 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
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aq	Aqueous / settled sample.
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Component	LOD/Units	Method	Customer Sample R	CAEMU041	CAEMU042	CAEMU043	CAEMU044	CAEMU045
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/12/2012	05/12/2012	05/12/2012	05/12/2012	05/12/2012
			Sample Time	.	.	.	.	.
			Date Received	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012
			SDG Ref	121207-101	121207-101	121207-101	121207-101	121207-101
			Lab Sample No.(s)	6624973	6624974	6624975	6624976	6624977
			AGS Reference					
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<7 #	<140 #	<14 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<10 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<13 M	<260 M	<26 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<24 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<10 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<20 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		2140 M	32.4 M	9220 M	297 M	3580 M
p/m-Xylene	<14 µg/kg	TM116		64700 #	111 #	71900 #	48.8 #	501 #
o-Xylene	<10 µg/kg	TM116		<200 M	99.8 M	20100 M	40.9 M	484 M
Styrene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<20 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<20 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		1660 M	30 M	6360 M	728 M	10800 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<20 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<17 M	<340 M	<34 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<20 M	<200 M
Propylbenzene	<11 µg/kg	TM116		2150 M	<11 M	9080 M	1280 M	17000 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<18 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		29400 #	37.4 #	17600 #	<16 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<24 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<12 #	<240 #	<24 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		92800 3 #	86.2 #	59500 #	1260 #	2200 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	523 M	5990 M
4-Isopropyltoluene	<11 µg/kg	TM116		5720 M	<11 M	2380 M	<22 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<12 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<10 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	713 M	7440 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<24 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<28 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<15	<300	<30	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<6 #	<120 #	<12 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<12	<240	<24	<240
Naphthalene	<13 µg/kg	TM116		30700 M	<13 M	6220 M	1710 M	9980 M

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
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Component	LOD/Units	Method	Customer Sample R	CAEMU041	CAEMU042	CAEMU043	CAEMU044	CAEMU045
			Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/12/2012	05/12/2012	05/12/2012	05/12/2012	05/12/2012
			Sample Time	.	.	.	.	.
			Date Received	07/12/2012	07/12/2012	07/12/2012	07/12/2012	07/12/2012
			SDG Ref	121207-101	121207-101	121207-101	121207-101	121207-101
			Lab Sample No.(s)	6624973	6624974	6624975	6624976	6624977
			AGS Reference					
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<12 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMU041 0.00 - 0.00 SOLID 04/12/2012 00:00:00 121207-101 6624973 TM048	19/12/12	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMU042 0.00 - 0.00 SOLID 05/12/2012 00:00:00 121207-101 6624974 TM048	19/12/12	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMU043 0.00 - 0.00 SOLID 05/12/2012 00:00:00 121207-101 6624975 TM048	19/12/12	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMU044 0.00 - 0.00 SOLID 05/12/2012 00:00:00 121207-101 6624976 TM048	19/12/12	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMU045 0.00 - 0.00 SOLID 05/12/2012 00:00:00 121207-101 6624977 TM048	19/12/12	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6624973	6624974	6624975	6624976	6624977
Customer Sample Ref.	CAEMU041	CAEMU042	CAEMU043	CAEMU044	CAEMU045
AGS Ref.					
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	20-Dec-2012	20-Dec-2012	20-Dec-2012	20-Dec-2012	20-Dec-2012
EPH CWG (Aliphatic) GC (S)	18-Dec-2012	18-Dec-2012	18-Dec-2012	18-Dec-2012	18-Dec-2012
EPH CWG (Aromatic) GC (S)	18-Dec-2012	18-Dec-2012	18-Dec-2012	18-Dec-2012	18-Dec-2012
GRO by GC-FID (S)	15-Dec-2012	14-Dec-2012	17-Dec-2012	17-Dec-2012	17-Dec-2012
Metals by iCap-OES (Soil)	17-Dec-2012	17-Dec-2012	17-Dec-2012	17-Dec-2012	17-Dec-2012
PAH by GCMS	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012
pH	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012	13-Dec-2012
Sample description	12-Dec-2012	12-Dec-2012	12-Dec-2012	12-Dec-2012	12-Dec-2012
Total Organic Carbon	20-Dec-2012	20-Dec-2012	20-Dec-2012	20-Dec-2012	20-Dec-2012
TPH CWG GC (S)	18-Dec-2012	18-Dec-2012	18-Dec-2012	18-Dec-2012	18-Dec-2012
VOC MS (S)	17-Dec-2012	16-Dec-2012	16-Dec-2012	16-Dec-2012	16-Dec-2012

SDG:	121207-101	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206620
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Atkins Global Ltd
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Llandarcy
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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

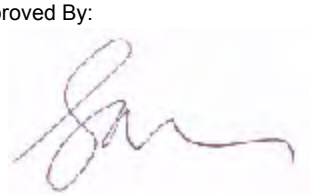
Date:	27 December 2012
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121212-61
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	206950

We received 3 samples on Wednesday December 12, 2012 and 3 of these samples were scheduled for analysis which was completed on Thursday December 27, 2012. 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

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CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6649030	CAEMV046			06/12/2012
6649031	CAEMV047			10/12/2012
6649033	CAEMV048			11/12/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6649030	CAEMV046			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6649031	CAEMV047			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6649033	CAEMV048			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 3		X		X	X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 3	X		X		X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 3	X		X		X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 3		X		X	X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 3	X		X		X
	Cadmium	NDPs: 0 Tests: 3	X		X		X
	Chromium	NDPs: 0 Tests: 3	X		X		X
	Copper	NDPs: 0 Tests: 3	X		X		X
	Lead	NDPs: 0 Tests: 3	X		X		X
	Mercury	NDPs: 0 Tests: 3	X		X		X
	Nickel	NDPs: 0 Tests: 3	X		X		X
	Selenium	NDPs: 0 Tests: 3	X		X		X
	Vanadium	NDPs: 0 Tests: 3	X		X		X
	Zinc	NDPs: 0 Tests: 3	X		X		X
pH	All	NDPs: 0 Tests: 3		X		X	X

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6649030	CAEMV046			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6649031	CAEMV047			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6649033	CAEMV048			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Sample description	All	NDPs: 0 Tests: 3	X		X		X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 3	X		X		X
Total Organic Carbon	All	NDPs: 0 Tests: 3	X		X		X
TPH CWG GC (S)	All	NDPs: 0 Tests: 3	X		X		X
VOC MS (S)	All	NDPs: 0 Tests: 3		X		X		X

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6649030	CAEMV046		Black	Silty Clay Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
6649031	CAEMV047		Black	Sandy Silt Loam	0.1 - 2 mm	Oil/Petroleum	Stones
6649033	CAEMV048		Beige	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV046	CAEMV047	CAEMV048			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/12/2012	10/12/2012	11/12/2012			
			Sample Time	.	.	.			
			Date Received	12/12/2012	12/12/2012	12/12/2012			
			SDG Ref	121212-61	121212-61	121212-61			
			Lab Sample No.(s)	6649030	6649031	6649033			
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		2.07 #	20.3 #	1.17 #			
pH	1 pH Units	TM133		7.54 M	7.25 M	7.96 M			
Arsenic	<0.6 mg/kg	TM181		2.32 M	167 M	10.7 M			
Cadmium	<0.02 mg/kg	TM181		0.328 M	0.335 M	0.438 M			
Chromium	<0.9 mg/kg	TM181		8.16 M	12.8 M	10.6 M			
Copper	<1.4 mg/kg	TM181		4.28 M	580 M	23.9 M			
Lead	<0.7 mg/kg	TM181		9.23 M	110 M	20.2 M			
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	0.165 M			
Nickel	<0.2 mg/kg	TM181		10.9 M	5.53 M	17.6 M			
Selenium	<1 mg/kg	TM181		<1 #	2.75 #	<1 #			
Vanadium	<0.2 mg/kg	TM181		9.52 #	22 #	12.2 #			
Zinc	<1.9 mg/kg	TM181		36.7 M	50 M	80.7 M			

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV046	CAEMV047	CAEMV048			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/12/2012	10/12/2012	11/12/2012			
			Sample Time	.	.	.			
			Date Received	12/12/2012	12/12/2012	12/12/2012			
			SDG Ref	121212-61	121212-61	121212-61			
			Lab Sample No.(s)	6649030	6649031	6649033			
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100			
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100			
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100			
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100			
Isophorone	<100 µg/kg	TM157		<100	<100	<100			
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100			
Carbazole	<100 µg/kg	TM157		<100	<100	<100			
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100			
Azobenzene	<100 µg/kg	TM157		<100	<100	<100			
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV046	CAEMV047	CAEMV048			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/12/2012	10/12/2012	11/12/2012			
			Sample Time	.	.	.			
			Date Received	12/12/2012	12/12/2012	12/12/2012			
			SDG Ref	121212-61	121212-61	121212-61			
			Lab Sample No.(s)	6649030	6649031	6649033			
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100			
2-Methylnaphthalene	<100 µg/kg	TM157		<100	513	<100			
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100			
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100			
Anthracene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100			
Chrysene	<100 µg/kg	TM157		<100	<100	<100			
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100			
Fluorene	<100 µg/kg	TM157		<100	271	118			
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100			
Phenanthrene	<100 µg/kg	TM157		<100	437	173			
Pyrene	<100 µg/kg	TM157		<100	<100	<100			
Naphthalene	<100 µg/kg	TM157		<100	<100	<100			
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100			

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV046	CAEMV047	CAEMV048			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/12/2012	10/12/2012	11/12/2012			
			Sample Time	.	.	.			
			Date Received	12/12/2012	12/12/2012	12/12/2012			
			SDG Ref	121212-61	121212-61	121212-61			
			Lab Sample No.(s)	6649030	6649031	6649033			
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		91	68	85			
GRO >C5-C12	<44 µg/kg	TM089		11300	233000	49600			
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	237 #	<5 #			
Benzene	<10 µg/kg	TM089		55.9 M	<50 M	107 M			
Toluene	<2 µg/kg	TM089		<2 M	<10 M	<2 M			
Ethylbenzene	<3 µg/kg	TM089		<3 M	<15 M	<3 M			
m,p-Xylene	<6 µg/kg	TM089		<6 M	<30 M	<6 M			
o-Xylene	<3 µg/kg	TM089		<3 M	<15 M	<3 M			
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	<9			
sum of detected BTEX by GC	<24 µg/kg	TM089		55.9	<24	107			
Aliphatics >C5-C6	<10 µg/kg	TM089		1470	213	163			
Aliphatics >C6-C8	<10 µg/kg	TM089		5760	35300	11200			
Aliphatics >C8-C10	<10 µg/kg	TM089		1650	43100	12100			
Aliphatics >C10-C12	<10 µg/kg	TM089		774	75300	10800			
Aliphatics >C12-C16	<100 µg/kg	TM173		4160	141000	152000			
Aliphatics >C16-C21	<100 µg/kg	TM173		3060	197000	172000			
Aliphatics >C21-C35	<100 µg/kg	TM173		18000	1180000	588000			
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	389000	111000			
Total Aliphatics >C12-C44	<100 µg/kg	TM173		25200	1900000	1020000			
Aromatics >EC5-EC7	<10 µg/kg	TM089		55.9	88.8	107			
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<50	<10			
Aromatics >EC8-EC10	<10 µg/kg	TM089		1100	28700	8080			
Aromatics >EC10-EC12	<10 µg/kg	TM089		516	50200	7170			
Aromatics >EC12-EC16	<100 µg/kg	TM173		6760	140000	91100			
Aromatics >EC16-EC21	<100 µg/kg	TM173		5310	146000	115000			
Aromatics >EC21-EC35	<100 µg/kg	TM173		64800	644000	320000			
Aromatics >EC35-EC44	<100 µg/kg	TM173		12100	239000	90300			
Aromatics >EC40-EC44	<100 µg/kg	TM173		3480	93400	33500			
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		88900	1170000	616000			
Total Aliphatics >C5-35	<100 µg/kg	TM173		34900	1670000	946000			
Total Aromatics >C5-35	<100 µg/kg	TM173		78500	1010000	541000			
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		113000	2680000	1490000			

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV046	CAEMV047	CAEMV048			
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.			
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
*	Subcontracted test.	Date Sampled	06/12/2012	10/12/2012	11/12/2012			
**	% 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	Sample Time	.	.	.			
		Date Received	12/12/2012	12/12/2012	12/12/2012			
		SDG Ref	121212-61	121212-61	121212-61			
(F)	Trigger breach confirmed	Lab Sample No.(s)	6649030	6649031	6649033			
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component		**LOD/Units**	**Method**					
Total Aliphatics & Aromatics >C5-C44		<100 µg/kg	TM173	125000	3310000	1690000		

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV046	CAEMV047	CAEMV048			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/12/2012	10/12/2012	11/12/2012			
			Sample Time	.	.	.			
			Date Received	12/12/2012	12/12/2012	12/12/2012			
			SDG Ref	121212-61	121212-61	121212-61			
			Lab Sample No.(s)	6649030	6649031	6649033			
			AGS Reference						
Dibromofluoromethane**	%	TM116		91.9	100	101			
Toluene-d8**	%	TM116		97.7	97.4	99.9			
4-Bromofluorobenzene**	%	TM116		127	111	104			
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<80 M	<80 M			
Chloromethane	<7 µg/kg	TM116		<7	<140	<140			
Vinyl Chloride	<10 µg/kg	TM116		<10	<200	<200			
Bromomethane	<13 µg/kg	TM116		<13 M	<260 M	<260 M			
Chloroethane	<14 µg/kg	TM116		<14 M	<280 M	<280 M			
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<120 M	<120 M			
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<200 #	<200 #			
Carbon Disulphide	<7 µg/kg	TM116		15.8 M	<140 M	<140 M			
Dichloromethane	<10 µg/kg	TM116		<10 #	<200 #	<200 #			
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<220 M	<220 M			
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<220 M	<220 M			
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<160 M	<160 M			
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<100 M	<100 M			
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<240 M			
Bromochloromethane	<14 µg/kg	TM116		<14 M	<280 M	<280 M			
Chloroform	<8 µg/kg	TM116		<8 M	<160 M	<160 M			
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<140 M	<140 M			
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<220 M	<220 M			
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<280 M	<280 M			
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<100 M	<100 M			
Benzene	<9 µg/kg	TM116		72.1 M	<180 M	<180 M			
Trichloroethene	<9 µg/kg	TM116		<9 M	<180 M	<180 M			
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<240 M			
Dibromomethane	<9 µg/kg	TM116		<9 M	<180 M	<180 M			
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<140 M	<140 M			
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<280 M	<280 M			
Toluene	<5 µg/kg	TM116		11.6 M	<100 M	<100 M			
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<280	<280			
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<200 M	<200 M			

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV046	CAEMV047	CAEMV048			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	06/12/2012	10/12/2012	11/12/2012			
			Sample Time	.	.	.			
			Date Received	12/12/2012	12/12/2012	12/12/2012			
			SDG Ref	121212-61	121212-61	121212-61			
			Lab Sample No.(s)	6649030	6649031	6649033			
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<140 #	<140 #			
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<100 M	<100 M			
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<260 M	<260 M			
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<240 M	<240 M			
Chlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<100 M			
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<200 M	<200 M			
Ethylbenzene	<4 µg/kg	TM116		7.91 M	<80 M	<80 M			
p/m-Xylene	<14 µg/kg	TM116		30.6 #	<280 #	<280 #			
o-Xylene	<10 µg/kg	TM116		20.7 M	<200 M	<200 M			
Styrene	<10 µg/kg	TM116		<10 M	<200 M	<200 M			
Bromoform	<10 µg/kg	TM116		<10 M	<200 M	<200 M			
Isopropylbenzene	<5 µg/kg	TM116		72.1 M	953 M	221 M			
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<200 #	<200 #			
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<340 M	<340 M			
Bromobenzene	<10 µg/kg	TM116		<10 M	<200 M	<200 M			
Propylbenzene	<11 µg/kg	TM116		39.8 M	1220 M	326 M			
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<180 M	<180 M			
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	<160 #	<160 #			
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<240 M	<240 M			
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<240 #	<240 #			
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 #	<180 #	<180 #			
sec-Butylbenzene	<10 µg/kg	TM116		46.1 M	<200 M	457 M			
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<220 M	<220 M			
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<120 M	<120 M			
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<100 M			
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<200 M	<200 M			
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<240 M	<240 M			
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<280 M	<280 M			
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<300	<300			
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<120 #	<120 #			
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<240	<240			
Naphthalene	<13 µg/kg	TM116		<13 M	<260 M	<260 M			

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMV046	CAEMV047	CAEMV048			
#	ISO17025 accredited.							
M	*m*CERTS 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							
1-4&+§@	Sample deviation (see appendix)							
		Depth (m)	.	.	.			
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
		Date Sampled	06/12/2012	10/12/2012	11/12/2012			
		Sample Time	.	.	.			
		Date Received	12/12/2012	12/12/2012	12/12/2012			
		SDG Ref	121212-61	121212-61	121212-61			
		Lab Sample No.(s)	6649030	6649031	6649033			
		AGS Reference						
Component	**LOD/Units**	**Method**						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 M	<120 M	<120 M			

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV046 SOLID 06/12/2012 00:00:00 121212-61 6649030 TM048	21/12/12	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV047 SOLID 10/12/2012 00:00:00 121212-61 6649031 TM048	21/12/12	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV048 SOLID 11/12/2012 00:00:00 121212-61 6649033 TM048	21/12/12	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6649030	6649031	6649033
Customer Sample Ref.	CAEMV046	CAEMV047	CAEMV048
AGS Ref.			
Depth			
Type	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	27-Dec-2012	27-Dec-2012	27-Dec-2012
EPH CWG (Aliphatic) GC (S)	20-Dec-2012	20-Dec-2012	20-Dec-2012
EPH CWG (Aromatic) GC (S)	20-Dec-2012	20-Dec-2012	20-Dec-2012
GRO by GC-FID (S)	19-Dec-2012	19-Dec-2012	19-Dec-2012
Metals by iCap-OES (Soil)	20-Dec-2012	20-Dec-2012	20-Dec-2012
pH	18-Dec-2012	18-Dec-2012	18-Dec-2012
Sample description	15-Dec-2012	15-Dec-2012	15-Dec-2012
Semi Volatile Organic Compounds	19-Dec-2012	19-Dec-2012	19-Dec-2012
Total Organic Carbon	27-Dec-2012	27-Dec-2012	27-Dec-2012
TPH CWG GC (S)	20-Dec-2012	20-Dec-2012	20-Dec-2012
VOC MS (S)	19-Dec-2012	19-Dec-2012	19-Dec-2012

SDG:	121212-61	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	206950
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

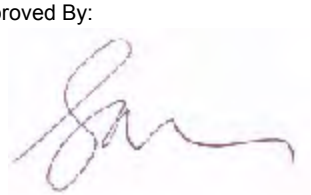
Date:	07 January 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	121215-9
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	207680

We received 4 samples on Friday December 14, 2012 and 4 of these samples were scheduled for analysis which was completed on Monday January 07, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6668305	CAEMV049			11/12/2012
6668306	CAEMV050			12/12/2012
6668307	CAEMV051			12/12/2012
6668309	CAEMV052			12/12/2012

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

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6668305	CAEMV049			250g Amber Jar (AL
			6668305	CAEMV049			400g Tub (ALE214)
			6668305	CAEMV049			60g VOC (ALE215)
			6668306	CAEMV050			250g Amber Jar (AL
			6668306	CAEMV050			400g Tub (ALE214)
			6668306	CAEMV050			60g VOC (ALE215)
			6668307	CAEMV051			250g Amber Jar (AL
			6668307	CAEMV051			400g Tub (ALE214)
			6668307	CAEMV051			60g VOC (ALE215)
			6668309	CAEMV052			250g Amber Jar (AL
			6668309	CAEMV052			400g Tub (ALE214)
			6668309	CAEMV052			60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 4					
				X			
					X		
						X	
							X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 4	X		X		X		X			
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 4	X		X		X		X			
GRO by GC-FID (S)	All	NDPs: 0 Tests: 4		X		X		X				X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 4	X		X		X		X			
	Cadmium	NDPs: 0 Tests: 4	X		X		X		X			
	Chromium	NDPs: 0 Tests: 4	X		X		X		X			
	Copper	NDPs: 0 Tests: 4	X		X		X		X			
	Lead	NDPs: 0 Tests: 4	X		X		X		X			
	Mercury	NDPs: 0 Tests: 4	X		X		X		X			
	Nickel	NDPs: 0 Tests: 4	X		X		X		X			
	Selenium	NDPs: 0 Tests: 4	X		X		X		X			
	Vanadium	NDPs: 0 Tests: 4	X		X		X		X			
	Zinc	NDPs: 0 Tests: 4	X		X		X		X			
pH	All	NDPs: 0 Tests: 4		X		X		X				X

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6668305	6668306	6668307	6668309
			Customer Sample Reference	CAEMV049	CAEMV050	CAEMV051	CAEMV052
			AGS Reference				
			Depth (m)				
			Container	250g Amber Jar (AL / 400g Tub (ALE214) / 60g VOC (ALE215)	250g Amber Jar (AL / 400g Tub (ALE214) / 60g VOC (ALE215)	250g Amber Jar (AL / 400g Tub (ALE214) / 60g VOC (ALE215)	250g Amber Jar (AL / 400g Tub (ALE214) / 60g VOC (ALE215)
Sample description	All	NDPs: 0 Tests: 4		X	X	X	X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 4		X	X	X	X
Total Organic Carbon	All	NDPs: 0 Tests: 4		X	X	X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 4		X	X	X	X
VOC MS (S)	All	NDPs: 0 Tests: 4		X	X	X	X

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6668305	CAEMV049		Light Brown	Silt Loam	0.063 - 0.1 mm	None	Stones
6668306	CAEMV050		Grey	Sandy Silt Loam	0.063 - 0.1 mm	None	Stones
6668307	CAEMV051		Dark Brown	Silty Clay	0.063 - 0.1 mm	None	None
6668309	CAEMV052		Light Brown	Sandy Clay	0.1 - 2 mm	None	Vegetation

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV049	CAEMV050	CAEMV051	CAEMV052		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	11/12/2012	12/12/2012	12/12/2012	12/12/2012		
			Sample Time	.	.	.	.		
			Date Received	14/12/2012	14/12/2012	14/12/2012	14/12/2012		
			SDG Ref	121215-9	121215-9	121215-9	121215-9		
			Lab Sample No.(s)	6668305	6668306	6668307	6668309		
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		2.19 #	<0.35 #	2.31 #	2.02 #		
pH	1 pH Units	TM133		7.95 M	9.55 M	6.87 M	7.45 M		
Arsenic	<0.6 mg/kg	TM181		11.6 M	2.72 M	14.4 M	7.33 M		
Cadmium	<0.02 mg/kg	TM181		0.173 M	0.109 M	0.575 M	0.214 M		
Chromium	<0.9 mg/kg	TM181		19.5 M	12.9 M	22 M	17.9 M		
Copper	<1.4 mg/kg	TM181		34.2 M	7.27 M	27.3 M	19.3 M		
Lead	<0.7 mg/kg	TM181		39 M	9.78 M	24.1 M	20.4 M		
Mercury	<0.14 mg/kg	TM181		0.245 M	<0.14 M	<0.14 M	<0.14 M		
Nickel	<0.2 mg/kg	TM181		26.7 M	32.3 M	14.1 M	19.3 M		
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #		
Vanadium	<0.2 mg/kg	TM181		24.7 #	11.8 #	30.1 #	17.5 #		
Zinc	<1.9 mg/kg	TM181		146 M	52.5 M	54.2 M	57.4 M		

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV049	CAEMV050	CAEMV051	CAEMV052		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	11/12/2012	12/12/2012	12/12/2012	12/12/2012		
			Sample Time	.	.	.	.		
			Date Received	14/12/2012	14/12/2012	14/12/2012	14/12/2012		
			SDG Ref	121215-9	121215-9	121215-9	121215-9		
			Lab Sample No.(s)	6668305	6668306	6668307	6668309		
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100		
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100		
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100		
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100		
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		326	<100	<100	<100		
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100		
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV049	CAEMV050	CAEMV051	CAEMV052		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	11/12/2012	12/12/2012	12/12/2012	12/12/2012		
			Sample Time	.	.	.	.		
			Date Received	14/12/2012	14/12/2012	14/12/2012	14/12/2012		
			SDG Ref	121215-9	121215-9	121215-9	121215-9		
			Lab Sample No.(s)	6668305	6668306	6668307	6668309		
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dinitrotoluene	<100 µg/kg	TM157		334	<100	<100	<100		
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylnaphthalene	<100 µg/kg	TM157		499	<100	<100	<100		
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100		
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100		
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100		
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100		
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100		
Phenanthrene	<100 µg/kg	TM157		199	<100	<100	<100		
Pyrene	<100 µg/kg	TM157		190	<100	<100	<100		
Naphthalene	<100 µg/kg	TM157		219	<100	<100	<100		
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV049	CAEMV050	CAEMV051	CAEMV052		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	11/12/2012	12/12/2012	12/12/2012	12/12/2012		
			Sample Time	.	.	.	.		
			Date Received	14/12/2012	14/12/2012	14/12/2012	14/12/2012		
			SDG Ref	121215-9	121215-9	121215-9	121215-9		
			Lab Sample No.(s)	6668305	6668306	6668307	6668309		
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		68	126	94	47		
GRO >C5-C12	<44 µg/kg	TM089		49400	5100	7340	3860		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 @ #	<5 #	<5 #	<5 #		
Benzene	<10 µg/kg	TM089		11.3 @ M	<10 M	70.4 M	14.9 M		
Toluene	<2 µg/kg	TM089		<2 @ M	<2 M	<2 M	<2 M		
Ethylbenzene	<3 µg/kg	TM089		<3 @ M	<3 M	<3 M	<3 M		
m,p-Xylene	<6 µg/kg	TM089		<6 @ M	<6 M	<6 M	<6 M		
o-Xylene	<3 µg/kg	TM089		<3 @ M	<3 M	<3 M	<3 M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	<9	<9		
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	70.4	<24		
Aliphatics >C5-C6	<10 µg/kg	TM089		37.3	21.5	108	65.7		
Aliphatics >C6-C8	<10 µg/kg	TM089		3150	1780	5030	1040		
Aliphatics >C8-C10	<10 µg/kg	TM089		10500	1380	1110	703		
Aliphatics >C10-C12	<10 µg/kg	TM089		17200	596	173	941		
Aliphatics >C12-C16	<100 µg/kg	TM173		705000	<100	10900	19200		
Aliphatics >C16-C21	<100 µg/kg	TM173		539000	<100	12700	43700		
Aliphatics >C21-C35	<100 µg/kg	TM173		485000	<100	38700	129000		
Aliphatics >C35-C44	<100 µg/kg	TM173		81800	<100	12200	19900		
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1810000	<100	74500	212000		
Aromatics >EC5-EC7	<10 µg/kg	TM089		11.3	<10	70.4	14.9		
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10		
Aromatics >EC8-EC10	<10 µg/kg	TM089		7000	918	740	469		
Aromatics >EC10-EC12	<10 µg/kg	TM089		11500	397	115	627		
Aromatics >EC12-EC16	<100 µg/kg	TM173		170000	1630	2690	8550		
Aromatics >EC16-EC21	<100 µg/kg	TM173		281000	1300	7100	25900		
Aromatics >EC21-EC35	<100 µg/kg	TM173		210000	6210	39500	94700		
Aromatics >EC35-EC44	<100 µg/kg	TM173		46400	<100	11000	14600		
Aromatics >EC40-EC44	<100 µg/kg	TM173		18400	<100	3950	5090		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		707000	9130	60400	144000		
Total Aliphatics >C5-35	<100 µg/kg	TM173		1760000	3780	68700	194000		
Total Aromatics >C5-35	<100 µg/kg	TM173		679000	10500	50200	130000		
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		2440000	14200	119000	325000		

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV049	CAEMV050	CAEMV051	CAEMV052		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
tot.unfilt	Total / unfiltered sample.	Date Sampled	11/12/2012	12/12/2012	12/12/2012	12/12/2012		
*	Subcontracted test.	Sample Time	.	.	.	.		
**	% 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	Date Received	14/12/2012	14/12/2012	14/12/2012	14/12/2012		
		SDG Ref	121215-9	121215-9	121215-9	121215-9		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6668305	6668306	6668307	6668309		
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2570000	14200	142000	359000		

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV049	CAEMV050	CAEMV051	CAEMV052		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	11/12/2012	12/12/2012	12/12/2012	12/12/2012		
			Sample Time	.	.	.	.		
			Date Received	14/12/2012	14/12/2012	14/12/2012	14/12/2012		
			SDG Ref	121215-9	121215-9	121215-9	121215-9		
			Lab Sample No.(s)	6668305	6668306	6668307	6668309		
			AGS Reference						
Dibromofluoromethane**	%	TM116		103 @	101	100	106 @		
Toluene-d8**	%	TM116		99.5 @	106	97.8	99.4 @		
4-Bromofluorobenzene**	%	TM116		111 @	105	123	104 @		
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 @ M	<4 M	<4 M	<80 @ M		
Chloromethane	<7 µg/kg	TM116		<140 @	<7	<7	<140 @		
Vinyl Chloride	<10 µg/kg	TM116		<200 @	854	<10	<200 @		
Bromomethane	<13 µg/kg	TM116		<260 @ M	<13 M	<13 M	<260 @ M		
Chloroethane	<14 µg/kg	TM116		<280 @ M	<14 M	<14 M	<280 @ M		
Trichlorofluorormethane	<6 µg/kg	TM116		<120 @ M	<6 M	<6 M	<120 @ M		
1,1-Dichloroethene	<10 µg/kg	TM116		<200 @ #	<10 #	<10 #	<200 @ #		
Carbon Disulphide	<7 µg/kg	TM116		<140 @ M	10.9 M	19.4 M	<140 @ M		
Dichloromethane	<10 µg/kg	TM116		<200 @ #	14.9 #	<10 #	<200 @ #		
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 @ M	<11 M	<11 M	<220 @ M		
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 @ M	<11 M	<11 M	<220 @ M		
1,1-Dichloroethane	<8 µg/kg	TM116		<160 @ M	<8 M	<8 M	<160 @ M		
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 @ M	<5 M	<5 M	<100 @ M		
2,2-Dichloropropane	<12 µg/kg	TM116		<240 @ M	<12 M	<12 M	<240 @ M		
Bromochloromethane	<14 µg/kg	TM116		<280 @ M	<14 M	<14 M	<280 @ M		
Chloroform	<8 µg/kg	TM116		<160 @ M	<8 M	<8 M	<160 @ M		
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 @ M	<7 M	<7 M	<140 @ M		
1,1-Dichloropropene	<11 µg/kg	TM116		<220 @ M	<11 M	<11 M	<220 @ M		
Carbontetrachloride	<14 µg/kg	TM116		<280 @ M	<14 M	<14 M	<280 @ M		
1,2-Dichloroethane	<5 µg/kg	TM116		<100 @ M	<5 M	<5 M	<100 @ M		
Benzene	<9 µg/kg	TM116		<180 @ M	<9 M	<9 M	<180 @ M		
Trichloroethene	<9 µg/kg	TM116		<180 @ M	<9 M	<9 M	<180 @ M		
1,2-Dichloropropane	<12 µg/kg	TM116		<240 @ M	<12 M	<12 M	<240 @ M		
Dibromomethane	<9 µg/kg	TM116		<180 @ M	<9 M	<9 M	<180 @ M		
Bromodichloromethane	<7 µg/kg	TM116		<140 @ M	<7 M	<7 M	<140 @ M		
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 @ M	<14 M	<14 M	<280 @ M		
Toluene	<5 µg/kg	TM116		<100 @ M	9.58 M	<5 M	<100 @ M		
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280 @	<14	<14	<280 @		
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 @ M	<10 M	<10 M	<200 @ M		

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV049	CAEMV050	CAEMV051	CAEMV052		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	11/12/2012	12/12/2012	12/12/2012	12/12/2012		
			Sample Time	.	.	.	.		
			Date Received	14/12/2012	14/12/2012	14/12/2012	14/12/2012		
			SDG Ref	121215-9	121215-9	121215-9	121215-9		
			Lab Sample No.(s)	6668305	6668306	6668307	6668309		
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 @ #	<7 #	<7 #	<140 @ #		
Tetrachloroethene	<5 µg/kg	TM116		<100 @ M	<5 M	<5 M	<100 @ M		
Dibromochloromethane	<13 µg/kg	TM116		<260 @ M	<13 M	<13 M	<260 @ M		
1,2-Dibromoethane	<12 µg/kg	TM116		<240 @ M	<12 M	<12 M	<240 @ M		
Chlorobenzene	<5 µg/kg	TM116		<100 @ M	<5 M	<5 M	<100 @ M		
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 @ M	<10 M	<10 M	<200 @ M		
Ethylbenzene	<4 µg/kg	TM116		<80 @ M	18 M	<4 M	<80 @ M		
p/m-Xylene	<14 µg/kg	TM116		<280 @ #	61.5 #	35.3 #	<280 @ #		
o-Xylene	<10 µg/kg	TM116		<200 @ M	<10 M	<10 M	<200 @ M		
Styrene	<10 µg/kg	TM116		<200 @ M	<10 M	<10 M	<200 @ M		
Bromoform	<10 µg/kg	TM116		<200 @ M	<10 M	<10 M	<200 @ M		
Isopropylbenzene	<5 µg/kg	TM116		<100 @ M	26 M	11 M	<100 @ M		
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 @ #	<10 #	<10 #	<200 @ #		
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 @ M	<17 M	<17 M	<340 @ M		
Bromobenzene	<10 µg/kg	TM116		<200 @ M	<10 M	<10 M	<200 @ M		
Propylbenzene	<11 µg/kg	TM116		<220 @ M	14.7 M	<11 M	<220 @ M		
2-Chlorotoluene	<9 µg/kg	TM116		<180 @ M	<9 M	<9 M	<180 @ M		
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 @ #	22 #	<8 #	<160 @ #		
4-Chlorotoluene	<12 µg/kg	TM116		<240 @ M	<12 M	<12 M	<240 @ M		
tert-Butylbenzene	<12 µg/kg	TM116		<240 @ #	<12 #	<12 #	<240 @ #		
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 @ #	47.1 #	15.8 #	<180 @ #		
sec-Butylbenzene	<10 µg/kg	TM116		<200 @ M	12.5 M	<10 M	<200 @ M		
4-Isopropyltoluene	<11 µg/kg	TM116		<220 @ M	<11 M	<11 M	<220 @ M		
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 @ M	<6 M	<6 M	<120 @ M		
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 @ M	<5 M	<5 M	<100 @ M		
n-Butylbenzene	<10 µg/kg	TM116		<200 @ M	<10 M	<10 M	<200 @ M		
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 @ M	<12 M	<12 M	<240 @ M		
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 @ M	<14 M	<14 M	<280 @ M		
Tert-amyl methyl ether	<15 µg/kg	TM116		<300 @	<15	<15	<300 @		
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 @ #	<6 #	<6 #	<120 @ #		
Hexachlorobutadiene	<12 µg/kg	TM116		<240 @	<12	<12	<240 @		
Naphthalene	<13 µg/kg	TM116		<260 @ M	<13 M	<13 M	<260 @ M		

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMV049	CAEMV050	CAEMV051	CAEMV052		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
tot.unfilt	Total / unfiltered sample.	Date Sampled	11/12/2012	12/12/2012	12/12/2012	12/12/2012		
*	Subcontracted test.	Sample Time	.	.	.	.		
**	% 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	Date Received	14/12/2012	14/12/2012	14/12/2012	14/12/2012		
		SDG Ref	121215-9	121215-9	121215-9	121215-9		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6668305	6668306	6668307	6668309		
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component		**LOD/Units**	**Method**					
1,2,3-Trichlorobenzene		<6 µg/kg	TM116	<120 @ M	<6 M	<6 M	<120 @ M		

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV049 SOLID 11/12/2012 00:00:00 121215-9 6668305 TM048	04/01/13	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 Receieved SDG Original Sample Method Number	CAEMV050 SOLID 12/12/2012 00:00:00 121215-9 6668306 TM048	04/01/13	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 Receieved SDG Original Sample Method Number	CAEMV051 SOLID 12/12/2012 00:00:00 121215-9 6668307 TM048	04/01/13	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 Receieved SDG Original Sample Method Number	CAEMV052 SOLID 12/12/2012 00:00:00 121215-9 6668309 TM048	04/01/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6668305	6668306	6668307	6668309
Customer Sample Ref.	CAEMV049	CAEMV050	CAEMV051	CAEMV052
AGS Ref.				
Depth				
Type	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	04-Jan-2013	04-Jan-2013	04-Jan-2013	04-Jan-2013
EPH CWG (Aliphatic) GC (S)	28-Dec-2012	28-Dec-2012	28-Dec-2012	28-Dec-2012
EPH CWG (Aromatic) GC (S)	28-Dec-2012	28-Dec-2012	28-Dec-2012	28-Dec-2012
GRO by GC-FID (S)	27-Dec-2012	27-Dec-2012	27-Dec-2012	27-Dec-2012
Metals by iCap-OES (Soil)	28-Dec-2012	28-Dec-2012	28-Dec-2012	28-Dec-2012
pH	21-Dec-2012	21-Dec-2012	21-Dec-2012	21-Dec-2012
Sample description	21-Dec-2012	21-Dec-2012	21-Dec-2012	21-Dec-2012
Semi Volatile Organic Compounds	29-Dec-2012	29-Dec-2012	29-Dec-2012	29-Dec-2012
Total Organic Carbon	07-Jan-2013	07-Jan-2013	07-Jan-2013	07-Jan-2013
TPH CWG GC (S)	28-Dec-2012	28-Dec-2012	28-Dec-2012	28-Dec-2012
VOC MS (S)	28-Dec-2012	27-Dec-2012	27-Dec-2012	28-Dec-2012

SDG:	121215-9	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	207680
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Project Jonah site office
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Suite 24
Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

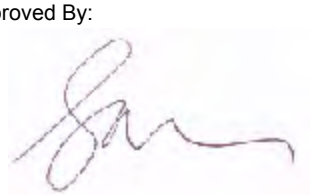
Date:	18 January 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130109-21
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	209091

We received 2 samples on Wednesday January 09, 2013 and 2 of these samples were scheduled for analysis which was completed on Friday January 18, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6745813	CAEMV053			07/01/2013
6745814	CAEMV054			07/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			6745813			6745814		
Lab Sample No(s)								
Customer Sample Reference			CAEMV053			CAEMV054		
AGS Reference								
Depth (m)								
Container			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 2		X			X	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2	X			X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 2	X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2			X			X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 2	X			X		
	Cadmium	NDPs: 0 Tests: 2	X			X		
	Chromium	NDPs: 0 Tests: 2	X			X		
	Copper	NDPs: 0 Tests: 2	X			X		
	Lead	NDPs: 0 Tests: 2	X			X		
	Mercury	NDPs: 0 Tests: 2	X			X		
	Nickel	NDPs: 0 Tests: 2	X			X		
	Selenium	NDPs: 0 Tests: 2	X			X		
	Zinc	NDPs: 0 Tests: 2	X			X		
pH	All	NDPs: 0 Tests: 2		X			X	
Sample description	All	NDPs: 0 Tests: 2	X			X		

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6745813	6745814
			Customer Sample Reference	CAEMV053	CAEMV054
			AGS Reference		
			Depth (m)		
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2				X		
Total Organic Carbon	All	NDPs: 0 Tests: 2	X			X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 2	X			X		
VOC MS (S)	All	NDPs: 0 Tests: 2			X			X

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6745813	CAEMV053		Dark Brown	Silty Clay	0.063 - 0.1 mm	None	None
6745814	CAEMV054		Dark Brown	Clay Loam	0.063 - 0.1 mm	None	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV053	CAEMV054			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	07/01/2013	07/01/2013			
			Sample Time	.	.			
			Date Received	09/01/2013	09/01/2013			
			SDG Ref	130109-21	130109-21			
			Lab Sample No.(s)	6745813	6745814			
			AGS Reference					
Soil Organic Matter (SOM)	<0.35 %	TM132		2.17 #	4.9 #			
pH	1 pH Units	TM133		7.56 M	7.81 M			
Arsenic	<0.6 mg/kg	TM181		6.96 M	37.4 M			
Cadmium	<0.02 mg/kg	TM181		0.269 M	0.804 M			
Chromium	<0.9 mg/kg	TM181		12.9 M	5.64 M			
Copper	<1.4 mg/kg	TM181		2.41 M	41.8 M			
Lead	<0.7 mg/kg	TM181		11.5 M	21 M			
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M			
Nickel	<0.2 mg/kg	TM181		11.2 M	5.73 M			
Selenium	<1 mg/kg	TM181		<1 #	1.1 #			
Zinc	<1.9 mg/kg	TM181		28.9 M	91 M			

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV053	CAEMV054				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	07/01/2013	07/01/2013				
			Sample Time	.	.				
			Date Received	09/01/2013	09/01/2013				
			SDG Ref	130109-21	130109-21				
			Lab Sample No.(s)	6745813	6745814				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV053	CAEMV054				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	07/01/2013	07/01/2013				
			Sample Time	.	.				
			Date Received	09/01/2013	09/01/2013				
			SDG Ref	130109-21	130109-21				
			Lab Sample No.(s)	6745813	6745814				
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100				
Acenaphthylene	<100 µg/kg	TM157		<100	<100				
Acenaphthene	<100 µg/kg	TM157		<100	<100				
Anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100				
Chrysene	<100 µg/kg	TM157		<100	<100				
Fluoranthene	<100 µg/kg	TM157		<100	<100				
Fluorene	<100 µg/kg	TM157		<100	<100				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100				
Phenanthrene	<100 µg/kg	TM157		<100	<100				
Pyrene	<100 µg/kg	TM157		<100	<100				
Naphthalene	<100 µg/kg	TM157		<100	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV053	CAEMV054				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.				
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid				
tot.unfilt	Total / unfiltered sample.	Date Sampled	07/01/2013	07/01/2013				
*	Subcontracted test.	Sample Time	.	.				
**	% 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	Date Received	09/01/2013	09/01/2013				
		SDG Ref	130109-21	130109-21				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6745813	6745814				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	95	37				
GRO >C5-C12	<44 µg/kg	TM089	<44	<44				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5 #	<5 #				
Benzene	<10 µg/kg	TM089	<10 M	<10 M				
Toluene	<2 µg/kg	TM089	<2 M	<2 M				
Ethylbenzene	<3 µg/kg	TM089	<3 M	<3 M				
m,p-Xylene	<6 µg/kg	TM089	<6 M	<6 M				
o-Xylene	<3 µg/kg	TM089	<3 M	<3 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	<10	<10				
Aliphatics >C6-C8	<10 µg/kg	TM089	<10	<10				
Aliphatics >C8-C10	<10 µg/kg	TM089	<10	<10				
Aliphatics >C10-C12	<10 µg/kg	TM089	<10	<10				
Aliphatics >C12-C16	<100 µg/kg	TM173	2340	2460				
Aliphatics >C16-C21	<100 µg/kg	TM173	52000	10700				
Aliphatics >C21-C35	<100 µg/kg	TM173	2550000	418000				
Aliphatics >C35-C44	<100 µg/kg	TM173	87500	10000				
Total Aliphatics >C12-C44	<100 µg/kg	TM173	2700000	441000				
Aromatics >EC5-EC7	<10 µg/kg	TM089	<10	<10				
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089	<10	<10				
Aromatics >EC10-EC12	<10 µg/kg	TM089	<10	<10				
Aromatics >EC12-EC16	<100 µg/kg	TM173	2300	1860				
Aromatics >EC16-EC21	<100 µg/kg	TM173	20800	6070				
Aromatics >EC21-EC35	<100 µg/kg	TM173	609000	177000				
Aromatics >EC35-EC44	<100 µg/kg	TM173	45400	14900				
Aromatics >EC40-EC44	<100 µg/kg	TM173	13100	4280				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	678000	199000				
Total Aliphatics >C5-35	<100 µg/kg	TM173	2610000	431000				
Total Aromatics >C5-35	<100 µg/kg	TM173	632000	185000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	3240000	616000				

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV053	CAEMV054				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.				
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid				
tot.unfilt	Total / unfiltered sample.	Date Sampled	07/01/2013	07/01/2013				
*	Subcontracted test.	Sample Time	.	.				
**	% 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	Date Received	09/01/2013	09/01/2013				
		SDG Ref	130109-21	130109-21				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6745813	6745814				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	3370000	641000				

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV053	CAEMV054				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	07/01/2013	07/01/2013				
			Sample Time	.	.				
			Date Received	09/01/2013	09/01/2013				
			SDG Ref	130109-21	130109-21				
			Lab Sample No.(s)	6745813	6745814				
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	103				
Toluene-d8**	%	TM116		97.2	99				
4-Bromofluorobenzene**	%	TM116		120	111				
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<80 M				
Chloromethane	<7 µg/kg	TM116		<14	<140				
Vinyl Chloride	<10 µg/kg	TM116		<20	<200				
Bromomethane	<13 µg/kg	TM116		<26 M	<260 M				
Chloroethane	<14 µg/kg	TM116		<28 M	<280 M				
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<120 M				
1,1-Dichloroethene	<10 µg/kg	TM116		<20 #	<200 #				
Carbon Disulphide	<7 µg/kg	TM116		<14 M	<140 M				
Dichloromethane	<10 µg/kg	TM116		<20 #	<200 #				
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<220 M				
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<22 M	<220 M				
1,1-Dichloroethane	<8 µg/kg	TM116		<16 M	<160 M				
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<10 M	<100 M				
2,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M				
Bromochloromethane	<14 µg/kg	TM116		<28 M	<280 M				
Chloroform	<8 µg/kg	TM116		<16 M	<160 M				
1,1,1-Trichloroethane	<7 µg/kg	TM116		<14 M	<140 M				
1,1-Dichloropropene	<11 µg/kg	TM116		<22 M	<220 M				
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<280 M				
1,2-Dichloroethane	<5 µg/kg	TM116		<10 M	<100 M				
Benzene	<9 µg/kg	TM116		<18 M	<180 M				
Trichloroethene	<9 µg/kg	TM116		<18 M	<180 M				
1,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M				
Dibromomethane	<9 µg/kg	TM116		<18 M	<180 M				
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<140 M				
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<28 M	<280 M				
Toluene	<5 µg/kg	TM116		<10 M	<100 M				
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<28	<280				
1,1,2-Trichloroethane	<10 µg/kg	TM116		<20 M	<200 M				

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV053	CAEMV054				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	07/01/2013	07/01/2013				
			Sample Time	.	.				
			Date Received	09/01/2013	09/01/2013				
			SDG Ref	130109-21	130109-21				
			Lab Sample No.(s)	6745813	6745814				
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<14 #	<140 #				
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<100 M				
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<260 M				
1,2-Dibromoethane	<12 µg/kg	TM116		<24 M	<240 M				
Chlorobenzene	<5 µg/kg	TM116		<10 M	<100 M				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<200 M				
Ethylbenzene	<4 µg/kg	TM116		<8 M	<80 M				
p/m-Xylene	<14 µg/kg	TM116		<28 #	<280 #				
o-Xylene	<10 µg/kg	TM116		<20 M	<200 M				
Styrene	<10 µg/kg	TM116		<20 M	<200 M				
Bromoform	<10 µg/kg	TM116		<20 M	<200 M				
Isopropylbenzene	<5 µg/kg	TM116		<10 M	<100 M				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<200 #				
1,2,3-Trichloropropane	<17 µg/kg	TM116		<34 M	<340 M				
Bromobenzene	<10 µg/kg	TM116		<20 M	<200 M				
Propylbenzene	<11 µg/kg	TM116		<22 M	<220 M				
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<180 M				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	<160 #				
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<240 M				
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<240 #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	<180 #				
sec-Butylbenzene	<10 µg/kg	TM116		<20 M	<200 M				
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<220 M				
1,3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M				
1,4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<100 M				
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<200 M				
1,2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<240 M				
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<280 M				
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<300				
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<120 #				
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<240				
Naphthalene	<13 µg/kg	TM116		<26 M	<260 M				

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV053	CAEMV054
			Depth (m)	.	.
			Sample Type	Soil/Solid	Soil/Solid
			Date Sampled	07/01/2013	07/01/2013
			Sample Time	.	.
			Date Received	09/01/2013	09/01/2013
			SDG Ref	130109-21	130109-21
			Lab Sample No.(s)	6745813	6745814
			AGS Reference		
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV053 SOLID 07/01/2013 00:00:00 130109-21 6745813 TM048	17/01/13	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV054 SOLID 07/01/2013 00:00:00 130109-21 6745814 TM048	17/01/13	Paul Poynton	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6745813	6745814
Customer Sample Ref.	CAEMV053	CAEMV054
AGS Ref.		
Depth		
Type	SOLID	SOLID
Asbestos Identification (Soil)	18-Jan-2013	18-Jan-2013
EPH CWG (Aliphatic) GC (S)	15-Jan-2013	15-Jan-2013
EPH CWG (Aromatic) GC (S)	15-Jan-2013	15-Jan-2013
GRO by GC-FID (S)	11-Jan-2013	11-Jan-2013
Metals by iCap-OES (Soil)	11-Jan-2013	11-Jan-2013
pH	10-Jan-2013	10-Jan-2013
Sample description	10-Jan-2013	10-Jan-2013
Semi Volatile Organic Compounds	11-Jan-2013	11-Jan-2013
Total Organic Carbon	18-Jan-2013	18-Jan-2013
TPH CWG GC (S)	15-Jan-2013	15-Jan-2013
VOC MS (S)	14-Jan-2013	14-Jan-2013

SDG:	130109-21	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209091
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

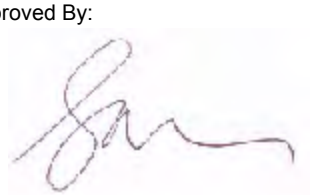
Date:	21 January 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130111-47
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	209274

We received 4 samples on Friday January 11, 2013 and 4 of these samples were scheduled for analysis which was completed on Monday January 21, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6757723	CAEMU054			09/01/2013
6757724	CAEMU055			09/01/2013
6757725	CAEMU056			10/01/2013
6757726	CAEMU057			10/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)				Customer Sample Reference				AGS Reference				Depth (m)				Container													
			6757723				CAEMU054												250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)		
			6757724				CAEMU055																									
			6757725				CAEMU056																									
			6757726				CAEMU057																									
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 4																		X			X			X					
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 4																	X			X			X			X			
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 4																	X			X			X			X			
GRO by GC-FID (S)	All	NDPs: 0 Tests: 4																			X			X			X					X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 4																	X			X			X			X			
	Cadmium	NDPs: 0 Tests: 4																	X			X			X			X			
	Chromium	NDPs: 0 Tests: 4																	X			X			X			X			
	Copper	NDPs: 0 Tests: 4																	X			X			X			X			
	Lead	NDPs: 0 Tests: 4																	X			X			X			X			
	Mercury	NDPs: 0 Tests: 4																	X			X			X			X			
	Nickel	NDPs: 0 Tests: 4																	X			X			X			X			
	Selenium	NDPs: 0 Tests: 4																	X			X			X			X			
	Vanadium	NDPs: 0 Tests: 4																	X			X			X			X			
	Zinc	NDPs: 0 Tests: 4																	X			X			X			X			
pH	All	NDPs: 0 Tests: 4																		X			X			X					

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6757723	6757724	6757725	6757726
			Customer Sample Reference	CAEMU054	CAEMU055	CAEMU056	CAEMU057
			AGS Reference				
			Depth (m)				
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Sample description	All	NDPs: 0 Tests: 4		X			X			X			X		
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 4		X			X			X			X		
Total Organic Carbon	All	NDPs: 0 Tests: 4		X			X			X			X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 4		X			X			X			X		
VOC MS (S)	All	NDPs: 0 Tests: 4				X			X			X			X

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6757723	CAEMU054		Grey	Silty Clay Loam	0.1 - 2 mm	None	N/A
6757724	CAEMU055		Dark Brown	Silty Clay Loam	0.1 - 2 mm	Vegetation	N/A
6757725	CAEMU056		Grey	Sandy Clay Loam	0.1 - 2 mm	Stones	N/A
6757726	CAEMU057		Light Brown	Silty Clay Loam	0.1 - 2 mm	None	N/A

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU054	CAEMU055	CAEMU056	CAEMU057		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/01/2013	09/01/2013	10/01/2013	10/01/2013		
			Sample Time	.	.	.	.		
			Date Received	11/01/2013	11/01/2013	11/01/2013	11/01/2013		
			SDG Ref	130111-47	130111-47	130111-47	130111-47		
			Lab Sample No.(s)	6757723	6757724	6757725	6757726		
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		1.21 #	1.84 #	1.98 #	2.07 #		
pH	1 pH Units	TM133		6.99 M	7.04 M	6.59 M	7.46 M		
Arsenic	<0.6 mg/kg	TM181		28.1 M	18.4 M	29.8 M	48.7 M		
Cadmium	<0.02 mg/kg	TM181		0.699 M	0.507 M	0.435 M	1.69 M		
Chromium	<0.9 mg/kg	TM181		17.7 M	9.71 M	9.89 M	19.5 M		
Copper	<1.4 mg/kg	TM181		5.67 M	9.87 M	75.9 M	12.3 M		
Lead	<0.7 mg/kg	TM181		18.2 M	8.8 M	42 M	26.3 M		
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	0.583 M		
Nickel	<0.2 mg/kg	TM181		16.1 M	8.35 M	10.2 M	14.2 M		
Selenium	<1 mg/kg	TM181		1.41 #	<1 #	1.09 #	1.52 #		
Vanadium	<0.2 mg/kg	TM181		28.4 #	13.7 #	15.4 #	23.9 #		
Zinc	<1.9 mg/kg	TM181		35.5 M	56.8 M	87.9 M	36.5 M		

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU054	CAEMU055	CAEMU056	CAEMU057		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/01/2013	09/01/2013	10/01/2013	10/01/2013		
			Sample Time	.	.	.	.		
			Date Received	11/01/2013	11/01/2013	11/01/2013	11/01/2013		
			SDG Ref	130111-47	130111-47	130111-47	130111-47		
			Lab Sample No.(s)	6757723	6757724	6757725	6757726		
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100		
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100		
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100		
Carbazole	<100 µg/kg	TM157		<100	<100	<100	166		
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100		
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU054	CAEMU055	CAEMU056	CAEMU057		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/01/2013	09/01/2013	10/01/2013	10/01/2013		
			Sample Time	.	.	.	.		
			Date Received	11/01/2013	11/01/2013	11/01/2013	11/01/2013		
			SDG Ref	130111-47	130111-47	130111-47	130111-47		
			Lab Sample No.(s)	6757723	6757724	6757725	6757726		
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100		
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100		
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100		
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100		
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	161		
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100		
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100		
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	381		
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100		
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU054	CAEMU055	CAEMU056	CAEMU057		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/01/2013	09/01/2013	10/01/2013	10/01/2013		
			Sample Time	.	.	.	.		
			Date Received	11/01/2013	11/01/2013	11/01/2013	11/01/2013		
			SDG Ref	130111-47	130111-47	130111-47	130111-47		
			Lab Sample No.(s)	6757723	6757724	6757725	6757726		
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		107	98	126	126		
GRO >C5-C12	<44 µg/kg	TM089		5370	1180	5130	126000		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<5 #	<25 #		
Benzene	<10 µg/kg	TM089		<10 M	<10 M	<10 M	<50 M		
Toluene	<2 µg/kg	TM089		<2 M	3.78 M	4.96 M	<10 M		
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<15 M		
m,p-Xylene	<6 µg/kg	TM089		<6 M	7.56 M	<6 M	<30 M		
o-Xylene	<3 µg/kg	TM089		<3 M	8.82 M	<3 M	<15 M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	16.4	<9	<9		
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	<24	<24		
Aliphatics >C5-C6	<10 µg/kg	TM089		43.5	99.5	186	300		
Aliphatics >C6-C8	<10 µg/kg	TM089		238	275	1190	10400		
Aliphatics >C8-C10	<10 µg/kg	TM089		1910	147	1710	35600		
Aliphatics >C10-C12	<10 µg/kg	TM089		1140	323	533	33900		
Aliphatics >C12-C16	<100 µg/kg	TM173		2960	23000	5250	13900		
Aliphatics >C16-C21	<100 µg/kg	TM173		19500	55900	10600	39300		
Aliphatics >C21-C35	<100 µg/kg	TM173		285000	1000000	9740	47600		
Aliphatics >C35-C44	<100 µg/kg	TM173		11400	24600	3730	<100		
Total Aliphatics >C12-C44	<100 µg/kg	TM173		319000	1100000	29400	101000		
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<50		
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<50		
Aromatics >EC8-EC10	<10 µg/kg	TM089		1280	116	1140	23700		
Aromatics >EC10-EC12	<10 µg/kg	TM089		759	215	355	22600		
Aromatics >EC12-EC16	<100 µg/kg	TM173		2000	13100	3200	8680		
Aromatics >EC16-EC21	<100 µg/kg	TM173		7480	24800	6010	28500		
Aromatics >EC21-EC35	<100 µg/kg	TM173		78500	240000	13600	32300		
Aromatics >EC35-EC44	<100 µg/kg	TM173		1680	10600	2320	1610		
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	2890	<100	<100		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		89600	289000	25100	71100		
Total Aliphatics >C5-35	<100 µg/kg	TM173		311000	1080000	29300	181000		
Total Aromatics >C5-35	<100 µg/kg	TM173		90000	278000	24300	116000		
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		401000	1360000	53500	297000		

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMU054	CAEMU055	CAEMU056	CAEMU057		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
tot.unfilt	Total / unfiltered sample.	Date Sampled	09/01/2013	09/01/2013	10/01/2013	10/01/2013		
*	Subcontracted test.	Sample Time	.	.	.	.		
**	% 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	Date Received	11/01/2013	11/01/2013	11/01/2013	11/01/2013		
		SDG Ref	130111-47	130111-47	130111-47	130111-47		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6757723	6757724	6757725	6757726		
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component		**LOD/Units**	**Method**					
Total Aliphatics & Aromatics >C5-C44		<100 µg/kg	TM173	414000	1390000	59600	298000		

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU054	CAEMU055	CAEMU056	CAEMU057		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/01/2013	09/01/2013	10/01/2013	10/01/2013		
			Sample Time	.	.	.	.		
			Date Received	11/01/2013	11/01/2013	11/01/2013	11/01/2013		
			SDG Ref	130111-47	130111-47	130111-47	130111-47		
			Lab Sample No.(s)	6757723	6757724	6757725	6757726		
			AGS Reference						
Dibromofluoromethane**	%	TM116		103	102	104	101		
Toluene-d8**	%	TM116		99.3	95.9	98.7	98.9		
4-Bromofluorobenzene**	%	TM116		112	121	111	124		
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<4 M	<4 M	<4 M		
Chloromethane	<7 µg/kg	TM116		<7	<7	<7	<7		
Vinyl Chloride	<10 µg/kg	TM116		<10	<10	<10	<10		
Bromomethane	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M		
Chloroethane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M		
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M		
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #		
Carbon Disulphide	<7 µg/kg	TM116		43.8 M	19.2 M	<7 M	48.8 M		
Dichloromethane	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #		
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M		
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M		
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<8 M	<8 M	<8 M		
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M		
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M		
Bromochloromethane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M		
Chloroform	<8 µg/kg	TM116		<8 M	<8 M	<8 M	<8 M		
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M		
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M		
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M		
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M		
Benzene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	64 M		
Trichloroethene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M		
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M		
Dibromomethane	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M		
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M		
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M		
Toluene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	104 M		
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<14	<14	<14		
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M		

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMU054	CAEMU055	CAEMU056	CAEMU057		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	09/01/2013	09/01/2013	10/01/2013	10/01/2013		
			Sample Time	.	.	.	.		
			Date Received	11/01/2013	11/01/2013	11/01/2013	11/01/2013		
			SDG Ref	130111-47	130111-47	130111-47	130111-47		
			Lab Sample No.(s)	6757723	6757724	6757725	6757726		
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<7 #	<7 #	<7 #		
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M		
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M		
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M		
Chlorobenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M		
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M		
Ethylbenzene	<4 µg/kg	TM116		<4 M	<4 M	<4 M	48 M		
p/m-Xylene	<14 µg/kg	TM116		<14 #	<14 #	<14 #	120 #		
o-Xylene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	37.2 M		
Styrene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M		
Bromoform	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M		
Isopropylbenzene	<5 µg/kg	TM116		<5 M	<5 M	14.6 M	57.2 M		
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #		
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<17 M	<17 M	<17 M		
Bromobenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M		
Propylbenzene	<11 µg/kg	TM116		<11 M	<11 M	15.3 M	127 M		
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M		
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	<8 #	<8 #	<8 #		
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M		
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<12 #	<12 #	<12 #		
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 #	<9 #	<9 #	47.6 #		
sec-Butylbenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	110 M		
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M		
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M		
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M		
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M		
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M		
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M		
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<15	<15	<15		
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<6 #	<6 #	<6 #		
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<12	<12	<12		
Naphthalene	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M		

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMU054	CAEMU055	CAEMU056	CAEMU057		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.		
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
tot.unfilt	Total / unfiltered sample.	Date Sampled	09/01/2013	09/01/2013	10/01/2013	10/01/2013		
*	Subcontracted test.	Sample Time	.	.	.	.		
**	% 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	Date Received	11/01/2013	11/01/2013	11/01/2013	11/01/2013		
		SDG Ref	130111-47	130111-47	130111-47	130111-47		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6757723	6757724	6757725	6757726		
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component		**LOD/Units**	**Method**					
1,2,3-Trichlorobenzene		<6 µg/kg	TM116	<6 M	<6 M	<6 M	<6 M		

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMU054 SOLID 09/01/2013 00:00:00 130111-47 6757723 TM048	18/01/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMU055 SOLID 09/01/2013 00:00:00 130111-47 6757724 TM048	18/01/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMU056 SOLID 10/01/2013 00:00:00 130111-47 6757725 TM048	18/01/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMU057 SOLID 10/01/2013 00:00:00 130111-47 6757726 TM048	18/01/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6757723	6757724	6757725	6757726
Customer Sample Ref.	CAEMU054	CAEMU055	CAEMU056	CAEMU057
AGS Ref.				
Depth				
Type	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	21-Jan-2013	21-Jan-2013	21-Jan-2013	21-Jan-2013
EPH CWG (Aliphatic) GC (S)	17-Jan-2013	17-Jan-2013	17-Jan-2013	17-Jan-2013
EPH CWG (Aromatic) GC (S)	17-Jan-2013	17-Jan-2013	17-Jan-2013	17-Jan-2013
GRO by GC-FID (S)	16-Jan-2013	16-Jan-2013	16-Jan-2013	16-Jan-2013
Metals by iCap-OES (Soil)	17-Jan-2013	17-Jan-2013	17-Jan-2013	17-Jan-2013
pH	16-Jan-2013	16-Jan-2013	16-Jan-2013	16-Jan-2013
Sample description	15-Jan-2013	15-Jan-2013	15-Jan-2013	15-Jan-2013
Semi Volatile Organic Compounds	16-Jan-2013	17-Jan-2013	16-Jan-2013	16-Jan-2013
Total Organic Carbon	21-Jan-2013	21-Jan-2013	21-Jan-2013	21-Jan-2013
TPH CWG GC (S)	17-Jan-2013	17-Jan-2013	17-Jan-2013	17-Jan-2013
VOC MS (S)	16-Jan-2013	16-Jan-2013	16-Jan-2013	16-Jan-2013

SDG:	130111-47	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	209274
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Atkins Global Ltd
Project Jonah site office
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Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

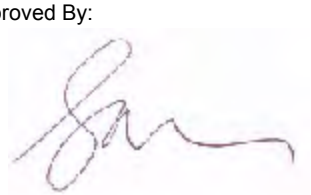
Date:	28 January 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130116-41
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	210068

We received 2 samples on Wednesday January 16, 2013 and 2 of these samples were scheduled for analysis which was completed on Monday January 28, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6777348	CAEMV058			14/01/2013
6777350	CAEMV059			14/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)						Customer Sample Reference						AGS Reference						Depth (m)						Container					
			6777348					6777350	CAEMV058					CAEMV059													250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 2		X			X																									
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2	X			X																										
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 2	X			X																										
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2			X			X																								
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 2	X			X																										
	Cadmium	NDPs: 0 Tests: 2	X			X																										
	Chromium	NDPs: 0 Tests: 2	X			X																										
	Copper	NDPs: 0 Tests: 2	X			X																										
	Lead	NDPs: 0 Tests: 2	X			X																										
	Mercury	NDPs: 0 Tests: 2	X			X																										
	Nickel	NDPs: 0 Tests: 2	X			X																										
	Selenium	NDPs: 0 Tests: 2	X			X																										
	Zinc	NDPs: 0 Tests: 2	X			X																										
pH	All	NDPs: 0 Tests: 2		X			X																									
Sample description	All	NDPs: 0 Tests: 2	X			X																										

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6777348	6777350
			Customer Sample Reference	CAEMV058	CAEMV059
			AGS Reference		
			Depth (m)		
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2		X		X		
Total Organic Carbon	All	NDPs: 0 Tests: 2		X		X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 2		X		X		
VOC MS (S)	All	NDPs: 0 Tests: 2			X			X

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6777348	CAEMV058		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
6777350	CAEMV059		Grey	Sandy Clay Loam	0.1 - 2 mm	Stones	N/A

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV058	CAEMV059				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	14/01/2013	14/01/2013				
			Sample Time	.	.				
			Date Received	16/01/2013	16/01/2013				
			SDG Ref	130116-41	130116-41				
			Lab Sample No.(s)	6777348	6777350				
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		1.11 #	0.89 #				
pH	1 pH Units	TM133		7.88 M	7.71 M				
Arsenic	<0.6 mg/kg	TM181		7.48 M	22.1 M				
Cadmium	<0.02 mg/kg	TM181		0.398 M	0.547 M				
Chromium	<0.9 mg/kg	TM181		15.1 M	6.77 M				
Copper	<1.4 mg/kg	TM181		16 M	49.8 M				
Lead	<0.7 mg/kg	TM181		15.3 M	23.8 M				
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M				
Nickel	<0.2 mg/kg	TM181		20.3 M	7.63 M				
Selenium	<1 mg/kg	TM181		<1 #	<1 #				
Zinc	<1.9 mg/kg	TM181		112 M	54.2 M				

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV058	CAEMV059				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	14/01/2013	14/01/2013				
			Sample Time	.	.				
			Date Received	16/01/2013	16/01/2013				
			SDG Ref	130116-41	130116-41				
			Lab Sample No.(s)	6777348	6777350				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend		Customer Sample R	CAEMV058	CAEMV059				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.				
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid				
*	Subcontracted test.	Date Sampled	14/01/2013	14/01/2013				
**	% 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	Sample Time	.	.				
		Date Received	16/01/2013	16/01/2013				
		SDG Ref	130116-41	130116-41				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6777348	6777350				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
2-Chlorophenol	<100 µg/kg	TM157	<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157	<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157	<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157	<100	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157	<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157	<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157	<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157	<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157	<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157	<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157	<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157	<100	<100				
Acenaphthylene	<100 µg/kg	TM157	<100	<100				
Acenaphthene	<100 µg/kg	TM157	<100	<100				
Anthracene	<100 µg/kg	TM157	<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157	<100	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157	<100	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157	<100	<100				
Benzo(a)pyrene	<100 µg/kg	TM157	<100	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157	<100	<100				
Chrysene	<100 µg/kg	TM157	<100	<100				
Fluoranthene	<100 µg/kg	TM157	<100	<100				
Fluorene	<100 µg/kg	TM157	<100	<100				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157	<100	<100				
Phenanthrene	<100 µg/kg	TM157	<100	<100				
Pyrene	<100 µg/kg	TM157	<100	<100				
Naphthalene	<100 µg/kg	TM157	<100	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157	<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV058	CAEMV059				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	14/01/2013	14/01/2013				
			Sample Time	.	.				
			Date Received	16/01/2013	16/01/2013				
			SDG Ref	130116-41	130116-41				
			Lab Sample No.(s)	6777348	6777350				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		150	85				
GRO >C5-C12	<44 µg/kg	TM089		1040000	15000				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<100 #	<5 #				
Benzene	<10 µg/kg	TM089		1640 M	<10 M				
Toluene	<2 µg/kg	TM089		<40 M	<2 M				
Ethylbenzene	<3 µg/kg	TM089		<60 M	<3 M				
m,p-Xylene	<6 µg/kg	TM089		<120 M	<6 M				
o-Xylene	<3 µg/kg	TM089		<60 M	<3 M				
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9				
sum of detected BTEX by GC	<24 µg/kg	TM089		1640	<24				
Aliphatics >C5-C6	<10 µg/kg	TM089		90700	148				
Aliphatics >C6-C8	<10 µg/kg	TM089		473000	810				
Aliphatics >C8-C10	<10 µg/kg	TM089		180000	2720				
Aliphatics >C10-C12	<10 µg/kg	TM089		106000	5700				
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	3610				
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	6070				
Aliphatics >C21-C35	<100 µg/kg	TM173		<100	14200				
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	3300				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		<100	27100				
Aromatics >EC5-EC7	<10 µg/kg	TM089		1640	<10				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<200	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089		120000	1810				
Aromatics >EC10-EC12	<10 µg/kg	TM089		70600	3800				
Aromatics >EC12-EC16	<100 µg/kg	TM173		3000	4690				
Aromatics >EC16-EC21	<100 µg/kg	TM173		3780	4510				
Aromatics >EC21-EC35	<100 µg/kg	TM173		12600	10200				
Aromatics >EC35-EC44	<100 µg/kg	TM173		4180	2710				
Aromatics >EC40-EC44	<100 µg/kg	TM173		982	1080				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		23500	22100				
Total Aliphatics >C5-35	<100 µg/kg	TM173		850000	33200				
Total Aromatics >C5-35	<100 µg/kg	TM173		211000	25000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1060000	58200				

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV058	CAEMV059				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.				
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid				
*	Subcontracted test.	Date Sampled	14/01/2013	14/01/2013				
**	% 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	Sample Time	.	.				
		Date Received	16/01/2013	16/01/2013				
		SDG Ref	130116-41	130116-41				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6777348	6777350				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1070000	64200				

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV058	CAEMV059				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	14/01/2013	14/01/2013				
			Sample Time	.	.				
			Date Received	16/01/2013	16/01/2013				
			SDG Ref	130116-41	130116-41				
			Lab Sample No.(s)	6777348	6777350				
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	98.1				
Toluene-d8**	%	TM116		112	97				
4-Bromofluorobenzene**	%	TM116		127	135				
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<4 M				
Chloromethane	<7 µg/kg	TM116		<7	<7				
Vinyl Chloride	<10 µg/kg	TM116		<10	<10				
Bromomethane	<13 µg/kg	TM116		<13 M	<13 M				
Chloroethane	<14 µg/kg	TM116		<14 M	<14 M				
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<6 M				
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<10 #				
Carbon Disulphide	<7 µg/kg	TM116		258 M	26.4 M				
Dichloromethane	<10 µg/kg	TM116		<10 #	<10 #				
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<11 M				
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<11 M				
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<8 M				
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<5 M				
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M				
Bromochloromethane	<14 µg/kg	TM116		<14 M	<14 M				
Chloroform	<8 µg/kg	TM116		<8 M	<8 M				
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<7 M				
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<11 M				
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<14 M				
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<5 M				
Benzene	<9 µg/kg	TM116		801 M	<9 M				
Trichloroethene	<9 µg/kg	TM116		<9 M	<9 M				
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M				
Dibromomethane	<9 µg/kg	TM116		<9 M	<9 M				
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<7 M				
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<14 M				
Toluene	<5 µg/kg	TM116		56.4 M	<5 M				
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<14				
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<10 M				

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV058	CAEMV059				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	14/01/2013	14/01/2013				
			Sample Time	.	.				
			Date Received	16/01/2013	16/01/2013				
			SDG Ref	130116-41	130116-41				
			Lab Sample No.(s)	6777348	6777350				
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<7 #				
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<5 M				
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<13 M				
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<12 M				
Chlorobenzene	<5 µg/kg	TM116		<5 M	<5 M				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<10 M				
Ethylbenzene	<4 µg/kg	TM116		406 M	<4 M				
p/m-Xylene	<14 µg/kg	TM116		416 #	<14 #				
o-Xylene	<10 µg/kg	TM116		83.3 M	<10 M				
Styrene	<10 µg/kg	TM116		<10 M	<10 M				
Bromoform	<10 µg/kg	TM116		<10 M	<10 M				
Isopropylbenzene	<5 µg/kg	TM116		1130 M	95.6 M				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<10 #				
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<17 M				
Bromobenzene	<10 µg/kg	TM116		<10 M	<10 M				
Propylbenzene	<11 µg/kg	TM116		1500 M	19 M				
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<9 M				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	<8 #				
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<12 M				
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<12 #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		2940 #	<9 #				
sec-Butylbenzene	<10 µg/kg	TM116		1020 M	<10 M				
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<11 M				
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<6 M				
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<5 M				
n-Butylbenzene	<10 µg/kg	TM116		1280 M	<10 M				
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<12 M				
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<14 M				
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<15				
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<6 #				
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<12				
Naphthalene	<13 µg/kg	TM116		<13 M	<13 M				

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV058	CAEMV059			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	14/01/2013	14/01/2013			
			Sample Time	.	.			
			Date Received	16/01/2013	16/01/2013			
			SDG Ref	130116-41	130116-41			
			Lab Sample No.(s)	6777348	6777350			
			AGS Reference					
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<6 M	<6 M			

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV058 SOLID 14/01/2013 00:00:00 130116-41 6777348 TM048	25/01/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV059 SOLID 14/01/2013 00:00:00 130116-41 6777350 TM048	25/01/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6777348	6777350
Customer Sample Ref.	CAEMV058	CAEMV059
AGS Ref.		
Depth		
Type	SOLID	SOLID
Asbestos Identification (Soil)	25-Jan-2013	25-Jan-2013
EPH CWG (Aliphatic) GC (S)	22-Jan-2013	22-Jan-2013
EPH CWG (Aromatic) GC (S)	22-Jan-2013	22-Jan-2013
GRO by GC-FID (S)	22-Jan-2013	22-Jan-2013
Metals by iCap-OES (Soil)	22-Jan-2013	22-Jan-2013
pH	21-Jan-2013	21-Jan-2013
Sample description	18-Jan-2013	18-Jan-2013
Semi Volatile Organic Compounds	22-Jan-2013	22-Jan-2013
Total Organic Carbon	28-Jan-2013	28-Jan-2013
TPH CWG GC (S)	22-Jan-2013	22-Jan-2013
VOC MS (S)	23-Jan-2013	22-Jan-2013

SDG:	130116-41	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210068
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

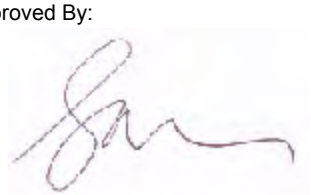
Date:	29 January 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130117-17
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	210178

We received 2 samples on Thursday January 17, 2013 and 2 of these samples were scheduled for analysis which was completed on Tuesday January 29, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6781773	CAEMV-60			15/01/2013
6781776	CAEMV-61			15/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)						Customer Sample Reference						AGS Reference						Depth (m)						Container					
			6781773					6781776	CAEMV-60					CAEMV-61												250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 2		X			X																									
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2	X			X																										
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 2	X			X																										
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2			X			X																								
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 2	X			X																										
	Cadmium	NDPs: 0 Tests: 2	X			X																										
	Chromium	NDPs: 0 Tests: 2	X			X																										
	Copper	NDPs: 0 Tests: 2	X			X																										
	Lead	NDPs: 0 Tests: 2	X			X																										
	Mercury	NDPs: 0 Tests: 2	X			X																										
	Nickel	NDPs: 0 Tests: 2	X			X																										
	Selenium	NDPs: 0 Tests: 2	X			X																										
	Zinc	NDPs: 0 Tests: 2	X			X																										
pH	All	NDPs: 0 Tests: 2		X			X																									
Sample description	All	NDPs: 0 Tests: 2	X			X																										

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6781773	6781776
			Customer Sample Reference	CAEMV-60	CAEMV-61
			AGS Reference		
			Depth (m)		
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2		X		X		
Total Organic Carbon	All	NDPs: 1 Tests: 1		X		N		
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 1				X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 2		X		X		
VOC MS (S)	All	NDPs: 0 Tests: 2			X			X

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6781773	CAEMV-60		Light Brown	Silt Loam	<0.063 mm	Oil/Petroleum	None
6781776	CAEMV-61		Grey	Loamy Sand	0.1 - 2 mm	Concrete/Aggregate	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV-60	CAEMV-61				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	15/01/2013	15/01/2013				
			Sample Time	.	.				
			Date Received	17/01/2013	17/01/2013				
			SDG Ref	130117-17	130117-17				
			Lab Sample No.(s)	6781773	6781776				
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		0.84 #					
pH	1 pH Units	TM133		7.61 M	8.21 M				
Arsenic	<0.6 mg/kg	TM181		12.7 M	120 M				
Cadmium	<0.02 mg/kg	TM181		0.438 M	1.81 M				
Chromium	<0.9 mg/kg	TM181		16.2 M	27.8 M				
Copper	<1.4 mg/kg	TM181		4.78 M	186 M				
Lead	<0.7 mg/kg	TM181		12.5 M	478 M				
Mercury	<0.14 mg/kg	TM181		<0.14 M	0.559 M				
Nickel	<0.2 mg/kg	TM181		16.6 M	27.1 M				
Selenium	<1 mg/kg	TM181		<1 #	<1 #				
Zinc	<1.9 mg/kg	TM181		32.7 M	1990 M				
Soil Organic Matter (SOM)	<0.1 %	TM321			1.67				

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV-60	CAEMV-61				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	15/01/2013	15/01/2013				
			Sample Time	.	.				
			Date Received	17/01/2013	17/01/2013				
			SDG Ref	130117-17	130117-17				
			Lab Sample No.(s)	6781773	6781776				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	915				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend		Customer Sample R	CAEMV-60	CAEMV-61				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.				
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid				
*	Subcontracted test.	Date Sampled	15/01/2013	15/01/2013				
**	% 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	Sample Time	.	.				
		Date Received	17/01/2013	17/01/2013				
		SDG Ref	130117-17	130117-17				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6781773	6781776				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
2-Chlorophenol	<100 µg/kg	TM157	<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157	<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157	<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157	<100	123				
2,4-Dichlorophenol	<100 µg/kg	TM157	<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157	<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157	<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157	<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157	<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157	<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157	<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157	<100	<100				
Acenaphthylene	<100 µg/kg	TM157	<100	<100				
Acenaphthene	<100 µg/kg	TM157	<100	<100				
Anthracene	<100 µg/kg	TM157	<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157	<100	131				
Benzo(b)fluoranthene	<100 µg/kg	TM157	<100	228				
Benzo(k)fluoranthene	<100 µg/kg	TM157	<100	146				
Benzo(a)pyrene	<100 µg/kg	TM157	<100	181				
Benzo(g,h,i)perylene	<100 µg/kg	TM157	<100	184				
Chrysene	<100 µg/kg	TM157	<100	273				
Fluoranthene	<100 µg/kg	TM157	<100	177				
Fluorene	<100 µg/kg	TM157	<100	<100				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157	<100	160				
Phenanthrene	<100 µg/kg	TM157	<100	<100				
Pyrene	<100 µg/kg	TM157	<100	284				
Naphthalene	<100 µg/kg	TM157	<100	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157	<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV-60	CAEMV-61				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	15/01/2013	15/01/2013				
			Sample Time	.	.				
			Date Received	17/01/2013	17/01/2013				
			SDG Ref	130117-17	130117-17				
			Lab Sample No.(s)	6781773	6781776				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		153	73				
GRO >C5-C12	<44 µg/kg	TM089		1370000	23100				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<100 #	<5 #				
Benzene	<10 µg/kg	TM089		<200 M	12.8 M				
Toluene	<2 µg/kg	TM089		<40 M	<2 M				
Ethylbenzene	<3 µg/kg	TM089		<60 M	<3 M				
m,p-Xylene	<6 µg/kg	TM089		<120 M	<6 M				
o-Xylene	<3 µg/kg	TM089		<60 M	<3 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		21700	103				
Aliphatics >C6-C8	<10 µg/kg	TM089		283000	1570				
Aliphatics >C8-C10	<10 µg/kg	TM089		311000	5760				
Aliphatics >C10-C12	<10 µg/kg	TM089		330000	7090				
Aliphatics >C12-C16	<100 µg/kg	TM173		54100	59500				
Aliphatics >C16-C21	<100 µg/kg	TM173		77300	241000				
Aliphatics >C21-C35	<100 µg/kg	TM173		158000	3970000				
Aliphatics >C35-C44	<100 µg/kg	TM173		7410	68400				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		297000	4340000				
Aromatics >EC5-EC7	<10 µg/kg	TM089		<200	12.8				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<200	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089		207000	3840				
Aromatics >EC10-EC12	<10 µg/kg	TM089		220000	4730				
Aromatics >EC12-EC16	<100 µg/kg	TM173		30600	18600				
Aromatics >EC16-EC21	<100 µg/kg	TM173		53100	144000				
Aromatics >EC21-EC35	<100 µg/kg	TM173		113000	2000000				
Aromatics >EC35-EC44	<100 µg/kg	TM173		3380	86600				
Aromatics >EC40-EC44	<100 µg/kg	TM173		1210	41100				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		200000	2250000				
Total Aliphatics >C5-35	<100 µg/kg	TM173		1240000	4290000				
Total Aromatics >C5-35	<100 µg/kg	TM173		624000	2170000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1860000	6450000				

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV-60	CAEMV-61				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.				
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid				
*	Subcontracted test.	Date Sampled	15/01/2013	15/01/2013				
**	% 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	Sample Time	.	.				
		Date Received	17/01/2013	17/01/2013				
		SDG Ref	130117-17	130117-17				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6781773	6781776				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1870000	6610000				

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV-60	CAEMV-61				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	15/01/2013	15/01/2013				
			Sample Time	.	.				
			Date Received	17/01/2013	17/01/2013				
			SDG Ref	130117-17	130117-17				
			Lab Sample No.(s)	6781773	6781776				
			AGS Reference						
Dibromofluoromethane**	%	TM116		103	101				
Toluene-d8**	%	TM116		95.4	97.3				
4-Bromofluorobenzene**	%	TM116		120	105				
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<80 M				
Chloromethane	<7 µg/kg	TM116		<7	<140				
Vinyl Chloride	<10 µg/kg	TM116		<10	<200				
Bromomethane	<13 µg/kg	TM116		<13 M	<260 M				
Chloroethane	<14 µg/kg	TM116		<14 M	<280 M				
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<120 M				
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<200 #				
Carbon Disulphide	<7 µg/kg	TM116		<7 M	<140 M				
Dichloromethane	<10 µg/kg	TM116		<10 #	<200 #				
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<220 M				
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<220 M				
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<160 M				
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<100 M				
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M				
Bromochloromethane	<14 µg/kg	TM116		<14 M	<280 M				
Chloroform	<8 µg/kg	TM116		<8 M	<160 M				
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<140 M				
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<220 M				
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<280 M				
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<100 M				
Benzene	<9 µg/kg	TM116		47.2 M	<180 M				
Trichloroethene	<9 µg/kg	TM116		<9 M	<180 M				
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M				
Dibromomethane	<9 µg/kg	TM116		<9 M	<180 M				
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<140 M				
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<280 M				
Toluene	<5 µg/kg	TM116		<5 M	<100 M				
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<280				
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<200 M				

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV-60	CAEMV-61				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	15/01/2013	15/01/2013				
			Sample Time	.	.				
			Date Received	17/01/2013	17/01/2013				
			SDG Ref	130117-17	130117-17				
			Lab Sample No.(s)	6781773	6781776				
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<140 #				
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<100 M				
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<260 M				
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<240 M				
Chlorobenzene	<5 µg/kg	TM116		<5 M	<100 M				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<200 M				
Ethylbenzene	<4 µg/kg	TM116		43.3 M	<80 M				
p/m-Xylene	<14 µg/kg	TM116		24.1 #	<280 #				
o-Xylene	<10 µg/kg	TM116		<10 M	<200 M				
Styrene	<10 µg/kg	TM116		<10 M	<200 M				
Bromoform	<10 µg/kg	TM116		<10 M	<200 M				
Isopropylbenzene	<5 µg/kg	TM116		309 M	<100 M				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<200 #				
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<340 M				
Bromobenzene	<10 µg/kg	TM116		<10 M	<200 M				
Propylbenzene	<11 µg/kg	TM116		652 M	<220 M				
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<180 M				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	<160 #				
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<240 M				
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<240 #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		67.7 #	<180 #				
sec-Butylbenzene	<10 µg/kg	TM116		316 M	<200 M				
4-Isopropyltoluene	<11 µg/kg	TM116		80.6 M	<220 M				
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<120 M				
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<100 M				
n-Butylbenzene	<10 µg/kg	TM116		384 M	<200 M				
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<240 M				
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<280 M				
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<300				
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<120 #				
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<240				
Naphthalene	<13 µg/kg	TM116		838 M	<260 M				

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMV-60	CAEMV-61				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.				
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid				
*	Subcontracted test.	Date Sampled	15/01/2013	15/01/2013				
**	% 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	Sample Time	.	.				
		Date Received	17/01/2013	17/01/2013				
		SDG Ref	130117-17	130117-17				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6781773	6781776				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 M	<120 M				

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV-60 SOLID 15/01/2013 00:00:00 130117-17 6781773 TM048	28/01/13	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 Receieved SDG Original Sample Method Number	CAEMV-61 SOLID 15/01/2013 00:00:00 130117-17 6781776 TM048	28/01/13	Lauren Sargeant	Soil containing loose fibres and material typical of AC	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of NDPs (No determination possible)

Date Received : 17/01/2013 08:27:14

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6781776	CAEMV-61		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6781773	6781776
Customer Sample Ref.	CAEMV-60	CAEMV-61
AGS Ref.		
Depth		
Type	SOLID	SOLID
Asbestos Identification (Soil)	28-Jan-2013	28-Jan-2013
EPH CWG (Aliphatic) GC (S)	23-Jan-2013	23-Jan-2013
EPH CWG (Aromatic) GC (S)	23-Jan-2013	23-Jan-2013
GRO by GC-FID (S)	23-Jan-2013	23-Jan-2013
Metals by iCap-OES (Soil)	22-Jan-2013	22-Jan-2013
pH	21-Jan-2013	21-Jan-2013
Sample description	18-Jan-2013	18-Jan-2013
Semi Volatile Organic Compounds	22-Jan-2013	22-Jan-2013
Total Organic Carbon	28-Jan-2013	
Total Organic Carbon (Asb)		29-Jan-2013
TPH CWG GC (S)	23-Jan-2013	23-Jan-2013
VOC MS (S)	24-Jan-2013	23-Jan-2013

SDG:	130117-17	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0341
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210178
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

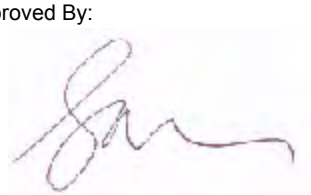
Date:	30 January 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130118-69
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	210389

We received 7 samples on Friday January 18, 2013 and 7 of these samples were scheduled for analysis which was completed on Wednesday January 30, 2013. 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

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6793705	CAEM V062			17/01/2013
6793706	CAEM V063			17/01/2013
6793707	CAEM V064			17/01/2013
6793708	CAEM V065			17/01/2013
6793709	CAEM V066			17/01/2013
6793710	CAEM V067			17/01/2013
6793711	CAEM V068			17/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6793705	CAEM V062			250g Amber Jar (AL
			6793706	CAEM V063			400g Tub (ALE214)
			6793707	CAEM V064			60g VOC (ALE215)
			6793708	CAEM V065			250g Amber Jar (AL
			6793709	CAEM V066			400g Tub (ALE214)
			6793710	CAEM V067			60g VOC (ALE215)
			6793711	CAEM V068			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 7					
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 7					
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 7					
GRO by GC-FID (S)	All	NDPs: 0 Tests: 7					
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 7					
	Cadmium	NDPs: 0 Tests: 7					
	Chromium	NDPs: 0 Tests: 7					
	Copper	NDPs: 0 Tests: 7					
	Lead	NDPs: 0 Tests: 7					
	Mercury	NDPs: 0 Tests: 7					
	Nickel	NDPs: 0 Tests: 7					
	Selenium	NDPs: 0 Tests: 7					
	Zinc	NDPs: 0 Tests: 7					
pH	All	NDPs: 0 Tests: 7					
Sample description	All	NDPs: 0 Tests: 7					

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6793705	CAEM V062			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6793706	CAEM V063			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6793707	CAEM V064			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6793708	CAEM V065			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6793709	CAEM V066			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6793710	CAEM V067			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6793711	CAEM V068			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 7	X		X		X
				X		X	
Total Organic Carbon	All	NDPs: 0 Tests: 7	X		X		X
				X		X	
TPH CWG GC (S)	All	NDPs: 0 Tests: 7	X		X		X
				X		X	
VOC MS (S)	All	NDPs: 0 Tests: 7		X		X	
					X		X

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6793705	CAEM V062		Dark Brown	Clay Loam	0.063 - 0.1 mm	None	Stones
6793706	CAEM V063		Dark Brown	Clay Loam	0.063 - 0.1 mm	None	None
6793707	CAEM V064		Dark Brown	Clay Loam	0.063 - 0.1 mm	None	None
6793708	CAEM V065		Dark Brown	Silty Clay	0.063 - 0.1 mm	None	Vegetation
6793709	CAEM V066		Dark Brown	Silty Clay	0.063 - 0.1 mm	None	None
6793710	CAEM V067		Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	None	None
6793711	CAEM V068		Grey	Sandy Clay Loam	0.063 - 0.1 mm	None	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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013
			SDG Ref	130118-69	130118-69	130118-69	130118-69	130118-69	130118-69
			Lab Sample No.(s)	6793705	6793706	6793707	6793708	6793709	6793710
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		1.74 #	1.45 #	1.34 #	16.7 #	2.14 #	8.52 #
pH	1 pH Units	TM133		6.85 M	7.18 M	6.98 M	6.01 M	7.02 M	7.47 M
Arsenic	<0.6 mg/kg	TM181		4.71 M	9.49 M	4.89 M	15.4 M	5.13 M	5.4 M
Cadmium	<0.02 mg/kg	TM181		0.45 M	0.628 M	0.354 M	2.44 M	0.488 M	1.16 M
Chromium	<0.9 mg/kg	TM181		18.5 M	16 M	15.3 M	10.4 M	19.1 M	11.5 M
Copper	<1.4 mg/kg	TM181		15.8 M	8.47 M	16.9 M	61.9 M	17.1 M	18.4 M
Lead	<0.7 mg/kg	TM181		15 M	12.8 M	15.3 M	12.2 M	16.8 M	15.6 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		25 M	19.7 M	21 M	10.4 M	22.4 M	11.2 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	1.22 #
Zinc	<1.9 mg/kg	TM181		72.5 M	33.5 M	40.2 M	110 M	45.7 M	23.3 M

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

	Customer Sample R	CAEM V068	
	Depth (m)	.	
	Sample Type	Soil/Solid	
	Date Sampled	17/01/2013	
	Sample Time	.	
	Date Received	18/01/2013	
	SDG Ref	130118-69	
	Lab Sample No.(s)	6793711	
	AGS Reference		
Component	**LOD/Units**	**Method**	
Soil Organic Matter (SOM)	<0.35 %	TM132	1.83 #
pH	1 pH Units	TM133	7.48 M
Arsenic	<0.6 mg/kg	TM181	3.7 M
Cadmium	<0.02 mg/kg	TM181	0.236 M
Chromium	<0.9 mg/kg	TM181	15.9 M
Copper	<1.4 mg/kg	TM181	6.62 M
Lead	<0.7 mg/kg	TM181	13.1 M
Mercury	<0.14 mg/kg	TM181	<0.14 M
Nickel	<0.2 mg/kg	TM181	16.3 M
Selenium	<1 mg/kg	TM181	<1 #
Zinc	<1.9 mg/kg	TM181	31.6 M

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013
			SDG Ref	130118-69	130118-69	130118-69	130118-69	130118-69	130118-69
			Lab Sample No.(s)	6793705	6793706	6793707	6793708	6793709	6793710
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013
			SDG Ref	130118-69	130118-69	130118-69	130118-69	130118-69	130118-69
			Lab Sample No.(s)	6793705	6793706	6793707	6793708	6793709	6793710
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	156	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		1510	2020	2020	42000	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluorene	<100 µg/kg	TM157		<100	<100	<100	1660	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	1270	276	<100
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	121	<100
Naphthalene	<100 µg/kg	TM157		781	1520	931	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R	CAEM V068
Depth (m)	.
Sample Type	Soil/Solid
Date Sampled	17/01/2013
Sample Time	.
Date Received	18/01/2013
SDG Ref	130118-69
Lab Sample No.(s)	6793711
AGS Reference	

Component	LOD/Units	Method	
Phenol	<100 µg/kg	TM157	<100
Pentachlorophenol	<100 µg/kg	TM157	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157	<100
Nitrobenzene	<100 µg/kg	TM157	<100
Isophorone	<100 µg/kg	TM157	<100
Hexachloroethane	<100 µg/kg	TM157	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157	<100
Hexachlorobutadiene	<100 µg/kg	TM157	<100
Hexachlorobenzene	<100 µg/kg	TM157	<100
n-Dioctyl phthalate	<100 µg/kg	TM157	<100
Dimethyl phthalate	<100 µg/kg	TM157	<100
Diethyl phthalate	<100 µg/kg	TM157	<100
n-Dibutyl phthalate	<100 µg/kg	TM157	<100
Dibenzofuran	<100 µg/kg	TM157	<100
Carbazole	<100 µg/kg	TM157	<100
Butylbenzyl phthalate	<100 µg/kg	TM157	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157	<100
Azobenzene	<100 µg/kg	TM157	<100
4-Nitrophenol	<100 µg/kg	TM157	<100
4-Nitroaniline	<100 µg/kg	TM157	<100
4-Methylphenol	<100 µg/kg	TM157	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157	<100
4-Chloroaniline	<100 µg/kg	TM157	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157	<100
4-Bromophenylphenylether	<100 µg/kg	TM157	<100
3-Nitroaniline	<100 µg/kg	TM157	<100
2-Nitrophenol	<100 µg/kg	TM157	<100
2-Nitroaniline	<100 µg/kg	TM157	<100
2-Methylphenol	<100 µg/kg	TM157	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157	<100

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

		Customer Sample R	CAEM V068
		Depth (m)	.
		Sample Type	Soil/Solid
		Date Sampled	17/01/2013
		Sample Time	.
		Date Received	18/01/2013
		SDG Ref	130118-69
		Lab Sample No.(s)	6793711
		AGS Reference	
Component	**LOD/Units**	**Method**	
2-Chlorophenol	<100 µg/kg	TM157	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157	<100
2,4-Dimethylphenol	<100 µg/kg	TM157	<100
2,4-Dichlorophenol	<100 µg/kg	TM157	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157	<100
2-Chloronaphthalene	<100 µg/kg	TM157	<100
2-Methylnaphthalene	<100 µg/kg	TM157	<100
Acenaphthylene	<100 µg/kg	TM157	<100
Acenaphthene	<100 µg/kg	TM157	<100
Anthracene	<100 µg/kg	TM157	<100
Benzo(a)anthracene	<100 µg/kg	TM157	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157	<100
Benzo(a)pyrene	<100 µg/kg	TM157	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157	<100
Chrysene	<100 µg/kg	TM157	<100
Fluoranthene	<100 µg/kg	TM157	<100
Fluorene	<100 µg/kg	TM157	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157	<100
Phenanthrene	<100 µg/kg	TM157	<100
Pyrene	<100 µg/kg	TM157	<100
Naphthalene	<100 µg/kg	TM157	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157	<100

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013
			SDG Ref	130118-69	130118-69	130118-69	130118-69	130118-69	130118-69
			Lab Sample No.(s)	6793705	6793706	6793707	6793708	6793709	6793710
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		136	128	114	82	141	136
GRO >C5-C12	<44 µg/kg	TM089		2250000	157000	122000	977000	178000	927000
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<100 #	<100 #	<50 #	<50 #	<50 #	<100 #
Benzene	<10 µg/kg	TM089		<200 M	<200 M	302 M	<100 M	<100 M	1190 M
Toluene	<2 µg/kg	TM089		<40 M	<40 M	<20 M	<20 M	<20 M	<40 M
Ethylbenzene	<3 µg/kg	TM089		<60 M	2050 M	381 M	<30 M	<30 M	<60 M
m,p-Xylene	<6 µg/kg	TM089		45900 M	<120 M	2280 M	<60 M	<60 M	859 M
o-Xylene	<3 µg/kg	TM089		<60 M	<60 M	<30 M	<30 M	<30 M	<60 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		45900	<9	2280	<9	<9	859
sum of detected BTEX by GC	<24 µg/kg	TM089		45900	2050	2960	<24	<24	2050
Aliphatics >C5-C6	<10 µg/kg	TM089		142000	436	2750	1830	553	24600
Aliphatics >C6-C8	<10 µg/kg	TM089		735000	46700	35300	105000	47700	610000
Aliphatics >C8-C10	<10 µg/kg	TM089		464000	34400	31000	234000	37200	74400
Aliphatics >C10-C12	<10 µg/kg	TM089		331000	30300	17900	288000	40500	27500
Aliphatics >C12-C16	<100 µg/kg	TM173		79700	23900	20800	477000	55200	6000
Aliphatics >C16-C21	<100 µg/kg	TM173		48400	16500	18400	101000	600000	5380
Aliphatics >C21-C35	<100 µg/kg	TM173		69000	26100	22700	48800	1620000	66700
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100	1480	1760	57900	2140
Total Aliphatics >C12-C44	<100 µg/kg	TM173		197000	66500	63400	628000	2330000	80200
Aromatics >EC5-EC7	<10 µg/kg	TM089		<200	<200	302	<100	<100	1190
Aromatics >EC7-EC8	<10 µg/kg	TM089		<200	<200	<100	<100	<100	<200
Aromatics >EC8-EC10	<10 µg/kg	TM089		355000	25000	23300	156000	24800	50400
Aromatics >EC10-EC12	<10 µg/kg	TM089		221000	20200	12000	192000	27000	18300
Aromatics >EC12-EC16	<100 µg/kg	TM173		53700	18200	20500	2010000	23500	10900
Aromatics >EC16-EC21	<100 µg/kg	TM173		27900	11800	12700	413000	375000	7370
Aromatics >EC21-EC35	<100 µg/kg	TM173		46500	20200	20700	278000	1080000	152000
Aromatics >EC35-EC44	<100 µg/kg	TM173		6400	<100	1550	47200	53100	45300
Aromatics >EC40-EC44	<100 µg/kg	TM173		2600	<100	<100	11900	18400	8750
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		134000	50100	55500	2750000	1530000	215000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1870000	178000	149000	1260000	2400000	815000
Total Aromatics >C5-35	<100 µg/kg	TM173		704000	95300	89500	3050000	1530000	240000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		2570000	274000	238000	4310000	3930000	1050000

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013
		SDG Ref	130118-69	130118-69	130118-69	130118-69	130118-69	130118-69
(F)	Trigger breach confirmed	Lab Sample No.(s)	6793705	6793706	6793707	6793708	6793709	6793710
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2580000	274000	241000	4360000	4040000	1100000

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM V068					
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.					
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid					
*	Subcontracted test.	Date Sampled	17/01/2013					
**	% 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	Sample Time	.					
		Date Received	18/01/2013					
		SDG Ref	130118-69					
(F)	Trigger breach confirmed	Lab Sample No.(s)	6793711					
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	102					
GRO >C5-C12	<44 µg/kg	TM089	23100					
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5 #					
Benzene	<10 µg/kg	TM089	34.8 M					
Toluene	<2 µg/kg	TM089	<2 M					
Ethylbenzene	<3 µg/kg	TM089	<3 M					
m,p-Xylene	<6 µg/kg	TM089	<6 M					
o-Xylene	<3 µg/kg	TM089	<3 M					
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9					
sum of detected BTEX by GC	<24 µg/kg	TM089	34.8					
Aliphatics >C5-C6	<10 µg/kg	TM089	348					
Aliphatics >C6-C8	<10 µg/kg	TM089	8470					
Aliphatics >C8-C10	<10 µg/kg	TM089	6360					
Aliphatics >C10-C12	<10 µg/kg	TM089	2210					
Aliphatics >C12-C16	<100 µg/kg	TM173	2600					
Aliphatics >C16-C21	<100 µg/kg	TM173	2630					
Aliphatics >C21-C35	<100 µg/kg	TM173	6980					
Aliphatics >C35-C44	<100 µg/kg	TM173	1030					
Total Aliphatics >C12-C44	<100 µg/kg	TM173	13200					
Aromatics >EC5-EC7	<10 µg/kg	TM089	34.8					
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10					
Aromatics >EC8-EC10	<10 µg/kg	TM089	4240					
Aromatics >EC10-EC12	<10 µg/kg	TM089	1470					
Aromatics >EC12-EC16	<100 µg/kg	TM173	3970					
Aromatics >EC16-EC21	<100 µg/kg	TM173	3250					
Aromatics >EC21-EC35	<100 µg/kg	TM173	11200					
Aromatics >EC35-EC44	<100 µg/kg	TM173	5320					
Aromatics >EC40-EC44	<100 µg/kg	TM173	2720					
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	23800					
Total Aliphatics >C5-35	<100 µg/kg	TM173	29600					
Total Aromatics >C5-35	<100 µg/kg	TM173	24200					
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	53800					

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM V068					
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.					
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid					
*	Subcontracted test.	Date Sampled	17/01/2013					
**	% 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	Sample Time	.					
		Date Received	18/01/2013					
		SDG Ref	130118-69					
(F)	Trigger breach confirmed	Lab Sample No.(s)	6793711					
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method					
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	60100				

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013
			SDG Ref	130118-69	130118-69	130118-69	130118-69	130118-69	130118-69
			Lab Sample No.(s)	6793705	6793706	6793707	6793708	6793709	6793710
			AGS Reference						
Dibromofluoromethane**	%	TM116		111	106	105	104	103	107
Toluene-d8**	%	TM116		98.8	98.9	100	95.9	97.5	97.4
4-Bromofluorobenzene**	%	TM116		103	99.9	112	124	124	107
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<4 M	<80 M	<8 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<7	<140	<14	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<10	<200	<20	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<260 M	<26 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<280 M	<28 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<120 M	<12 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<200 #	<20 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<140 M	<14 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<200 #	<20 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<220 M	<22 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<220 M	<22 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<8 M	<160 M	<16 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<100 M	<10 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<240 M	<24 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<280 M	<28 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<8 M	<160 M	<16 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<140 M	<14 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<220 M	<22 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<280 M	<28 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<100 M	<10 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	283 M	472 M	<180 M	<18 M	1040 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<180 M	<18 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<240 M	<24 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<180 M	<18 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<140 M	<14 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<280 M	<28 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	69.3 M	<100 M	<10 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<14	<280	<28	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<200 M	<20 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013
			SDG Ref	130118-69	130118-69	130118-69	130118-69	130118-69	130118-69
			Lab Sample No.(s)	6793705	6793706	6793707	6793708	6793709	6793710
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<7 #	<140 #	<14 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<100 M	<10 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<260 M	<26 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<240 M	<24 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<100 M	<10 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<200 M	<20 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		1330 M	202 M	619 M	<80 M	19.3 M	148 M
p/m-Xylene	<14 µg/kg	TM116		872 #	<280 #	3110 #	<280 #	88.4 #	788 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	74.8 M	<200 M	<20 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<200 M	<20 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<200 M	<20 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		1250 M	458 M	217 M	2580 M	324 M	4140 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<200 #	<20 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<17 M	<340 M	<34 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<200 M	<20 M	<200 M
Propylbenzene	<11 µg/kg	TM116		2470 M	946 M	377 M	5390 M	355 M	4170 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<180 M	<18 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		1410 #	<160 #	739 #	2980 #	<16 #	1380 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<240 M	<24 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<12 #	<240 #	<24 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		12500 #	328 #	2670 #	10700 #	1270 #	12500 #
sec-Butylbenzene	<10 µg/kg	TM116		1170 M	346 M	83.1 M	4270 M	105 M	410 M
4-Isopropyltoluene	<11 µg/kg	TM116		797 M	<220 M	85.5 M	1940 M	<22 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<120 M	<12 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<100 M	<10 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		1170 M	440 M	74.9 M	5670 M	<20 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<240 M	<24 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<280 M	<28 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<15	<300	<30	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<6 #	<120 #	<12 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<12	<240	<24	<240
Naphthalene	<13 µg/kg	TM116		2550 M	1730 M	606 M	<260 M	<26 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013	17/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013	18/01/2013
			SDG Ref	130118-69	130118-69	130118-69	130118-69	130118-69	130118-69
			Lab Sample No.(s)	6793705	6793706	6793707	6793708	6793709	6793710
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<120 M	<12 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

		Customer Sample R	CAEM V068
		Depth (m)	.
		Sample Type	Soil/Solid
		Date Sampled	17/01/2013
		Sample Time	.
		Date Received	18/01/2013
		SDG Ref	130118-69
		Lab Sample No.(s)	6793711
		AGS Reference	
Component	**LOD/Units**	**Method**	
Dibromofluoromethane**	%	TM116	105
Toluene-d8**	%	TM116	103
4-Bromofluorobenzene**	%	TM116	104
Dichlorodifluoromethane	<4 µg/kg	TM116	<4 M
Chloromethane	<7 µg/kg	TM116	<7
Vinyl Chloride	<10 µg/kg	TM116	<10
Bromomethane	<13 µg/kg	TM116	<13 M
Chloroethane	<14 µg/kg	TM116	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116	<10 #
Carbon Disulphide	<7 µg/kg	TM116	17.2 M
Dichloromethane	<10 µg/kg	TM116	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116	<12 M
Bromochloromethane	<14 µg/kg	TM116	<14 M
Chloroform	<8 µg/kg	TM116	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116	<11 M
Carbontetrachloride	<14 µg/kg	TM116	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116	<5 M
Benzene	<9 µg/kg	TM116	68.6 M
Trichloroethene	<9 µg/kg	TM116	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116	<12 M
Dibromomethane	<9 µg/kg	TM116	<9 M
Bromodichloromethane	<7 µg/kg	TM116	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116	<14 M
Toluene	<5 µg/kg	TM116	8.24 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEM V068
#	ISO17025 accredited.		
M	*m*CERTS accredited.		
aq	Aqueous / settled sample.		
diss.filt	Dissolved / filtered sample.	Depth (m)	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid
*	Subcontracted test.	Date Sampled	17/01/2013
**	% 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	Sample Time	.
		Date Received	18/01/2013
		SDG Ref	130118-69
(F)	Trigger breach confirmed	Lab Sample No.(s)	6793711
1-4&+§@	Sample deviation (see appendix)	AGS Reference	

Component	LOD/Units	Method					
1,3-Dichloropropane	<7 µg/kg	TM116	<7 #				
Tetrachloroethene	<5 µg/kg	TM116	<5 M				
Dibromochloromethane	<13 µg/kg	TM116	<13 M				
1,2-Dibromoethane	<12 µg/kg	TM116	<12 M				
Chlorobenzene	<5 µg/kg	TM116	<5 M				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<10 M				
Ethylbenzene	<4 µg/kg	TM116	9.2 M				
p/m-Xylene	<14 µg/kg	TM116	54.7 #				
o-Xylene	<10 µg/kg	TM116	15.1 M				
Styrene	<10 µg/kg	TM116	<10 M				
Bromoform	<10 µg/kg	TM116	<10 M				
Isopropylbenzene	<5 µg/kg	TM116	24.3 M				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<10 #				
1,2,3-Trichloropropane	<17 µg/kg	TM116	<17 M				
Bromobenzene	<10 µg/kg	TM116	<10 M				
Propylbenzene	<11 µg/kg	TM116	<11 M				
2-Chlorotoluene	<9 µg/kg	TM116	<9 M				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<8 #				
4-Chlorotoluene	<12 µg/kg	TM116	<12 M				
tert-Butylbenzene	<12 µg/kg	TM116	<12 #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	32 #				
sec-Butylbenzene	<10 µg/kg	TM116	<10 M				
4-Isopropyltoluene	<11 µg/kg	TM116	<11 M				
1,3-Dichlorobenzene	<6 µg/kg	TM116	<6 M				
1,4-Dichlorobenzene	<5 µg/kg	TM116	<5 M				
n-Butylbenzene	<10 µg/kg	TM116	<10 M				
1,2-Dichlorobenzene	<12 µg/kg	TM116	<12 M				
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<14 M				
Tert-amyl methyl ether	<15 µg/kg	TM116	<15				
1,2,4-Trichlorobenzene	<6 µg/kg	TM116	<6 #				
Hexachlorobutadiene	<12 µg/kg	TM116	<12				
Naphthalene	<13 µg/kg	TM116	<13 M				

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R			CAEM V068
Depth (m)			.
Sample Type			Soil/Solid
Date Sampled			17/01/2013
Sample Time			.
Date Received			18/01/2013
SDG Ref			130118-69
Lab Sample No.(s)			6793711
AGS Reference			
Component	**LOD/Units**	**Method**	
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEM V062 SOLID 17/01/2013 00:00:00 130118-69 6793705 TM048	29/1/13	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 Receieved SDG Original Sample Method Number	CAEM V063 SOLID 17/01/2013 00:00:00 130118-69 6793706 TM048	29/1/13	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 Receieved SDG Original Sample Method Number	CAEM V064 SOLID 17/01/2013 00:00:00 130118-69 6793707 TM048	29/01/13	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 Receieved SDG Original Sample Method Number	CAEM V065 SOLID 17/01/2013 00:00:00 130118-69 6793708 TM048	29/1/13	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 Receieved SDG Original Sample Method Number	CAEM V066 SOLID 17/01/2013 00:00:00 130118-69 6793709 TM048	29/1/13	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEM V067 SOLID 17/01/2013 00:00:00 130118-69 6793710 TM048	29/1/13	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 Receieved SDG Original Sample Method Number	CAEM V068 SOLID 17/01/2013 00:00:00 130118-69 6793711 TM048	29/1/13	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6793705	6793706	6793707	6793708	6793709	6793710	6793711
Customer Sample Ref.	CAEM V062	CAEM V063	CAEM V064	CAEM V065	CAEM V066	CAEM V067	CAEM V068
AGS Ref.							
Depth							
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013
EPH CWG (Aliphatic) GC (S)	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013
EPH CWG (Aromatic) GC (S)	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013
GRO by GC-FID (S)	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013
Metals by iCap-OES (Soil)	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013
pH	23-Jan-2013	23-Jan-2013	23-Jan-2013	23-Jan-2013	23-Jan-2013	23-Jan-2013	23-Jan-2013
Sample description	23-Jan-2013	23-Jan-2013	23-Jan-2013	23-Jan-2013	23-Jan-2013	23-Jan-2013	23-Jan-2013
Semi Volatile Organic Compounds	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013
Total Organic Carbon	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013
TPH CWG GC (S)	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013
VOC MS (S)	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013	24-Jan-2013

SDG:	130118-69	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	210389
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Atkins Global Ltd
Project Jonah site office
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Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	07 February 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130124-50
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	211250

This report has been revised and directly supersedes 211196 in its entirety.

We received 7 samples on Thursday January 24, 2013 and 7 of these samples were scheduled for analysis which was completed on Thursday February 07, 2013. 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

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Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6816057	CAEMV 69			21/01/2013
6816058	CAEMV 70			22/01/2013
6816060	CAEMV 71			22/01/2013
6816061	CAEMV 72			22/01/2013
6816052	SP87-1			22/01/2013
6816053	SP87-2			22/01/2013
6816055	SP87-3			22/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6816057	CAEMV 69			250g Amber Jar
			6816057	CAEMV 69			400g Tub (ALE214)
			6816057	CAEMV 69			60g VOC (ALE215)
			6816058	CAEMV 70			250g Amber Jar
			6816058	CAEMV 70			400g Tub (ALE214)
			6816058	CAEMV 70			60g VOC (ALE215)
			6816060	CAEMV 71			250g Amber Jar
			6816060	CAEMV 71			400g Tub (ALE214)
			6816060	CAEMV 71			60g VOC (ALE215)
			6816061	CAEMV 72			250g Amber Jar
			6816061	CAEMV 72			400g Tub (ALE214)
			6816061	CAEMV 72			60g VOC (ALE215)
			6816052	SP87-1			250g Amber Jar
			6816052	SP87-1			400g Tub (ALE214)
			6816052	SP87-1			60g VOC (ALE215)
			6816053	SP87-2			250g Amber Jar
			6816053	SP87-2			400g Tub (ALE214)
			6816053	SP87-2			60g VOC (ALE215)
			6816055	SP87-3			250g Amber Jar
			6816055	SP87-3			400g Tub (ALE214)
			6816055	SP87-3			60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 7		X			
				X			
				X			
				X			
				X			
				X			
				X			
				X			
				X			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 7		X			
				X			
				X			
				X			
				X			
				X			
				X			
				X			
				X			
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
	Cadmium	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
	Chromium	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
	Copper	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
	Lead	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
	Mercury	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
	Nickel	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
	Selenium	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
	Zinc	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
pH	All	NDPs: 0 Tests: 7		X			
				X			
				X			
				X			
				X			
				X			
				X			
				X			
				X			
Sample description	All	NDPs: 0 Tests: 7	X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				
			X				

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	6816057	6816058	6816060	6816061	6816052	6816053	6816055
			Customer Sample Reference	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2	SP87-3
			AGS Reference							
			Depth (m)							
			Container	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 7		X			X			X			X			X			X			X			X		
Total Organic Carbon	All	NDPs: 1 Tests: 6		X			X			N			X			X			X			X			X		
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 1								X																		
TPH CWG GC (S)	All	NDPs: 0 Tests: 7		X			X			X			X			X			X			X			X		
VOC MS (S)	All	NDPs: 0 Tests: 7				X			X			X			X			X			X			X			X

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

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
6816057	CAEMV 69		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
6816058	CAEMV 70		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
6816060	CAEMV 71		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
6816061	CAEMV 72		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Vegetation	None
6816052	SP87-1		Red	Sandy Loam	0.1 - 2 mm	Brick	Stones
6816053	SP87-2		Light Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
6816055	SP87-3		Light Brown	Sandy Clay	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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	21/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			SDG Ref	130124-50	130124-50	130124-50	130124-50	130124-50	130124-50
			Lab Sample No.(s)	6816057	6816058	6816060	6816061	6816052	6816053
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		3.69 #	2.19 #		1.83 #	1.2 #	1.21 #
pH	1 pH Units	TM133		8.26 M	6.76 M	7.07 M	6.7 M	8.42 M	8.24 M
Arsenic	<0.6 mg/kg	TM181		13.4 M	18.2 M	6.57 M	2.22 M	19.1 M	14 M
Cadmium	<0.02 mg/kg	TM181		0.436 M	0.328 M	0.456 M	0.139 M	0.731 M	1.21 M
Chromium	<0.9 mg/kg	TM181		18.9 M	16.2 M	12.3 M	16.6 M	28.3 M	19.5 M
Copper	<1.4 mg/kg	TM181		93.2 M	10.4 M	13.1 M	13.1 M	21.2 M	16 M
Lead	<0.7 mg/kg	TM181		42 M	17.6 M	12.1 M	14.4 M	85.9 M	73.5 M
Mercury	<0.14 mg/kg	TM181		0.208 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		22.1 M	14.6 M	24.7 M	20.5 M	20.8 M	18.5 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	1.99 #	1.95 #
Zinc	<1.9 mg/kg	TM181		156 M	37.8 M	59.6 M	49.7 M	234 M	337 M
Soil Organic Matter (SOM)	<0.1 %	TM321				1.66			

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample Ref.	SP87-3
Depth (m)	.
Sample Type	Soil/Solid
Date Sampled	22/01/2013
Sample Time	.
Date Received	24/01/2013
SDG Ref	130124-50
Lab Sample No.(s)	6816055
AGS Reference	

Component	LOD/Units	Method	
Soil Organic Matter (SOM)	<0.35 %	TM132	0.717 #
pH	1 pH Units	TM133	9.22 M
Arsenic	<0.6 mg/kg	TM181	14.8 M
Cadmium	<0.02 mg/kg	TM181	0.656 M
Chromium	<0.9 mg/kg	TM181	17.8 M
Copper	<1.4 mg/kg	TM181	21.1 M
Lead	<0.7 mg/kg	TM181	72.6 M
Mercury	<0.14 mg/kg	TM181	<0.14 M
Nickel	<0.2 mg/kg	TM181	19.3 M
Selenium	<1 mg/kg	TM181	1.44 #
Zinc	<1.9 mg/kg	TM181	192 M

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	21/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			SDG Ref	130124-50	130124-50	130124-50	130124-50	130124-50	130124-50
			Lab Sample No.(s)	6816057	6816058	6816060	6816061	6816052	6816053
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	21/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			SDG Ref	130124-50	130124-50	130124-50	130124-50	130124-50	130124-50
			Lab Sample No.(s)	6816057	6816058	6816060	6816061	6816052	6816053
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		186	<100	<100	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		447	<100	<100	<100	<100	<100
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Naphthalene	<100 µg/kg	TM157		<100	125	117	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sample Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			SP87-3	.	Soil/Solid	22/01/2013	.	24/01/2013	130124-50	6816055	
Phenol	<100 µg/kg	TM157	<100								
Pentachlorophenol	<100 µg/kg	TM157	<100								
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157	<100								
Nitrobenzene	<100 µg/kg	TM157	<100								
Isophorone	<100 µg/kg	TM157	<100								
Hexachloroethane	<100 µg/kg	TM157	<100								
Hexachlorocyclopentadiene	<100 µg/kg	TM157	<100								
Hexachlorobutadiene	<100 µg/kg	TM157	<100								
Hexachlorobenzene	<100 µg/kg	TM157	<100								
n-Dioctyl phthalate	<100 µg/kg	TM157	<100								
Dimethyl phthalate	<100 µg/kg	TM157	<100								
Diethyl phthalate	<100 µg/kg	TM157	<100								
n-Dibutyl phthalate	<100 µg/kg	TM157	<100								
Dibenzofuran	<100 µg/kg	TM157	<100								
Carbazole	<100 µg/kg	TM157	<100								
Butylbenzyl phthalate	<100 µg/kg	TM157	<100								
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157	<100								
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157	<100								
bis(2-Chloroethyl)ether	<100 µg/kg	TM157	<100								
Azobenzene	<100 µg/kg	TM157	<100								
4-Nitrophenol	<100 µg/kg	TM157	<100								
4-Nitroaniline	<100 µg/kg	TM157	<100								
4-Methylphenol	<100 µg/kg	TM157	<100								
4-Chlorophenylphenylether	<100 µg/kg	TM157	<100								
4-Chloroaniline	<100 µg/kg	TM157	<100								
4-Chloro-3-methylphenol	<100 µg/kg	TM157	<100								
4-Bromophenylphenylether	<100 µg/kg	TM157	<100								
3-Nitroaniline	<100 µg/kg	TM157	<100								
2-Nitrophenol	<100 µg/kg	TM157	<100								
2-Nitroaniline	<100 µg/kg	TM157	<100								
2-Methylphenol	<100 µg/kg	TM157	<100								
1,2,4-Trichlorobenzene	<100 µg/kg	TM157	<100								

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

		Customer Sample Ref.	SP87-3
		Depth (m)	.
		Sample Type	Soil/Solid
		Date Sampled	22/01/2013
		Sample Time	.
		Date Received	24/01/2013
		SDG Ref	130124-50
		Lab Sample No.(s)	6816055
		AGS Reference	
Component	**LOD/Units**	**Method**	
2-Chlorophenol	<100 µg/kg	TM157	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157	<100
2,4-Dimethylphenol	<100 µg/kg	TM157	<100
2,4-Dichlorophenol	<100 µg/kg	TM157	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157	<100
2-Chloronaphthalene	<100 µg/kg	TM157	<100
2-Methylnaphthalene	<100 µg/kg	TM157	<100
Acenaphthylene	<100 µg/kg	TM157	<100
Acenaphthene	<100 µg/kg	TM157	<100
Anthracene	<100 µg/kg	TM157	<100
Benzo(a)anthracene	<100 µg/kg	TM157	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157	<100
Benzo(a)pyrene	<100 µg/kg	TM157	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157	<100
Chrysene	<100 µg/kg	TM157	<100
Fluoranthene	<100 µg/kg	TM157	<100
Fluorene	<100 µg/kg	TM157	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157	<100
Phenanthrene	<100 µg/kg	TM157	<100
Pyrene	<100 µg/kg	TM157	<100
Naphthalene	<100 µg/kg	TM157	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157	<100

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	21/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			SDG Ref	130124-50	130124-50	130124-50	130124-50	130124-50	130124-50
			Lab Sample No.(s)	6816057	6816058	6816060	6816061	6816052	6816053
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		81	130	181	99	118	103
GRO >C5-C12	<44 µg/kg	TM089		13900	185000	1030000	1020	84.7	187
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<100 #	<100 #	<5 #	<5 #	<5 #
Benzene	<10 µg/kg	TM089		27 M	<200 M	625 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<40 M	<40 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	1650 M	<60 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	15500 M	<120 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<60 M	<60 M	<3 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	15500	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		27	17200	625	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		586	2500	19700	27.4	<10	12.3
Aliphatics >C6-C8	<10 µg/kg	TM089		6310	53100	414000	193	12.1	35.7
Aliphatics >C8-C10	<10 µg/kg	TM089		2190	54800	263000	243	18.2	39.4
Aliphatics >C10-C12	<10 µg/kg	TM089		2010	12300	94200	234	15.7	39.4
Aliphatics >C12-C16	<100 µg/kg	TM173		19800	<100	<100	<100	1960	1240
Aliphatics >C16-C21	<100 µg/kg	TM173		18400	<100	<100	<100	9260	8250
Aliphatics >C21-C35	<100 µg/kg	TM173		46500	21700	<100	1300	48000	34500
Aliphatics >C35-C44	<100 µg/kg	TM173		4950	11400	<100	<100	14900	10400
Total Aliphatics >C12-C44	<100 µg/kg	TM173		89700	33000	<100	1300	74100	54400
Aromatics >EC5-EC7	<10 µg/kg	TM089		27	<200	625	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<200	<200	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		1460	53700	175000	164	19.4	34.4
Aromatics >EC10-EC12	<10 µg/kg	TM089		1340	8190	62800	156	10.9	25.8
Aromatics >EC12-EC16	<100 µg/kg	TM173		15100	<100	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		17000	<100	<100	<100	1630	4180
Aromatics >EC21-EC35	<100 µg/kg	TM173		89900	26300	<100	14200	30300	29900
Aromatics >EC35-EC44	<100 µg/kg	TM173		15100	10800	<100	<100	18000	15600
Aromatics >EC40-EC44	<100 µg/kg	TM173		5390	3740	<100	<100	7770	6870
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		137000	37200	<100	14200	50000	49600
Total Aliphatics >C5-35	<100 µg/kg	TM173		95800	144000	791000	2000	59200	44100
Total Aromatics >C5-35	<100 µg/kg	TM173		125000	88400	239000	14600	32000	34100
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		221000	233000	1030000	16600	91200	78200

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

TPH CWG (S)

Results Legend		Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	21/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
		SDG Ref	130124-50	130124-50	130124-50	130124-50	130124-50	130124-50
(F)	Trigger breach confirmed	Lab Sample No.(s)	6816057	6816058	6816060	6816061	6816052	6816053
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	241000	255000	1030000	16600	124000	104000

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

TPH CWG (S)

Results Legend		Customer Sample Ref.	SP87-3
#	ISO17025 accredited.		
M	*m*CERTS accredited.		
aq	Aqueous / settled sample.		
diss.filt	Dissolved / filtered sample.	Depth (m)	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid
*	Subcontracted test.	Date Sampled	22/01/2013
**	% 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	Sample Time	.
		Date Received	24/01/2013
		SDG Ref	130124-50
(F)	Trigger breach confirmed	Lab Sample No.(s)	6816055
1-4&+§@	Sample deviation (see appendix)	AGS Reference	

Component	LOD/Units	Method	
GRO Surrogate % recovery**	%	TM089	113
GRO >C5-C12	<44 µg/kg	TM089	101
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5 #
Benzene	<10 µg/kg	TM089	<10 M
Toluene	<2 µg/kg	TM089	<2 M
Ethylbenzene	<3 µg/kg	TM089	<3 M
m,p-Xylene	<6 µg/kg	TM089	<6 M
o-Xylene	<3 µg/kg	TM089	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	<10
Aliphatics >C6-C8	<10 µg/kg	TM089	14.4
Aliphatics >C8-C10	<10 µg/kg	TM089	20.4
Aliphatics >C10-C12	<10 µg/kg	TM089	22.8
Aliphatics >C12-C16	<100 µg/kg	TM173	<100
Aliphatics >C16-C21	<100 µg/kg	TM173	4530
Aliphatics >C21-C35	<100 µg/kg	TM173	25900
Aliphatics >C35-C44	<100 µg/kg	TM173	7330
Total Aliphatics >C12-C44	<100 µg/kg	TM173	37800
Aromatics >EC5-EC7	<10 µg/kg	TM089	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089	18
Aromatics >EC10-EC12	<10 µg/kg	TM089	15.6
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173	655
Aromatics >EC21-EC35	<100 µg/kg	TM173	19800
Aromatics >EC35-EC44	<100 µg/kg	TM173	10200
Aromatics >EC40-EC44	<100 µg/kg	TM173	4190
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	30700
Total Aliphatics >C5-35	<100 µg/kg	TM173	30500
Total Aromatics >C5-35	<100 µg/kg	TM173	20500
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	51000

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

TPH CWG (S)

Results Legend		Customer Sample Ref.	SP87-3
#	ISO17025 accredited.		
M	*m*CERTS accredited.		
aq	Aqueous / settled sample.	Depth (m)	.
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	22/01/2013
*	Subcontracted test.	Sample Time	.
**	% 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	Date Received	24/01/2013
		SDG Ref	130124-50
(F)	Trigger breach confirmed	Lab Sample No.(s)	6816055
1-4&+§@	Sample deviation (see appendix)	AGS Reference	

Component	LOD/Units	Method	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	68600

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	21/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			SDG Ref	130124-50	130124-50	130124-50	130124-50	130124-50	130124-50
			Lab Sample No.(s)	6816057	6816058	6816060	6816061	6816052	6816053
			AGS Reference						
Dibromofluoromethane**	%	TM116		97.6	103	97.7	124	113	115
Toluene-d8**	%	TM116		95.6	100	102	100	101	99.6
4-Bromofluorobenzene**	%	TM116		127	101	125	125	108	115
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<80 M	<8 M	<4 M	<4 M	<4 M
Chloromethane	<7 µg/kg	TM116		<14	<140	<14	<7	<7	<7
Vinyl Chloride	<10 µg/kg	TM116		<20	<200	<20	<10	<10	<10
Bromomethane	<13 µg/kg	TM116		<26 M	<260 M	<26 M	<13 M	<13 M	<13 M
Chloroethane	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<14 M	<14 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<120 M	<12 M	<6 M	<6 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<20 #	<200 #	<20 #	<10 #	<10 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<14 M	<140 M	22.5 M	<7 M	9.62 M	32.5 M
Dichloromethane	<10 µg/kg	TM116		<20 #	<200 #	<20 #	<10 #	<10 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<220 M	<22 M	<11 M	<11 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<22 M	<220 M	<22 M	<11 M	<11 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<16 M	<160 M	<16 M	<8 M	<8 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<5 M	<5 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<12 M	<12 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<14 M	<14 M	<14 M
Chloroform	<8 µg/kg	TM116		<16 M	<160 M	<16 M	<8 M	<8 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<14 M	<140 M	<14 M	<7 M	<7 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<22 M	<220 M	<22 M	<11 M	<11 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<14 M	<14 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<5 M	<5 M	<5 M
Benzene	<9 µg/kg	TM116		<18 M	289 M	179 M	<9 M	<9 M	<9 M
Trichloroethene	<9 µg/kg	TM116		<18 M	<180 M	<18 M	<9 M	<9 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<12 M	<12 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<18 M	<180 M	<18 M	<9 M	<9 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<140 M	<14 M	<7 M	<7 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<14 M	<14 M	<14 M
Toluene	<5 µg/kg	TM116		<10 M	<100 M	55.8 M	<5 M	8.55 M	6.99 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<28	<280	<28	<14	<14	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<10 M	<10 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	21/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			SDG Ref	130124-50	130124-50	130124-50	130124-50	130124-50	130124-50
			Lab Sample No.(s)	6816057	6816058	6816060	6816061	6816052	6816053
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<14 #	<140 #	<14 #	<7 #	<7 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<5 M	<5 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<260 M	<26 M	<13 M	<13 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<12 M	<12 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<5 M	<5 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<10 M	<10 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		12.4 M	2380 M	388 M	10.8 M	<4 M	<4 M
p/m-Xylene	<14 µg/kg	TM116		110 #	14800 #	1690 #	18.8 #	<14 #	<14 #
o-Xylene	<10 µg/kg	TM116		<20 M	467 M	183 M	<10 M	<10 M	<10 M
Styrene	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<10 M	<10 M	<10 M
Bromoform	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<10 M	<10 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		70.6 M	527 M	1440 M	9.03 M	<5 M	<5 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<200 #	<20 #	<10 #	<10 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<34 M	<340 M	<34 M	<17 M	<17 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<20 M	<200 M	<20 M	<10 M	<10 M	<10 M
Propylbenzene	<11 µg/kg	TM116		98.6 M	768 M	1970 M	14 M	<11 M	<11 M
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<180 M	<18 M	<9 M	<9 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		57.1 #	1450 #	419 #	24.6 #	<8 #	<8 #
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<12 M	<12 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<240 #	<24 #	<12 #	<12 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		243 #	3860 #	4130 #	58 #	<9 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116		<20 M	<200 M	540 M	<10 M	<10 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<220 M	186 M	<11 M	<11 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M	<12 M	<6 M	<6 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<100 M	<10 M	<5 M	<5 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<200 M	413 M	<10 M	<10 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<240 M	<24 M	<12 M	<12 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<280 M	<28 M	<14 M	<14 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<300	<30	<15	<15	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<120 #	<12 #	<6 #	<6 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<240	<24	<12	<12	<12
Naphthalene	<13 µg/kg	TM116		<26 M	<260 M	551 M	23.8 M	<13 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

VOC MS (S)

Results Legend		Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	21/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013	22/01/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
		SDG Ref	130124-50	130124-50	130124-50	130124-50	130124-50	130124-50
(F)	Trigger breach confirmed	Lab Sample No.(s)	6816057	6816058	6816060	6816061	6816052	6816053
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<12 M	<120 M	<12 M	<6 M	<6 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample Ref.	SP87-3
Depth (m)	.
Sample Type	Soil/Solid
Date Sampled	22/01/2013
Sample Time	.
Date Received	24/01/2013
SDG Ref	130124-50
Lab Sample No.(s)	6816055
AGS Reference	

Component	LOD/Units	Method	
Dibromofluoromethane**	%	TM116	118
Toluene-d8**	%	TM116	100
4-Bromofluorobenzene**	%	TM116	106
Dichlorodifluoromethane	<4 µg/kg	TM116	<4 M
Chloromethane	<7 µg/kg	TM116	<7
Vinyl Chloride	<10 µg/kg	TM116	<10
Bromomethane	<13 µg/kg	TM116	<13 M
Chloroethane	<14 µg/kg	TM116	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116	<10 #
Carbon Disulphide	<7 µg/kg	TM116	<7 M
Dichloromethane	<10 µg/kg	TM116	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116	<12 M
Bromochloromethane	<14 µg/kg	TM116	<14 M
Chloroform	<8 µg/kg	TM116	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116	<11 M
Carbontetrachloride	<14 µg/kg	TM116	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116	<5 M
Benzene	<9 µg/kg	TM116	<9 M
Trichloroethene	<9 µg/kg	TM116	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116	<12 M
Dibromomethane	<9 µg/kg	TM116	<9 M
Bromodichloromethane	<7 µg/kg	TM116	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116	<14 M
Toluene	<5 µg/kg	TM116	9.96 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sample Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			SP87-3	.	Soil/Solid	22/01/2013	.	24/01/2013	130124-50	6816055	
1,3-Dichloropropane	<7 µg/kg	TM116	<7 #								
Tetrachloroethene	<5 µg/kg	TM116	<5 M								
Dibromochloromethane	<13 µg/kg	TM116	<13 M								
1,2-Dibromoethane	<12 µg/kg	TM116	<12 M								
Chlorobenzene	<5 µg/kg	TM116	<5 M								
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<10 M								
Ethylbenzene	<4 µg/kg	TM116	<4 M								
p/m-Xylene	<14 µg/kg	TM116	<14 #								
o-Xylene	<10 µg/kg	TM116	<10 M								
Styrene	<10 µg/kg	TM116	<10 M								
Bromoform	<10 µg/kg	TM116	<10 M								
Isopropylbenzene	<5 µg/kg	TM116	<5 M								
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<10 #								
1,2,3-Trichloropropane	<17 µg/kg	TM116	<17 M								
Bromobenzene	<10 µg/kg	TM116	<10 M								
Propylbenzene	<11 µg/kg	TM116	<11 M								
2-Chlorotoluene	<9 µg/kg	TM116	<9 M								
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<8 #								
4-Chlorotoluene	<12 µg/kg	TM116	<12 M								
tert-Butylbenzene	<12 µg/kg	TM116	<12 #								
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	<9 #								
sec-Butylbenzene	<10 µg/kg	TM116	<10 M								
4-Isopropyltoluene	<11 µg/kg	TM116	<11 M								
1,3-Dichlorobenzene	<6 µg/kg	TM116	<6 M								
1,4-Dichlorobenzene	<5 µg/kg	TM116	<5 M								
n-Butylbenzene	<10 µg/kg	TM116	<10 M								
1,2-Dichlorobenzene	<12 µg/kg	TM116	<12 M								
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<14 M								
Tert-amyl methyl ether	<15 µg/kg	TM116	<15								
1,2,4-Trichlorobenzene	<6 µg/kg	TM116	<6 #								
Hexachlorobutadiene	<12 µg/kg	TM116	<12								
Naphthalene	<13 µg/kg	TM116	<13 M								

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	
			Depth (m)	.
			Sample Type	Soil/Solid
			Date Sampled	22/01/2013
			Sample Time	.
			Date Received	24/01/2013
			SDG Ref	130124-50
			Lab Sample No.(s)	6816055
			AGS Reference	SP87-3
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<6 M

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV 69 SOLID 21/01/2013 00:00:00 130124-50 6816057 TM048	05/02/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV 70 SOLID 22/01/2013 00:00:00 130124-50 6816058 TM048	05/02/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV 71 SOLID 22/01/2013 00:00:00 130124-50 6816060 TM048	05/02/13	Chris Swindells	Loose fibres in soil	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV 72 SOLID 22/01/2013 00:00:00 130124-50 6816061 TM048	05/02/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP87-1 SOLID 22/01/2013 00:00:00 130124-50 6816052 TM048	05/02/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

		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 Receieved SDG Original Sample Method Number	SP87-2 SOLID 22/01/2013 00:00:00 130124-50 6816053 TM048	05/02/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP87-3 SOLID 22/01/2013 00:00:00 130124-50 6816055 TM048	05/02/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Notification of NDPs (No determination possible)

Date Received : 24/01/2013 11:42:59

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6816060	CAEMV 71		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Test Completion Dates

Lab Sample No(s)	6816057	6816058	6816060	6816061	6816052	6816053	6816055
Customer Sample Ref.	CAEMV 69	CAEMV 70	CAEMV 71	CAEMV 72	SP87-1	SP87-2	SP87-3
AGS Ref.							
Depth							
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	05-Feb-2013	05-Feb-2013	05-Feb-2013	05-Feb-2013	05-Feb-2013	05-Feb-2013	05-Feb-2013
EPH CWG (Aliphatic) GC (S)	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013
EPH CWG (Aromatic) GC (S)	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013
GRO by GC-FID (S)	29-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013
Metals by iCap-OES (Soil)	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013
pH	29-Jan-2013	29-Jan-2013	29-Jan-2013	30-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013
Sample description	27-Jan-2013	27-Jan-2013	27-Jan-2013	27-Jan-2013	27-Jan-2013	27-Jan-2013	27-Jan-2013
Semi Volatile Organic Compounds	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013
Total Organic Carbon	06-Feb-2013	06-Feb-2013		06-Feb-2013	06-Feb-2013	06-Feb-2013	06-Feb-2013
Total Organic Carbon (Asb)			06-Feb-2013				
TPH CWG GC (S)	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013
VOC MS (S)	30-Jan-2013	30-Jan-2013	30-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013	29-Jan-2013

SDG:	130124-50	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0342
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	211250
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	211196

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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
§	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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

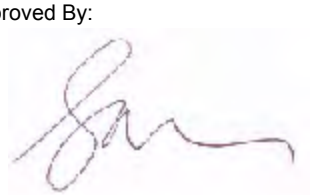
Date:	19 February 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130203-27
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	212582

We received 3 samples on Saturday February 02, 2013 and 3 of these samples were scheduled for analysis which was completed on Tuesday February 19, 2013. 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

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6859259	CAEMV84			30/01/2013
6859261	CAEMV85			30/01/2013
6859263	CAEMV86			30/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6859259	CAEMV84			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6859261	CAEMV85			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6859263	CAEMV86			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 3		X			X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 3	X		X		X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 3	X		X		X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 3		X		X	X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 3	X		X		X
	Cadmium	NDPs: 0 Tests: 3	X		X		X
	Chromium	NDPs: 0 Tests: 3	X		X		X
	Copper	NDPs: 0 Tests: 3	X		X		X
	Lead	NDPs: 0 Tests: 3	X		X		X
	Mercury	NDPs: 0 Tests: 3	X		X		X
	Nickel	NDPs: 0 Tests: 3	X		X		X
	Selenium	NDPs: 0 Tests: 3	X		X		X
	Zinc	NDPs: 0 Tests: 3	X		X		X
pH	All	NDPs: 0 Tests: 3		X		X	X
Sample description	All	NDPs: 0 Tests: 2	X				X

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6859259	6859261	6859263
			Customer Sample Reference	CAEMV84	CAEMV85	CAEMV86
			AGS Reference			
			Depth (m)			
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 3		X			X			X		
Total Organic Carbon	All	NDPs: 0 Tests: 3		X			X			X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 3		X			X			X		
VOC MS (S)	All	NDPs: 0 Tests: 3				X			X			X

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6859259	CAEMV84		Grey	Sandy Clay	0.1 - 2 mm	None	None
6859261	CAEMV85		Black	Sandy Clay Loam	0.1 - 2 mm	Vegetation	None
6859263	CAEMV86		Light 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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV84	CAEMV85	CAEMV86			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	30/01/2013	30/01/2013	30/01/2013			
			Sample Time	.	.	.			
			Date Received	02/02/2013	02/02/2013	02/02/2013			
			SDG Ref	130203-27	130203-27	130203-27			
			Lab Sample No.(s)	6859259	6859261	6859263			
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		0.979 #	9.17 #	1.63 #			
pH	1 pH Units	TM133		8.04 M	6.52 M	6.83 M			
Arsenic	<0.6 mg/kg	TM181		6.1 M	169 M	13 M			
Cadmium	<0.02 mg/kg	TM181		0.612 M	2.73 M	0.978 M			
Chromium	<0.9 mg/kg	TM181		14.8 M	12.4 M	13.1 M			
Copper	<1.4 mg/kg	TM181		13.4 M	435 M	29.6 M			
Lead	<0.7 mg/kg	TM181		14.6 M	232 M	33.8 M			
Mercury	<0.14 mg/kg	TM181		<0.14 M	0.373 M	<0.14 M			
Nickel	<0.2 mg/kg	TM181		26.4 M	22.8 M	21.7 M			
Selenium	<1 mg/kg	TM181		<1 #	2.65 #	<1 #			
Zinc	<1.9 mg/kg	TM181		59.4 M	1470 M	126 M			

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV84	CAEMV85	CAEMV86			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	30/01/2013	30/01/2013	30/01/2013			
			Sample Time	.	.	.			
			Date Received	02/02/2013	02/02/2013	02/02/2013			
			SDG Ref	130203-27	130203-27	130203-27			
			Lab Sample No.(s)	6859259	6859261	6859263			
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100			
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100			
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100			
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100			
Isophorone	<100 µg/kg	TM157		<100	<100	<100			
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100			
Carbazole	<100 µg/kg	TM157		<100	<100	<100			
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100			
Azobenzene	<100 µg/kg	TM157		<100	<100	<100			
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV84	CAEMV85	CAEMV86			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	30/01/2013	30/01/2013	30/01/2013			
			Sample Time	.	.	.			
			Date Received	02/02/2013	02/02/2013	02/02/2013			
			SDG Ref	130203-27	130203-27	130203-27			
			Lab Sample No.(s)	6859259	6859261	6859263			
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100			
2-Methylnaphthalene	<100 µg/kg	TM157		1600	236	<100			
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100			
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100			
Anthracene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100			
Chrysene	<100 µg/kg	TM157		<100	287	<100			
Fluoranthene	<100 µg/kg	TM157		<100	195	<100			
Fluorene	<100 µg/kg	TM157		<100	<100	217			
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100			
Phenanthrene	<100 µg/kg	TM157		<100	399	204			
Pyrene	<100 µg/kg	TM157		<100	219	<100			
Naphthalene	<100 µg/kg	TM157		1270	<100	<100			
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100			

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV84	CAEMV85	CAEMV86			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	30/01/2013	30/01/2013	30/01/2013			
			Sample Time	.	.	.			
			Date Received	02/02/2013	02/02/2013	02/02/2013			
			SDG Ref	130203-27	130203-27	130203-27			
			Lab Sample No.(s)	6859259	6859261	6859263			
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		137	122	118			
Al GRO TOT	<44 µg/kg	TM089		56300 M	592000 M	472000 M			
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<100 M	<50 M			
Benzene	<10 µg/kg	TM089		85.5 M	<200 M	<100 M			
Toluene	<2 µg/kg	TM089		86.6 M	<40 M	<20 M			
Ethylbenzene	<3 µg/kg	TM089		<3 M	<60 M	<30 M			
m,p-Xylene	<6 µg/kg	TM089		<6 M	<120 M	<60 M			
o-Xylene	<3 µg/kg	TM089		320 M	<60 M	<30 M			
sum of detected mpo xylene by GC	<9 µg/kg	TM089		320	<9	<9			
sum of detected BTEX by GC	<24 µg/kg	TM089		492	<24	<24			
Aliphatics >C5-C6	<10 µg/kg	TM089		1260	1530	<100			
Aliphatics >C6-C8	<10 µg/kg	TM089		15500	113000	5920			
Aliphatics >C8-C10	<10 µg/kg	TM089		14000	195000	80200			
Aliphatics >C10-C12	<10 µg/kg	TM089		9430	90800	199000			
Aliphatics >C12-C16	<100 µg/kg	TM173		35400	148000	489000			
Aliphatics >C16-C21	<100 µg/kg	TM173		46500	153000	96300			
Aliphatics >C21-C35	<100 µg/kg	TM173		61700	505000	226000			
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	14600	55300			
Total Aliphatics >C12-C44	<100 µg/kg	TM173		144000	821000	867000			
Aromatics >EC5-EC7	<10 µg/kg	TM089		85.5	229	<100			
Aromatics >EC7-EC8	<10 µg/kg	TM089		86.6	<200	<100			
Aromatics >EC8-EC10	<10 µg/kg	TM089		9660	130000	53500			
Aromatics >EC10-EC12	<10 µg/kg	TM089		6290	60600	133000			
Aromatics >EC12-EC16	<100 µg/kg	TM173		25400	71500	198000			
Aromatics >EC16-EC21	<100 µg/kg	TM173		31000	155000	62500			
Aromatics >EC21-EC35	<100 µg/kg	TM173		45300	579000	175000			
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	73300	72200			
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	18200	28600			
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		102000	879000	508000			
Total Aliphatics >C5-35	<100 µg/kg	TM173		184000	1210000	1100000			
Total Aromatics >C5-35	<100 µg/kg	TM173		118000	997000	622000			
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		302000	2200000	1720000			

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV84	CAEMV85	CAEMV86			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	30/01/2013	30/01/2013	30/01/2013			
			Sample Time	.	.	.			
			Date Received	02/02/2013	02/02/2013	02/02/2013			
			SDG Ref	130203-27	130203-27	130203-27			
			Lab Sample No.(s)	6859259	6859261	6859263			
			AGS Reference						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		302000	2290000	1850000			

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV84	CAEMV85	CAEMV86			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	30/01/2013	30/01/2013	30/01/2013			
			Sample Time	.	.	.			
			Date Received	02/02/2013	02/02/2013	02/02/2013			
			SDG Ref	130203-27	130203-27	130203-27			
			Lab Sample No.(s)	6859259	6859261	6859263			
			AGS Reference						
Dibromofluoromethane**	%	TM116		97.4	102	102			
Toluene-d8**	%	TM116		102	97	92.6			
4-Bromofluorobenzene**	%	TM116		132	111	128			
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<80 M	<8 M			
Chloromethane	<7 µg/kg	TM116		<7	<140	<14			
Vinyl Chloride	<10 µg/kg	TM116		<10	<200	<20			
Bromomethane	<13 µg/kg	TM116		<13 M	<260 M	<26 M			
Chloroethane	<14 µg/kg	TM116		<14 M	<280 M	<28 M			
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<120 M	<12 M			
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<200 #	<20 #			
Carbon Disulphide	<7 µg/kg	TM116		11.6 M	478 M	18 M			
Dichloromethane	<10 µg/kg	TM116		<10 #	<200 #	<20 #			
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<220 M	<22 M			
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<220 M	<22 M			
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<160 M	<16 M			
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<100 M	<10 M			
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<24 M			
Bromochloromethane	<14 µg/kg	TM116		<14 M	<280 M	<28 M			
Chloroform	<8 µg/kg	TM116		<8 M	<160 M	<16 M			
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<140 M	<14 M			
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<220 M	<22 M			
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<280 M	<28 M			
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<100 M	<10 M			
Benzene	<9 µg/kg	TM116		301 M	<180 M	<18 M			
Trichloroethene	<9 µg/kg	TM116		<9 M	<180 M	<18 M			
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<24 M			
Dibromomethane	<9 µg/kg	TM116		<9 M	<180 M	<18 M			
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<140 M	<14 M			
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<280 M	<28 M			
Toluene	<5 µg/kg	TM116		35.5 M	164 M	<10 M			
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<280	<28			
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<200 M	<20 M			

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV84	CAEMV85	CAEMV86			
			Depth (m)	.	.	.			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	30/01/2013	30/01/2013	30/01/2013			
			Sample Time	.	.	.			
			Date Received	02/02/2013	02/02/2013	02/02/2013			
			SDG Ref	130203-27	130203-27	130203-27			
			Lab Sample No.(s)	6859259	6859261	6859263			
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<140 #	<14 #			
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<100 M	<10 M			
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<260 M	<26 M			
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<240 M	<24 M			
Chlorobenzene	<5 µg/kg	TM116		<5 M	24600 M	<10 M			
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<200 M	<20 M			
Ethylbenzene	<4 µg/kg	TM116		552 M	173 M	<8 M			
p/m-Xylene	<14 µg/kg	TM116		942 #	443 #	<28 #			
o-Xylene	<10 µg/kg	TM116		121 M	<200 M	<20 M			
Styrene	<10 µg/kg	TM116		<10 M	<200 M	<20 M			
Bromoform	<10 µg/kg	TM116		<10 M	<200 M	<20 M			
Isopropylbenzene	<5 µg/kg	TM116		471 M	2870 M	1640 M			
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<200 #	<20 #			
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<340 M	<34 M			
Bromobenzene	<10 µg/kg	TM116		<10 M	<200 M	<20 M			
Propylbenzene	<11 µg/kg	TM116		815 M	3180 M	3240 M			
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<180 M	<18 M			
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		399 #	<160 #	<16 #			
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<240 M	<24 M			
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<240 #	<24 #			
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		4780 #	1040 #	<18 #			
sec-Butylbenzene	<10 µg/kg	TM116		272 M	1640 M	3630 M			
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<220 M	<22 M			
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<120 M	<12 M			
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<10 M			
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<200 M	5090 M			
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<240 M	<24 M			
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<280 M	<28 M			
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<300	<30			
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<120 #	<12 #			
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<240	<24			
Naphthalene	<13 µg/kg	TM116		614 M	<260 M	<26 M			

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMV84	CAEMV85	CAEMV86			
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.			
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
*	Subcontracted test.	Date Sampled	30/01/2013	30/01/2013	30/01/2013			
**	% 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	Sample Time	.	.	.			
		Date Received	02/02/2013	02/02/2013	02/02/2013			
		SDG Ref	130203-27	130203-27	130203-27			
(F)	Trigger breach confirmed	Lab Sample No.(s)	6859259	6859261	6859263			
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 M	<120 M	<12 M			

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV84 SOLID 30/01/2013 00:00:00 130203-27 6859259 TM048	15/2/13	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 Receieved SDG Original Sample Method Number	CAEMV85 SOLID 30/01/2013 00:00:00 130203-27 6859261 TM048	15/2/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV86 SOLID 30/01/2013 00:00:00 130203-27 6859263 TM048	15/2/13	Simon Postlewhite	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6859259	6859261	6859263
Customer Sample Ref.	CAEMV84	CAEMV85	CAEMV86
AGS Ref.			
Depth			
Type	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	15-Feb-2013	15-Feb-2013	15-Feb-2013
EPH CWG (Aliphatic) GC (S)	08-Feb-2013	08-Feb-2013	08-Feb-2013
EPH CWG (Aromatic) GC (S)	08-Feb-2013	08-Feb-2013	08-Feb-2013
GRO by GC-FID (S)	08-Feb-2013	08-Feb-2013	08-Feb-2013
Metals by iCap-OES (Soil)	08-Feb-2013	11-Feb-2013	08-Feb-2013
pH	08-Feb-2013	08-Feb-2013	08-Feb-2013
Sample description	07-Feb-2013	07-Feb-2013	07-Feb-2013
Semi Volatile Organic Compounds	08-Feb-2013	08-Feb-2013	08-Feb-2013
Total Organic Carbon	19-Feb-2013	19-Feb-2013	19-Feb-2013
TPH CWG GC (S)	08-Feb-2013	08-Feb-2013	08-Feb-2013
VOC MS (S)	08-Feb-2013	08-Feb-2013	08-Feb-2013

SDG:	130203-27	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	212582
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Llandarcy
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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

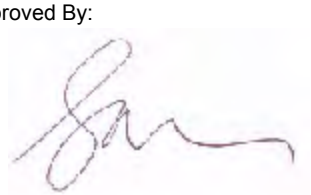
Date:	06 March 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130219-14
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	214677

We received 4 samples on Tuesday February 19, 2013 and 4 of these samples were scheduled for analysis which was completed on Wednesday March 06, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6940149	CAEMV94			15/02/2013
6940150	DSB024			18/02/2013
6940151	DSB027			18/02/2013
6940152	DSB028			18/02/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6940150	6940151	6940152
			Customer Sample Reference	DSB024	DSB027	DSB028
			AGS Reference			
			Depth (m)			
			Container	1l green glass bottle	Vial (ALE297)	1l green glass bottle	Vial (ALE297)	1l green glass bottle	Vial (ALE297)
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 3		X		X		X	
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 3		X		X		X	
GRO by GC-FID (W)	All	NDPs: 0 Tests: 3			X		X		X
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 3		X		X		X	
TPH CWG (W)	All	NDPs: 0 Tests: 3		X		X		X	
VOC MS (W)	All	NDPs: 0 Tests: 3			X		X		X

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container		
			6940149	CAEMV94			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 1						X	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 1					X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 1					X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 1							X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 1					X		
	Cadmium	NDPs: 0 Tests: 1					X		
	Chromium	NDPs: 0 Tests: 1					X		
	Copper	NDPs: 0 Tests: 1					X		
	Lead	NDPs: 0 Tests: 1					X		
	Mercury	NDPs: 0 Tests: 1					X		
	Nickel	NDPs: 0 Tests: 1					X		
	Selenium	NDPs: 0 Tests: 1					X		
	Zinc	NDPs: 0 Tests: 1					X		
pH	All	NDPs: 0 Tests: 1						X	
Sample description	All	NDPs: 0 Tests: 1					X		

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container		
			6940149	CAEMV94			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 1					X		
Total Organic Carbon	All	NDPs: 0 Tests: 1					X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 1					X		
VOC MS (S)	All	NDPs: 0 Tests: 1							X

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
6940149	CAEMV94		Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	Oil/Petroleum

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R	CAEMV94
Depth (m)	.
Sample Type	Soil/Solid
Date Sampled	15/02/2013
Sample Time	.
Date Received	19/02/2013
SDG Ref	130219-14
Lab Sample No.(s)	6940149
AGS Reference	

Component	LOD/Units	Method	
Soil Organic Matter (SOM)	<0.35 %	TM132	5.24 #
pH	1 pH Units	TM133	7.44 M
Arsenic	<0.6 mg/kg	TM181	22.2 M
Cadmium	<0.02 mg/kg	TM181	0.612 M
Chromium	<0.9 mg/kg	TM181	14.9 M
Copper	<1.4 mg/kg	TM181	55.9 M
Lead	<0.7 mg/kg	TM181	45 M
Mercury	<0.14 mg/kg	TM181	0.573 M
Nickel	<0.2 mg/kg	TM181	20.8 M
Selenium	<1 mg/kg	TM181	<1 #
Zinc	<1.9 mg/kg	TM181	115 M

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R	CAEMV94
Depth (m)	.
Sample Type	Soil/Solid
Date Sampled	15/02/2013
Sample Time	.
Date Received	19/02/2013
SDG Ref	130219-14
Lab Sample No.(s)	6940149
AGS Reference	

Component	LOD/Units	Method	
Phenol	<100 µg/kg	TM157	<100
Pentachlorophenol	<100 µg/kg	TM157	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157	<100
Nitrobenzene	<100 µg/kg	TM157	<100
Isophorone	<100 µg/kg	TM157	<100
Hexachloroethane	<100 µg/kg	TM157	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157	<100
Hexachlorobutadiene	<100 µg/kg	TM157	<100
Hexachlorobenzene	<100 µg/kg	TM157	<100
n-Dioctyl phthalate	<100 µg/kg	TM157	<100
Dimethyl phthalate	<100 µg/kg	TM157	<100
Diethyl phthalate	<100 µg/kg	TM157	<100
n-Dibutyl phthalate	<100 µg/kg	TM157	<100
Dibenzofuran	<100 µg/kg	TM157	<100
Carbazole	<100 µg/kg	TM157	<100
Butylbenzyl phthalate	<100 µg/kg	TM157	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157	<100
Azobenzene	<100 µg/kg	TM157	<100
4-Nitrophenol	<100 µg/kg	TM157	<100
4-Nitroaniline	<100 µg/kg	TM157	<100
4-Methylphenol	<100 µg/kg	TM157	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157	<100
4-Chloroaniline	<100 µg/kg	TM157	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157	<100
4-Bromophenylphenylether	<100 µg/kg	TM157	<100
3-Nitroaniline	<100 µg/kg	TM157	<100
2-Nitrophenol	<100 µg/kg	TM157	<100
2-Nitroaniline	<100 µg/kg	TM157	<100
2-Methylphenol	<100 µg/kg	TM157	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157	<100

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend		Customer Sample R	CAEMV94					
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.					
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid					
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/02/2013					
*	Subcontracted test.	Sample Time	.					
**	% 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	Date Received	19/02/2013					
		SDG Ref	130219-14					
(F)	Trigger breach confirmed	Lab Sample No.(s)	6940149					
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method					
2-Chlorophenol	<100 µg/kg	TM157	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157	<100				
2-Chloronaphthalene	<100 µg/kg	TM157	<100				
2-Methylnaphthalene	<100 µg/kg	TM157	<100				
Acenaphthylene	<100 µg/kg	TM157	<100				
Acenaphthene	<100 µg/kg	TM157	<100				
Anthracene	<100 µg/kg	TM157	<100				
Benzo(a)anthracene	<100 µg/kg	TM157	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157	<100				
Benzo(a)pyrene	<100 µg/kg	TM157	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157	<100				
Chrysene	<100 µg/kg	TM157	<100				
Fluoranthene	<100 µg/kg	TM157	144				
Fluorene	<100 µg/kg	TM157	148				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157	<100				
Phenanthrene	<100 µg/kg	TM157	297				
Pyrene	<100 µg/kg	TM157	144				
Naphthalene	<100 µg/kg	TM157	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157	<100				

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DSB024	DSB027	DSB028			
			Depth (m)	.	.	.			
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)			
			Date Sampled	18/02/2013	18/02/2013	18/02/2013			
			Sample Time	.	.	.			
			Date Received	19/02/2013	19/02/2013	19/02/2013			
			SDG Ref	130219-14	130219-14	130219-14			
			Lab Sample No.(s)	6940150	6940151	6940152			
			AGS Reference						
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176		<1	<2	<1			
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176		<1	<2	<1			
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176		<1	<2	<1			
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176		<1	<2	<1			
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176		<1	<2	<1			
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176		<1	<2	<1			
2,4-Dichlorophenol (aq)	<1 µg/l	TM176		<1	<2	<1			
2,4-Dimethylphenol (aq)	<1 µg/l	TM176		<1	<2	<1			
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176		<1	9.18	<1			
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176		<1	<2	<1			
2-Chloronaphthalene (aq)	<1 µg/l	TM176		<1	<2	<1			
2-Chlorophenol (aq)	<1 µg/l	TM176		<1	<2	<1			
2-Methylnaphthalene (aq)	<1 µg/l	TM176		<1	<2	<1			
2-Methylphenol (aq)	<1 µg/l	TM176		<1	<2	<1			
2-Nitroaniline (aq)	<1 µg/l	TM176		<1	<2	<1			
2-Nitrophenol (aq)	<1 µg/l	TM176		<1	<2	<1			
3-Nitroaniline (aq)	<1 µg/l	TM176		<1	<2	<1			
4-Bromophenylphenylether (aq)	<1 µg/l	TM176		<1	<2	<1			
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176		<1	<2	<1			
4-Chloroaniline (aq)	<1 µg/l	TM176		<1	<2	<1			
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176		<1	<2	<1			
4-Methylphenol (aq)	<1 µg/l	TM176		<1	<2	<1			
4-Nitrophenol (aq)	<1 µg/l	TM176		<1	<2	<1			
4-Nitroaniline (aq)	<1 µg/l	TM176		<1	<2	<1			
Azobenzene (aq)	<1 µg/l	TM176		<1	<2	<1			
Acenaphthylene (aq)	<1 µg/l	TM176		<1	<2	<1			
Acenaphthene (aq)	<1 µg/l	TM176		<1	2.1	<1			
Anthracene (aq)	<1 µg/l	TM176		<1	4.21	<1			
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176		<1	<2	<1			
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176		<1	<2	<1			
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176		2.26	<4	2.55			
Benzo(a)anthracene (aq)	<1 µg/l	TM176		<1	2.44	<1			

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DSB024	DSB027	DSB028			
			Depth (m)	.	.	.			
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)			
			Date Sampled	18/02/2013	18/02/2013	18/02/2013			
			Sample Time	.	.	.			
			Date Received	19/02/2013	19/02/2013	19/02/2013			
			SDG Ref	130219-14	130219-14	130219-14			
			Lab Sample No.(s)	6940150	6940151	6940152			
			AGS Reference						
Butylbenzyl phthalate (aq)	<1 µg/l	TM176		<1	<2	<1			
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176		<1	<2	<1			
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176		<1	<2	<1			
Benzo(a)pyrene (aq)	<1 µg/l	TM176		<1	<2	<1			
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176		<1	<2	<1			
Carbazole (aq)	<1 µg/l	TM176		<1	<2	<1			
Chrysene (aq)	<1 µg/l	TM176		<1	13.7	<1			
Dibenzofuran (aq)	<1 µg/l	TM176		<1	<2	<1			
n-Dibutyl phthalate (aq)	<1 µg/l	TM176		<1	<2	<1			
Diethyl phthalate (aq)	<1 µg/l	TM176		<1	<2	<1			
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176		<1	<2	<1			
Dimethyl phthalate (aq)	<1 µg/l	TM176		<1	<2	<1			
n-Dioctyl phthalate (aq)	<5 µg/l	TM176		<5	<10	<5			
Fluoranthene (aq)	<1 µg/l	TM176		<1	<2	<1			
Fluorene (aq)	<1 µg/l	TM176		<1	12.9	<1			
Hexachlorobenzene (aq)	<1 µg/l	TM176		<1	<2	<1			
Hexachlorobutadiene (aq)	<1 µg/l	TM176		<1	<2	<1			
Pentachlorophenol (aq)	<1 µg/l	TM176		<1	<2	<1			
Phenol (aq)	<1 µg/l	TM176		<1	<2	<1			
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176		<1	<2	<1			
Hexachloroethane (aq)	<1 µg/l	TM176		<1	<2	<1			
Nitrobenzene (aq)	<1 µg/l	TM176		<1	<2	<1			
Naphthalene (aq)	<1 µg/l	TM176		<1	<2	<1			
Isophorone (aq)	<1 µg/l	TM176		<1	<2	<1			
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176		<1	<2	<1			
Phenanthrene (aq)	<1 µg/l	TM176		<1	39.3	<1			
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176		<1	<2	<1			
Pyrene (aq)	<1 µg/l	TM176		<1	11.4	<1			

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV94					
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.					
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid					
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/02/2013					
*	Subcontracted test.	Sample Time	.					
**	% 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	Date Received	19/02/2013					
		SDG Ref	130219-14					
(F)	Trigger breach confirmed	Lab Sample No.(s)	6940149					
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	65					
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	190000 M					
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<50 M					
Benzene	<10 µg/kg	TM089	<100 M					
Toluene	<2 µg/kg	TM089	<20 M					
Ethylbenzene	<3 µg/kg	TM089	<30 M					
m,p-Xylene	<6 µg/kg	TM089	<60 M					
o-Xylene	<3 µg/kg	TM089	<30 M					
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<90					
sum of detected BTEX by GC	<24 µg/kg	TM089	<240					
Aliphatics >C5-C6	<10 µg/kg	TM089	307					
Aliphatics >C6-C8	<10 µg/kg	TM089	16600					
Aliphatics >C8-C10	<10 µg/kg	TM089	48500					
Aliphatics >C10-C12	<10 µg/kg	TM089	55600					
Aliphatics >C12-C16	<100 µg/kg	TM173	264000					
Aliphatics >C16-C21	<100 µg/kg	TM173	194000					
Aliphatics >C21-C35	<100 µg/kg	TM173	203000					
Aliphatics >C35-C44	<100 µg/kg	TM173	46700					
Total Aliphatics >C12-C44	<100 µg/kg	TM173	707000					
Aromatics >EC5-EC7	<10 µg/kg	TM089	<100					
Aromatics >EC7-EC8	<10 µg/kg	TM089	<100					
Aromatics >EC8-EC10	<10 µg/kg	TM089	32300					
Aromatics >EC10-EC12	<10 µg/kg	TM089	37100					
Aromatics >EC12-EC16	<100 µg/kg	TM173	160000					
Aromatics >EC16-EC21	<100 µg/kg	TM173	65100					
Aromatics >EC21-EC35	<100 µg/kg	TM173	138000					
Aromatics >EC35-EC44	<100 µg/kg	TM173	46900					
Aromatics >EC40-EC44	<100 µg/kg	TM173	15200					
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	410000					
Total Aliphatics >C5-35	<100 µg/kg	TM173	782000					
Total Aromatics >C5-35	<100 µg/kg	TM173	432000					
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	1210000					

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV94					
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.					
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid					
*	Subcontracted test.	Date Sampled	15/02/2013					
**	% 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	Sample Time	.					
		Date Received	19/02/2013					
		SDG Ref	130219-14					
(F)	Trigger breach confirmed	Lab Sample No.(s)	6940149					
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method					
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1310000				

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DSB024	DSB027	DSB028			
			Depth (m)	.	.	.			
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)			
			Date Sampled	18/02/2013	18/02/2013	18/02/2013			
			Sample Time	.	.	.			
			Date Received	19/02/2013	19/02/2013	19/02/2013			
			SDG Ref	130219-14	130219-14	130219-14			
			Lab Sample No.(s)	6940150	6940151	6940152			
			AGS Reference						
GRO Surrogate % recovery**	%	TM245		108	12 3	103			
GRO >C5-C12	<50 µg/l	TM245		<50 #	5070 #	<50 #			
Methyl tertiary butyl ether (MTBE)	<3 µg/l	TM245		<3 #	<3 #	<3 #			
Benzene	<7 µg/l	TM245		<7 #	<7 #	<7 #			
Toluene	<4 µg/l	TM245		<4 #	<4 #	<4 #			
Ethylbenzene	<5 µg/l	TM245		<5 #	<5 #	<5 #			
m,p-Xylene	<8 µg/l	TM245		<8 #	<8 #	<8 #			
o-Xylene	<3 µg/l	TM245		<3 #	<3 #	<3 #			
Sum of detected Xylenes	<11 µg/l	TM245		<11	<11	<11			
Sum of detected BTEX	<28 µg/l	TM245		<28	<28	<28			
Aliphatics >C5-C6	<10 µg/l	TM245		<10	75	<10			
Aliphatics >C6-C8	<10 µg/l	TM245		<10	997	20			
Aliphatics >C8-C10	<10 µg/l	TM245		<10	748	<10			
Aliphatics >C10-C12	<10 µg/l	TM245		<10	1650	<10			
Aliphatics >C12-C16 (aq)	<10 µg/l	TM174		29	52800	53			
Aliphatics >C16-C21 (aq)	<10 µg/l	TM174		217	277000	244			
Aliphatics >C21-C35 (aq)	<10 µg/l	TM174		557	481000	457			
Total Aliphatics >C12-C35 (aq)	<10 µg/l	TM174		803	811000	754			
Aromatics >EC5-EC7	<10 µg/l	TM245		<10	<10	<10			
Aromatics >EC7-EC8	<10 µg/l	TM245		<10	<10	<10			
Aromatics >EC8-EC10	<10 µg/l	TM245		<10	499	<10			
Aromatics >EC10-EC12	<10 µg/l	TM245		<10	1100	<10			
Aromatics >EC12-EC16 (aq)	<10 µg/l	TM174		20	20500	26			
Aromatics >EC16-EC21 (aq)	<10 µg/l	TM174		105	125000	114			
Aromatics >EC21-EC35 (aq)	<10 µg/l	TM174		282	274000	235			
Total Aromatics >EC12-EC35 (aq)	<10 µg/l	TM174		407	420000	375			
Total Aliphatics & Aromatics >C5-35 (aq)	<10 µg/l	TM174		1220	1240000	1160			

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R	CAEMV94
Depth (m)	.
Sample Type	Soil/Solid
Date Sampled	15/02/2013
Sample Time	.
Date Received	19/02/2013
SDG Ref	130219-14
Lab Sample No.(s)	6940149
AGS Reference	

Component	LOD/Units	Method	
Dibromofluoromethane**	%	TM116	100
Toluene-d8**	%	TM116	97.9
4-Bromofluorobenzene**	%	TM116	122
Dichlorodifluoromethane	<4 µg/kg	TM116	<80 M
Chloromethane	<7 µg/kg	TM116	<140
Vinyl Chloride	<10 µg/kg	TM116	<200
Bromomethane	<13 µg/kg	TM116	<260 M
Chloroethane	<14 µg/kg	TM116	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116	<200 #
Carbon Disulphide	<7 µg/kg	TM116	<140 M
Dichloromethane	<10 µg/kg	TM116	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116	<240 M
Bromochloromethane	<14 µg/kg	TM116	<280 M
Chloroform	<8 µg/kg	TM116	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116	<220 M
Carbontetrachloride	<14 µg/kg	TM116	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116	<100 M
Benzene	<9 µg/kg	TM116	<180 M
Trichloroethene	<9 µg/kg	TM116	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116	<240 M
Dibromomethane	<9 µg/kg	TM116	<180 M
Bromodichloromethane	<7 µg/kg	TM116	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116	<280 M
Toluene	<5 µg/kg	TM116	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAEMV94					
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.					
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid					
*	Subcontracted test.	Date Sampled	15/02/2013					
**	% 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	Sample Time	.					
		Date Received	19/02/2013					
		SDG Ref	130219-14					
(F)	Trigger breach confirmed	Lab Sample No.(s)	6940149					
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,3-Dichloropropane	<7 µg/kg	TM116	<140 #					
Tetrachloroethene	<5 µg/kg	TM116	<100 M					
Dibromochloromethane	<13 µg/kg	TM116	<260 M					
1,2-Dibromoethane	<12 µg/kg	TM116	<240 M					
Chlorobenzene	<5 µg/kg	TM116	<100 M					
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<200 M					
Ethylbenzene	<4 µg/kg	TM116	<80 M					
p/m-Xylene	<14 µg/kg	TM116	<280 #					
o-Xylene	<10 µg/kg	TM116	<200 M					
Styrene	<10 µg/kg	TM116	<200 M					
Bromoform	<10 µg/kg	TM116	<200 M					
Isopropylbenzene	<5 µg/kg	TM116	4670 M					
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<200 #					
1,2,3-Trichloropropane	<17 µg/kg	TM116	<340 M					
Bromobenzene	<10 µg/kg	TM116	<200 M					
Propylbenzene	<11 µg/kg	TM116	5310 M					
2-Chlorotoluene	<9 µg/kg	TM116	<180 M					
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<160 #					
4-Chlorotoluene	<12 µg/kg	TM116	<240 M					
tert-Butylbenzene	<12 µg/kg	TM116	<240 #					
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	1770 #					
sec-Butylbenzene	<10 µg/kg	TM116	4670 M					
4-Isopropyltoluene	<11 µg/kg	TM116	<220 M					
1,3-Dichlorobenzene	<6 µg/kg	TM116	<120 M					
1,4-Dichlorobenzene	<5 µg/kg	TM116	<100 M					
n-Butylbenzene	<10 µg/kg	TM116	<200 M					
1,2-Dichlorobenzene	<12 µg/kg	TM116	<240 M					
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<280 M					
Tert-amyl methyl ether	<15 µg/kg	TM116	<300					
1,2,4-Trichlorobenzene	<6 µg/kg	TM116	<120 #					
Hexachlorobutadiene	<12 µg/kg	TM116	<240					
Naphthalene	<13 µg/kg	TM116	<260 M					

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R			CAEMV94
Depth (m)			.
Sample Type			Soil/Solid
Date Sampled			15/02/2013
Sample Time			.
Date Received			19/02/2013
SDG Ref			130219-14
Lab Sample No.(s)			6940149
AGS Reference			
Component	**LOD/Units**	**Method**	
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DSB024	DSB027	DSB028			
			Depth (m)	.	.	.			
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)			
			Date Sampled	18/02/2013	18/02/2013	18/02/2013			
			Sample Time	.	.	.			
			Date Received	19/02/2013	19/02/2013	19/02/2013			
			SDG Ref	130219-14	130219-14	130219-14			
			Lab Sample No.(s)	6940150	6940151	6940152			
			AGS Reference						
Dibromofluoromethane**	%	TM208		109	104	107			
Toluene-d8**	%	TM208		99.7	83.6	99.9			
4-Bromofluorobenzene**	%	TM208		102	66.6	101			
Dichlorodifluoromethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Chloromethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Vinyl chloride	<1 µg/l	TM208		<1 #	<1000 #	42.2 #			
Bromomethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Chloroethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Trichlorofluoromethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,1-Dichloroethene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Carbon disulphide	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Dichloromethane	<3 µg/l	TM208		<3 #	<3000 #	<3 #			
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
trans-1,2-Dichloroethene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,1-Dichloroethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
cis-1,2-Dichloroethene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
2,2-Dichloropropane	<1 µg/l	TM208		<1	<1000	<1			
Bromochloromethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Chloroform	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,1,1-Trichloroethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,1-Dichloropropene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Carbontetrachloride	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,2-Dichloroethane	<1 µg/l	TM208		<1	<1000	202			
Benzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Trichloroethene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,2-Dichloropropane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Dibromomethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Bromodichloromethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
cis-1,3-Dichloropropene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Toluene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
trans-1,3-Dichloropropene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,1,2-Trichloroethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DSB024	DSB027	DSB028			
			Depth (m)	.	.	.			
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)			
			Date Sampled	18/02/2013	18/02/2013	18/02/2013			
			Sample Time	.	.	.			
			Date Received	19/02/2013	19/02/2013	19/02/2013			
			SDG Ref	130219-14	130219-14	130219-14			
			Lab Sample No.(s)	6940150	6940151	6940152			
			AGS Reference						
1,3-Dichloropropane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Tetrachloroethene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Dibromochloromethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,2-Dibromoethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Chlorobenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Ethylbenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
m,p-Xylene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
o-Xylene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Styrene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Bromoform	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Isopropylbenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208		<1	<1000	<1			
1,2,3-Trichloropropane	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Bromobenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Propylbenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
2-Chlorotoluene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,3,5-Trimethylbenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
4-Chlorotoluene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
tert-Butylbenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,2,4-Trimethylbenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
sec-Butylbenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
4-iso-Propyltoluene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,3-Dichlorobenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,4-Dichlorobenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
n-Butylbenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
1,2-Dichlorobenzene	<1 µg/l	TM208		<1	<1000	<1			
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208		<1	<1000	<1			
1,2,4-Trichlorobenzene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Hexachlorobutadiene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208		<1 #	<1000 #	<1 #			
Naphthalene	<1 µg/l	TM208		<1 #	<1000 #	<1 #			

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend		Customer Sample R	DSB024	DSB027	DSB028			
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.			
diss.filt	Dissolved / filtered sample.	Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)			
tot.unfilt	Total / unfiltered sample.	Date Sampled	18/02/2013	18/02/2013	18/02/2013			
*	Subcontracted test.	Sample Time	.	.	.			
**	% 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	Date Received	19/02/2013	19/02/2013	19/02/2013			
		SDG Ref	130219-14	130219-14	130219-14			
(F)	Trigger breach confirmed	Lab Sample No.(s)	6940150	6940151	6940152			
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1 #	<1000 #	<1 #			
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<1	<1000	<1			

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV94 SOLID 15/02/2013 00:00:00 130219-14 6940149 TM048	05/03/13	Simon Postlewhite	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material		
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID		
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID		
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS		
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES		
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters		
TM245	By GC-FID	Determination of GRO by Headspace in waters		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	6940149	6940150	6940151	6940152
Customer Sample Ref.	CAEMV94	DSB024	DSB027	DSB028
AGS Ref.				
Depth				
Type	SOLID	LIQUID	LIQUID	LIQUID
Asbestos Identification (Soil)	05-Mar-2013			
EPH CWG (Aliphatic) Aqueous GC (W)		25-Feb-2013	25-Feb-2013	25-Feb-2013
EPH CWG (Aliphatic) GC (S)	27-Feb-2013			
EPH CWG (Aromatic) Aqueous GC (W)		25-Feb-2013	25-Feb-2013	25-Feb-2013
EPH CWG (Aromatic) GC (S)	27-Feb-2013			
GRO by GC-FID (S)	24-Feb-2013			
GRO by GC-FID (W)		24-Feb-2013	25-Feb-2013	24-Feb-2013
Metals by iCap-OES (Soil)	26-Feb-2013			
pH	25-Feb-2013			
Sample description	22-Feb-2013			
Semi Volatile Organic Compounds	26-Feb-2013			
SVOC MS (W) - Aqueous		25-Feb-2013	25-Feb-2013	25-Feb-2013
Total Organic Carbon	06-Mar-2013			
TPH CWG (W)		25-Feb-2013	25-Feb-2013	25-Feb-2013
TPH CWG GC (S)	27-Feb-2013			
VOC MS (S)	25-Feb-2013			
VOC MS (W)		22-Feb-2013	25-Feb-2013	24-Feb-2013

SDG:	130219-14	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0361
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	214677
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	08 March 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130207-35
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	215046

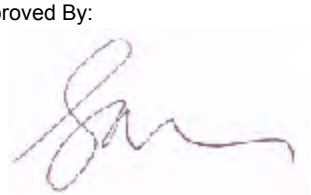
This report has been revised and directly supersedes 213019 in its entirety.

We received 4 samples on Thursday February 07, 2013 and 4 of these samples were scheduled for analysis which was completed on Friday March 08, 2013. 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

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6876703	CAEMV 87			04/02/2013
6876707	CAEMV 88			05/02/2013
6876709	CAEMV 89			05/02/2013
6876710	CAEMV 90			05/02/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

SOLID

Results Legend

X **Test**

N **No Determination Possible**

Lab Sample No(s)			6876703			6876707			6876709			6876710		
Customer Sample Reference			CAEMV 87			CAEMV 88			CAEMV 89			CAEMV 90		
AGS Reference														
Depth (m)														
Container			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 4		X			X			X			X	
Asbestos Quantification - Full	All	NDPs: 0 Tests: 1					X							
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 4	X			X			X			X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 4	X			X			X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 4			X			X			X			X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 4	X			X			X			X		
	Cadmium	NDPs: 0 Tests: 4	X			X			X			X		
	Chromium	NDPs: 0 Tests: 4	X			X			X			X		
	Copper	NDPs: 0 Tests: 4	X			X			X			X		
	Lead	NDPs: 0 Tests: 4	X			X			X			X		
	Mercury	NDPs: 0 Tests: 4	X			X			X			X		
	Nickel	NDPs: 0 Tests: 4	X			X			X			X		
	Selenium	NDPs: 0 Tests: 4	X			X			X			X		
	Zinc	NDPs: 0 Tests: 4	X			X			X			X		
pH	All	NDPs: 0 Tests: 4		X			X			X			X	

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6876703	CAEMV 87			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6876707	CAEMV 88			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6876709	CAEMV 89			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6876710	CAEMV 90			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Sample description	All	NDPs: 0 Tests: 4	X		X		X			X			X		
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 4	X		X		X			X					
Total Organic Carbon	All	NDPs: 1 Tests: 3	X		N		X			X					
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 1			X										
TPH CWG GC (S)	All	NDPs: 0 Tests: 4	X		X		X			X					
VOC MS (S)	All	NDPs: 0 Tests: 4				X			X			X			X

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

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
6876703	CAEMV 87		Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	N/A
6876707	CAEMV 88		Black	Peat	0.063 - 0.1 mm	Vegetation	N/A
6876709	CAEMV 89		Grey	Silt Loam	0.063 - 0.1 mm	Stones	Vegetation
6876710	CAEMV 90		Grey	Loamy Sand	0.063 - 0.1 mm	Stones	N/A

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	04/02/2013	05/02/2013	05/02/2013	05/02/2013		
			Sample Time	.	.	.	.		
			Date Received	07/02/2013	07/02/2013	07/02/2013	07/02/2013		
			SDG Ref	130207-35	130207-35	130207-35	130207-35		
			Lab Sample No.(s)	6876703	6876707	6876709	6876710		
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		2.14 #		1.35 #	0.979 #		
pH	1 pH Units	TM133		5.79 M	5.85 #	7.53 M	7.39 M		
Arsenic	<0.6 mg/kg	TM181		12 M	396 #	7.75 M	10.1 M		
Cadmium	<0.02 mg/kg	TM181		0.902 M	1.78 #	2.61 M	0.837 M		
Chromium	<0.9 mg/kg	TM181		19.6 M	12.1 #	14.5 M	10.6 M		
Copper	<1.4 mg/kg	TM181		22.3 M	467 #	<14 M	50.3 M		
Lead	<0.7 mg/kg	TM181		14.3 M	263 #	11.5 M	20 M		
Mercury	<0.14 mg/kg	TM181		<0.14 M	0.316 #	<0.14 M	<0.14 M		
Nickel	<0.2 mg/kg	TM181		22.4 M	27.5 #	27.2 M	18 M		
Selenium	<1 mg/kg	TM181		<1 #	4.47 #	<10 #	<1 #		
Zinc	<1.9 mg/kg	TM181		64.4 M	83.1 #	105 M	84.3 M		
Soil Organic Matter (SOM)	<0.1 %	TM321			11				

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	04/02/2013	05/02/2013	05/02/2013	05/02/2013		
			Sample Time	.	.	.	.		
			Date Received	07/02/2013	07/02/2013	07/02/2013	07/02/2013		
			SDG Ref	130207-35	130207-35	130207-35	130207-35		
			Lab Sample No.(s)	6876703	6876707	6876709	6876710		
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100		
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100		
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100		
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100		
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100		
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	04/02/2013	05/02/2013	05/02/2013	05/02/2013		
			Sample Time	.	.	.	.		
			Date Received	07/02/2013	07/02/2013	07/02/2013	07/02/2013		
			SDG Ref	130207-35	130207-35	130207-35	130207-35		
			Lab Sample No.(s)	6876703	6876707	6876709	6876710		
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylnaphthalene	<100 µg/kg	TM157		22500	326	<100	12100		
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100		
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Anthracene	<100 µg/kg	TM157		<100	203	<100	<100		
Benzo(a)anthracene	<100 µg/kg	TM157		<100	2250	<100	<100		
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	2360	<100	<100		
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	1720	<100	<100		
Benzo(a)pyrene	<100 µg/kg	TM157		<100	2170	<100	<100		
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	1140	<100	<100		
Chrysene	<100 µg/kg	TM157		<100	2400	<100	<100		
Fluoranthene	<100 µg/kg	TM157		<100	3190	<100	<100		
Fluorene	<100 µg/kg	TM157		1830	<100	<100	337		
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	1090	<100	<100		
Phenanthrene	<100 µg/kg	TM157		1520	1390	125	269		
Pyrene	<100 µg/kg	TM157		<100	2720	<100	<100		
Naphthalene	<100 µg/kg	TM157		14100	357	<100	4800		
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	375	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	04/02/2013	05/02/2013	05/02/2013	05/02/2013		
			Sample Time	.	.	.	.		
			Date Received	07/02/2013	07/02/2013	07/02/2013	07/02/2013		
			SDG Ref	130207-35	130207-35	130207-35	130207-35		
			Lab Sample No.(s)	6876703	6876707	6876709	6876710		
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		144	9	172	91		
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		697000 M	71900 #	390000 M	306000 M		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<100 M	<5 #	<50 M	<50 M		
Benzene	<10 µg/kg	TM089		<200 M	<10 #	<100 M	<100 M		
Toluene	<2 µg/kg	TM089		54.7 M	<2 #	638 M	46 M		
Ethylbenzene	<3 µg/kg	TM089		1390 M	<3 #	<30 M	<30 M		
m,p-Xylene	<6 µg/kg	TM089		25400 M	<6 #	<60 M	<60 M		
o-Xylene	<3 µg/kg	TM089		1990 M	<3 #	<30 M	<30 M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089		27400	<9	<9	<9		
sum of detected BTEX by GC	<24 µg/kg	TM089		28800	<24	638	46		
Aliphatics >C5-C6	<10 µg/kg	TM089		<200	132	1090	<100		
Aliphatics >C6-C8	<10 µg/kg	TM089		10400	2170	79300	10400		
Aliphatics >C8-C10	<10 µg/kg	TM089		145000	15800	101000	111000		
Aliphatics >C10-C12	<10 µg/kg	TM089		249000	26000	84200	65900		
Aliphatics >C12-C16	<100 µg/kg	TM173		155000	59500	135000	203000		
Aliphatics >C16-C21	<100 µg/kg	TM173		68300	19300	37600	39500		
Aliphatics >C21-C35	<100 µg/kg	TM173		62000	156000	46500	83900		
Aliphatics >C35-C44	<100 µg/kg	TM173		43400	11700	16200	30800		
Total Aliphatics >C12-C44	<100 µg/kg	TM173		329000	246000	235000	358000		
Aromatics >EC5-EC7	<10 µg/kg	TM089		<200	12	<100	<100		
Aromatics >EC7-EC8	<10 µg/kg	TM089		<200	<10	638	<100		
Aromatics >EC8-EC10	<10 µg/kg	TM089		126000	10600	67300	74200		
Aromatics >EC10-EC12	<10 µg/kg	TM089		166000	17300	56200	44000		
Aromatics >EC12-EC16	<100 µg/kg	TM173		147000	25300	88900	175000		
Aromatics >EC16-EC21	<100 µg/kg	TM173		75400	27900	30300	40200		
Aromatics >EC21-EC35	<100 µg/kg	TM173		34800	445000	44400	73000		
Aromatics >EC35-EC44	<100 µg/kg	TM173		24400	190000	18900	27800		
Aromatics >EC40-EC44	<100 µg/kg	TM173		9200	57900	7240	10500		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		282000	688000	182000	316000		
Total Aliphatics >C5-35	<100 µg/kg	TM173		690000	279000	484000	514000		
Total Aromatics >C5-35	<100 µg/kg	TM173		549000	526000	288000	406000		
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1240000	805000	772000	921000		

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.		
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
*	Subcontracted test.	Date Sampled	04/02/2013	05/02/2013	05/02/2013	05/02/2013		
**	% 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	Sample Time	.	.	.	.		
		Date Received	07/02/2013	07/02/2013	07/02/2013	07/02/2013		
		SDG Ref	130207-35	130207-35	130207-35	130207-35		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6876703	6876707	6876709	6876710		
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1310000	1010000	807000	979000		

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	04/02/2013	05/02/2013	05/02/2013	05/02/2013		
			Sample Time	.	.	.	.		
			Date Received	07/02/2013	07/02/2013	07/02/2013	07/02/2013		
			SDG Ref	130207-35	130207-35	130207-35	130207-35		
			Lab Sample No.(s)	6876703	6876707	6876709	6876710		
			AGS Reference						
Dibromofluoromethane**	%	TM116		96.1	101	96.3	106		
Toluene-d8**	%	TM116		109	105	110	111		
4-Bromofluorobenzene**	%	TM116		97.8	101	114	80.1		
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 #	<8 M	<4 M		
Chloromethane	<7 µg/kg	TM116		<140	<140	<14	<7		
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<20	<10		
Bromomethane	<13 µg/kg	TM116		<260 M	<260 #	<26 M	<13 M		
Chloroethane	<14 µg/kg	TM116		<280 M	<280 #	<28 M	<14 M		
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 #	<12 M	<6 M		
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<10 #		
Carbon Disulphide	<7 µg/kg	TM116		<140 M	312 #	22.2 M	78.6 M		
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<10 #		
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 #	<22 M	<11 M		
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 #	<22 M	<11 M		
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 #	<16 M	<8 M		
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 #	<10 M	<5 M		
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 #	<24 M	<12 M		
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 #	<28 M	<14 M		
Chloroform	<8 µg/kg	TM116		<160 M	<160 #	<16 M	<8 M		
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 #	<14 M	<7 M		
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 #	<22 M	<11 M		
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 #	<28 M	<14 M		
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 #	<10 M	<5 M		
Benzene	<9 µg/kg	TM116		<180 M	<180 #	28.5 M	14 M		
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 #	<18 M	<9 M		
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 #	<24 M	<12 M		
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 #	<18 M	<9 M		
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 #	<14 M	<7 M		
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 #	<28 M	<14 M		
Toluene	<5 µg/kg	TM116		<100 M	<100 #	14.3 M	<5 M		
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<28	<14		
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 #	<20 M	<10 M		

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	04/02/2013	05/02/2013	05/02/2013	05/02/2013		
			Sample Time	.	.	.	.		
			Date Received	07/02/2013	07/02/2013	07/02/2013	07/02/2013		
			SDG Ref	130207-35	130207-35	130207-35	130207-35		
			Lab Sample No.(s)	6876703	6876707	6876709	6876710		
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<14 #	<7 #		
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 #	<10 M	<5 M		
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 #	<26 M	<13 M		
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 #	<24 M	<12 M		
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 #	<10 M	<5 M		
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 #	<20 M	<10 M		
Ethylbenzene	<4 µg/kg	TM116		960 M	<80 #	<8 M	<4 M		
p/m-Xylene	<14 µg/kg	TM116		16600 #	<280 #	<28 #	<14 #		
o-Xylene	<10 µg/kg	TM116		624 M	<200 #	<20 M	<10 M		
Styrene	<10 µg/kg	TM116		<200 M	<200 #	<20 M	<10 M		
Bromoform	<10 µg/kg	TM116		<200 M	<200 #	<20 M	<10 M		
Isopropylbenzene	<5 µg/kg	TM116		6590 M	231 #	1330 M	4180 M		
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<10 #		
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 #	<34 M	<17 M		
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 #	<20 M	<10 M		
Propylbenzene	<11 µg/kg	TM116		13200 M	<220 #	2230 M	9970 M		
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 #	<18 M	<9 M		
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		9580 #	631 #	<16 #	<8 #		
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 #	<24 M	<12 M		
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<24 #	<12 #		
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		41700 #	1900 #	258 #	258000 #		
sec-Butylbenzene	<10 µg/kg	TM116		6240 M	<200 #	1580 M	<10 M		
4-Isopropyltoluene	<11 µg/kg	TM116		4460 M	<220 #	<22 M	<11 M		
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 #	<12 M	<6 M		
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 #	<10 M	<5 M		
n-Butylbenzene	<10 µg/kg	TM116		8010 M	<200 #	1680 M	7530 M		
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 #	<24 M	<12 M		
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 #	<28 M	<14 M		
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<30	<15		
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<12 #	<6 #		
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<24	<12		
Naphthalene	<13 µg/kg	TM116		11900 M	<260 #	<26 M	6290 M		

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

VOC MS (S)

Results Legend		Customer Sample R	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.		
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
*	Subcontracted test.	Date Sampled	04/02/2013	05/02/2013	05/02/2013	05/02/2013		
**	% 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	Sample Time	.	.	.	.		
		Date Received	07/02/2013	07/02/2013	07/02/2013	07/02/2013		
		SDG Ref	130207-35	130207-35	130207-35	130207-35		
(F)	Trigger breach confirmed	Lab Sample No.(s)	6876703	6876707	6876709	6876710		
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component		**LOD/Units**	**Method**					
1,2,3-Trichlorobenzene		<6 µg/kg	TM116	<120 M	<120 #	<12 M	<6 M		

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV 87 SOLID 04/02/2013 00:00:00 130207-35 6876703 TM048	20/02/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV 88 SOLID 05/02/2013 00:00:00 130207-35 6876707 TM048	20/02/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAEMV 89 SOLID 05/02/2013 00:00:00 130207-35 6876709 TM048	20/02/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV 90 SOLID 05/02/2013 00:00:00 130207-35 6876710 TM048	20/02/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

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 Receieved SDG Original Sample Method Number	CAEMV 88 SOLID 05/02/2013 00:00:00 130207-35 6876707 TM 304	None (#)	Amphibole fibres found during PCM analysis.	<0.001 (#)	0.0010 (#)	0.0019 (#)

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

Notification of NDPs (No determination possible)

Date Received : 07/02/2013 10:32:34

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6876707	CAEMV 88		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

Test Completion Dates

Lab Sample No(s)	6876703	6876707	6876709	6876710
Customer Sample Ref.	CAEMV 87	CAEMV 88	CAEMV 89	CAEMV 90
AGS Ref.				
Depth				
Type	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	20-Feb-2013	20-Feb-2013	20-Feb-2013	20-Feb-2013
Asbestos Quantification - Full		08-Mar-2013		
EPH CWG (Aliphatic) GC (S)	13-Feb-2013	13-Feb-2013	13-Feb-2013	13-Feb-2013
EPH CWG (Aromatic) GC (S)	13-Feb-2013	13-Feb-2013	13-Feb-2013	13-Feb-2013
GRO by GC-FID (S)	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013
Metals by iCap-OES (Soil)	13-Feb-2013	13-Feb-2013	13-Feb-2013	13-Feb-2013
pH	12-Feb-2013	13-Feb-2013	11-Feb-2013	11-Feb-2013
Sample description	09-Feb-2013	09-Feb-2013	09-Feb-2013	09-Feb-2013
Semi Volatile Organic Compounds	13-Feb-2013	13-Feb-2013	13-Feb-2013	13-Feb-2013
Total Organic Carbon	21-Feb-2013		21-Feb-2013	21-Feb-2013
Total Organic Carbon (Asb)		21-Feb-2013		
TPH CWG GC (S)	13-Feb-2013	13-Feb-2013	13-Feb-2013	13-Feb-2013
VOC MS (S)	12-Feb-2013	12-Feb-2013	12-Feb-2013	12-Feb-2013

SDG:	130207-35	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	215046
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213019

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	18 March 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130128-33
Your Reference:	Stockpiles
Location:	Coed Darcy Urban Village
Report No:	216231

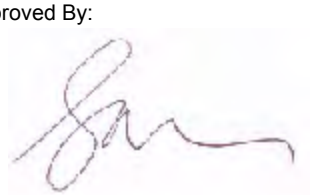
This report has been revised and directly supersedes 213530 in its entirety.

We received 30 samples on Monday January 28, 2013 and 30 of these samples were scheduled for analysis which was completed on Monday March 18, 2013. 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

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6832797	CASP6			24/01/2013
6832798	CASP7			24/01/2013
6832802	CASP8			24/01/2013
6832803	CASP9			24/01/2013
6832804	CASP10			24/01/2013
6832805	CASP11			24/01/2013
6832806	CASP12			24/01/2013
6832807	CASP13			24/01/2013
6832808	CASP14			24/01/2013
6832809	CASP15			24/01/2013
6832810	CASP16			24/01/2013
6832811	CASP17			24/01/2013
6832812	CASP18			24/01/2013
6832813	CASP19			24/01/2013
6832814	CASP20			24/01/2013
6832782	DME21			24/01/2013
6832783	DME22			24/01/2013
6832784	DME23			24/01/2013
6832785	DME24			24/01/2013
6832786	DME25			24/01/2013
6832787	DME26			24/01/2013
6832788	DME27			24/01/2013
6832789	DME28			24/01/2013
6832790	DME29			24/01/2013
6832791	DME30			24/01/2013
6832792	SP87B-1			24/01/2013
6832793	SP87B-2			24/01/2013
6832794	SP87B-3			24/01/2013
6832795	SP87B-4			24/01/2013
6832796	SP87B-5			24/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6832797	CASP6			250g Amber Jar (AL
			6832798	CASP7			400g Tub (ALE214)
			6832802	CASP8			60g VOC (ALE215)
			6832803	CASP9			250g Amber Jar (AL
			6832804	CASP10			400g Tub (ALE214)
			6832805	CASP11			60g VOC (ALE215)
			6832806	CASP12			250g Amber Jar (AL
			6832807	CASP13			400g Tub (ALE214)
			6832808	CASP14			60g VOC (ALE215)
			6832809	CASP15			250g Amber Jar (AL
			6832810	CASP16			400g Tub (ALE214)
			6832811	CASP17			60g VOC (ALE215)
			6832812	CASP18			250g Amber Jar (AL
			6832813	CASP19			400g Tub (ALE214)
							60g VOC (ALE215)
							250g Amber Jar (AL
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 30					
Asbestos Quant. - Waste Limit	All	NDPs: 0 Tests: 11					
Asbestos Quantification - Full	All	NDPs: 0 Tests: 11					
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 30					
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 30					
GRO by GC-FID (S)	All	NDPs: 0 Tests: 30					
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 30					
	Cadmium	NDPs: 0 Tests: 30					
	Chromium	NDPs: 0 Tests: 30					
	Copper	NDPs: 0 Tests: 30					
	Lead	NDPs: 0 Tests: 30					
	Mercury	NDPs: 0 Tests: 30					
	Nickel	NDPs: 0 Tests: 30					
	Selenium	NDPs: 0 Tests: 30					
	Zinc	NDPs: 0 Tests: 30					

SDG: 130128-33	**Location:** Coed Darcy Urban Village	**Order Number:** CD0345	
Job: H_ATKINS_LDC-40	**Customer:** Atkins Global Ltd	**Report Number:** 216231	
Client Reference: Stockpiles	**Attention:** Selina Bamforth	**Superseded Report:** 213530	

SOLID

Results Legend

- **X** Test
- **N** No Determination Possible

Lab Sample No(s)			6832797			6832798			6832802			6832803			6832804			6832805			6832806			6832807			6832808			6832809			6832810			6832811			6832812			6832813
Customer Sample Reference			CASP6			CASP7			CASP8			CASP9			CASP10			CASP11			CASP12			CASP13			CASP14			CASP15			CASP16			CASP17			CASP18			CASP19
AGS Reference																																											
Depth (m)																																											
Container			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL
pH	All	NDPs: 0 Tests: 30		X			X			X			X			X			X			X			X			X			X			X			X			X		
Sample description	All	NDPs: 0 Tests: 30	X			X			X			X			X			X			X			X			X			X			X			X			X			X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 30	X			X			X			X			X			X			X			X			X			X			X			X			X			X
Total Organic Carbon	All	NDPs: 26 Tests: 4	N			N			N			N			N			N			N			N			N			N			N			N			N			N
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 26	X			X			X			X			X			X			X			X			X			X			X			X			X			X
TPH CWG GC (S)	All	NDPs: 0 Tests: 30	X			X			X			X			X			X			X			X			X			X			X			X			X			X
VOC MS (S)	All	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

SOLID

Results Legend

- X — Test
- N — No Determination Possible

Lab Sample No(s)			6832813		6832814			6832782			6832783			6832784			6832785			6832786			6832787			6832788			6832789			6832790			6832791			6832792			6832793	
Customer Sample Reference			CASP19		CASP20			DME21			DME22			DME23			DME24			DME25			DME26			DME27			DME28			DME29			DME30			SP87B-1			SP87B-2	
AGS Reference																																										
Depth (m)																																										
Container			400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 30	X			X			X			X			X			X			X			X			X			X			X			X			X			X
Asbestos Quant. - Waste Limit	All	NDPs: 0 Tests: 11	X						X						X						X									X						X						
Asbestos Quantification - Full	All	NDPs: 0 Tests: 11	X						X						X						X									X						X						
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
GRO by GC-FID (S)	All	NDPs: 0 Tests: 30		X			X			X			X			X			X			X			X			X			X			X			X			X		
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
	Cadmium	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
	Chromium	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
	Copper	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
	Lead	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
	Mercury	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
	Nickel	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
	Selenium	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	
	Zinc	NDPs: 0 Tests: 30			X			X			X			X			X			X			X			X			X			X			X			X			X	

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6832813	CASP19			400g Tub (ALE214)
			6832814	CASP20			60g VOC (ALE215)
			6832782	DME21			250g Amber Jar (AL
			6832783	DME22			400g Tub (ALE214)
			6832784	DME23			60g VOC (ALE215)
			6832785	DME24			250g Amber Jar (AL
			6832786	DME25			400g Tub (ALE214)
			6832787	DME26			60g VOC (ALE215)
			6832788	DME27			250g Amber Jar (AL
			6832789	DME28			400g Tub (ALE214)
			6832790	DME29			60g VOC (ALE215)
			6832791	DME30			250g Amber Jar (AL
			6832792	SP87B-1			400g Tub (ALE214)
			6832793	SP87B-2			250g Amber Jar (AL
pH	All	NDPs: 0 Tests: 30	X		X		X		X		X		X		X		X		X		X		X		X		X		X		X
Sample description	All	NDPs: 0 Tests: 30		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 30		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
Total Organic Carbon	All	NDPs: 26 Tests: 4		N		N		N		N		N		N		N			X	N		N		N				N			
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 26		X		X		X		X		X		X		X				X		X		X				X			
TPH CWG GC (S)	All	NDPs: 0 Tests: 30		X		X		X		X		X		X		X		X		X		X		X		X		X			
VOC MS (S)	All	NDPs: 0 Tests: 30	X		X		X		X		X		X		X		X		X		X		X		X		X				

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6832793	SP87B-2			60g VOC (ALE215)
			6832794	SP87B-3			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6832795	SP87B-4			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6832796	SP87B-5			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 30					X X X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 30					X X X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 30					X X X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 30					X X X X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 30					X X X
	Cadmium	NDPs: 0 Tests: 30					X X X
	Chromium	NDPs: 0 Tests: 30					X X X
	Copper	NDPs: 0 Tests: 30					X X X
	Lead	NDPs: 0 Tests: 30					X X X
	Mercury	NDPs: 0 Tests: 30					X X X
	Nickel	NDPs: 0 Tests: 30					X X X
	Selenium	NDPs: 0 Tests: 30					X X X
	Zinc	NDPs: 0 Tests: 30					X X X
pH	All	NDPs: 0 Tests: 30					X X X
Sample description	All	NDPs: 0 Tests: 30					X X X

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6832793	SP87B-2			60g VOC (ALE215)
							250g Amber Jar (AL
							400g Tub (ALE214)
			6832794	SP87B-3			60g VOC (ALE215)
							250g Amber Jar (AL
							400g Tub (ALE214)
			6832795	SP87B-4			60g VOC (ALE215)
							250g Amber Jar (AL
							400g Tub (ALE214)
			6832796	SP87B-5			60g VOC (ALE215)
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 30					
							X
							X
							X
Total Organic Carbon	All	NDPs: 26 Tests: 4					
							N
							X
							X
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 26					
							X
TPH CWG GC (S)	All	NDPs: 0 Tests: 30					
							X
							X
							X
VOC MS (S)	All	NDPs: 0 Tests: 30					
							X
							X
							X
							X

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

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
6832797	CASP6		Black	Silty Clay	0.063 - 0.1 mm	None	Stones
6832798	CASP7		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Crushed Brick	Stones
6832802	CASP8		Dark Brown	Clay	0.1 - 2 mm	None	Stones
6832803	CASP9		Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	N/A
6832804	CASP10		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Brick	Stones
6832805	CASP11		Dark Brown	Sandy Loam	0.1 - 2 mm	Brick	Stones
6832806	CASP12		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
6832807	CASP13		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Crushed Brick
6832808	CASP14		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Crushed Brick
6832809	CASP15		Dark Brown	Sandy Loam	0.1 - 2 mm	Crushed Brick	Stones
6832810	CASP16		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Brick	Stones
6832811	CASP17		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
6832812	CASP18		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Crushed Brick	Stones
6832813	CASP19		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Crushed Brick	Stones
6832814	CASP20		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Crushed Brick
6832782	DME21		Dark Brown	Sandy Clay Loam	0.063 - 0.1 mm	None	Stones
6832783	DME22		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	None	Stones
6832784	DME23		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	None	Stones
6832785	DME24		Dark Brown	Sandy Loam	0.1 - 2 mm	Crushed Brick	Stones
6832786	DME25		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	None	Stones
6832787	DME26		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	None	Stones
6832788	DME27		Light Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	N/A
6832789	DME28		Dark Brown	Sandy Loam	0.1 - 2 mm	Crushed Brick	Stones
6832790	DME29		Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Crushed Brick
6832791	DME30		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Crushed Brick
6832792	SP87B-1		Light Brown	Silty Clay	0.063 - 0.1 mm	None	Stones
6832793	SP87B-2		Dark Brown	Sandy Clay	0.063 - 0.1 mm	None	Stones
6832794	SP87B-3		Dark Brown	Silty Clay	0.063 - 0.1 mm	None	Stones
6832795	SP87B-4		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	None	Stones
6832796	SP87B-5		Light Brown	Silty Clay	0.063 - 0.1 mm	None	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832797	6832798	6832802	6832803	6832804	6832805
			AGS Reference						
pH	1 pH Units	TM133		7.78 M	7.83 M	8.23 M	8.93 M	8.41 M	8.59 M
Arsenic	<0.6 mg/kg	TM181		23.3 M	35.5 M	32.6 M	20.7 M	24.1 M	31.4 M
Cadmium	<0.02 mg/kg	TM181		0.686 M	0.752 M	0.839 M	0.594 M	0.912 M	0.69 M
Chromium	<0.9 mg/kg	TM181		13.8 M	14.5 M	19.4 M	18 M	16.9 M	10.3 M
Copper	<1.4 mg/kg	TM181		86.1 M	149 M	117 M	51.8 M	99.8 M	43.7 M
Lead	<0.7 mg/kg	TM181		95.3 M	190 M	114 M	142 M	138 M	170 M
Mercury	<0.14 mg/kg	TM181		0.356 M	1 M	0.568 M	0.159 M	0.781 M	0.81 M
Nickel	<0.2 mg/kg	TM181		15.2 M	22.8 M	21.8 M	16.2 M	28.1 M	13.2 M
Selenium	<1 mg/kg	TM181		<1 #	1.08 #	1.19 #	1.01 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181		470 M	1120 M	607 M	328 M	432 M	447 M
Soil Organic Matter (SOM)	<0.1 %	TM321		2.62	3.27	2.64	3.27	2.07	1.49

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP12	CASP13	CASP14	CASP15	CASP16	CASP17
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832806	6832807	6832808	6832809	6832810	6832811
			AGS Reference						
pH	1 pH Units	TM133		8.55 M	8.51 M	7.74 M	8.16 M	7.77 M	8.04 M
Arsenic	<0.6 mg/kg	TM181		18.5 M	22.5 M	24.2 M	19.4 M	18.4 M	29.2 M
Cadmium	<0.02 mg/kg	TM181		0.689 M	0.489 M	0.933 M	0.713 M	0.643 M	1.42 M
Chromium	<0.9 mg/kg	TM181		12.6 M	13.7 M	16.3 M	17 M	14.8 M	16.1 M
Copper	<1.4 mg/kg	TM181		41.8 M	81.9 M	70.6 M	44.6 M	44.5 M	116 M
Lead	<0.7 mg/kg	TM181		61.8 M	157 M	82.3 M	67.2 M	40.3 M	113 M
Mercury	<0.14 mg/kg	TM181		0.576 M	0.213 M	0.445 M	1.19 M	<0.14 M	0.438 M
Nickel	<0.2 mg/kg	TM181		20 M	19.8 M	23 M	25.3 M	21.3 M	23.9 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181		211 M	650 M	238 M	257 M	130 M	278 M
Soil Organic Matter (SOM)	<0.1 %	TM321		1.61	2.34	2.27	1.52	2.57	2.18

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP18	CASP19	CASP20	DME21	DME22	DME23
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832812	6832813	6832814	6832782	6832783	6832784
			AGS Reference						
pH	1 pH Units	TM133		8.18 M	8.08 M	7.91 M	9.48 M	10.3 M	9.87 M
Arsenic	<0.6 mg/kg	TM181		10.2 M	30.5 M	36 M	9.01 M	4.13 M	6.54 M
Cadmium	<0.02 mg/kg	TM181		0.486 M	0.896 M	1.06 M	0.329 M	<0.02 M	0.207 M
Chromium	<0.9 mg/kg	TM181		14.1 M	11.9 M	13.8 M	12.1 M	5.84 M	7.66 M
Copper	<1.4 mg/kg	TM181		35.2 M	76.1 M	135 M	22.9 M	7.94 M	25.3 M
Lead	<0.7 mg/kg	TM181		61.3 M	77.8 M	91.6 M	48.1 M	18.4 M	31.6 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	0.467 M	1.42 M	0.394 M	<0.14 M	0.199 M
Nickel	<0.2 mg/kg	TM181		22.1 M	16.5 M	23.2 M	10.1 M	3.45 M	7.53 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	1.09 #	1.6 #	1.79 #	1.55 #
Zinc	<1.9 mg/kg	TM181		203 M	271 M	356 M	172 M	53.6 M	125 M
Soil Organic Matter (SOM)	<0.1 %	TM321		2	3.09	3.47	6.84	2.34	3.55

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME24	DME25	DME26	DME27	DME28	DME29
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832785	6832786	6832787	6832788	6832789	6832790
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132					2.48 #		
pH	1 pH Units	TM133		10.2 M	9.34 M	9.09 M	10.3 M	10.2 M	8.26 M
Arsenic	<0.6 mg/kg	TM181		9.64 M	11.2 M	4.14 M	7.76 M	8.12 M	29.7 M
Cadmium	<0.02 mg/kg	TM181		0.303 M	0.386 M	0.14 M	0.359 M	0.21 M	0.824 M
Chromium	<0.9 mg/kg	TM181		10.4 M	6.67 M	6.19 M	9.49 M	8.11 M	13.2 M
Copper	<1.4 mg/kg	TM181		57.5 M	19.1 M	10.8 M	13.3 M	20.4 M	105 M
Lead	<0.7 mg/kg	TM181		44.9 M	80.7 M	14.3 M	28.6 M	28.8 M	382 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		7.96 M	7.56 M	7.11 M	12.9 M	10.4 M	27.8 M
Selenium	<1 mg/kg	TM181		1.15 #	1.93 #	2.09 #	1.37 #	1.29 #	<1 #
Zinc	<1.9 mg/kg	TM181		117 M	105 M	43.5 M	68.6 M	110 M	1050 M
Soil Organic Matter (SOM)	<0.1 %	TM321		4.05	2.7	2.99		3.08	2.99

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832791	6832792	6832793	6832794	6832795	6832796
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132			1.2 #		1.79 #	3.48 #	
pH	1 pH Units	TM133		7.88 M	8.52 M	8.69 M	8.11 M	8.24 M	8.05 M
Arsenic	<0.6 mg/kg	TM181		14.7 M	14.2 M	19.2 M	17.2 M	20.3 M	18.3 M
Cadmium	<0.02 mg/kg	TM181		0.528 M	0.99 M	1.22 M	1.4 M	1.48 M	1.01 M
Chromium	<0.9 mg/kg	TM181		8.32 M	41.3 M	29.1 M	27.6 M	33.5 M	25 M
Copper	<1.4 mg/kg	TM181		33 M	18.5 M	18.5 M	30.1 M	34.6 M	23 M
Lead	<0.7 mg/kg	TM181		47 M	93.4 M	85.2 M	172 M	283 M	99.4 M
Mercury	<0.14 mg/kg	TM181		0.194 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		11.4 M	21.3 M	20.1 M	26.9 M	31.2 M	23.4 M
Selenium	<1 mg/kg	TM181		<1 #	1.58 #	1.83 #	1.78 #	1.66 #	2.09 #
Zinc	<1.9 mg/kg	TM181		115 M	222 M	290 M	396 M	348 M	272 M
Soil Organic Matter (SOM)	<0.1 %	TM321		4.61		0.934			1.01

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832797	6832798	6832802	6832803	6832804	6832805
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	339	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		331	<100	<100	475	159	320
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832797	6832798	6832802	6832803	6832804	6832805
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		706	204	<100	149	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	159	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		297	285	372	272	248	300
Benzo(b)fluoranthene	<100 µg/kg	TM157		247	218	239	260	267	279
Benzo(k)fluoranthene	<100 µg/kg	TM157		232	177	260	181	203	220
Benzo(a)pyrene	<100 µg/kg	TM157		324	259	320	257	279	271
Benzo(g,h,i)perylene	<100 µg/kg	TM157		184	133	178	187	184	191
Chrysene	<100 µg/kg	TM157		408	285	384	506	300	410
Fluoranthene	<100 µg/kg	TM157		339	511	552	451	384	463
Fluorene	<100 µg/kg	TM157		196	<100	<100	155	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		175	136	164	162	164	169
Phenanthrene	<100 µg/kg	TM157		673	423	316	497	194	230
Pyrene	<100 µg/kg	TM157		434	426	525	823	352	462
Naphthalene	<100 µg/kg	TM157		293	143	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP12	CASP13	CASP14	CASP15	CASP16	CASP17
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832806	6832807	6832808	6832809	6832810	6832811
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	205	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	198	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP12	CASP13	CASP14	CASP15	CASP16	CASP17
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832806	6832807	6832808	6832809	6832810	6832811
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	123	<100	146
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		175	198	405	253	153	248
Benzo(b)fluoranthene	<100 µg/kg	TM157		205	206	461	220	200	313
Benzo(k)fluoranthene	<100 µg/kg	TM157		138	166	311	168	<100	205
Benzo(a)pyrene	<100 µg/kg	TM157		182	226	401	252	167	302
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	151	242	150	<100	166
Chrysene	<100 µg/kg	TM157		198	235	477	327	332	295
Fluoranthene	<100 µg/kg	TM157		300	319	590	327	211	337
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	147	238	132	<100	165
Phenanthrene	<100 µg/kg	TM157		161	249	433	372	120	239
Pyrene	<100 µg/kg	TM157		251	311	589	469	250	355
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP18	CASP19	CASP20	DME21	DME22	DME23
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832812	6832813	6832814	6832782	6832783	6832784
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	278	349
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP18	CASP19	CASP20	DME21	DME22	DME23
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832812	6832813	6832814	6832782	6832783	6832784
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	177	156	<100	<100	189
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		165	568	128	175	157	361
Benzo(b)fluoranthene	<100 µg/kg	TM157		222	668	133	173	142	315
Benzo(k)fluoranthene	<100 µg/kg	TM157		139	443	<100	<100	<100	224
Benzo(a)pyrene	<100 µg/kg	TM157		191	615	<100	127	132	284
Benzo(g,h,i)perylene	<100 µg/kg	TM157		118	333	<100	<100	<100	287
Chrysene	<100 µg/kg	TM157		189	760	225	515	535	1300
Fluoranthene	<100 µg/kg	TM157		241	904	134	207	152	405
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		116	320	<100	<100	<100	167
Phenanthrene	<100 µg/kg	TM157		144	595	360	<100	<100	211
Pyrene	<100 µg/kg	TM157		221	1090	271	358	353	912
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME24	DME25	DME26	DME27	DME28	DME29
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832785	6832786	6832787	6832788	6832789	6832790
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		314	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME24	DME25	DME26	DME27	DME28	DME29
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832785	6832786	6832787	6832788	6832789	6832790
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		117	<100	<100	<100	<100	178
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		294	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		300	133	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		164	<100	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		251	127	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		174	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		1060	132	205	<100	462	267
Fluoranthene	<100 µg/kg	TM157		320	<100	<100	277	<100	<100
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	250	<100	<100
Pyrene	<100 µg/kg	TM157		821	146	289	308	288	177
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832791	6832792	6832793	6832794	6832795	6832796
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		1390	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	129	340	191	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	311	283	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		198	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
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**	% 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832791	6832792	6832793	6832794	6832795	6832796
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	206	139	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	138	205	574	461	<100
Anthracene	<100 µg/kg	TM157		<100	201	395	802	651	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	993	1700	2370	2950	127
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	997	1860	1950	2770	141
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	747	1310	1820	2350	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	1040	1910	2110	2930	162
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	623	1130	1090	1720	<100
Chrysene	<100 µg/kg	TM157		<100	1080	1830	2360	3160	144
Fluoranthene	<100 µg/kg	TM157		<100	1540	2840	4310	4380	211
Fluorene	<100 µg/kg	TM157		<100	<100	205	492	356	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	625	1090	1120	1770	<100
Phenanthrene	<100 µg/kg	TM157		<100	720	1450	3270	2540	<100
Pyrene	<100 µg/kg	TM157		<100	1130	2100	3150	3140	169
Naphthalene	<100 µg/kg	TM157		134	<100	<100	166	434	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	208	363	353	578	<100

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832797	6832798	6832802	6832803	6832804	6832805
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		118	149	101	77	64	51
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		204000 M	138000 M	18400 M	24200 M	7160 M	3490 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<50 M	<25 M	<5 M	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		<100 M	<50 M	16.4 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<20 M	<10 M	<2 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<30 M	<15 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<60 M	<30 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<30 M	<15 M	<3 M	<3 M	<3 M	<3 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		351	721	83.1	43.7	18.9	21.7
Aliphatics >C6-C8	<10 µg/kg	TM089		15400	15800	1960	706	245	235
Aliphatics >C8-C10	<10 µg/kg	TM089		43100	28100	4120	4490	1390	723
Aliphatics >C10-C12	<10 µg/kg	TM089		69900	44800	5680	9570	2750	1220
Aliphatics >C12-C16	<100 µg/kg	TM173		212000	178000	163000	281000	80000	74700
Aliphatics >C16-C21	<100 µg/kg	TM173		292000	194000	563000	1260000	176000	273000
Aliphatics >C21-C35	<100 µg/kg	TM173		860000	550000	1450000	1980000	493000	1230000
Aliphatics >C35-C44	<100 µg/kg	TM173		164000	143000	203000	268000	73400	213000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1530000	1070000	2380000	3790000	823000	1790000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<100	51.2	16.4	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<100	<50	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		28700	18700	2750	2990	927	481
Aromatics >EC10-EC12	<10 µg/kg	TM089		46600	29900	3780	6380	1830	811
Aromatics >EC12-EC16	<100 µg/kg	TM173		109000	69900	64800	108000	22600	18500
Aromatics >EC16-EC21	<100 µg/kg	TM173		201000	119000	285000	768000	112000	137000
Aromatics >EC21-EC35	<100 µg/kg	TM173		549000	353000	628000	1080000	338000	616000
Aromatics >EC35-EC44	<100 µg/kg	TM173		152000	163000	160000	274000	93100	160000
Aromatics >EC40-EC44	<100 µg/kg	TM173		58700	68800	66100	128000	36100	63700
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1010000	704000	1140000	2230000	566000	931000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1490000	1010000	2190000	3530000	754000	1580000
Total Aromatics >C5-35	<100 µg/kg	TM173		934000	590000	985000	1970000	476000	773000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		2430000	1600000	3180000	5500000	1230000	2350000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend		Customer Sample R	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
(F)	Trigger breach confirmed	Lab Sample No.(s)	6832797	6832798	6832802	6832803	6832804	6832805
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2740000	1910000	3540000	6040000	1400000	2720000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP12	CASP13	CASP14	CASP15	CASP16	CASP17
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832806	6832807	6832808	6832809	6832810	6832811
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		102	92	74	84	127	134
GRO >C5-C12	<44 µg/kg	TM089		37000	2710	26500			
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089					13000 M	6620 M	49100 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<5 #	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		17.3 M	<10 M	<10 M	<10 M	<10 M	18.9 M
Toluene	<2 µg/kg	TM089		<2 M	3.51 M	<2 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 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		25.3	21.1	72.5	29.9	24.8	212
Aliphatics >C6-C8	<10 µg/kg	TM089		3930	136	1370	1060	498	5580
Aliphatics >C8-C10	<10 µg/kg	TM089		9910	395	7470	3020	1130	12600
Aliphatics >C10-C12	<10 µg/kg	TM089		9920	1130	7590	4090	2530	13400
Aliphatics >C12-C16	<100 µg/kg	TM173		94700	55000	96100	107000	27200	203000
Aliphatics >C16-C21	<100 µg/kg	TM173		175000	177000	120000	132000	104000	109000
Aliphatics >C21-C35	<100 µg/kg	TM173		399000	616000	391000	342000	240000	515000
Aliphatics >C35-C44	<100 µg/kg	TM173		170000	119000	85100	108000	43800	34300
Total Aliphatics >C12-C44	<100 µg/kg	TM173		839000	966000	692000	689000	415000	861000
Aromatics >EC5-EC7	<10 µg/kg	TM089		17.3	<10	<10	<10	<10	18.9
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		6600	267	4980	2020	752	8410
Aromatics >EC10-EC12	<10 µg/kg	TM089		6610	756	5060	2730	1690	8910
Aromatics >EC12-EC16	<100 µg/kg	TM173		23800	10500	20800	27400	10400	47500
Aromatics >EC16-EC21	<100 µg/kg	TM173		85400	81800	63900	82800	67000	66400
Aromatics >EC21-EC35	<100 µg/kg	TM173		304000	372000	215000	256000	187000	302000
Aromatics >EC35-EC44	<100 µg/kg	TM173		208000	134000	111000	128000	68100	77400
Aromatics >EC40-EC44	<100 µg/kg	TM173		91300	58700	51000	55900	28900	29700
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		621000	598000	410000	495000	333000	493000
Total Aliphatics >C5-35	<100 µg/kg	TM173		693000	849000	624000	590000	376000	858000
Total Aromatics >C5-35	<100 µg/kg	TM173		426000	466000	310000	371000	267000	433000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend		Customer Sample R	CASP12	CASP13	CASP14	CASP15	CASP16	CASP17
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
(F)	Trigger breach confirmed	Lab Sample No.(s)	6832806	6832807	6832808	6832809	6832810	6832811
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	1120000	1310000	933000	961000	643000	1290000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1500000	1570000	1130000	1200000	755000	1400000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP18	CASP19	CASP20	DME21	DME22	DME23
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832812	6832813	6832814	6832782	6832783	6832784
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		78	106	115	44	61	56
GRO >C5-C12	<44 µg/kg	TM089		4750	26300				
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089				344000 M	10200 M	12900 M	13500 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 #	<50 M	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		<10 M	<10 M	<100 M	11.3 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<20 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<30 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<60 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<30 M	<3 M	<3 M	<3 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		16.1	34.8	2410	106	118	171
Aliphatics >C6-C8	<10 µg/kg	TM089		384	1020	36700	1370	1340	1380
Aliphatics >C8-C10	<10 µg/kg	TM089		868	5670	67800	2460	3040	3200
Aliphatics >C10-C12	<10 µg/kg	TM089		1740	9490	115000	2790	3820	3940
Aliphatics >C12-C16	<100 µg/kg	TM173		31800	190000	177000	140000	114000	162000
Aliphatics >C16-C21	<100 µg/kg	TM173		84200	503000	123000	385000	456000	458000
Aliphatics >C21-C35	<100 µg/kg	TM173		223000	1520000	317000	4400000	4120000	4290000
Aliphatics >C35-C44	<100 µg/kg	TM173		39700	185000	69600	1550000	1030000	1140000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		379000	2390000	686000	6480000	5720000	6060000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<100	11.3	10.4	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<100	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		578	3780	45200	1640	2030	2130
Aromatics >EC10-EC12	<10 µg/kg	TM089		1160	6330	76700	1860	2550	2630
Aromatics >EC12-EC16	<100 µg/kg	TM173		11000	62100	83300	34000	62000	67300
Aromatics >EC16-EC21	<100 µg/kg	TM173		55700	301000	89300	228000	328000	301000
Aromatics >EC21-EC35	<100 µg/kg	TM173		175000	904000	262000	3320000	3560000	3500000
Aromatics >EC35-EC44	<100 µg/kg	TM173		60400	181000	89700	1510000	1260000	1300000
Aromatics >EC40-EC44	<100 µg/kg	TM173		24300	68800	33000	525000	444000	464000
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		302000	1450000	524000	5100000	5210000	5180000
Total Aliphatics >C5-35	<100 µg/kg	TM173		342000	2220000	839000	4930000	4700000	4920000
Total Aromatics >C5-35	<100 µg/kg	TM173		244000	1280000	556000	3590000	3950000	3880000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend		Customer Sample R	CASP18	CASP19	CASP20	DME21	DME22	DME23
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
(F)	Trigger breach confirmed	Lab Sample No.(s)	6832812	6832813	6832814	6832782	6832783	6832784
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	586000	3500000	1390000	8520000	8650000	8800000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	686000	3870000	1550000	11600000	10900000	11200000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME24	DME25	DME26	DME27	DME28	DME29
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832785	6832786	6832787	6832788	6832789	6832790
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		44	47	44	61	60	88
GRO >C5-C12	<44 µg/kg	TM089							7600
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		3500 M	1050 M	1630 M	1120 M	3910 M	
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<5 M	<5 M	<5 M	<5 M	<5 #
Benzene	<10 µg/kg	TM089		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 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		12.8	10.6	30.2	15	98.9	23.4
Aliphatics >C6-C8	<10 µg/kg	TM089		95.1	85	117	48.3	705	190
Aliphatics >C8-C10	<10 µg/kg	TM089		755	211	349	156	842	1250
Aliphatics >C10-C12	<10 µg/kg	TM089		1280	359	538	477	1020	3180
Aliphatics >C12-C16	<100 µg/kg	TM173		154000	37400	74800	63600	147000	440000
Aliphatics >C16-C21	<100 µg/kg	TM173		450000	199000	448000	412000	470000	442000
Aliphatics >C21-C35	<100 µg/kg	TM173		4640000	3470000	7730000	5340000	6560000	2230000
Aliphatics >C35-C44	<100 µg/kg	TM173		1090000	471000	897000	624000	977000	261000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		6330000	4180000	9150000	6440000	8160000	3370000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		503	140	239	105	561	840
Aromatics >EC10-EC12	<10 µg/kg	TM089		854	240	358	319	679	2120
Aromatics >EC12-EC16	<100 µg/kg	TM173		26000	15900	23200	11200	40700	97300
Aromatics >EC16-EC21	<100 µg/kg	TM173		246000	102000	176000	156000	254000	263000
Aromatics >EC21-EC35	<100 µg/kg	TM173		2760000	1970000	2920000	1640000	3420000	1410000
Aromatics >EC35-EC44	<100 µg/kg	TM173		958000	413000	491000	273000	852000	284000
Aromatics >EC40-EC44	<100 µg/kg	TM173		342000	151000	178000	114000	314000	106000
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		3990000	2510000	3610000	2080000	4560000	2050000
Total Aliphatics >C5-35	<100 µg/kg	TM173		5250000	3710000	8260000	5820000	7180000	3120000
Total Aromatics >C5-35	<100 µg/kg	TM173		3030000	2090000	3120000	1800000	3710000	1770000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend		Customer Sample R	DME24	DME25	DME26	DME27	DME28	DME29
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.	.	.
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
(F)	Trigger breach confirmed	Lab Sample No.(s)	6832785	6832786	6832787	6832788	6832789	6832790
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	8280000	5800000	11400000	7620000	10900000	4890000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	10300000	6680000	12800000	8520000	12700000	5430000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832791	6832792	6832793	6832794	6832795	6832796
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		150	126	79	88	116	81
GRO >C5-C12	<44 µg/kg	TM089					119		234
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		169000 M	305 M	<44 M		<44 M	
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<25 M	<5 M	<5 M	<5 #	<5 M	<5 #
Benzene	<10 µg/kg	TM089		<50 M	<10 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<10 M	2.38 M	<2 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<15 M	<3 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<30 M	<6 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<15 M	<3 M	<3 M	4.76 M	<3 M	<3 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		135	<10	<10	<10	<10	11.2
Aliphatics >C6-C8	<10 µg/kg	TM089		3840	19	<10	14.3	<10	27.3
Aliphatics >C8-C10	<10 µg/kg	TM089		29800	47.6	<10	20.2	<10	43.4
Aliphatics >C10-C12	<10 µg/kg	TM089		68900	113	<10	32.1	10.6	69.4
Aliphatics >C12-C16	<100 µg/kg	TM173		462000	2270	4960	9460	8600	3370
Aliphatics >C16-C21	<100 µg/kg	TM173		394000	10600	8820	19500	48100	5530
Aliphatics >C21-C35	<100 µg/kg	TM173		507000	40100	31600	63300	158000	29500
Aliphatics >C35-C44	<100 µg/kg	TM173		90800	15200	9700	108000	78800	7160
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1450000	68100	55100	201000	293000	45600
Aromatics >EC5-EC7	<10 µg/kg	TM089		<50	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<50	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		19900	36.9	<10	23.8	<10	36
Aromatics >EC10-EC12	<10 µg/kg	TM089		46000	75	<10	21.4	<10	45.9
Aromatics >EC12-EC16	<100 µg/kg	TM173		138000	4970	3400	8200	7900	2750
Aromatics >EC16-EC21	<100 µg/kg	TM173		237000	30100	7770	39400	62500	6420
Aromatics >EC21-EC35	<100 µg/kg	TM173		282000	136000	40600	200000	306000	34800
Aromatics >EC35-EC44	<100 µg/kg	TM173		111000	61800	21800	287000	199000	14900
Aromatics >EC40-EC44	<100 µg/kg	TM173		50000	24400	9510	163000	88000	6250
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		768000	233000	73500	534000	576000	58800
Total Aliphatics >C5-35	<100 µg/kg	TM173		1470000	53100	45400	92400	214000	38600
Total Aromatics >C5-35	<100 µg/kg	TM173		723000	171000	51700	248000	377000	44000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

TPH CWG (S)

Results Legend		Customer Sample R	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.	.	.
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
(F)	Trigger breach confirmed	Lab Sample No.(s)	6832791	6832792	6832793	6832794	6832795	6832796
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	2190000	224000	97200	340000	591000	82600
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2390000	301000	129000	735000	869000	105000

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832797	6832798	6832802	6832803	6832804	6832805
			AGS Reference						
Dibromofluoromethane**	%	TM116		104	103	121	102	101	122
Toluene-d8**	%	TM116		103	102	123	104	99.6	121
4-Bromofluorobenzene**	%	TM116		100	106	121	125	108	131
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<8 M	<8 M	<80 M	<8 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<14	<14	<140	<14
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<20	<20	<200	<20
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<26 M	<26 M	<260 M	<26 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<28 M	<280 M	<28 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<12 M	<12 M	<120 M	<12 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<20 #	<200 #	<20 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	63.5 M	32.7 M	<140 M	114 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<20 #	<200 #	<20 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<22 M	<220 M	<22 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<22 M	<220 M	<22 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<16 M	<16 M	<160 M	<16 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<10 M	<100 M	<10 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<24 M	<240 M	<24 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<28 M	<280 M	<28 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<16 M	<16 M	<160 M	<16 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<14 M	<14 M	<140 M	<14 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<22 M	<220 M	<22 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<28 M	<280 M	<28 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<10 M	<100 M	158 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	34.2 M	24.4 M	<180 M	28.1 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<18 M	59.9 M	<180 M	<18 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<24 M	<240 M	<24 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<18 M	<180 M	<18 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<14 M	<14 M	<140 M	<14 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<28 M	<280 M	<28 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	46.8 M	29.3 M	<100 M	45.1 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<28	<28	<280	<28
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<20 M	<200 M	<20 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832797	6832798	6832802	6832803	6832804	6832805
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<14 #	<14 #	<140 #	<14 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<10 M	<100 M	<10 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<26 M	<26 M	<260 M	<26 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<24 M	<240 M	<24 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<10 M	<100 M	<10 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<20 M	<200 M	<20 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	10.3 M	17 M	<80 M	17.1 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	54.1 #	65 #	<280 #	58.7 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<20 M	<200 M	<20 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<20 M	<200 M	<20 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<20 M	<200 M	<20 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<10 M	<100 M	<10 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<20 #	<200 #	<20 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<34 M	<34 M	<340 M	<34 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<20 M	<200 M	<20 M
Propylbenzene	<11 µg/kg	TM116		<220 M	300 M	<22 M	<22 M	<220 M	<22 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<18 M	<180 M	<18 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<16 #	<16 #	<160 #	<16 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<24 M	<240 M	<24 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<24 #	<24 #	<240 #	<24 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		783 #	380 #	<18 #	35.5 #	<180 #	<18 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<20 M	<200 M	<20 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<22 M	<220 M	<22 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<12 M	<12 M	<120 M	<12 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<10 M	<100 M	<10 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<20 M	<200 M	<20 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<24 M	<240 M	<24 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<28 M	<280 M	<28 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<30	<30	<300	<30
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<12 #	<12 #	<120 #	<12 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<24	<24	<240	<24
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<26 M	<26 M	<260 M	<26 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend		Customer Sample R	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11
#	ISO17025 accredited.							
M	*m*CERTS 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	Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
		Sample Time	.	.	.	.	.	.
		Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
(F)	Trigger breach confirmed	Lab Sample No.(s)	6832797	6832798	6832802	6832803	6832804	6832805
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M	<12 M	<12 M	<120 M	<12 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP12	CASP13	CASP14	CASP15	CASP16	CASP17
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832806	6832807	6832808	6832809	6832810	6832811
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	103	106	106	104	102
Toluene-d8**	%	TM116		107	99.4	103	105	112	103
4-Bromofluorobenzene**	%	TM116		112	105	106	129	122	107
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<80 M	<80 M	<8 M	<8 M	<80 M
Chloromethane	<7 µg/kg	TM116		<14	<140	<140	<14	<14	<140
Vinyl Chloride	<10 µg/kg	TM116		<20	<200	<200	<20	<20	<200
Bromomethane	<13 µg/kg	TM116		<26 M	<260 M	<260 M	<26 M	<26 M	<260 M
Chloroethane	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<28 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<120 M	<120 M	<12 M	<12 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<20 #	<200 #	<200 #	<20 #	<20 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<14 M	<140 M	<140 M	25.2 M	30.3 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<20 #	<200 #	<200 #	<20 #	<20 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<22 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<22 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<16 M	<160 M	<160 M	<16 M	<16 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<10 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<24 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<28 M	<280 M
Chloroform	<8 µg/kg	TM116		<16 M	<160 M	<160 M	<16 M	<16 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<14 M	<140 M	<140 M	<14 M	<14 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<22 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<28 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<10 M	<100 M
Benzene	<9 µg/kg	TM116		<18 M	<180 M	<180 M	<18 M	<18 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<18 M	<180 M	<180 M	<18 M	<18 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<24 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<18 M	<180 M	<180 M	<18 M	<18 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<140 M	<140 M	<14 M	<14 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<28 M	<280 M
Toluene	<5 µg/kg	TM116		14.1 M	<100 M	<100 M	22.7 M	21.4 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<28	<280	<280	<28	<28	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<20 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP12	CASP13	CASP14	CASP15	CASP16	CASP17
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832806	6832807	6832808	6832809	6832810	6832811
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<14 #	<140 #	<140 #	<14 #	<14 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<10 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<260 M	<260 M	<26 M	<26 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<24 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<10 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<20 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<8 M	<80 M	<80 M	10.3 M	10.4 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<28 #	<280 #	<280 #	<28 #	<28 #	<280 #
o-Xylene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<20 M	<200 M
Styrene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<20 M	<200 M
Bromoform	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<20 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<10 M	<100 M	212 M	<10 M	<10 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<200 #	<200 #	<20 #	<20 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<34 M	<340 M	<340 M	<34 M	<34 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<20 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<22 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<180 M	<180 M	<18 M	<18 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	<160 #	<160 #	<16 #	<16 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<24 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<240 #	<240 #	<24 #	<24 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	<180 #	<180 #	<18 #	<18 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<20 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<22 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M	<120 M	<12 M	<12 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<10 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<20 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<24 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<28 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<300	<300	<30	<30	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<120 #	<120 #	<12 #	<12 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<240	<240	<24	<24	<240
Naphthalene	<13 µg/kg	TM116		<26 M	<260 M	<260 M	<26 M	<26 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend		Customer Sample R	CASP12	CASP13	CASP14	CASP15	CASP16	CASP17
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
(F)	Trigger breach confirmed	Lab Sample No.(s)	6832806	6832807	6832808	6832809	6832810	6832811
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<12 M	<120 M	<120 M	<12 M	<12 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP18	CASP19	CASP20	DME21	DME22	DME23
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832812	6832813	6832814	6832782	6832783	6832784
			AGS Reference						
Dibromofluoromethane**	%	TM116		109	110	108	97.6	97.3	105
Toluene-d8**	%	TM116		99.2	109	108	115	112	99.5
4-Bromofluorobenzene**	%	TM116		107	96.9	95.3	108	103	119
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<280	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CASP18	CASP19	CASP20	DME21	DME22	DME23
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832812	6832813	6832814	6832782	6832783	6832784
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<280 #	<280 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<160 #	<160 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<240 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	<180 #	<180 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<300	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R	CASP18	CASP19	CASP20	DME21	DME22	DME23
Depth (m)	.	.	.	.	.	.
Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
Sample Time	.	.	.	.	.	.
Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
Lab Sample No.(s)	6832812	6832813	6832814	6832782	6832783	6832784
AGS Reference						

Component	LOD/Units	Method					
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M	<120 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME24	DME25	DME26	DME27	DME28	DME29
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832785	6832786	6832787	6832788	6832789	6832790
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	94	105	104	108	110
Toluene-d8**	%	TM116		112	106	97.8	99.1	106	106
4-Bromofluorobenzene**	%	TM116		110	125	117	109	104	96.1
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<8 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<14	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<20	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<26 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<28 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	44.6 M	<120 M	<120 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<20 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	29.7 M	<140 M	206 M	354 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<20 #	<200 #	471 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<22 M	<220 M	<220 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<22 M	<220 M	<220 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<16 M	<160 M	<160 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<10 M	<100 M	<100 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<24 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<28 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<16 M	<160 M	<160 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<14 M	<140 M	<140 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<22 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<28 M	<280 M	<280 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	200 M	<100 M	962 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<18 M	<180 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<18 M	<180 M	<180 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<24 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<18 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<14 M	<140 M	<140 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<28 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<10 M	<100 M	<100 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<28	<280	<280	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<20 M	<200 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME24	DME25	DME26	DME27	DME28	DME29
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832785	6832786	6832787	6832788	6832789	6832790
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<14 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<10 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<26 M	<260 M	<260 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<24 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<10 M	<100 M	<100 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<20 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<8 M	<80 M	<80 M	<80 M	113 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<28 #	<280 #	<280 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<200 M	<20 M	<200 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<20 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<20 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<10 M	<100 M	<100 M	<100 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<20 #	<200 #	<200 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<34 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<20 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<22 M	<220 M	<220 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<18 M	<180 M	<180 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<16 #	<160 #	<160 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<24 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<24 #	<240 #	<240 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<18 #	<180 #	<180 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<20 M	<200 M	<200 M	<200 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<22 M	<220 M	<220 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<12 M	<120 M	<120 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<10 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<20 M	<200 M	<200 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<24 M	<240 M	<240 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<28 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<30	<300	<300	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<12 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<24	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<26 M	<260 M	<260 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend		Customer Sample R	DME24	DME25	DME26	DME27	DME28	DME29
#	ISO17025 accredited.							
M	*m*CERTS 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							
1-4&+§@	Sample deviation (see appendix)							
		Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
		Sample Time	.	.	.	.	.	.
		Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
		Lab Sample No.(s)	6832785	6832786	6832787	6832788	6832789	6832790
		AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<12 M	<120 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832791	6832792	6832793	6832794	6832795	6832796
			AGS Reference						
Dibromofluoromethane**	%	TM116		113	119	118	102	111	104
Toluene-d8**	%	TM116		120	104	108	99.5	102	98.9
4-Bromofluorobenzene**	%	TM116		123	115	121	113	100	119
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<4 M	<4 M	<8 M	<8 M	<8 M
Chloromethane	<7 µg/kg	TM116		<14	<7	<7	<14	<14	<14
Vinyl Chloride	<10 µg/kg	TM116		<20	<10	<10	<20	<20	<20
Bromomethane	<13 µg/kg	TM116		<26 M	<13 M	<13 M	<26 M	<26 M	<26 M
Chloroethane	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<28 M	<28 M	<28 M
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<6 M	<6 M	<12 M	<12 M	<12 M
1,1-Dichloroethene	<10 µg/kg	TM116		<20 #	<10 #	<10 #	<20 #	<20 #	<20 #
Carbon Disulphide	<7 µg/kg	TM116		70.1 M	16.1 M	13.2 M	<14 M	<14 M	<14 M
Dichloromethane	<10 µg/kg	TM116		<20 #	<10 #	<10 #	<20 #	<20 #	<20 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<22 M	<22 M	<22 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<22 M	<22 M	<22 M
1,1-Dichloroethane	<8 µg/kg	TM116		<16 M	<8 M	<8 M	<16 M	<16 M	<16 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<10 M	<10 M	<10 M
2,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<24 M	<24 M	<24 M
Bromochloromethane	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<28 M	<28 M	<28 M
Chloroform	<8 µg/kg	TM116		<16 M	<8 M	<8 M	<16 M	<16 M	<16 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<14 M	<7 M	<7 M	<14 M	<14 M	<14 M
1,1-Dichloropropene	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<22 M	<22 M	<22 M
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<28 M	<28 M	<28 M
1,2-Dichloroethane	<5 µg/kg	TM116		361 M	<5 M	<5 M	<10 M	<10 M	<10 M
Benzene	<9 µg/kg	TM116		72.7 M	<9 M	<9 M	<18 M	<18 M	<18 M
Trichloroethene	<9 µg/kg	TM116		<18 M	<9 M	<9 M	<18 M	<18 M	<18 M
1,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<24 M	<24 M	<24 M
Dibromomethane	<9 µg/kg	TM116		<18 M	<9 M	<9 M	<18 M	<18 M	<18 M
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<7 M	<7 M	<14 M	<14 M	<14 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<28 M	<28 M	<28 M
Toluene	<5 µg/kg	TM116		43.6 M	14.9 M	21.2 M	12.8 M	18.3 M	14.1 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<28	<14	<14	<28	<28	<28
1,1,2-Trichloroethane	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<20 M	<20 M	<20 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832791	6832792	6832793	6832794	6832795	6832796
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<14 #	<7 #	<7 #	<14 #	<14 #	<14 #
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<10 M	<10 M	<10 M
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<13 M	<13 M	<26 M	<26 M	<26 M
1,2-Dibromoethane	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<24 M	<24 M	<24 M
Chlorobenzene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<10 M	<10 M	<10 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<20 M	<20 M	<20 M
Ethylbenzene	<4 µg/kg	TM116		<8 M	<4 M	5.43 M	<8 M	<8 M	<8 M
p/m-Xylene	<14 µg/kg	TM116		<28 #	<14 #	18.3 #	<28 #	<28 #	<28 #
o-Xylene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<20 M	<20 M	<20 M
Styrene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<20 M	<20 M	<20 M
Bromoform	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<20 M	<20 M	<20 M
Isopropylbenzene	<5 µg/kg	TM116		56.8 M	<5 M	<5 M	<10 M	<10 M	<10 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<10 #	<10 #	<20 #	<20 #	<20 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<34 M	<17 M	<17 M	<34 M	<34 M	<34 M
Bromobenzene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<20 M	<20 M	<20 M
Propylbenzene	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<22 M	<22 M	<22 M
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<9 M	<9 M	<18 M	<18 M	<18 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	<8 #	16.9 #	<16 #	<16 #	<16 #
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<24 M	<24 M	<24 M
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<12 #	<12 #	<24 #	<24 #	<24 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	15.5 #	20 #	<18 #	<18 #	<18 #
sec-Butylbenzene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<20 M	<20 M	<20 M
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<11 M	<11 M	<22 M	<22 M	<22 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<6 M	<6 M	<12 M	<12 M	<12 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<5 M	<5 M	<10 M	<10 M	<10 M
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<10 M	<10 M	<20 M	<20 M	<20 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<12 M	<12 M	<24 M	<24 M	<24 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<14 M	<14 M	<28 M	<28 M	<28 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<15	<15	<30	<30	<30
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<6 #	<6 #	<12 #	<12 #	<12 #
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<12	<12	<24	<24	<24
Naphthalene	<13 µg/kg	TM116		<26 M	79.9 M	139 M	451 M	<26 M	168 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013	24/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130128-33	130128-33	130128-33	130128-33	130128-33	130128-33
			Lab Sample No.(s)	6832791	6832792	6832793	6832794	6832795	6832796
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<12 M	<6 M	<6 M	<12 M	<12 M	<12 M

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CASP6 SOLID 24/01/2013 00:00:00 130128-33 6832797 TM048	8/02/13	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 Receieved SDG Original Sample Method Number	CASP7 SOLID 24/01/2013 00:00:00 130128-33 6832798 TM048	7/02/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CASP8 SOLID 24/01/2013 00:00:00 130128-33 6832802 TM048	8/02/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CASP9 SOLID 24/01/2013 00:00:00 130128-33 6832803 TM048	8/02/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CASP10 SOLID 24/01/2013 00:00:00 130128-33 6832804 TM048	8/02/13	Chris Swindells	Loose fibres in soil	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

		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 Receieved SDG Original Sample Method Number	CASP11 SOLID 24/01/2013 00:00:00 130128-33 6832805 TM048	7/02/13	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 Receieved SDG Original Sample Method Number	CASP12 SOLID 24/01/2013 00:00:00 130128-33 6832806 TM048	8/02/13	Chris Swindells	Loose fibres in soil	Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP13 SOLID 24/01/2013 00:00:00 130128-33 6832807 TM048	8/02/13	Kevin Bowron	Soil containing loose fibres and ACM debris	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP14 SOLID 24/01/2013 00:00:00 130128-33 6832808 TM048	8/02/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CASP15 SOLID 24/01/2013 00:00:00 130128-33 6832809 TM048	8/02/13	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 Receieved SDG Original Sample Method Number	CASP16 SOLID 24/01/2013 00:00:00 130128-33 6832810 TM048	7/02/13	Tomasz Pawlikowski	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

		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 Receieved SDG Original Sample Method Number	CASP17 SOLID 24/01/2013 00:00:00 130128-33 6832811 TM048	8/02/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CASP18 SOLID 24/01/2013 00:00:00 130128-33 6832812 TM048	7/02/13	Martin Cotterell	Loose fibres in soil	Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP19 SOLID 24/01/2013 00:00:00 130128-33 6832813 TM048	7/02/13	Tomasz Pawlikowski	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 Receieved SDG Original Sample Method Number	CASP20 SOLID 24/01/2013 00:00:00 130128-33 6832814 TM048	8/02/13	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 Receieved SDG Original Sample Method Number	DME21 SOLID 24/01/2013 00:00:00 130128-33 6832782 TM048	7/02/13	Martin Cotterell	Soil containing loose fibres and ACM debris	Detected (#)	Trace (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME22 SOLID 24/01/2013 00:00:00 130128-33 6832783 TM048	8/02/13	Chris Swindells	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

		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 Receieved SDG Original Sample Method Number	DME23 SOLID 24/01/2013 00:00:00 130128-33 6832784 TM048	7/02/13	Tomasz Pawlikowski	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 Receieved SDG Original Sample Method Number	DME24 SOLID 24/01/2013 00:00:00 130128-33 6832785 TM048	7/02/13	Tomasz Pawlikowski	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 Receieved SDG Original Sample Method Number	DME25 SOLID 24/01/2013 00:00:00 130128-33 6832786 TM048	7/02/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	DME26 SOLID 24/01/2013 00:00:00 130128-33 6832787 TM048	7/02/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	DME27 SOLID 24/01/2013 00:00:00 130128-33 6832788 TM048	7/02/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME28 SOLID 24/01/2013 00:00:00 130128-33 6832789 TM048	7/02/13	Tomasz Pawlikowski	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

		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 Receieved SDG Original Sample Method Number	DME29 SOLID 24/01/2013 00:00:00 130128-33 6832790 TM048	8/02/13	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 Receieved SDG Original Sample Method Number	DME30 SOLID 24/01/2013 00:00:00 130128-33 6832791 TM048	8/02/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	SP87B-1 SOLID 24/01/2013 00:00:00 130128-33 6832792 TM048	8/02/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP87B-2 SOLID 24/01/2013 00:00:00 130128-33 6832793 TM048	8/02/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	SP87B-3 SOLID 24/01/2013 00:00:00 130128-33 6832794 TM048	8/02/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP87B-4 SOLID 24/01/2013 00:00:00 130128-33 6832795 TM048	7/02/13	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

		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 Receieved SDG Original Sample Method Number	SP87B-5 SOLID 24/01/2013 00:00:00 130128-33 6832796 TM048	8/02/13	Chris Swindells	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

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 Receieved SDG Original Sample Method Number	CASP6 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:19 130128-33 6832797 TM 304	None (#)	N/C	0.0010 (#)	<0.001 (#)	0.0017 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP9 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:19 130128-33 6832803 TM 304	None (#)	N/C	0.0014 (#)	<0.001 (#)	0.0017 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP13 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832807 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP15 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832809 TM 304	None (#)	N/C	0.0030 (#)	<0.001 (#)	0.0036 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP17 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832811 TM 304	None (#)	N/C	0.007 (#)	<0.001 (#)	0.0073 (#)

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

		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 Receieved SDG Original Sample Method Number	CASP19 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:14 130128-33 6832813 TM 304	None (#)	N/C	0.0105 (#)	0.0013 (#)	0.0118 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME21 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832782 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	0.0011 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME23 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832784 TM 304	Chrysotile (#)	N/C	0.0012 (#)	<0.001 (#)	0.0013 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME25 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:19 130128-33 6832786 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	0.0011 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME28 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:14 130128-33 6832789 TM 304	None (#)	N/C	<0.001 (#)	0.0010 (#)	0.0019 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME30 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:15 130128-33 6832791 TM 304	None (#)	N/C	0.0016 (#)	<0.001 (#)	0.0017 (#)

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Asbestos Quantification - Waste Limit

		Additional Asbestos Components (Using TM048)	Analysts Comments	Waste Limit, Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP6 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:19 130128-33 6832797 TM 304	None (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP9 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:19 130128-33 6832803 TM 304	None (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP13 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832807 TM 304	None (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP15 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832809 TM 304	None (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP17 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832811 TM 304	None (#)	N/C	<0.1 (#)

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

		Additional Asbestos Components (Using TM048)	Analysts Comments	Waste Limit, Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CASP19 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:14 130128-33 6832813 TM 304	None (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME21 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832782 TM 304	None (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME23 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:18 130128-33 6832784 TM 304	Chrysotile (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME25 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:19 130128-33 6832786 TM 304	None (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME28 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:14 130128-33 6832789 TM 304	None (#)	N/C	<0.1 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	DME30 SOLID 24/01/2013 00:00:00 12/03/2013 11:35:15 130128-33 6832791 TM 304	None (#)	N/C	<0.1 (#)

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Notification of NDPs (No determination possible)

Date Received : 28/01/2013 14:43:18

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6832782	DME21		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832783	DME22		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832784	DME23		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832785	DME24		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832786	DME25		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832787	DME26		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832789	DME28		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832790	DME29		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832791	DME30		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832793	SP87B-2		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832796	SP87B-5		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832797	CASP6		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832798	CASP7		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832802	CASP8		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832803	CASP9		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832804	CASP10		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832805	CASP11		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832806	CASP12		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832807	CASP13		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832808	CASP14		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832809	CASP15		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832810	CASP16		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832811	CASP17		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832812	CASP18		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832813	CASP19		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6832814	CASP20		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Test Completion Dates

Lab Sample No(s)	6832797	6832798	6832802	6832803	6832804	6832805	6832806	6832807	6832808	6832809
Customer Sample Ref.	CASP6	CASP7	CASP8	CASP9	CASP10	CASP11	CASP12	CASP13	CASP14	CASP15
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013
Asbestos Quant. - Waste Limit	26-Feb-2013			26-Feb-2013				26-Feb-2013		26-Feb-2013
Asbestos Quantification - Full	18-Mar-2013			18-Mar-2013				18-Mar-2013		18-Mar-2013
EPH CWG (Aliphatic) GC (S)	01-Feb-2013	04-Feb-2013	01-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013
EPH CWG (Aromatic) GC (S)	01-Feb-2013	04-Feb-2013	01-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013
GRO by GC-FID (S)	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013
Metals by iCap-OES (Soil)	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013
pH	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
Sample description	30-Jan-2013	31-Jan-2013	30-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
Semi Volatile Organic Compounds	31-Jan-2013	01-Feb-2013	31-Jan-2013	02-Feb-2013	02-Feb-2013	02-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013
Total Organic Carbon (Asb)	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013
TPH CWG GC (S)	01-Feb-2013	04-Feb-2013	01-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013
VOC MS (S)	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013

Lab Sample No(s)	6832810	6832811	6832812	6832813	6832814	6832782	6832783	6832784	6832785	6832786
Customer Sample Ref.	CASP16	CASP17	CASP18	CASP19	CASP20	DME21	DME22	DME23	DME24	DME25
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013
Asbestos Quant. - Waste Limit		26-Feb-2013		26-Feb-2013		26-Feb-2013		26-Feb-2013		26-Feb-2013
Asbestos Quantification - Full		18-Mar-2013		18-Mar-2013		18-Mar-2013		18-Mar-2013		18-Mar-2013
EPH CWG (Aliphatic) GC (S)	03-Feb-2013	03-Feb-2013	04-Feb-2013	04-Feb-2013	03-Feb-2013	31-Jan-2013	01-Feb-2013	01-Feb-2013	04-Feb-2013	01-Feb-2013
EPH CWG (Aromatic) GC (S)	03-Feb-2013	03-Feb-2013	03-Feb-2013	04-Feb-2013	03-Feb-2013	31-Jan-2013	01-Feb-2013	01-Feb-2013	04-Feb-2013	01-Feb-2013
GRO by GC-FID (S)	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013
Metals by iCap-OES (Soil)	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	30-Jan-2013	31-Jan-2013	31-Jan-2013	01-Feb-2013	31-Jan-2013
pH	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
Sample description	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	29-Jan-2013	30-Jan-2013	30-Jan-2013	31-Jan-2013	30-Jan-2013
Semi Volatile Organic Compounds	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	31-Jan-2013	31-Jan-2013	02-Feb-2013	02-Feb-2013	02-Feb-2013
Total Organic Carbon (Asb)	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013	11-Feb-2013
TPH CWG GC (S)	03-Feb-2013	03-Feb-2013	04-Feb-2013	04-Feb-2013	03-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	04-Feb-2013	01-Feb-2013
VOC MS (S)	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013

Lab Sample No(s)	6832787	6832788	6832789	6832790	6832791	6832792	6832793	6832794	6832795	6832796
Customer Sample Ref.	DME26	DME27	DME28	DME29	DME30	SP87B-1	SP87B-2	SP87B-3	SP87B-4	SP87B-5
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013
Asbestos Quant. - Waste Limit			26-Feb-2013		26-Feb-2013					
Asbestos Quantification - Full			18-Mar-2013		18-Mar-2013					
EPH CWG (Aliphatic) GC (S)	01-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013
EPH CWG (Aromatic) GC (S)	01-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013
GRO by GC-FID (S)	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	31-Jan-2013	01-Feb-2013	31-Jan-2013
Metals by iCap-OES (Soil)	31-Jan-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	01-Feb-2013
pH	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013
Sample description	30-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013
Semi Volatile Organic Compounds	02-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	02-Feb-2013	02-Feb-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
Total Organic Carbon		11-Feb-2013				11-Feb-2013		11-Feb-2013	11-Feb-2013	
Total Organic Carbon (Asb)	11-Feb-2013		11-Feb-2013	11-Feb-2013	11-Feb-2013		11-Feb-2013			11-Feb-2013
TPH CWG GC (S)	01-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	04-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013
VOC MS (S)	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013	01-Feb-2013

SDG:	130128-33	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0345
Job:	H_ATKINS_LDC-40	**Customer:**	Atkins Global Ltd	**Report Number:**	216231
Client Reference:	Stockpiles	**Attention:**	Selina Bamforth	**Superseded Report:**	213530

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Atkins Global Ltd
Project Jonah site office
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Coed Darcy
Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	18 March 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130129-3
Your Reference:	Embankment
Location:	Coed Darcy
Report No:	216206

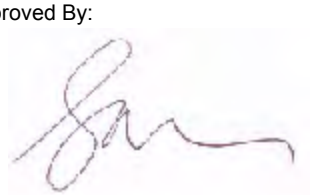
This report has been revised and directly supersedes 213316 in its entirety.

We received 12 samples on Monday January 28, 2013 and 12 of these samples were scheduled for analysis which was completed on Monday March 18, 2013. 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

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6833666	CAEMV073			24/01/2013
6833669	CAEMV074			24/01/2013
6833671	CAEMV075			25/01/2013
6833672	CAEMV076			25/01/2013
6833674	CAEMV077			25/01/2013
6833675	CAEMV078			25/01/2013
6833676	CAEMV079			25/01/2013
6833677	CAEMV080			25/01/2013
6833678	CAEMV082			25/01/2013
6833679	SP87B-6			25/01/2013
6833680	SP87B-7			25/01/2013
6833681	SP87B-8			25/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
Asbestos Quant. - Waste Limit	All	NDPs: 0 Tests: 1	6833677	CAEMV080			400g Tub (ALE214)
Asbestos Quantification - Full	All	NDPs: 0 Tests: 1	6833677	CAEMV080			400g Tub (ALE214)
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
GRO by GC-FID (S)	All	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
	Cadmium	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
	Chromium	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
	Copper	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
	Lead	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
	Mercury	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
	Nickel	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
	Selenium	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)
	Zinc	NDPs: 0 Tests: 12	6833666	CAEMV073			250g Amber Jar (AL)
			6833669	CAEMV074			400g Tub (ALE214)
			6833671	CAEMV075			60g VOC (ALE215)
			6833672	CAEMV076			250g Amber Jar (AL)
			6833674	CAEMV077			400g Tub (ALE214)
			6833675	CAEMV078			60g VOC (ALE215)
			6833676	CAEMV079			250g Amber Jar (AL)
			6833677	CAEMV080			400g Tub (ALE214)
			6833678	CAEMV082			60g VOC (ALE215)
			6833679	SP87B-6			250g Amber Jar (AL)
			6833680	SP87B-7			400g Tub (ALE214)
			6833681	SP87B-8			60g VOC (ALE215)

ALcontrol Laboratories

Validated

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

SOLID

Results Legend

- X Test
- N No Determination Possible

Lab Sample No(s)			6833666			6833669			6833671			6833672			6833674			6833675			6833676			6833677			6833678			6833679			6833680			6833681		
Customer Sample Reference			CAEMV073			CAEMV074			CAEMV075			CAEMV076			CAEMV077			CAEMV078			CAEMV079			CAEMV080			CAEMV082			SP87B-6			SP87B-7			SP87B-8		
AGS Reference																																						
Depth (m)																																						
Container			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
pH	All	NDPs: 0 Tests: 12		X			X			X			X			X			X			X			X			X			X			X			X	
Sample description	All	NDPs: 0 Tests: 12	X			X			X			X			X			X			X			X			X			X			X			X		
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 12	X			X			X			X			X			X			X			X			X			X			X			X		
Total Organic Carbon	All	NDPs: 2 Tests: 10	X			X			X			X			X			X			N			N			X			X			X			X		
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 2																			X			X														
TPH CWG GC (S)	All	NDPs: 0 Tests: 12	X			X			X			X			X			X			X			X			X			X			X			X		
VOC MS (S)	All	NDPs: 0 Tests: 12			X			X			X			X			X			X			X			X			X			X			X			X

13:08:32 18/03/2013

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

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
6833666	CAEMV073		Grey	Silt Loam	0.063 - 0.1 mm	Vegetation	Stones
6833669	CAEMV074		Grey	Sandy Silt Loam	0.1 - 2 mm	None	N/A
6833671	CAEMV075		Grey	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
6833672	CAEMV076		Grey	Loamy Sand	0.1 - 2 mm	Vegetation	Stones
6833674	CAEMV077		Black	Silty Clay Loam	0.1 - 2 mm	Vegetation	N/A
6833675	CAEMV078		Grey	Sandy Clay Loam	0.1 - 2 mm	Stones	Oil/Petroleum
6833676	CAEMV079		Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	N/A
6833677	CAEMV080		Black	Silty Clay Loam	0.063 - 0.1 mm	Vegetation	Stones
6833678	CAEMV082		Grey	Silt Loam	0.1 - 2 mm	Stones	Oil/Petroleum
6833679	SP87B-6		Orange	Sandy Clay Loam	0.1 - 2 mm	Stones	N/A
6833680	SP87B-7		Light Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
6833681	SP87B-8		Orange	Sandy Clay	0.1 - 2 mm	Stones	N/A

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833666	6833669	6833671	6833672	6833674	6833675
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		3.41 #	2.14 #	1.48 #	2.26 #	17.6 #	1.81 #
pH	1 pH Units	TM133		6.84 M	5.77 M	7.34 M	7.91 M	6.83 M	7.58 M
Arsenic	<0.6 mg/kg	TM181		1.92 M	2.66 M	3.29 M	10.4 M	107 M	21.7 M
Cadmium	<0.02 mg/kg	TM181		0.385 M	0.458 M	0.364 M	0.597 M	2.45 M	1.25 M
Chromium	<0.9 mg/kg	TM181		19.4 M	13.8 M	16.7 M	6.51 M	16.1 M	29.4 M
Copper	<1.4 mg/kg	TM181		4.97 M	3.44 M	13.6 M	16.6 M	115 M	24.2 M
Lead	<0.7 mg/kg	TM181		32.2 M	19.4 M	15.8 M	10.8 M	76.3 M	17.7 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		18.6 M	12.9 M	22.5 M	7.27 M	9.13 M	29.9 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	1.56 #	<1 #
Zinc	<1.9 mg/kg	TM181		126 M	70.3 M	55.2 M	81 M	56.3 M	232 M

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV079	CAEMV080	CAEMV082	SP87B-6	SP87B-7	SP87B-8
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833676	6833677	6833678	6833679	6833680	6833681
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132			2.17 #	1.23 #	1.46 #	1.78 #
pH	1 pH Units	TM133	6.65 M	6.49 M	8.25 M	7.82 M	8.38 M	8.49 M
Arsenic	<0.6 mg/kg	TM181	27.6 M	83.2 M	43 M	16.2 M	19 M	13.1 M
Cadmium	<0.02 mg/kg	TM181	1.55 M	2.37 M	1.31 M	1.48 M	1.41 M	1.03 M
Chromium	<0.9 mg/kg	TM181	11.7 M	13 M	14 M	28.3 M	24.5 M	19 M
Copper	<1.4 mg/kg	TM181	73.8 M	224 M	58.1 M	16.7 M	22.5 M	15.5 M
Lead	<0.7 mg/kg	TM181	70.8 M	125 M	38.5 M	100 M	118 M	78.1 M
Mercury	<0.14 mg/kg	TM181	0.244 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181	24.2 M	25.6 M	16.4 M	19.2 M	23.3 M	16.3 M
Selenium	<1 mg/kg	TM181	1.43 #	2.3 #	<1 #	1.25 #	1.94 #	1.19 #
Zinc	<1.9 mg/kg	TM181	130 M	202 M	135 M	380 M	349 M	257 M
Soil Organic Matter (SOM)	<0.1 %	TM321	7.07	12				

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833666	6833669	6833671	6833672	6833674	6833675
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	619	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	2100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	1270	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833666	6833669	6833671	6833672	6833674	6833675
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	124	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	1340	280
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	133	<100	<100
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	2340	506
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV079	CAEMV080	CAEMV082	SP87B-6	SP87B-7	SP87B-8
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833676	6833677	6833678	6833679	6833680	6833681
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		196	<500	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV079	CAEMV080	CAEMV082	SP87B-6	SP87B-7	SP87B-8
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833676	6833677	6833678	6833679	6833680	6833681
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		3970	134000	333	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<500	<100	<100	194	<100
Benzo(a)anthracene	<100 µg/kg	TM157		250	<500	<100	139	1160	270
Benzo(b)fluoranthene	<100 µg/kg	TM157		287	<500	<100	149	1590	386
Benzo(k)fluoranthene	<100 µg/kg	TM157		230	<500	<100	<100	981	274
Benzo(a)pyrene	<100 µg/kg	TM157		267	<500	<100	123	1270	316
Benzo(g,h,i)perylene	<100 µg/kg	TM157		169	<500	<100	<100	743	192
Chrysene	<100 µg/kg	TM157		294	<500	<100	149	1380	373
Fluoranthene	<100 µg/kg	TM157		447	<500	<100	225	1820	486
Fluorene	<100 µg/kg	TM157		488	2430	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<500	<100	<100	767	177
Phenanthrene	<100 µg/kg	TM157		423	1300	<100	142	858	300
Pyrene	<100 µg/kg	TM157		374	<500	<100	168	1350	376
Naphthalene	<100 µg/kg	TM157		872	64400	211	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<500	<100	<100	244	<100

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833666	6833669	6833671	6833672	6833674	6833675
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		90	151	136	161	0 3	0
GRO >C5-C12	<44 µg/kg	TM089		2500					
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089			31600 M	5150 M	8240 M	4590000 3 M	393000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 #	<5 M	<5 M	<5 M	<100 3 M	<25 M
Benzene	<10 µg/kg	TM089		<10 M	146 M	<10 M	12.3 M	5280 3 M	242 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	<2 M	<40 3 M	<10 M
Ethylbenzene	<3 µg/kg	TM089		4.92 M	238 M	7.02 M	<3 M	<60 3 M	<15 M
m,p-Xylene	<6 µg/kg	TM089		16 M	264 M	10.5 M	<6 M	<120 3 M	2040 M
o-Xylene	<3 µg/kg	TM089		11.1 M	<3 M	<3 M	<3 M	<60 3 M	<15 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		27.1	264	10.5	<9	<9 3	2040
sum of detected BTEX by GC	<24 µg/kg	TM089		32	648	<24	<24	5280 3	2280
Aliphatics >C5-C6	<10 µg/kg	TM089		78.7	706	16.4	107	76700 3	4320
Aliphatics >C6-C8	<10 µg/kg	TM089		807	6550	269	1910	2640000 3	148000
Aliphatics >C8-C10	<10 µg/kg	TM089		418	8030	668	1620	1010000 3	108000
Aliphatics >C10-C12	<10 µg/kg	TM089		534	6200	2240	2110	106000 3	35400
Aliphatics >C12-C16	<100 µg/kg	TM173		4240	17000	2390	<100	45500	16000
Aliphatics >C16-C21	<100 µg/kg	TM173		3660	17300	6350	3110	9020	88400
Aliphatics >C21-C35	<100 µg/kg	TM173		16200	30100	18600	18300	41700	363000
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	12100	2870	5770	<100	8500
Total Aliphatics >C12-C44	<100 µg/kg	TM173		24000	76500	30200	27200	96200	476000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	146	<10	12.3	5280 3	242
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<200 3	<50
Aromatics >EC8-EC10	<10 µg/kg	TM089		310	5850	463	1080	676000 3	73800
Aromatics >EC10-EC12	<10 µg/kg	TM089		355	4130	1490	1400	70400 3	23600
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	14200	<100	2620	32900	8040
Aromatics >EC16-EC21	<100 µg/kg	TM173		3030	14000	4410	2910	7060	62300
Aromatics >EC21-EC35	<100 µg/kg	TM173		57900	48300	21100	55300	125000	273000
Aromatics >EC35-EC44	<100 µg/kg	TM173		10800	19100	2300	14400	76300	8660
Aromatics >EC40-EC44	<100 µg/kg	TM173		1890	6640	348	3150	6570	2420
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		71700	95600	27800	75300	241000	352000
Total Aliphatics >C5-35	<100 µg/kg	TM173		25900	85900	30500	27200	3930000	763000
Total Aromatics >C5-35	<100 µg/kg	TM173		61600	86600	27500	63400	917000	441000

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833666	6833669	6833671	6833672	6833674	6833675
			AGS Reference						
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		87500	172000	58000	90500	4850000	1200000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		98200	204000	63200	111000	4920000	1220000

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV079	CAEMV080	CAEMV082	SP87B-6	SP87B-7	SP87B-8
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833676	6833677	6833678	6833679	6833680	6833681
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		45	67	0 3	120	107	103
GRO >C5-C12	<44 µg/kg	TM089					492	343	482
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		165000 M	269000 M	1010000 3 M			
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<10 M	<10 M	<100 3 M	<5 #	<5 #	<5 #
Benzene	<10 µg/kg	TM089		70 M	155 M	<200 3 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<4 M	<4 M	<40 3 M	2.4 M	2.32 M	2.3 M
Ethylbenzene	<3 µg/kg	TM089		<6 M	<6 M	<60 3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<12 M	3850 M	<120 3 M	7.2 M	<6 M	6.9 M
o-Xylene	<3 µg/kg	TM089		<6 M	<6 M	<60 3 M	<3 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	3850	<9 3	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		70	4010	<24 3	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		542	1150	11500 3	<10	<10	11.5
Aliphatics >C6-C8	<10 µg/kg	TM089		16400	49800	316000 3	139	183	254
Aliphatics >C8-C10	<10 µg/kg	TM089		37200	54800	294000 3	92.4	52.2	67.9
Aliphatics >C10-C12	<10 µg/kg	TM089		51600	73900	112000 3	107	33.6	51.8
Aliphatics >C12-C16	<100 µg/kg	TM173		103000	181000	139000	1370	1540	1870
Aliphatics >C16-C21	<100 µg/kg	TM173		22900	57200	36900	4310	8110	8480
Aliphatics >C21-C35	<100 µg/kg	TM173		67800	275000	28200	24600	35000	39600
Aliphatics >C35-C44	<100 µg/kg	TM173		2600	41600	<100	7020	14700	10900
Total Aliphatics >C12-C44	<100 µg/kg	TM173		197000	554000	204000	37300	59300	60800
Aromatics >EC5-EC7	<10 µg/kg	TM089		70	155	<200 3	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<20	<20	<200 3	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		24800	40400	196000 3	70.8	41.8	57.5
Aromatics >EC10-EC12	<10 µg/kg	TM089		34400	49200	74800 3	70.8	23.2	34.5
Aromatics >EC12-EC16	<100 µg/kg	TM173		274000	318000	41100	1110	4140	1670
Aromatics >EC16-EC21	<100 µg/kg	TM173		40200	66900	21100	4660	30200	8180
Aromatics >EC21-EC35	<100 µg/kg	TM173		205000	514000	46900	29800	134000	48400
Aromatics >EC35-EC44	<100 µg/kg	TM173		73500	241000	9080	15300	57800	20300
Aromatics >EC40-EC44	<100 µg/kg	TM173		28300	86600	3380	6530	22500	7930
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		593000	1140000	118000	50800	226000	78500
Total Aliphatics >C5-35	<100 µg/kg	TM173		300000	692000	938000	30700	44900	50300
Total Aromatics >C5-35	<100 µg/kg	TM173		579000	989000	380000	35700	168000	58300

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV079	CAEMV080	CAEMV082	SP87B-6	SP87B-7	SP87B-8
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833676	6833677	6833678	6833679	6833680	6833681
			AGS Reference						
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		878000	1680000	1320000	66300	213000	109000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		954000	1960000	1330000	88700	285000	140000

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833666	6833669	6833671	6833672	6833674	6833675
			AGS Reference						
Dibromofluoromethane**	%	TM116		92.2	98.1	95.9	103	102	99.6
Toluene-d8**	%	TM116		95.7	96.3	99.3	97.6	99.6	100
4-Bromofluorobenzene**	%	TM116		129	122	110	126	109	130
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<4 M	<4 M	<4 M	<80 M	<4 M
Chloromethane	<7 µg/kg	TM116		<7	<7	<7	<7	<140	<7
Vinyl Chloride	<10 µg/kg	TM116		<10	<10	<10	<10	<200	<10
Bromomethane	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M	<260 M	<13 M
Chloroethane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<280 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M	<120 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<200 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		35.9 M	58.5 M	27 M	32 M	<140 M	31.9 M
Dichloromethane	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<200 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<220 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<220 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<8 M	<8 M	<8 M	<160 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<100 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<240 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<280 M	<14 M
Chloroform	<8 µg/kg	TM116		<8 M	<8 M	<8 M	<8 M	<160 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<140 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<220 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<280 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<100 M	<5 M
Benzene	<9 µg/kg	TM116		<9 M	78.5 M	15.5 M	20 M	435 M	93.7 M
Trichloroethene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<180 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<240 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<180 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<140 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<280 M	<14 M
Toluene	<5 µg/kg	TM116		<5 M	42 M	<5 M	<5 M	<100 M	46.9 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<14	<14	<14	<280	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<200 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	24/01/2013	24/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833666	6833669	6833671	6833672	6833674	6833675
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<7 #	<7 #	<7 #	<140 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<100 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M	<260 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<240 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<100 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<200 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<4 M	101 M	18.9 M	8.49 M	602 M	765 M
p/m-Xylene	<14 µg/kg	TM116		<14 #	99.9 #	<14 #	<14 #	2380 #	1670 #
o-Xylene	<10 µg/kg	TM116		<10 M	56.3 M	<10 M	<10 M	<200 M	191 M
Styrene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<200 M	<10 M
Bromoform	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<200 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		8.3 M	60 M	14.1 M	<5 M	9530 M	651 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<200 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<17 M	<17 M	<17 M	<340 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<200 M	<10 M
Propylbenzene	<11 µg/kg	TM116		<11 M	63.9 M	17 M	<11 M	9610 M	1030 M
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<180 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	118 #	<8 #	<8 #	781 #	754 #
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<240 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<12 #	<12 #	<12 #	<240 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		18.1 #	537 #	56.7 #	15 #	21400 #	2970 #
sec-Butylbenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<200 M	447 M
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<220 M	293 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M	<120 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<100 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<200 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<240 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<280 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<15	<15	<15	<300	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<6 #	<6 #	<6 #	<120 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<12	<12	<12	<240	<12
Naphthalene	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M	1930 M	322 M

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

VOC MS (S)

Results Legend		Customer Sample R	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	24/01/2013	24/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
		SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
(F)	Trigger breach confirmed	Lab Sample No.(s)	6833666	6833669	6833671	6833672	6833674	6833675
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 M	<6 M	<6 M	<6 M	<120 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV079	CAEMV080	CAEMV082	SP87B-6	SP87B-7	SP87B-8
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833676	6833677	6833678	6833679	6833680	6833681
			AGS Reference						
Dibromofluoromethane**	%	TM116		71.7	101	113	127	104	117
Toluene-d8**	%	TM116		73.2	97.2	105	105	99.6	99.9
4-Bromofluorobenzene**	%	TM116		119	117	118	102	107	105
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<80 M	<4 M	<4 M	<4 M	<4 M
Chloromethane	<7 µg/kg	TM116		<7	<140	<7	<7	<7	<7
Vinyl Chloride	<10 µg/kg	TM116		<10	<200	<10	<10	<10	<10
Bromomethane	<13 µg/kg	TM116		<13 M	<260 M	<13 M	<13 M	<13 M	<13 M
Chloroethane	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<14 M	<14 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<120 M	<6 M	<6 M	<6 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<200 #	<10 #	<10 #	<10 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		26 M	<140 M	31.7 M	21.7 M	<7 M	<7 M
Dichloromethane	<10 µg/kg	TM116		<10 #	<200 #	<10 #	<10 #	<10 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<220 M	<11 M	<11 M	<11 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<220 M	<11 M	<11 M	<11 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<160 M	<8 M	<8 M	<8 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<5 M	<5 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<12 M	<12 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<14 M	<14 M	<14 M
Chloroform	<8 µg/kg	TM116		<8 M	<160 M	<8 M	<8 M	<8 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<140 M	<7 M	<7 M	<7 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<220 M	<11 M	<11 M	<11 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<14 M	<14 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<5 M	<5 M	<5 M
Benzene	<9 µg/kg	TM116		14.3 M	<180 M	140 M	<9 M	<9 M	10.5 M
Trichloroethene	<9 µg/kg	TM116		<9 M	<180 M	<9 M	<9 M	<9 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<12 M	<12 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<9 M	<180 M	<9 M	<9 M	<9 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<140 M	<7 M	<7 M	<7 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<14 M	<14 M	<14 M
Toluene	<5 µg/kg	TM116		<5 M	<100 M	79.9 M	23.5 M	11 M	16.8 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<280	<14	<14	<14	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<10 M	<10 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV079	CAEMV080	CAEMV082	SP87B-6	SP87B-7	SP87B-8
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833676	6833677	6833678	6833679	6833680	6833681
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<140 #	<7 #	<7 #	<7 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<5 M	<5 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<260 M	<13 M	<13 M	<13 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<12 M	<12 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<5 M	<5 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<10 M	<10 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<4 M	473 M	706 M	<4 M	<4 M	<4 M
p/m-Xylene	<14 µg/kg	TM116		<14 #	11400 #	3440 #	<14 #	<14 #	<14 #
o-Xylene	<10 µg/kg	TM116		<10 M	<200 M	324 M	<10 M	<10 M	<10 M
Styrene	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<10 M	<10 M	<10 M
Bromoform	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<10 M	<10 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		1600 M	3250 M	444 M	<5 M	<5 M	<5 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<200 #	<10 #	<10 #	<10 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<340 M	<17 M	<17 M	<17 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<10 M	<10 M	<10 M
Propylbenzene	<11 µg/kg	TM116		3030 M	6170 M	634 M	<11 M	<11 M	<11 M
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<180 M	<9 M	<9 M	<9 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	9770 #	1470 #	<8 #	<8 #	<8 #
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<12 M	<12 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<240 #	<12 #	<12 #	<12 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		2040 #	44600 #	4220 #	<9 #	<9 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116		3370 M	3830 M	404 M	<10 M	<10 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		420 M	<220 M	421 M	<11 M	<11 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<120 M	<6 M	<6 M	<6 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<5 M	<5 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<10 M	<10 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<12 M	<12 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<14 M	<14 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<300	<15	<15	<15	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<120 #	<6 #	<6 #	<6 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<240	<12	<12	<12	<12
Naphthalene	<13 µg/kg	TM116		<13 M	31600 M	<13 M	<13 M	<13 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV079	CAEMV080	CAEMV082	SP87B-6	SP87B-7	SP87B-8
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013	25/01/2013
			Sample Time	.	.	.	.	.	.
			Date Received	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013	28/01/2013
			SDG Ref	130129-3	130129-3	130129-3	130129-3	130129-3	130129-3
			Lab Sample No.(s)	6833676	6833677	6833678	6833679	6833680	6833681
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<6 M	<120 M	<6 M	<6 M	<6 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CAEMV073 SOLID 24/01/2013 00:00:00 130129-3 6833666 TM048	7/02/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV074 SOLID 24/01/2013 00:00:00 130129-3 6833669 TM048	7/02/13	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 Receieved SDG Original Sample Method Number	CAEMV075 SOLID 25/01/2013 00:00:00 130129-3 6833671 TM048	7/02/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV076 SOLID 25/01/2013 00:00:00 130129-3 6833672 TM048	7/02/13	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 Receieved SDG Original Sample Method Number	CAEMV077 SOLID 25/01/2013 00:00:00 130129-3 6833674 TM048	7/02/13	Tomasz Pawlikowski	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

		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 Receieved SDG Original Sample Method Number	CAEMV078 SOLID 25/01/2013 00:00:00 130129-3 6833675 TM048	7/02/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV079 SOLID 25/01/2013 00:00:00 130129-3 6833676 TM048	7/02/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Trace (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV080 SOLID 25/01/2013 00:00:00 12/03/2013 11:34:55 130129-3 6833677 TM048	7/02/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAEMV082 SOLID 25/01/2013 00:00:00 130129-3 6833678 TM048	7/02/13	Tomasz Pawlikowski	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP87B-6 SOLID 25/01/2013 00:00:00 130129-3 6833679 TM048	7/02/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	SP87B-7 SOLID 25/01/2013 00:00:00 130129-3 6833680 TM048	7/02/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

		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 Receieved SDG Original Sample Method Number	SP87B-8 SOLID 25/01/2013 00:00:00 130129-3 6833681 TM048	7/02/13	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

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 Receieved SDG Original Sample Method Number	CAEMV080 SOLID 25/01/2013 00:00:00 18/03/2013 10:41:13 130129-3 6833677 TM 304	None (#)	Fibres found during gravimetric stage, but too few to weigh	<0.001 (#)	0.0011 (#)	0.0011 (#)

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Asbestos Quantification - Waste Limit

		Additional Asbestos Components (Using TM048)	Analysts Comments	Waste Limit, Total - %
Cust. Sample Ref.	CAEMV080	None (#)	n/c	<0.1 (#)
Depth (m)				
Sample Type	SOLID			
Date Sampled	25/01/2013 00:00:00			
Date Receieved	18/03/2013 10:41:13			
SDG	130129-3			
Original Sample	6833677			
Method Number	TM 304			

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Notification of NDPs (No determination possible)

Date Received : 29/01/2013 07:33:01

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6833676	CAEMV079		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6833677	CAEMV080		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Test Completion Dates

Lab Sample No(s)	6833666	6833669	6833671	6833672	6833674	6833675	6833676	6833677	6833678	6833679
Customer Sample Ref.	CAEMV073	CAEMV074	CAEMV075	CAEMV076	CAEMV077	CAEMV078	CAEMV079	CAEMV080	CAEMV082	SP87B-6
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos Identification (Soil)	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013
Asbestos Quant. - Waste Limit								25-Feb-2013		
Asbestos Quantification - Full								18-Mar-2013		
EPH CWG (Aliphatic) GC (S)	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
EPH CWG (Aromatic) GC (S)	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
GRO by GC-FID (S)	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
Metals by iCap-OES (Soil)	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
pH	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	31-Jan-2013
Sample description	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013	30-Jan-2013
Semi Volatile Organic Compounds	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
Total Organic Carbon	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013	08-Feb-2013			08-Feb-2013	08-Feb-2013
Total Organic Carbon (Asb)							08-Feb-2013	08-Feb-2013		
TPH CWG GC (S)	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013
VOC MS (S)	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013	31-Jan-2013

Lab Sample No(s)	6833680	6833681
Customer Sample Ref.	SP87B-7	SP87B-8
AGS Ref.		
Depth		
Type	SOLID	SOLID
Asbestos Identification (Soil)	08-Feb-2013	08-Feb-2013
EPH CWG (Aliphatic) GC (S)	31-Jan-2013	31-Jan-2013
EPH CWG (Aromatic) GC (S)	31-Jan-2013	31-Jan-2013
GRO by GC-FID (S)	31-Jan-2013	31-Jan-2013
Metals by iCap-OES (Soil)	31-Jan-2013	31-Jan-2013
pH	31-Jan-2013	31-Jan-2013
Sample description	30-Jan-2013	30-Jan-2013
Semi Volatile Organic Compounds	31-Jan-2013	31-Jan-2013
Total Organic Carbon	08-Feb-2013	08-Feb-2013
TPH CWG GC (S)	31-Jan-2013	31-Jan-2013
VOC MS (S)	31-Jan-2013	31-Jan-2013

SDG:	130129-3	**Location:**	Coed Darcy	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-160	**Customer:**	Atkins Global Ltd	**Report Number:**	216206
Client Reference:	Embankment	**Attention:**	Selina Bamforth	**Superseded Report:**	213316

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	18 March 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130130-23
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	216176

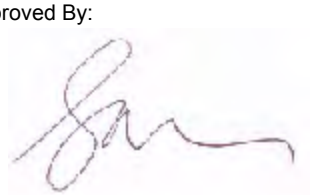
This report has been revised and directly supersedes 213760 in its entirety.

We received 2 samples on Wednesday January 30, 2013 and 2 of these samples were scheduled for analysis which was completed on Monday March 18, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6838453	CDEMV81			25/01/2013
6838454	CDEMV83			28/01/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	6838453	6838454
			Customer Sample Reference	CDEMV81	CDEMV83
			AGS Reference		
			Depth (m)		
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 2		X			X	
Asbestos Quant. - Waste Limit	All	NDPs: 0 Tests: 1		X				
Asbestos Quantification - Full	All	NDPs: 0 Tests: 1		X				
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2	X			X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 2	X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2			X			X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 2	X			X		
	Cadmium	NDPs: 0 Tests: 2	X			X		
	Chromium	NDPs: 0 Tests: 2	X			X		
	Copper	NDPs: 0 Tests: 2	X			X		
	Lead	NDPs: 0 Tests: 2	X			X		
	Mercury	NDPs: 0 Tests: 2	X			X		
	Nickel	NDPs: 0 Tests: 2	X			X		
	Selenium	NDPs: 0 Tests: 2	X			X		
	Zinc	NDPs: 0 Tests: 2	X			X		

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6838453	CDEMV81			250g Amber Jar (AL)
			6838454	CDEMV83			400g Tub (ALE214)
							60g VOC (ALE215)
							250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
pH	All	NDPs: 0 Tests: 2					X
							X
Sample description	All	NDPs: 0 Tests: 2	X				
			X				
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2	X				
			X				
Total Organic Carbon	All	NDPs: 2 Tests: 0	N				
			N				
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 2	X				
			X				
TPH CWG GC (S)	All	NDPs: 0 Tests: 2	X				
			X				
VOC MS (S)	All	NDPs: 0 Tests: 2					
							X

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

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
6838453	CDEMV81		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
6838454	CDEMV83		Dark Brown	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CDEMV81	CDEMV83				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	25/01/2013	28/01/2013				
			Sample Time	.	.				
			Date Received	30/01/2013	30/01/2013				
			SDG Ref	130130-23	130130-23				
			Lab Sample No.(s)	6838453	6838454				
			AGS Reference						
pH	1 pH Units	TM133		7.07 M	9.48 M				
Arsenic	<0.6 mg/kg	TM181		22.1 M	6.41 M				
Cadmium	<0.02 mg/kg	TM181		0.512 M	0.574 M				
Chromium	<0.9 mg/kg	TM181		15.5 M	13.1 M				
Copper	<1.4 mg/kg	TM181		58.5 M	12.6 M				
Lead	<0.7 mg/kg	TM181		65.7 M	14.9 M				
Mercury	<0.14 mg/kg	TM181		0.323 M	<0.14 M				
Nickel	<0.2 mg/kg	TM181		17 M	27.5 M				
Selenium	<1 mg/kg	TM181		1 #	<1 #				
Zinc	<1.9 mg/kg	TM181		79.6 M	79.8 M				
Soil Organic Matter (SOM)	<0.1 %	TM321		1.09	13.6				

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CDEMV81	CDEMV83				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	25/01/2013	28/01/2013				
			Sample Time	.	.				
			Date Received	30/01/2013	30/01/2013				
			SDG Ref	130130-23	130130-23				
			Lab Sample No.(s)	6838453	6838454				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		1020	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		186	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CDEMV81	CDEMV83				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	25/01/2013	28/01/2013				
			Sample Time	.	.				
			Date Received	30/01/2013	30/01/2013				
			SDG Ref	130130-23	130130-23				
			Lab Sample No.(s)	6838453	6838454				
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157		1460	3010				
Acenaphthylene	<100 µg/kg	TM157		128	<100				
Acenaphthene	<100 µg/kg	TM157		1400	<100				
Anthracene	<100 µg/kg	TM157		613	<100				
Benzo(a)anthracene	<100 µg/kg	TM157		356	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157		267	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157		260	<100				
Benzo(a)pyrene	<100 µg/kg	TM157		323	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157		195	<100				
Chrysene	<100 µg/kg	TM157		495	<100				
Fluoranthene	<100 µg/kg	TM157		1130	<100				
Fluorene	<100 µg/kg	TM157		2110	142				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		167	<100				
Phenanthrene	<100 µg/kg	TM157		3110	217				
Pyrene	<100 µg/kg	TM157		1110	<100				
Naphthalene	<100 µg/kg	TM157		1030	1470				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CDEMV81	CDEMV83				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	25/01/2013	28/01/2013				
			Sample Time	.	.				
			Date Received	30/01/2013	30/01/2013				
			SDG Ref	130130-23	130130-23				
			Lab Sample No.(s)	6838453	6838454				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		67	136				
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		82000 M	258000 M				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<100 M				
Benzene	<10 µg/kg	TM089		88 M	<200 M				
Toluene	<2 µg/kg	TM089		<2 M	<40 M				
Ethylbenzene	<3 µg/kg	TM089		<3 M	<60 M				
m,p-Xylene	<6 µg/kg	TM089		<6 M	<120 M				
o-Xylene	<3 µg/kg	TM089		<3 M	<60 M				
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9				
sum of detected BTEX by GC	<24 µg/kg	TM089		88	<24				
Aliphatics >C5-C6	<10 µg/kg	TM089		616	2390				
Aliphatics >C6-C8	<10 µg/kg	TM089		22700	39400				
Aliphatics >C8-C10	<10 µg/kg	TM089		20300	58800				
Aliphatics >C10-C12	<10 µg/kg	TM089		14900	70900				
Aliphatics >C12-C16	<100 µg/kg	TM173		462000	41700				
Aliphatics >C16-C21	<100 µg/kg	TM173		212000	17100				
Aliphatics >C21-C35	<100 µg/kg	TM173		166000	17900				
Aliphatics >C35-C44	<100 µg/kg	TM173		144000	<100				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		985000	76600				
Aromatics >EC5-EC7	<10 µg/kg	TM089		88	<200				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<200				
Aromatics >EC8-EC10	<10 µg/kg	TM089		13500	39200				
Aromatics >EC10-EC12	<10 µg/kg	TM089		9930	47300				
Aromatics >EC12-EC16	<100 µg/kg	TM173		267000	20100				
Aromatics >EC16-EC21	<100 µg/kg	TM173		167000	11100				
Aromatics >EC21-EC35	<100 µg/kg	TM173		418000	19200				
Aromatics >EC35-EC44	<100 µg/kg	TM173		272000	6740				
Aromatics >EC40-EC44	<100 µg/kg	TM173		109000	2970				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1120000	57100				
Total Aliphatics >C5-35	<100 µg/kg	TM173		899000	248000				
Total Aromatics >C5-35	<100 µg/kg	TM173		875000	137000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1770000	385000				

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

TPH CWG (S)

Results Legend		Customer Sample R	CDEMV81	CDEMV83				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.				
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid				
*	Subcontracted test.	Date Sampled	25/01/2013	28/01/2013				
**	% 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	Sample Time	.	.				
		Date Received	30/01/2013	30/01/2013				
		SDG Ref	130130-23	130130-23				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6838453	6838454				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2190000	392000				

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CDEMV81	CDEMV83				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	25/01/2013	28/01/2013				
			Sample Time	.	.				
			Date Received	30/01/2013	30/01/2013				
			SDG Ref	130130-23	130130-23				
			Lab Sample No.(s)	6838453	6838454				
			AGS Reference						
Dibromofluoromethane**	%	TM116		99.6	102				
Toluene-d8**	%	TM116		99.1	101				
4-Bromofluorobenzene**	%	TM116		117	119				
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 M				
Chloromethane	<7 µg/kg	TM116		<140	<7				
Vinyl Chloride	<10 µg/kg	TM116		<200	<10				
Bromomethane	<13 µg/kg	TM116		<260 M	<13 M				
Chloroethane	<14 µg/kg	TM116		<280 M	<14 M				
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 M				
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #				
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<7 M				
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #				
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 M				
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 M				
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 M				
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 M				
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M				
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 M				
Chloroform	<8 µg/kg	TM116		<160 M	<8 M				
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 M				
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 M				
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 M				
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<5 M				
Benzene	<9 µg/kg	TM116		<180 M	60.7 M				
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 M				
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M				
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 M				
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 M				
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 M				
Toluene	<5 µg/kg	TM116		<100 M	46 M				
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<14				
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 M				

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

VOC MS (S)

Results Legend		Customer Sample R	CDEMV81	CDEMV83				
#	ISO17025 accredited.							
M	*m*CERTS 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	Depth (m)	.	.				
		Sample Type	Soil/Solid	Soil/Solid				
		Date Sampled	25/01/2013	28/01/2013				
		Sample Time	.	.				
		Date Received	30/01/2013	30/01/2013				
		SDG Ref	130130-23	130130-23				
(F)	Trigger breach confirmed	Lab Sample No.(s)	6838453	6838454				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,3-Dichloropropane	<7 µg/kg	TM116	<140 #	<7 #				
Tetrachloroethene	<5 µg/kg	TM116	<100 M	<5 M				
Dibromochloromethane	<13 µg/kg	TM116	<260 M	<13 M				
1,2-Dibromoethane	<12 µg/kg	TM116	<240 M	<12 M				
Chlorobenzene	<5 µg/kg	TM116	<100 M	<5 M				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<200 M	<10 M				
Ethylbenzene	<4 µg/kg	TM116	<80 M	116 M				
p/m-Xylene	<14 µg/kg	TM116	<280 #	320 #				
o-Xylene	<10 µg/kg	TM116	<200 M	100 M				
Styrene	<10 µg/kg	TM116	<200 M	<10 M				
Bromoform	<10 µg/kg	TM116	<200 M	<10 M				
Isopropylbenzene	<5 µg/kg	TM116	990 M	141 M				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<200 #	<10 #				
1,2,3-Trichloropropane	<17 µg/kg	TM116	<340 M	<17 M				
Bromobenzene	<10 µg/kg	TM116	<200 M	<10 M				
Propylbenzene	<11 µg/kg	TM116	1730 M	249 M				
2-Chlorotoluene	<9 µg/kg	TM116	<180 M	<9 M				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<160 #	222 #				
4-Chlorotoluene	<12 µg/kg	TM116	<240 M	<12 M				
tert-Butylbenzene	<12 µg/kg	TM116	<240 #	<12 #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	922 #	1170 #				
sec-Butylbenzene	<10 µg/kg	TM116	1730 M	153 M				
4-Isopropyltoluene	<11 µg/kg	TM116	<220 M	<11 M				
1,3-Dichlorobenzene	<6 µg/kg	TM116	<120 M	<6 M				
1,4-Dichlorobenzene	<5 µg/kg	TM116	<100 M	<5 M				
n-Butylbenzene	<10 µg/kg	TM116	<200 M	<10 M				
1,2-Dichlorobenzene	<12 µg/kg	TM116	<240 M	<12 M				
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<280 M	<14 M				
Tert-amyl methyl ether	<15 µg/kg	TM116	<300	<15				
1,2,4-Trichlorobenzene	<6 µg/kg	TM116	<120 #	<6 #				
Hexachlorobutadiene	<12 µg/kg	TM116	<240	<12				
Naphthalene	<13 µg/kg	TM116	<260 M	291 M				

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CDEMV81	CDEMV83			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	25/01/2013	28/01/2013			
			Sample Time	.	.			
			Date Received	30/01/2013	30/01/2013			
			SDG Ref	130130-23	130130-23			
			Lab Sample No.(s)	6838453	6838454			
			AGS Reference					
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M			

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CDEMV81 SOLID 25/01/2013 00:00:00 130130-23 6838453 TM048	11/2/13	Simon Postlewhite	Loose fibres in soil	Trace (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CDEMV83 SOLID 28/01/2013 00:00:00 130130-23 6838454 TM048	11/2/13	Simon Postlewhite	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

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 Receieved SDG Original Sample Method Number	CDEMV81 SOLID 25/01/2013 00:00:00 12/03/2013 11:34:09 130130-23 6838453 TM 304	None (#)	Fibres found during gravimetric stage, but too few to weigh	<0.001 (#)	<0.001 (#)	<0.001 (#)

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Asbestos Quantification - Waste Limit

		Additional Asbestos Components (Using TM048)	Analysts Comments	Waste Limit, Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CDEMV81 SOLID 25/01/2013 00:00:00 12/03/2013 11:34:09 130130-23 6838453 TM 304	None (#)	Fibres found during gravimetric analysis, but too small/few to accurately weigh.	<0.1 (#)

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Notification of NDPs (No determination possible)

Date Received : 30/01/2013 08:25:48

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6838453	CDEMV81		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
6838454	CDEMV83		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Test Completion Dates

Lab Sample No(s)	6838453	6838454
Customer Sample Ref.	CDEMV81	CDEMV83
AGS Ref.		
Depth		
Type	SOLID	SOLID
Asbestos Identification (Soil)	12-Feb-2013	12-Feb-2013
Asbestos Quant. - Waste Limit	28-Feb-2013	
Asbestos Quantification - Full	18-Mar-2013	
EPH CWG (Aliphatic) GC (S)	05-Feb-2013	05-Feb-2013
EPH CWG (Aromatic) GC (S)	05-Feb-2013	05-Feb-2013
GRO by GC-FID (S)	03-Feb-2013	03-Feb-2013
Metals by iCap-OES (Soil)	04-Feb-2013	04-Feb-2013
pH	04-Feb-2013	04-Feb-2013
Sample description	01-Feb-2013	01-Feb-2013
Semi Volatile Organic Compounds	03-Feb-2013	03-Feb-2013
Total Organic Carbon (Asb)	12-Feb-2013	12-Feb-2013
TPH CWG GC (S)	05-Feb-2013	05-Feb-2013
VOC MS (S)	03-Feb-2013	04-Feb-2013

SDG:	130130-23	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0314
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216176
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	213760

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

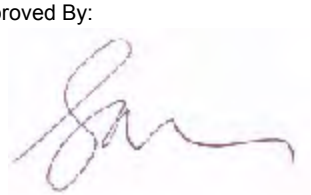
Date:	19 March 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130303-15
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	216421

We received 3 samples on Saturday March 02, 2013 and 3 of these samples were scheduled for analysis which was completed on Tuesday March 19, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7014552	CA HOTSPOT 1		0.00	28/02/2013
7014553	CA HOTSPOT 2		0.00	28/02/2013
7014555	CA SEEPAGE		0.00	28/02/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	
			7014555	CA SEEPAGE		0.00	1l green glass bottle	500ml Plastic (ALE2	Vial (ALE297)
Acidity as HCl	All	NDPs: 0 Tests: 1						X	
Alkalinity as CaCO3	All	NDPs: 0 Tests: 1						X	
Anions by Kone (w)	All	NDPs: 0 Tests: 1						X	
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 1						X	
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 1						X	
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 1					X		
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 1					X		
GRO by GC-FID (W)	All	NDPs: 0 Tests: 1							X
Mercury Dissolved	All	NDPs: 1 Tests: 0					N		
pH Value	All	NDPs: 0 Tests: 1						X	
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 1					X		
TPH CWG (W)	All	NDPs: 0 Tests: 1					X		
VOC MS (W)	All	NDPs: 0 Tests: 1							X

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	7014552	7014553
			Customer Sample Reference	CA HOTSPOT 1	CA HOTSPOT 2
			AGS Reference		
			Depth (m)	0.00	0.00
			Container	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 2		X		X		
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2	X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2			X			X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 2	X			X		
	Cadmium	NDPs: 0 Tests: 2	X			X		
	Chromium	NDPs: 0 Tests: 2	X			X		
	Copper	NDPs: 0 Tests: 2	X			X		
	Lead	NDPs: 0 Tests: 2	X			X		
	Mercury	NDPs: 0 Tests: 2	X			X		
	Nickel	NDPs: 0 Tests: 2	X			X		
	Selenium	NDPs: 0 Tests: 2	X			X		
	Zinc	NDPs: 0 Tests: 2	X			X		
pH	All	NDPs: 0 Tests: 2		X			X	
Sample description	All	NDPs: 0 Tests: 2	X			X		
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2	X			X		

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7014552	CA HOTSPOT 1		0.00	250g Amber Jar (AL
			7014553	CA HOTSPOT 2		0.00	250g Amber Jar (AL
TPH CWG GC (S)	All	NDPs: 0 Tests: 2	X				
							400g Tub (ALE214)
							400g Tub (ALE214)
VOC MS (S)	All	NDPs: 0 Tests: 2					
				X			60g VOC (ALE215)
							60g VOC (ALE215)
				X			
							60g VOC (ALE215)
				X			

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
7014552	CA HOTSPOT 1	0.00	Grey	Sand	0.1 - 2 mm	Stones	None
7014553	CA HOTSPOT 2	0.00	Grey	Sand	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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CA HOTSPOT 1	CA HOTSPOT 2	CA SEEPAGE
			Depth (m)	0.00	0.00	0.00
			Sample Type	Soil/Solid	Soil/Solid	Water(GW/SW)
			Date Sampled	28/02/2013	28/02/2013	28/02/2013
			Sample Time	.	.	.
			Date Received	02/03/2013	02/03/2013	02/03/2013
			SDG Ref	130303-15	130303-15	130303-15
			Lab Sample No.(s)	7014552	7014553	7014555
			AGS Reference			
Alkalinity, Total as CaCO3	<2 mg/l	TM043				860 #
Acidity as HCl	<4 mg/l	TM094				<4
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120				2.23 #
Arsenic (diss.filt)	<0.12 µg/l	TM152				63.8 #
Cadmium (diss.filt)	<0.1 µg/l	TM152				<1 #
Chromium (diss.filt)	<0.22 µg/l	TM152				21.7 #
Copper (diss.filt)	<0.85 µg/l	TM152				80.8 #
Lead (diss.filt)	<0.02 µg/l	TM152				57.9 #
Nickel (diss.filt)	<0.15 µg/l	TM152				48.7 #
Selenium (diss.filt)	<0.39 µg/l	TM152				<3.9 #
Zinc (diss.filt)	<0.41 µg/l	TM152				44.6 #
Sulphate	<2 mg/l	TM184				547 #
pH	<1 pH Units	TM256				8.37 #
pH	1 pH Units	TM133		9.39 M	9.4 M	
Arsenic	<0.6 mg/kg	TM181		9.34 M	8.84 M	
Cadmium	<0.02 mg/kg	TM181		0.677 M	0.543 M	
Chromium	<0.9 mg/kg	TM181		12.2 M	11.1 M	
Copper	<1.4 mg/kg	TM181		13.2 M	20.3 M	
Lead	<0.7 mg/kg	TM181		34.5 M	35.4 M	
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	
Nickel	<0.2 mg/kg	TM181		20.7 M	20.8 M	
Selenium	<1 mg/kg	TM181		<1 #	<1 #	
Zinc	<1.9 mg/kg	TM181		84.4 M	114 M	

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CA HOTSPOT 1	CA HOTSPOT 2				
			Depth (m)	0.00	0.00				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	28/02/2013	28/02/2013				
			Sample Time	.	.				
			Date Received	02/03/2013	02/03/2013				
			SDG Ref	130303-15	130303-15				
			Lab Sample No.(s)	7014552	7014553				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CA HOTSPOT 1	CA HOTSPOT 2				
			Depth (m)	0.00	0.00				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	28/02/2013	28/02/2013				
			Sample Time	.	.				
			Date Received	02/03/2013	02/03/2013				
			SDG Ref	130303-15	130303-15				
			Lab Sample No.(s)	7014552	7014553				
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157		2550	2340				
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157		5900	6850				
Acenaphthylene	<100 µg/kg	TM157		<100	<100				
Acenaphthene	<100 µg/kg	TM157		<100	<100				
Anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100				
Chrysene	<100 µg/kg	TM157		<100	<100				
Fluoranthene	<100 µg/kg	TM157		<100	<100				
Fluorene	<100 µg/kg	TM157		<100	133				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100				
Phenanthrene	<100 µg/kg	TM157		265	396				
Pyrene	<100 µg/kg	TM157		<100	112				
Naphthalene	<100 µg/kg	TM157		2250	2550				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

		Customer Sample R	CA SEEPAGE
		Depth (m)	0.00
		Sample Type	Water(GW/SW)
		Date Sampled	28/02/2013
		Sample Time	.
		Date Received	02/03/2013
		SDG Ref	130303-15
		Lab Sample No.(s)	7014555
		AGS Reference	
Component	**LOD/Units**	**Method**	
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<2
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<2
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<2
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<2
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<2
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<2
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<2
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	3
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<2
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<2
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<2
2-Chlorophenol (aq)	<1 µg/l	TM176	<2
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<2
2-Methylphenol (aq)	<1 µg/l	TM176	<2
2-Nitroaniline (aq)	<1 µg/l	TM176	<2
2-Nitrophenol (aq)	<1 µg/l	TM176	<2
3-Nitroaniline (aq)	<1 µg/l	TM176	<2
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	<2
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<2
4-Chloroaniline (aq)	<1 µg/l	TM176	<2
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<2
4-Methylphenol (aq)	<1 µg/l	TM176	<2
4-Nitrophenol (aq)	<1 µg/l	TM176	<2
4-Nitroaniline (aq)	<1 µg/l	TM176	<2
Azobenzene (aq)	<1 µg/l	TM176	<2
Acenaphthylene (aq)	<1 µg/l	TM176	<2
Acenaphthene (aq)	<1 µg/l	TM176	<2
Anthracene (aq)	<1 µg/l	TM176	<2
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<2
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<2
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<4
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<2

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

		Customer Sample R	CA SEEPAGE
		Depth (m)	0.00
		Sample Type	Water(GW/SW)
		Date Sampled	28/02/2013
		Sample Time	.
		Date Received	02/03/2013
		SDG Ref	130303-15
		Lab Sample No.(s)	7014555
		AGS Reference	
Component	**LOD/Units**	**Method**	
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<2
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<2
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<2
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<2
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<2
Carbazole (aq)	<1 µg/l	TM176	<2
Chrysene (aq)	<1 µg/l	TM176	<2
Dibenzofuran (aq)	<1 µg/l	TM176	<2
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	<2
Diethyl phthalate (aq)	<1 µg/l	TM176	<2
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<2
Dimethyl phthalate (aq)	<1 µg/l	TM176	<2
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<10
Fluoranthene (aq)	<1 µg/l	TM176	<2
Fluorene (aq)	<1 µg/l	TM176	<2
Hexachlorobenzene (aq)	<1 µg/l	TM176	<2
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<2
Pentachlorophenol (aq)	<1 µg/l	TM176	<2
Phenol (aq)	<1 µg/l	TM176	<2
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<2
Hexachloroethane (aq)	<1 µg/l	TM176	<2
Nitrobenzene (aq)	<1 µg/l	TM176	<2
Naphthalene (aq)	<1 µg/l	TM176	<2
Isophorone (aq)	<1 µg/l	TM176	<2
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<2
Phenanthrene (aq)	<1 µg/l	TM176	<2
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176	<2
Pyrene (aq)	<1 µg/l	TM176	<2

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CA HOTSPOT 1	CA HOTSPOT 2				
			Depth (m)	0.00	0.00				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	28/02/2013	28/02/2013				
			Sample Time	.	.				
			Date Received	02/03/2013	02/03/2013				
			SDG Ref	130303-15	130303-15				
			Lab Sample No.(s)	7014552	7014553				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		143	144				
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		812000 M	905000 M				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<100 M	<100 M				
Benzene	<10 µg/kg	TM089		275 M	272 M				
Toluene	<2 µg/kg	TM089		151 M	202 M				
Ethylbenzene	<3 µg/kg	TM089		1920 M	2270 M				
m,p-Xylene	<6 µg/kg	TM089		12600 M	16900 M				
o-Xylene	<3 µg/kg	TM089		1900 M	2140 M				
sum of detected mpo xylene by GC	<9 µg/kg	TM089		14500	19000				
sum of detected BTEX by GC	<24 µg/kg	TM089		16800	21700				
Aliphatics >C5-C6	<10 µg/kg	TM089		<200	<200				
Aliphatics >C6-C8	<10 µg/kg	TM089		13500	16900				
Aliphatics >C8-C10	<10 µg/kg	TM089		148000	177000				
Aliphatics >C10-C12	<10 µg/kg	TM089		320000	343000				
Aliphatics >C12-C16	<100 µg/kg	TM173		144000	105000				
Aliphatics >C16-C21	<100 µg/kg	TM173		31900	24200				
Aliphatics >C21-C35	<100 µg/kg	TM173		62300	42600				
Aliphatics >C35-C44	<100 µg/kg	TM173		24100	13900				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		262000	185000				
Aromatics >EC5-EC7	<10 µg/kg	TM089		275	272				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<200	202				
Aromatics >EC8-EC10	<10 µg/kg	TM089		115000	139000				
Aromatics >EC10-EC12	<10 µg/kg	TM089		214000	229000				
Aromatics >EC12-EC16	<100 µg/kg	TM173		101000	91100				
Aromatics >EC16-EC21	<100 µg/kg	TM173		27400	26800				
Aromatics >EC21-EC35	<100 µg/kg	TM173		57300	50000				
Aromatics >EC35-EC44	<100 µg/kg	TM173		21000	18400				
Aromatics >EC40-EC44	<100 µg/kg	TM173		8030	7510				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		207000	186000				
Total Aliphatics >C5-35	<100 µg/kg	TM173		720000	708000				
Total Aromatics >C5-35	<100 µg/kg	TM173		515000	536000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1240000	1240000				

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CA HOTSPOT 1	CA HOTSPOT 2				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.00	0.00				
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid				
tot.unfilt	Total / unfiltered sample.	Date Sampled	28/02/2013	28/02/2013				
*	Subcontracted test.	Sample Time	.	.				
**	% 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	Date Received	02/03/2013	02/03/2013				
		SDG Ref	130303-15	130303-15				
(F)	Trigger breach confirmed	Lab Sample No.(s)	7014552	7014553				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1280000	1280000				

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (W)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R	CA SEEPAGE
Depth (m)	0.00
Sample Type	Water(GW/SW)
Date Sampled	28/02/2013
Sample Time	.
Date Received	02/03/2013
SDG Ref	130303-15
Lab Sample No.(s)	7014555
AGS Reference	

Component	LOD/Units	Method	
GRO Surrogate % recovery**	%	TM245	119
GRO >C5-C12	<50 µg/l	TM245	1150 #
Methyl tertiary butyl ether (MTBE)	<3 µg/l	TM245	<3 #
Benzene	<7 µg/l	TM245	<7 #
Toluene	<4 µg/l	TM245	<4 #
Ethylbenzene	<5 µg/l	TM245	<5 #
m,p-Xylene	<8 µg/l	TM245	<8 #
o-Xylene	<3 µg/l	TM245	<3 #
Sum of detected Xylenes	<11 µg/l	TM245	<11
Sum of detected BTEX	<28 µg/l	TM245	<28
Aliphatics >C5-C6	<10 µg/l	TM245	<10
Aliphatics >C6-C8	<10 µg/l	TM245	39
Aliphatics >C8-C10	<10 µg/l	TM245	152
Aliphatics >C10-C12	<10 µg/l	TM245	506
Aliphatics >C12-C16 (aq)	<10 µg/l	TM174	262
Aliphatics >C16-C21 (aq)	<10 µg/l	TM174	64
Aliphatics >C21-C35 (aq)	<10 µg/l	TM174	<10
Total Aliphatics >C12-C35 (aq)	<10 µg/l	TM174	326
Aromatics >EC5-EC7	<10 µg/l	TM245	<10
Aromatics >EC7-EC8	<10 µg/l	TM245	<10
Aromatics >EC8-EC10	<10 µg/l	TM245	104
Aromatics >EC10-EC12	<10 µg/l	TM245	337
Aromatics >EC12-EC16 (aq)	<10 µg/l	TM174	6270
Aromatics >EC16-EC21 (aq)	<10 µg/l	TM174	225
Aromatics >EC21-EC35 (aq)	<10 µg/l	TM174	94
Total Aromatics >EC12-EC35 (aq)	<10 µg/l	TM174	6590
Total Aliphatics & Aromatics >C5-35 (aq)	<10 µg/l	TM174	8070

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CA HOTSPOT 1	CA HOTSPOT 2			
			Depth (m)	0.00	0.00			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	28/02/2013	28/02/2013			
			Sample Time	.	.			
			Date Received	02/03/2013	02/03/2013			
			SDG Ref	130303-15	130303-15			
			Lab Sample No.(s)	7014552	7014553			
			AGS Reference					
Dibromofluoromethane**	%	TM116		99.9	103			
Toluene-d8**	%	TM116		96.7	95.3			
4-Bromofluorobenzene**	%	TM116		96.6	90.8			
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<8 M			
Chloromethane	<7 µg/kg	TM116		<14	<14			
Vinyl Chloride	<10 µg/kg	TM116		<20	<20			
Bromomethane	<13 µg/kg	TM116		<26 M	<26 M			
Chloroethane	<14 µg/kg	TM116		<28 M	<28 M			
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<12 M			
1,1-Dichloroethene	<10 µg/kg	TM116		<20 #	<20 #			
Carbon Disulphide	<7 µg/kg	TM116		46.3 M	28.1 M			
Dichloromethane	<10 µg/kg	TM116		<20 #	<20 #			
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<22 M			
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<22 M	<22 M			
1,1-Dichloroethane	<8 µg/kg	TM116		<16 M	<16 M			
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<10 M	<10 M			
2,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<24 M			
Bromochloromethane	<14 µg/kg	TM116		<28 M	<28 M			
Chloroform	<8 µg/kg	TM116		<16 M	<16 M			
1,1,1-Trichloroethane	<7 µg/kg	TM116		<14 M	<14 M			
1,1-Dichloropropene	<11 µg/kg	TM116		<22 M	<22 M			
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<28 M			
1,2-Dichloroethane	<5 µg/kg	TM116		<10 M	<10 M			
Benzene	<9 µg/kg	TM116		237 M	327 M			
Trichloroethene	<9 µg/kg	TM116		<18 M	<18 M			
1,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<24 M			
Dibromomethane	<9 µg/kg	TM116		<18 M	<18 M			
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<14 M			
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<28 M	<28 M			
Toluene	<5 µg/kg	TM116		166 M	274 M			
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<28	<28			
1,1,2-Trichloroethane	<10 µg/kg	TM116		<20 M	<20 M			

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CA HOTSPOT 1	CA HOTSPOT 2			
			Depth (m)	0.00	0.00			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	28/02/2013	28/02/2013			
			Sample Time	.	.			
			Date Received	02/03/2013	02/03/2013			
			SDG Ref	130303-15	130303-15			
			Lab Sample No.(s)	7014552	7014553			
			AGS Reference					
1,3-Dichloropropane	<7 µg/kg	TM116		<14 #	<14 #			
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<10 M			
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<26 M			
1,2-Dibromoethane	<12 µg/kg	TM116		<24 M	<24 M			
Chlorobenzene	<5 µg/kg	TM116		<10 M	<10 M			
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<20 M			
Ethylbenzene	<4 µg/kg	TM116		2400 M	3660 M			
p/m-Xylene	<14 µg/kg	TM116		9210 #	12100 #			
o-Xylene	<10 µg/kg	TM116		265 M	495 M			
Styrene	<10 µg/kg	TM116		<20 M	<20 M			
Bromoform	<10 µg/kg	TM116		<20 M	<20 M			
Isopropylbenzene	<5 µg/kg	TM116		2620 M	4610 M			
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<20 #			
1,2,3-Trichloropropane	<17 µg/kg	TM116		<34 M	<34 M			
Bromobenzene	<10 µg/kg	TM116		<20 M	<20 M			
Propylbenzene	<11 µg/kg	TM116		4890 M	7450 M			
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<18 M			
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		2660 #	5870 #			
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<24 M			
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<24 #			
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		14800 #	45100 #			
sec-Butylbenzene	<10 µg/kg	TM116		1530 M	2890 M			
4-Isopropyltoluene	<11 µg/kg	TM116		2880 M	5130 M			
1,3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<12 M			
1,4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<10 M			
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<20 M			
1,2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<24 M			
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<28 M			
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<30			
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<12 #			
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<24			
Naphthalene	<13 µg/kg	TM116		3370 M	4730 M			

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CA HOTSPOT 1	CA HOTSPOT 2				
			Depth (m)	0.00	0.00				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	28/02/2013	28/02/2013				
			Sample Time	.	.				
			Date Received	02/03/2013	02/03/2013				
			SDG Ref	130303-15	130303-15				
			Lab Sample No.(s)	7014552	7014553				
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<12 M	<12 M				

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

	Customer Sample R	LOD/Units	Method
Depth (m)	0.00		
Sample Type	Water(GW/SW)		
Date Sampled	28/02/2013		
Sample Time	.		
Date Received	02/03/2013		
SDG Ref	130303-15		
Lab Sample No.(s)	7014555		
AGS Reference	CA SEEPAGE		
Component			
Dibromofluoromethane**	117	%	TM208
Toluene-d8**	99.9	%	TM208
4-Bromofluorobenzene**	97.1	%	TM208
Dichlorodifluoromethane	<1 ♦ #	<1 µg/l	TM208
Chloromethane	<1 #	<1 µg/l	TM208
Vinyl chloride	<1 #	<1 µg/l	TM208
Bromomethane	<1 #	<1 µg/l	TM208
Chloroethane	<1 #	<1 µg/l	TM208
Trichlorofluoromethane	<1 #	<1 µg/l	TM208
1,1-Dichloroethene	<1 #	<1 µg/l	TM208
Carbon disulphide	<1 #	<1 µg/l	TM208
Dichloromethane	<3 #	<3 µg/l	TM208
Methyl tertiary butyl ether (MTBE)	<1 #	<1 µg/l	TM208
trans-1,2-Dichloroethene	<1 #	<1 µg/l	TM208
1,1-Dichloroethane	<1 #	<1 µg/l	TM208
cis-1,2-Dichloroethene	<1 #	<1 µg/l	TM208
2,2-Dichloropropane	<1 ♦	<1 µg/l	TM208
Bromochloromethane	<1 #	<1 µg/l	TM208
Chloroform	<1 #	<1 µg/l	TM208
1,1,1-Trichloroethane	<1 #	<1 µg/l	TM208
1,1-Dichloropropene	<1 #	<1 µg/l	TM208
Carbontetrachloride	<1 #	<1 µg/l	TM208
1,2-Dichloroethane	<1	<1 µg/l	TM208
Benzene	<1 #	<1 µg/l	TM208
Trichloroethene	<1 #	<1 µg/l	TM208
1,2-Dichloropropane	<1 #	<1 µg/l	TM208
Dibromomethane	<1 #	<1 µg/l	TM208
Bromodichloromethane	<1 #	<1 µg/l	TM208
cis-1,3-Dichloropropene	<1 #	<1 µg/l	TM208
Toluene	<1 #	<1 µg/l	TM208
trans-1,3-Dichloropropene	<1 #	<1 µg/l	TM208
1,1,2-Trichloroethane	<1 #	<1 µg/l	TM208

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend		Customer Sample R	CA SEEPAGE
#	ISO17025 accredited.		
M	*m*CERTS accredited.		
aq	Aqueous / settled sample.		
diss.filt	Dissolved / filtered sample.	Depth (m)	0.00
tot.unfilt	Total / unfiltered sample.	Sample Type	Water(GW/SW)
*	Subcontracted test.	Date Sampled	28/02/2013
**	% 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	Sample Time	.
		Date Received	02/03/2013
		SDG Ref	130303-15
(F)	Trigger breach confirmed	Lab Sample No.(s)	7014555
1-4&+§@	Sample deviation (see appendix)	AGS Reference	

Component	LOD/Units	Method	
1,3-Dichloropropane	<1 µg/l	TM208	<1 #
Tetrachloroethene	<1 µg/l	TM208	<1 #
Dibromochloromethane	<1 µg/l	TM208	<1 #
1,2-Dibromoethane	<1 µg/l	TM208	<1 #
Chlorobenzene	<1 µg/l	TM208	<1 #
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1 #
Ethylbenzene	<1 µg/l	TM208	<1 #
m,p-Xylene	<1 µg/l	TM208	3.28 #
o-Xylene	<1 µg/l	TM208	<1 #
Styrene	<1 µg/l	TM208	<1 #
Bromoform	<1 µg/l	TM208	<1 #
Isopropylbenzene	<1 µg/l	TM208	<1 #
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1
1,2,3-Trichloropropane	<1 µg/l	TM208	<1 #
Bromobenzene	<1 µg/l	TM208	<1 #
Propylbenzene	<1 µg/l	TM208	<1 #
2-Chlorotoluene	<1 µg/l	TM208	<1 #
1,3,5-Trimethylbenzene	<1 µg/l	TM208	1.45 #
4-Chlorotoluene	<1 µg/l	TM208	<1 #
tert-Butylbenzene	<1 µg/l	TM208	<1 #
1,2,4-Trimethylbenzene	<1 µg/l	TM208	2.78 #
sec-Butylbenzene	<1 µg/l	TM208	<1 #
4-iso-Propyltoluene	<1 µg/l	TM208	<1 #
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 #
1,4-Dichlorobenzene	<1 µg/l	TM208	<1 #
n-Butylbenzene	<1 µg/l	TM208	<1 #
1,2-Dichlorobenzene	<1 µg/l	TM208	<1
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1 #
Hexachlorobutadiene	<1 µg/l	TM208	<1 #
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #
Naphthalene	<1 µg/l	TM208	<1 #

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (W)

Results Legend		Customer Sample R	CA SEEPAGE
#	ISO17025 accredited.		
M	*m*CERTS accredited.		
aq	Aqueous / settled sample.	Depth (m)	0.00
diss.filt	Dissolved / filtered sample.	Sample Type	Water(GW/SW)
tot.unfilt	Total / unfiltered sample.	Date Sampled	28/02/2013
*	Subcontracted test.	Sample Time	.
**	% 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	Date Received	02/03/2013
		SDG Ref	130303-15
(F)	Trigger breach confirmed	Lab Sample No.(s)	7014555
1-4&+§@	Sample deviation (see appendix)	AGS Reference	

Component	LOD/Units	Method	
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1 #
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<1

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Asbestos Identification - Soil

		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 Receieved SDG Original Sample Method Number	CA HOTSPOT 1 0.00 SOLID 28/02/2013 00:00:00 130303-15 7014552 TM048	19/03/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CA HOTSPOT 2 0.00 SOLID 28/02/2013 00:00:00 130303-15 7014553 TM048	19/03/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of NDPs (No determination possible)

Date Received : 03/03/2013 10:33:25

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
7014555	CA SEEPAGE	0.00	Mercury Dissolved	Sample precipitated

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples		
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material		
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM094	Method 2310B, AWWA/APHA, 19th Ed., 1981	Determination of Acidity by titration		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter		
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter		
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID		
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID		
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS		
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES		
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry		
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers		
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters		
TM245	By GC-FID	Determination of GRO by Headspace in waters		
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter		

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

CERTIFICATE OF ANALYSIS

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	7014552	7014553	7014555
Customer Sample Ref.	CA HOTSPOT 1	CA HOTSPOT 2	CA SEEPAGE
AGS Ref.			
Depth	0.00	0.00	0.00
Type	SOLID	SOLID	LIQUID
Acidity as HCl			07-Mar-2013
Alkalinity as CaCO3			11-Mar-2013
Anions by Kone (w)			11-Mar-2013
Asbestos Identification	19-Mar-2013	19-Mar-2013	
Conductivity (at 20 deg.C)			07-Mar-2013
Dissolved Metals by ICP-MS			12-Mar-2013
EPH CWG (Aliphatic) Aqueous GC (W)			12-Mar-2013
EPH CWG (Aliphatic) GC (S)	14-Mar-2013	14-Mar-2013	
EPH CWG (Aromatic) Aqueous GC (W)			12-Mar-2013
EPH CWG (Aromatic) GC (S)	14-Mar-2013	14-Mar-2013	
GRO by GC-FID (S)	11-Mar-2013	11-Mar-2013	
GRO by GC-FID (W)			12-Mar-2013
Metals by iCap-OES	12-Mar-2013	12-Mar-2013	
pH	09-Mar-2013	09-Mar-2013	
pH Value			11-Mar-2013
Sample description	06-Mar-2013	06-Mar-2013	
Semi Volatile Organic Compounds	08-Mar-2013	08-Mar-2013	
SVOC MS (W) - Aqueous			12-Mar-2013
TPH CWG (W)			12-Mar-2013
TPH CWG GC (S)	14-Mar-2013	14-Mar-2013	
VOC MS (S)	16-Mar-2013	16-Mar-2013	
VOC MS (W)			13-Mar-2013

SDG:	130303-15	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0365
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	216421
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

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Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	02 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130213-66
Your Reference:	CA Remediation
Location:	Coed Darcy
Report No:	218033

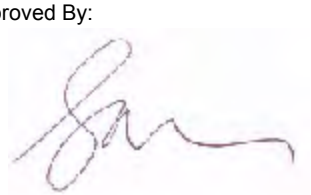
This report has been revised and directly supersedes 213877 in its entirety.

We received 3 samples on Wednesday February 13, 2013 and 3 of these samples were scheduled for analysis which was completed on Tuesday April 02, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
6909597	CAEMV91		0.00	08/02/2013
6909598	CAEMV92		0.00	08/02/2013
6909599	CAEMV93		0.00	08/02/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6909597	CAEMV91		0.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6909598	CAEMV92		0.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6909599	CAEMV93		0.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 3					
				X			
							X
Asbestos Quantification - Full	All	NDPs: 0 Tests: 1					
							X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 3	X		X		X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 3	X		X		X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 3		X		X	
							X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 3	X		X		X
	Cadmium	NDPs: 0 Tests: 3	X		X		X
	Chromium	NDPs: 0 Tests: 3	X		X		X
	Copper	NDPs: 0 Tests: 3	X		X		X
	Lead	NDPs: 0 Tests: 3	X		X		X
	Mercury	NDPs: 0 Tests: 3	X		X		X
	Nickel	NDPs: 0 Tests: 3	X		X		X
	Selenium	NDPs: 0 Tests: 3	X		X		X
	Zinc	NDPs: 0 Tests: 3	X		X		X
pH	All	NDPs: 0 Tests: 3		X		X	
							X

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SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			6909597	CAEMV91		0.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6909598	CAEMV92		0.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			6909599	CAEMV93		0.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Sample description	All	NDPs: 0 Tests: 3		X		X	X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 3		X		X	X
Total Organic Carbon	All	NDPs: 1 Tests: 2		X		X	N
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 1					X
TPH CWG GC (S)	All	NDPs: 0 Tests: 3		X		X	X
VOC MS (S)	All	NDPs: 0 Tests: 3			X		X	X

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

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
6909597	CAEMV91	0.00	Grey	Clay	0.063 - 0.1 mm	None	None
6909598	CAEMV92	0.00	Grey	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	None
6909599	CAEMV93	0.00	Grey	Sandy Clay Loam	0.1 - 2 mm	Stones	Brick

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 ocurring 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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Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV91	CAEMV92	CAEMV93			
			Depth (m)	0.00	0.00	0.00			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	08/02/2013	08/02/2013	08/02/2013			
			Sample Time	.	.	.			
			Date Received	13/02/2013	13/02/2013	13/02/2013			
			SDG Ref	130213-66	130213-66	130213-66			
			Lab Sample No.(s)	6909597	6909598	6909599			
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		2.52 #	1.9 #				
pH	1 pH Units	TM133		7.75 M	6.93 M	10.7 M			
Arsenic	<0.6 mg/kg	TM181		5.28 M	3.61 M	11.1 M			
Cadmium	<0.02 mg/kg	TM181		0.552 M	0.62 M	0.899 M			
Chromium	<0.9 mg/kg	TM181		21.8 M	11.4 M	13.5 M			
Copper	<1.4 mg/kg	TM181		14.5 M	2.26 M	28.3 M			
Lead	<0.7 mg/kg	TM181		16.9 M	10 M	38.7 M			
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	0.225 M			
Nickel	<0.2 mg/kg	TM181		18.2 M	10.4 M	21.9 M			
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #			
Zinc	<1.9 mg/kg	TM181		58.1 M	22.2 M	106 M			
Soil Organic Matter (SOM)	<0.1 %	TM321				1.96			

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Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

Semi Volatile Organic Compounds

Results Legend

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tot.unfilt	Total / unfiltered sample.
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(F)	Trigger breach confirmed
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV91	CAEMV92	CAEMV93			
			Depth (m)	0.00	0.00	0.00			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	08/02/2013	08/02/2013	08/02/2013			
			Sample Time	.	.	.			
			Date Received	13/02/2013	13/02/2013	13/02/2013			
			SDG Ref	130213-66	130213-66	130213-66			
			Lab Sample No.(s)	6909597	6909598	6909599			
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100			
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100			
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100			
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100			
Isophorone	<100 µg/kg	TM157		<100	<100	<100			
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100			
Carbazole	<100 µg/kg	TM157		<100	<100	<100			
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100			
Azobenzene	<100 µg/kg	TM157		<100	<100	<100			
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			

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Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV91	CAEMV92	CAEMV93			
			Depth (m)	0.00	0.00	0.00			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	08/02/2013	08/02/2013	08/02/2013			
			Sample Time	.	.	.			
			Date Received	13/02/2013	13/02/2013	13/02/2013			
			SDG Ref	130213-66	130213-66	130213-66			
			Lab Sample No.(s)	6909597	6909598	6909599			
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	1040			
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100			
2-Methylnaphthalene	<100 µg/kg	TM157		1440	488	1180			
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100			
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100			
Anthracene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100			
Chrysene	<100 µg/kg	TM157		<100	<100	<100			
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100			
Fluorene	<100 µg/kg	TM157		<100	<100	221			
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100			
Phenanthrene	<100 µg/kg	TM157		<100	<100	343			
Pyrene	<100 µg/kg	TM157		<100	<100	<100			
Naphthalene	<100 µg/kg	TM157		497	347	<100			
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100			

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Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV91	CAEMV92	CAEMV93			
			Depth (m)	0.00	0.00	0.00			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	08/02/2013	08/02/2013	08/02/2013			
			Sample Time	.	.	.			
			Date Received	13/02/2013	13/02/2013	13/02/2013			
			SDG Ref	130213-66	130213-66	130213-66			
			Lab Sample No.(s)	6909597	6909598	6909599			
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		85	121	125			
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		209000 M	329000 M	93200 M			
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<10 M	<50 M	<25 M			
Benzene	<10 µg/kg	TM089		52.5 M	<100 M	<50 M			
Toluene	<2 µg/kg	TM089		<4 M	<20 M	<10 M			
Ethylbenzene	<3 µg/kg	TM089		<6 M	<30 M	<15 M			
m,p-Xylene	<6 µg/kg	TM089		<12 M	<60 M	633 M			
o-Xylene	<3 µg/kg	TM089		<6 M	<30 M	<15 M			
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	633			
sum of detected BTEX by GC	<24 µg/kg	TM089		52.5	<24	633			
Aliphatics >C5-C6	<10 µg/kg	TM089		660	109	<50			
Aliphatics >C6-C8	<10 µg/kg	TM089		28500	9610	2570			
Aliphatics >C8-C10	<10 µg/kg	TM089		56500	102000	19300			
Aliphatics >C10-C12	<10 µg/kg	TM089		51500	89800	34700			
Aliphatics >C12-C16	<100 µg/kg	TM173		16400	20000	124000			
Aliphatics >C16-C21	<100 µg/kg	TM173		19700	7530	120000			
Aliphatics >C21-C35	<100 µg/kg	TM173		27000	18400	465000			
Aliphatics >C35-C44	<100 µg/kg	TM173		6890	3760	159000			
Total Aliphatics >C12-C44	<100 µg/kg	TM173		69900	49700	869000			
Aromatics >EC5-EC7	<10 µg/kg	TM089		52.5	<100	<50			
Aromatics >EC7-EC8	<10 µg/kg	TM089		<20	<100	<50			
Aromatics >EC8-EC10	<10 µg/kg	TM089		37700	67800	13500			
Aromatics >EC10-EC12	<10 µg/kg	TM089		34300	59800	23100			
Aromatics >EC12-EC16	<100 µg/kg	TM173		7820	12100	54100			
Aromatics >EC16-EC21	<100 µg/kg	TM173		11400	8440	54300			
Aromatics >EC21-EC35	<100 µg/kg	TM173		38900	23800	247000			
Aromatics >EC35-EC44	<100 µg/kg	TM173		16200	8370	130000			
Aromatics >EC40-EC44	<100 µg/kg	TM173		5920	2710	50600			
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		74300	52700	486000			
Total Aliphatics >C5-35	<100 µg/kg	TM173		200000	247000	766000			
Total Aromatics >C5-35	<100 µg/kg	TM173		130000	172000	392000			
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		330000	419000	1160000			

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Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV91	CAEMV92	CAEMV93			
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.00	0.00	0.00			
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
tot.unfilt	Total / unfiltered sample.	Date Sampled	08/02/2013	08/02/2013	08/02/2013			
*	Subcontracted test.	Sample Time	.	.	.			
**	% 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	Date Received	13/02/2013	13/02/2013	13/02/2013			
		SDG Ref	130213-66	130213-66	130213-66			
(F)	Trigger breach confirmed	Lab Sample No.(s)	6909597	6909598	6909599			
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component		**LOD/Units**	**Method**					
Total Aliphatics & Aromatics >C5-C44		<100 µg/kg	TM173	353000	431000	1450000		

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VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
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1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV91	CAEMV92	CAEMV93			
			Depth (m)	0.00	0.00	0.00			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	08/02/2013	08/02/2013	08/02/2013			
			Sample Time	.	.	.			
			Date Received	13/02/2013	13/02/2013	13/02/2013			
			SDG Ref	130213-66	130213-66	130213-66			
			Lab Sample No.(s)	6909597	6909598	6909599			
			AGS Reference						
Dibromofluoromethane**	%	TM116		111	101	101			
Toluene-d8**	%	TM116		101	101	99.6			
4-Bromofluorobenzene**	%	TM116		115	110	112			
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M			
Chloromethane	<7 µg/kg	TM116		<140	<140	<140			
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200			
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M			
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M			
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M			
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #			
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M			
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #			
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M			
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M			
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M			
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M			
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M			
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M			
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M			
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M			
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M			
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M			
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M			
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M			
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M			
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M			
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M			
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M			
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M			
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M			
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280			
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M			

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV91	CAEMV92	CAEMV93			
			Depth (m)	0.00	0.00	0.00			
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
			Date Sampled	08/02/2013	08/02/2013	08/02/2013			
			Sample Time	.	.	.			
			Date Received	13/02/2013	13/02/2013	13/02/2013			
			SDG Ref	130213-66	130213-66	130213-66			
			Lab Sample No.(s)	6909597	6909598	6909599			
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #			
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M			
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M			
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M			
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M			
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M			
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	187 M			
p/m-Xylene	<14 µg/kg	TM116		699 #	<280 #	647 #			
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M			
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M			
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M			
Isopropylbenzene	<5 µg/kg	TM116		1410 M	2650 M	641 M			
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #			
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M			
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M			
Propylbenzene	<11 µg/kg	TM116		3230 M	4660 M	1140 M			
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M			
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		1250 #	<160 #	697 #			
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M			
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #			
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		50400 #	374 #	3770 #			
sec-Butylbenzene	<10 µg/kg	TM116		2010 M	3320 M	660 M			
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M			
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M			
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M			
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M			
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M			
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M			
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300			
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #			
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240			
Naphthalene	<13 µg/kg	TM116		1540 M	<260 M	<260 M			

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

VOC MS (S)

Results Legend		Customer Sample R	CAEMV91	CAEMV92	CAEMV93			
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	0.00	0.00	0.00			
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid			
*	Subcontracted test.	Date Sampled	08/02/2013	08/02/2013	08/02/2013			
**	% 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	Sample Time	.	.	.			
		Date Received	13/02/2013	13/02/2013	13/02/2013			
		SDG Ref	130213-66	130213-66	130213-66			
(F)	Trigger breach confirmed	Lab Sample No.(s)	6909597	6909598	6909599			
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component		**LOD/Units**	**Method**					
1,2,3-Trichlorobenzene		<6 µg/kg	TM116	<120 M	<120 M	<120 M			

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

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 Receieved SDG Original Sample Method Number	CAEMV91 0.00 SOLID 08/02/2013 00:00:00 130213-66 6909597 TM048	27/02/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV92 0.00 SOLID 08/02/2013 00:00:00 130213-66 6909598 TM048	27/02/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV93 0.00 SOLID 08/02/2013 00:00:00 130213-66 6909599 TM048	27/02/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

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 Receieved SDG Original Sample Method Number	CAEMV93 0.00 SOLID 08/02/2013 00:00:00 130213-66 6909599 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

Notification of NDPs (No determination possible)

Date Received : 13/02/2013 13:46:52

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
6909599	CAEMV93	0.00	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

Test Completion Dates

Lab Sample No(s)	6909597	6909598	6909599
Customer Sample Ref.	CAEMV91	CAEMV92	CAEMV93
AGS Ref.			
Depth	0.00	0.00	0.00
Type	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	28-Feb-2013	28-Feb-2013	28-Feb-2013
Asbestos Quantification - Full			02-Apr-2013
EPH CWG (Aliphatic) GC (S)	19-Feb-2013	19-Feb-2013	19-Feb-2013
EPH CWG (Aromatic) GC (S)	19-Feb-2013	19-Feb-2013	19-Feb-2013
GRO by GC-FID (S)	18-Feb-2013	19-Feb-2013	18-Feb-2013
Metals in solid samples by OES	19-Feb-2013	19-Feb-2013	19-Feb-2013
pH	18-Feb-2013	18-Feb-2013	18-Feb-2013
Sample description	16-Feb-2013	16-Feb-2013	16-Feb-2013
Semi Volatile Organic Compounds	20-Feb-2013	20-Feb-2013	20-Feb-2013
Total Organic Carbon	28-Feb-2013	28-Feb-2013	
Total Organic Carbon (Asb)			28-Feb-2013
TPH CWG GC (S)	19-Feb-2013	19-Feb-2013	19-Feb-2013
VOC MS (S)	18-Feb-2013	18-Feb-2013	18-Feb-2013

SDG:	130213-66	**Location:**	Coed Darcy	**Order Number:**	CD0354
Job:	H_ATKINS_LDC-162	**Customer:**	Atkins Global Ltd	**Report Number:**	218033
Client Reference:	CA Remediation	**Attention:**	Selina Bamforth	**Superseded Report:**	213877

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	11 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130308-115
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	219427

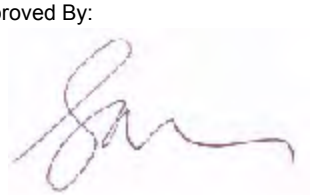
This report has been revised and directly supersedes 217240 in its entirety.

We received 1 sample on Friday March 08, 2013 and 1 of these samples were scheduled for analysis which was completed on Thursday April 11, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7045422	CAEMVO95			06/03/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7045422	CAEMVO95			250g Amber Jar (AL / 400g Tub (ALE214) / 60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 1		X			
Asbestos Quantification - Full	All	NDPs: 0 Tests: 1		X			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 1	X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 1	X				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 1					X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 1	X				
	Cadmium	NDPs: 0 Tests: 1	X				
	Chromium	NDPs: 0 Tests: 1	X				
	Copper	NDPs: 0 Tests: 1	X				
	Lead	NDPs: 0 Tests: 1	X				
	Mercury	NDPs: 0 Tests: 1	X				
	Nickel	NDPs: 0 Tests: 1	X				
	Selenium	NDPs: 0 Tests: 1	X				
	Zinc	NDPs: 0 Tests: 1	X				
pH	All	NDPs: 0 Tests: 1		X			

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container		
			7045422	CAEMVO95			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Sample description	All	NDPs: 0 Tests: 1					X		
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 1					X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 1					X		
VOC MS (S)	All	NDPs: 0 Tests: 1							X

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

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
7045422	CAEMVO95		Grey	Loamy Sand	0.1 - 2 mm	Stones	Oil/Petroleum

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

	Customer Sample R	CAEMVO95	
	Depth (m)	.	
	Sample Type	Soil/Solid	
	Date Sampled	06/03/2013	
	Sample Time	.	
	Date Received	08/03/2013	
	SDG Ref	130308-115	
	Lab Sample No.(s)	7045422	
	AGS Reference		
Component	**LOD/Units**	**Method**	
pH	1 pH Units	TM133	9.6 M
Arsenic	<0.6 mg/kg	TM181	4.01 M
Cadmium	<0.02 mg/kg	TM181	0.373 M
Chromium	<0.9 mg/kg	TM181	14.2 M
Copper	<1.4 mg/kg	TM181	10.4 M
Lead	<0.7 mg/kg	TM181	15.9 M
Mercury	<0.14 mg/kg	TM181	<0.14 M
Nickel	<0.2 mg/kg	TM181	18.3 M
Selenium	<1 mg/kg	TM181	<1 #
Zinc	<1.9 mg/kg	TM181	47.7 M

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R	CAEMVO95
Depth (m)	.
Sample Type	Soil/Solid
Date Sampled	06/03/2013
Sample Time	.
Date Received	08/03/2013
SDG Ref	130308-115
Lab Sample No.(s)	7045422
AGS Reference	

Component	LOD/Units	Method	
Phenol	<100 µg/kg	TM157	<100
Pentachlorophenol	<100 µg/kg	TM157	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157	<100
Nitrobenzene	<100 µg/kg	TM157	<100
Isophorone	<100 µg/kg	TM157	<100
Hexachloroethane	<100 µg/kg	TM157	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157	<100
Hexachlorobutadiene	<100 µg/kg	TM157	<100
Hexachlorobenzene	<100 µg/kg	TM157	<100
n-Dioctyl phthalate	<100 µg/kg	TM157	<100
Dimethyl phthalate	<100 µg/kg	TM157	<100
Diethyl phthalate	<100 µg/kg	TM157	<100
n-Dibutyl phthalate	<100 µg/kg	TM157	<100
Dibenzofuran	<100 µg/kg	TM157	<100
Carbazole	<100 µg/kg	TM157	<100
Butylbenzyl phthalate	<100 µg/kg	TM157	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157	<100
Azobenzene	<100 µg/kg	TM157	<100
4-Nitrophenol	<100 µg/kg	TM157	<100
4-Nitroaniline	<100 µg/kg	TM157	<100
4-Methylphenol	<100 µg/kg	TM157	450
4-Chlorophenylphenylether	<100 µg/kg	TM157	<100
4-Chloroaniline	<100 µg/kg	TM157	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157	<100
4-Bromophenylphenylether	<100 µg/kg	TM157	<100
3-Nitroaniline	<100 µg/kg	TM157	<100
2-Nitrophenol	<100 µg/kg	TM157	<100
2-Nitroaniline	<100 µg/kg	TM157	<100
2-Methylphenol	<100 µg/kg	TM157	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157	<100

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

Semi Volatile Organic Compounds

Results Legend		Customer Sample R	CAEMVO95
#	ISO17025 accredited.		
M	*m*CERTS 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		
1-4&+§@	Sample deviation (see appendix)		
		Depth (m)	.
		Sample Type	Soil/Solid
		Date Sampled	06/03/2013
		Sample Time	.
		Date Received	08/03/2013
		SDG Ref	130308-115
		Lab Sample No.(s)	7045422
		AGS Reference	

Component	LOD/Units	Method	
2-Chlorophenol	<100 µg/kg	TM157	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157	<100
2,4-Dimethylphenol	<100 µg/kg	TM157	621
2,4-Dichlorophenol	<100 µg/kg	TM157	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157	<100
2-Chloronaphthalene	<100 µg/kg	TM157	<100
2-Methylnaphthalene	<100 µg/kg	TM157	<100
Acenaphthylene	<100 µg/kg	TM157	<100
Acenaphthene	<100 µg/kg	TM157	<100
Anthracene	<100 µg/kg	TM157	<100
Benzo(a)anthracene	<100 µg/kg	TM157	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157	<100
Benzo(a)pyrene	<100 µg/kg	TM157	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157	<100
Chrysene	<100 µg/kg	TM157	<100
Fluoranthene	<100 µg/kg	TM157	<100
Fluorene	<100 µg/kg	TM157	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157	<100
Phenanthrene	<100 µg/kg	TM157	<100
Pyrene	<100 µg/kg	TM157	<100
Naphthalene	<100 µg/kg	TM157	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157	<100

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

TPH CWG (S)

Results Legend		Customer Sample R	CAEMVO95					
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.					
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid					
tot.unfilt	Total / unfiltered sample.	Date Sampled	06/03/2013					
*	Subcontracted test.	Sample Time	.					
**	% 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	Date Received	08/03/2013					
		SDG Ref	130308-115					
(F)	Trigger breach confirmed	Lab Sample No.(s)	7045422					
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	120					
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	10900 M					
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5 M					
Benzene	<10 µg/kg	TM089	40.3 M					
Toluene	<2 µg/kg	TM089	75 M					
Ethylbenzene	<3 µg/kg	TM089	99.7 M					
m,p-Xylene	<6 µg/kg	TM089	71.7 M					
o-Xylene	<3 µg/kg	TM089	79.5 M					
sum of detected mpo xylene by GC	<9 µg/kg	TM089	151					
sum of detected BTEX by GC	<24 µg/kg	TM089	366					
Aliphatics >C5-C6	<10 µg/kg	TM089	48.2					
Aliphatics >C6-C8	<10 µg/kg	TM089	1770					
Aliphatics >C8-C10	<10 µg/kg	TM089	2660					
Aliphatics >C10-C12	<10 µg/kg	TM089	2560					
Aliphatics >C12-C16	<100 µg/kg	TM173	11900					
Aliphatics >C16-C21	<100 µg/kg	TM173	18400					
Aliphatics >C21-C35	<100 µg/kg	TM173	48000					
Aliphatics >C35-C44	<100 µg/kg	TM173	7730					
Total Aliphatics >C12-C44	<100 µg/kg	TM173	86000					
Aromatics >EC5-EC7	<10 µg/kg	TM089	40.3					
Aromatics >EC7-EC8	<10 µg/kg	TM089	75					
Aromatics >EC8-EC10	<10 µg/kg	TM089	2020					
Aromatics >EC10-EC12	<10 µg/kg	TM089	1710					
Aromatics >EC12-EC16	<100 µg/kg	TM173	6250					
Aromatics >EC16-EC21	<100 µg/kg	TM173	11200					
Aromatics >EC21-EC35	<100 µg/kg	TM173	40800					
Aromatics >EC35-EC44	<100 µg/kg	TM173	8630					
Aromatics >EC40-EC44	<100 µg/kg	TM173	3270					
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	66800					
Total Aliphatics >C5-35	<100 µg/kg	TM173	85300					
Total Aromatics >C5-35	<100 µg/kg	TM173	62000					
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	147000					

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

TPH CWG (S)

Results Legend		Customer Sample R	CAEMVO95
#	ISO17025 accredited.		
M	*m*CERTS 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		
1-4&+§@	Sample deviation (see appendix)		
		Depth (m)	.
		Sample Type	Soil/Solid
		Date Sampled	06/03/2013
		Sample Time	.
		Date Received	08/03/2013
		SDG Ref	130308-115
		Lab Sample No.(s)	7045422
		AGS Reference	

Component	LOD/Units	Method	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	164000

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

	Customer Sample R
	CAEMVO95
Depth (m)	.
Sample Type	Soil/Solid
Date Sampled	06/03/2013
Sample Time	.
Date Received	08/03/2013
SDG Ref	130308-115
Lab Sample No.(s)	7045422
AGS Reference	

Component	LOD/Units	Method		
Dibromofluoromethane**	%	TM116	96.3	
Toluene-d8**	%	TM116	94.8	
4-Bromofluorobenzene**	%	TM116	124	
Dichlorodifluoromethane	<4 µg/kg	TM116	<4	M
Chloromethane	<7 µg/kg	TM116	<7	
Vinyl Chloride	<10 µg/kg	TM116	<10	
Bromomethane	<13 µg/kg	TM116	<13	M
Chloroethane	<14 µg/kg	TM116	<14	M
Trichlorofluorormethane	<6 µg/kg	TM116	<6	M
1,1-Dichloroethene	<10 µg/kg	TM116	<10	#
Carbon Disulphide	<7 µg/kg	TM116	<7	M
Dichloromethane	<10 µg/kg	TM116	<10	#
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116	<11	M
trans-1,2-Dichloroethene	<11 µg/kg	TM116	<11	M
1,1-Dichloroethane	<8 µg/kg	TM116	<8	M
cis-1,2-Dichloroethene	<5 µg/kg	TM116	<5	M
2,2-Dichloropropane	<12 µg/kg	TM116	<12	M
Bromochloromethane	<14 µg/kg	TM116	<14	M
Chloroform	<8 µg/kg	TM116	<8	M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<7	M
1,1-Dichloropropene	<11 µg/kg	TM116	<11	M
Carbontetrachloride	<14 µg/kg	TM116	<14	M
1,2-Dichloroethane	<5 µg/kg	TM116	<5	M
Benzene	<9 µg/kg	TM116	176	M
Trichloroethene	<9 µg/kg	TM116	<9	M
1,2-Dichloropropane	<12 µg/kg	TM116	<12	M
Dibromomethane	<9 µg/kg	TM116	<9	M
Bromodichloromethane	<7 µg/kg	TM116	<7	M
cis-1,3-Dichloropropene	<14 µg/kg	TM116	<14	M
Toluene	<5 µg/kg	TM116	113	M
trans-1,3-Dichloropropene	<14 µg/kg	TM116	<14	
1,1,2-Trichloroethane	<10 µg/kg	TM116	<10	M

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample R			CAEMVO95
Depth (m)			.
Sample Type			Soil/Solid
Date Sampled			06/03/2013
Sample Time			.
Date Received			08/03/2013
SDG Ref			130308-115
Lab Sample No.(s)			7045422
AGS Reference			
Component	**LOD/Units**	**Method**	
1,3-Dichloropropane	<7 µg/kg	TM116	<7 #
Tetrachloroethene	<5 µg/kg	TM116	<5 M
Dibromochloromethane	<13 µg/kg	TM116	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116	<12 M
Chlorobenzene	<5 µg/kg	TM116	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<10 M
Ethylbenzene	<4 µg/kg	TM116	88.9 M
p/m-Xylene	<14 µg/kg	TM116	172 #
o-Xylene	<10 µg/kg	TM116	104 M
Styrene	<10 µg/kg	TM116	<10 M
Bromoform	<10 µg/kg	TM116	<10 M
Isopropylbenzene	<5 µg/kg	TM116	10.3 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116	<17 M
Bromobenzene	<10 µg/kg	TM116	<10 M
Propylbenzene	<11 µg/kg	TM116	13.7 M
2-Chlorotoluene	<9 µg/kg	TM116	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<8 #
4-Chlorotoluene	<12 µg/kg	TM116	<12 M
tert-Butylbenzene	<12 µg/kg	TM116	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	27 #
sec-Butylbenzene	<10 µg/kg	TM116	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116	<5 M
n-Butylbenzene	<10 µg/kg	TM116	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116	<12
Naphthalene	<13 µg/kg	TM116	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

VOC MS (S)

Results Legend		Customer Sample R	CAEMVO95
#	ISO17025 accredited.		
M	*m*CERTS 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		
1-4&+§@	Sample deviation (see appendix)		
		Depth (m)	.
		Sample Type	Soil/Solid
		Date Sampled	06/03/2013
		Sample Time	.
		Date Received	08/03/2013
		SDG Ref	130308-115
		Lab Sample No.(s)	7045422
		AGS Reference	

Component	LOD/Units	Method	
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

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 Receieved SDG Original Sample Method Number	CAEMVO95 SOLID 06/03/2013 00:00:00 130308-115 7045422 TM048	25/03/13	Lauren Sargeant	Soil containing loose fibres and AIB debris	Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

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 Receieved SDG Original Sample Method Number	CAEMVO95 SOLID 06/03/2013 00:00:00 130308-115 7045422 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
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		

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

CERTIFICATE OF ANALYSIS

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

Test Completion Dates

Lab Sample No(s)	7045422
Customer Sample Ref.	CAEMVO95
AGS Ref.	
Depth	
Type	SOLID
Asbestos ID in Solid Samples	25-Mar-2013
Asbestos Quantification - Full	11-Apr-2013
EPH CWG (Aliphatic) GC (S)	14-Mar-2013
EPH CWG (Aromatic) GC (S)	14-Mar-2013
GRO by GC-FID (S)	14-Mar-2013
Metals in solid samples by OES	13-Mar-2013
pH	12-Mar-2013
Sample description	11-Mar-2013
Semi Volatile Organic Compounds	14-Mar-2013
TPH CWG GC (S)	14-Mar-2013
VOC MS (S)	16-Mar-2013

SDG:	130308-115	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0368
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219427
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217240

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Atkins Global Ltd
Project Jonah site office
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Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	12 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130323-78
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	219843

We received 22 samples on Saturday March 23, 2013 and 22 of these samples were scheduled for analysis which was completed on Friday April 12, 2013. 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

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Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7125240	CAEM TP20		0.50	22/03/2013
7125241	CAEM TP20		2.80	22/03/2013
7125242	CAEM TP21		0.50	22/03/2013
7125243	CAEM TP21		3.00	22/03/2013
7125244	CAEM TP22		0.50	22/03/2013
7125245	CAEM TP22		3.40	22/03/2013
7125246	CAEM TP23		0.50	22/03/2013
7125247	CAEM TP23		3.20	22/03/2013
7125248	CAEM TP24		0.50	22/03/2013
7125249	CAEM TP24		1.40	22/03/2013
7125250	CAEM TP25		0.50	22/03/2013
7125251	CAEM TP25		2.30	22/03/2013
7125252	CAEM TP26		0.50	22/03/2013
7125253	CAEM TP26		2.00	22/03/2013
7125254	CAEM TP27		0.50	22/03/2013
7125255	CAEM TP27		2.00	22/03/2013
7125256	CAEM TP28		0.50	22/03/2013
7125257	CAEM TP28		2.40	22/03/2013
7125258	CAEM TP29		0.50	22/03/2013
7125259	CAEM TP29		3.00	22/03/2013
7125260	CAEM TP30		0.50	22/03/2013
7125261	CAEM TP30		1.90	22/03/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7125240	CAEM TP20		0.50	250g Amber Jar
			7125241	CAEM TP20		2.80	400g Tub (ALE214)
			7125242	CAEM TP21		0.50	60g VOC (ALE215)
			7125243	CAEM TP21		3.00	250g Amber Jar
			7125244	CAEM TP22		0.50	400g Tub (ALE214)
			7125245	CAEM TP22		3.40	60g VOC (ALE215)
			7125246	CAEM TP23		0.50	250g Amber Jar
			7125247	CAEM TP23		3.20	400g Tub (ALE214)
			7125248	CAEM TP24		0.50	60g VOC (ALE215)
			7125249	CAEM TP24		1.40	250g Amber Jar
			7125250	CAEM TP25		0.50	400g Tub (ALE214)
			7125251	CAEM TP25		2.30	60g VOC (ALE215)
			7125252	CAEM TP26		0.50	250g Amber Jar
			7125253	CAEM TP26		2.00	400g Tub (ALE214)
Asbestos Identification (Solids)	All	NDPs: 0 Tests: 22					60g VOC (ALE215)
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 22					250g Amber Jar
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 22					400g Tub (ALE214)
GRO by GC-FID (S)	All	NDPs: 0 Tests: 22					60g VOC (ALE215)
Metals in solid samples by OES	All	NDPs: 0 Tests: 22					250g Amber Jar
PAH by GCMS	All	NDPs: 0 Tests: 22					400g Tub (ALE214)
pH	All	NDPs: 0 Tests: 22					60g VOC (ALE215)
Sample description	All	NDPs: 0 Tests: 22					250g Amber Jar
Total Organic Carbon	All	NDPs: 17 Tests: 5					400g Tub (ALE214)
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 17					60g VOC (ALE215)
TPH CWG GC (S)	All	NDPs: 0 Tests: 22					250g Amber Jar
VOC MS (S)	All	NDPs: 0 Tests: 22					400g Tub (ALE214)

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X Test

N No Determination Possible

Lab Sample No(s)			7125253			7125254			7125255			7125256			7125257			7125258			7125259			7125260			7125261		
Customer Sample Reference			CAEM TP26			CAEM TP27			CAEM TP27			CAEM TP28			CAEM TP28			CAEM TP29			CAEM TP29			CAEM TP30			CAEM TP30		
AGS Reference																													
Depth (m)			2.00			0.50			2.00			0.50			2.40			0.50			3.00			0.50			1.90		
Container			400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Solids)	All	NDPs: 0 Tests: 22	X			X			X			X			X			X			X			X			X		
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 22			X			X			X			X			X			X			X			X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 22			X			X			X			X			X			X			X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 22		X			X			X			X			X			X			X			X			X
Metals in solid samples by OES	All	NDPs: 0 Tests: 22			X			X			X			X			X			X			X			X		
PAH by GCMS	All	NDPs: 0 Tests: 22			X			X			X			X			X			X			X			X		
pH	All	NDPs: 0 Tests: 22	X			X			X			X			X			X			X			X			X	
Sample description	All	NDPs: 0 Tests: 22			X			X			X			X			X			X			X			X		
Total Organic Carbon	All	NDPs: 17 Tests: 5			N						N						N			N			N			N		
								X						X														
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 17			X						X						X			X			X			X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 22			X			X			X			X			X			X			X			X		
VOC MS (S)	All	NDPs: 0 Tests: 22		X			X			X			X			X			X			X			X			X

16:28:35 12/04/2013

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
7125240	CAEM TP20	0.50	Grey	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125241	CAEM TP20	2.80	Grey	Sandy Clay Loam	0.1 - 2 mm	None	None
7125242	CAEM TP21	0.50	Black	Loamy Sand	0.1 - 2 mm	Stones	None
7125243	CAEM TP21	3.00	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
7125244	CAEM TP22	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125245	CAEM TP22	3.40	Light Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Oil/Petroleum
7125246	CAEM TP23	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125247	CAEM TP23	3.20	Grey	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125248	CAEM TP24	0.50	Grey	Sandy Clay	0.1 - 2 mm	None	None
7125249	CAEM TP24	1.40	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125250	CAEM TP25	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125251	CAEM TP25	2.30	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125252	CAEM TP26	0.50	Black	Sand	0.1 - 2 mm	Stones	None
7125253	CAEM TP26	2.00	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
7125254	CAEM TP27	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
7125255	CAEM TP27	2.00	Grey	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125256	CAEM TP28	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Plastic
7125257	CAEM TP28	2.40	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
7125258	CAEM TP29	0.50	Grey	Sandy Clay	0.063 - 0.1 mm	None	None
7125259	CAEM TP29	3.00	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7125260	CAEM TP30	0.50	Dark Brown	Gravel	2 - 10 mm	Stones	None
7125261	CAEM TP30	1.90	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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP20	CAEM TP20	CAEM TP21	CAEM TP21	CAEM TP22	CAEM TP22
			Depth (m)	0.50	2.80	0.50	3.00	0.50	3.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125240	7125241	7125242	7125243	7125244	7125245
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132					1.2 #		
pH	1 pH Units	TM133		7.57 M	6.45 M	7.79 M	8.01 M	7.71 M	7.4 M
Arsenic	<0.6 mg/kg	TM181		21.1 M	8.47 M	28.3 M	7.3 M	19.3 M	12.4 M
Cadmium	<0.02 mg/kg	TM181		0.484 M	0.22 M	0.598 M	0.13 M	0.459 M	<0.02 M
Chromium	<0.9 mg/kg	TM181		19.4 M	15 M	15.5 M	10.3 M	17.1 M	12 M
Copper	<1.4 mg/kg	TM181		69.5 M	14.9 M	89 M	12.4 M	91.7 M	16.5 M
Lead	<0.7 mg/kg	TM181		164 M	18.6 M	104 M	12.5 M	122 M	21.7 M
Mercury	<0.14 mg/kg	TM181		0.707 M	<0.14 M	0.946 M	<0.14 M	0.44 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		25.9 M	15.9 M	26.2 M	21.8 M	24.9 M	18.8 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		30.3 #	23.7 #	29.2 #	11.9 #	22.3 #	15.1 #
Zinc	<1.9 mg/kg	TM181		369 M	45.9 M	265 M	68.9 M	516 M	76.5 M
Soil Organic Matter (SOM)	<0.1 %	TM321		3.32	2.37	3.32		2.57	0.972

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP23	CAEM TP23	CAEM TP24	CAEM TP24	CAEM TP25	CAEM TP25
			Depth (m)	0.50	3.20	0.50	1.40	0.50	2.30
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125246	7125247	7125248	7125249	7125250	7125251
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132			2.07 #				
pH	1 pH Units	TM133		8.04 M	7.74 M	6.69 M	7.72 M	7.71 M	7.33 M
Arsenic	<0.6 mg/kg	TM181		23.7 M	5.84 M	4.31 M	8.68 M	69.5 M	15.2 M
Cadmium	<0.02 mg/kg	TM181		0.449 M	0.0702 M	0.198 M	0.263 M	1.61 M	0.258 M
Chromium	<0.9 mg/kg	TM181		15.3 M	11.5 M	16.3 M	15.7 M	75.1 M	13.6 M
Copper	<1.4 mg/kg	TM181		71.3 M	9.9 M	12.8 M	16.7 M	244 M	48.4 M
Lead	<0.7 mg/kg	TM181		111 M	10.1 M	14.5 M	23.3 M	412 M	60.7 M
Mercury	<0.14 mg/kg	TM181		0.662 M	<0.14 M	<0.14 M	<0.14 M	1.2 M	0.142 M
Nickel	<0.2 mg/kg	TM181		20.5 M	18.2 M	17.6 M	26.8 M	26.5 M	31 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	2.74 #	<1 #
Vanadium	<0.2 mg/kg	TM181		21.9 #	12.6 #	19.7 #	20.1 #	203 #	16.6 #
Zinc	<1.9 mg/kg	TM181		224 M	53.6 M	48.4 M	78.6 M	2860 M	176 M
Soil Organic Matter (SOM)	<0.1 %	TM321		3.09	1.1		0.819	4.8	2.31

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP26	CAEM TP26	CAEM TP27	CAEM TP27	CAEM TP28	CAEM TP28
			Depth (m)	0.50	2.00	0.50	2.00	0.50	2.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125252	7125253	7125254	7125255	7125256	7125257
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		1.45 #		1.15 #		0.964 #	
pH	1 pH Units	TM133	7.95 M	7.35 M	8.53 M	5.56 M	12.6 M	6.5 M	
Arsenic	<0.6 mg/kg	TM181	51.1 M	7.63 M	101 M	8.89 M	43.1 M	8.66 M	
Cadmium	<0.02 mg/kg	TM181	1.4 M	0.0695 M	1.97 M	0.189 M	2.02 M	0.026 M	
Chromium	<0.9 mg/kg	TM181	49.3 M	15.5 M	12.6 M	13.3 M	22.8 M	12.2 M	
Copper	<1.4 mg/kg	TM181	409 M	17.7 M	571 M	17.5 M	212 M	14.4 M	
Lead	<0.7 mg/kg	TM181	283 M	19.4 M	1730 M	30.9 M	1870 M	14.7 M	
Mercury	<0.14 mg/kg	TM181	0.454 M	<0.14 M	0.252 M	<0.14 M	0.92 M	<0.14 M	
Nickel	<0.2 mg/kg	TM181	38.1 M	20.3 M	22.5 M	37.4 M	31.3 M	25.6 M	
Selenium	<1 mg/kg	TM181	1.03 #	<1 #	<1 #	<1 #	1.37 #	<1 #	
Vanadium	<0.2 mg/kg	TM181	38.9 #	18.7 #	18.1 #	14.4 #	27.4 #	13.9 #	
Zinc	<1.9 mg/kg	TM181	951 M	109 M	3690 M	102 M	1090 M	68.8 M	
Soil Organic Matter (SOM)	<0.1 %	TM321	4.57		1.6		3.53		

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP29	CAEM TP29	CAEM TP30	CAEM TP30		
			Depth (m)	0.50	3.00	0.50	1.90		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013		
			Sample Time	.	.	.	.		
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013		
			SDG Ref	130323-78	130323-78	130323-78	130323-78		
			Lab Sample No.(s)	7125258	7125259	7125260	7125261		
			AGS Reference						
pH	1 pH Units	TM133		7.53 M	6.94 M	9.86 #	7.86 M		
Arsenic	<0.6 mg/kg	TM181		5.2 M	9.29 M	22.6 #	6.02 M		
Cadmium	<0.02 mg/kg	TM181		0.139 M	0.126 M	0.323 #	0.082 M		
Chromium	<0.9 mg/kg	TM181		14.5 M	12.4 M	11.1 #	11.1 M		
Copper	<1.4 mg/kg	TM181		12 M	20.8 M	44.9 #	10.8 M		
Lead	<0.7 mg/kg	TM181		19.8 M	73.4 M	198 #	12.4 M		
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	0.24 #	<0.14 M		
Nickel	<0.2 mg/kg	TM181		12.8 M	30.8 M	14.8 #	24.4 M		
Selenium	<1 mg/kg	TM181		<1 #	<1 #	1.37 #	<1 #		
Vanadium	<0.2 mg/kg	TM181		19.6 #	13.6 #	15.7 #	10.7 #		
Zinc	<1.9 mg/kg	TM181		45.6 M	87.5 M	604 #	67.4 M		
Soil Organic Matter (SOM)	<0.1 %	TM321		3.07	1.11	0.761	0.477		

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP20	CAEM TP20	CAEM TP21	CAEM TP21	CAEM TP22	CAEM TP22
			Depth (m)	0.50	2.80	0.50	3.00	0.50	3.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125240	7125241	7125242	7125243	7125244	7125245
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		106	106	108	105	103	98.5
Acenaphthene-d10 % recovery**	%	TM218		107	103	112	101	106	101
Phenanthrene-d10 % recovery**	%	TM218		105	103	108	102	103	99.8
Chrysene-d12 % recovery**	%	TM218		99.4	96.8	93.4	97.4	97.6	92.1
Perylene-d12 % recovery**	%	TM218		105	100	99.2	106	103	98.6
Naphthalene	<9 µg/kg	TM218		1230 M	4110 M	2020 M	23800 M	825 M	760 M
Acenaphthylene	<12 µg/kg	TM218		<12 M	<12 M	85.9 M	<12 M	56.5 M	37.3 M
Acenaphthene	<8 µg/kg	TM218		475 M	45.6 M	345 M	383 M	258 M	139 M
Fluorene	<10 µg/kg	TM218		1170 M	203 M	1090 M	2470 M	523 M	350 M
Phenanthrene	<15 µg/kg	TM218		1870 M	63.4 M	1340 M	2170 M	800 M	404 M
Anthracene	<16 µg/kg	TM218		363 M	<16 M	207 M	165 M	272 M	86.1 M
Fluoranthene	<17 µg/kg	TM218		859 M	<17 M	1100 M	36.4 M	802 M	204 M
Pyrene	<15 µg/kg	TM218		845 M	23.2 M	939 M	28.4 M	757 M	168 M
Benz(a)anthracene	<14 µg/kg	TM218		461 M	<14 M	567 M	28.1 M	439 M	59 M
Chrysene	<10 µg/kg	TM218		508 M	<10 M	706 M	26.4 M	469 M	81.7 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		579 M	<15 M	892 M	22.8 M	509 M	51.3 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		267 M	<14 M	282 M	<14 M	195 M	21.4 M
Benzo(a)pyrene	<15 µg/kg	TM218		537 M	<15 M	716 M	<15 M	465 M	45.1 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		296 M	<18 M	458 M	<18 M	266 M	20.4 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		109 M	<23 M	<115 M	<23 M	98.9 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		372 M	<24 M	624 M	<24 M	320 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		9940	4450	11400	29100	7060	2430

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP23	CAEM TP23	CAEM TP24	CAEM TP24	CAEM TP25	CAEM TP25
			Depth (m)	0.50	3.20	0.50	1.40	0.50	2.30
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125246	7125247	7125248	7125249	7125250	7125251
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		97.7	102	114	106	106	108
Acenaphthene-d10 % recovery**	%	TM218		101	100	112	102	106	106
Phenanthrene-d10 % recovery**	%	TM218		100	99.8	110	101	105	105
Chrysene-d12 % recovery**	%	TM218		94.8	95.9	105	96	111	101
Perylene-d12 % recovery**	%	TM218		99.2	99.3	109	97.3	104	104
Naphthalene	<9 µg/kg	TM218		570 M	166 M	11.5 M	<9 M	157 M	82.3 M
Acenaphthylene	<12 µg/kg	TM218		45.9 M	<12 M	<12 M	<12 M	23.1 M	<12 M
Acenaphthene	<8 µg/kg	TM218		233 M	10.8 M	<8 M	<8 M	33.8 M	11.8 M
Fluorene	<10 µg/kg	TM218		428 M	25 M	39.9 M	<10 M	65.6 M	24.7 M
Phenanthrene	<15 µg/kg	TM218		598 M	45.9 M	244 M	25.5 M	399 M	135 M
Anthracene	<16 µg/kg	TM218		191 M	<16 M	72.1 M	<16 M	108 M	41.7 M
Fluoranthene	<17 µg/kg	TM218		450 M	<17 M	<17 M	<17 M	665 M	203 M
Pyrene	<15 µg/kg	TM218		468 M	<15 M	80.6 M	<15 M	608 M	222 M
Benz(a)anthracene	<14 µg/kg	TM218		220 M	<14 M	22.6 M	<14 M	462 M	150 M
Chrysene	<10 µg/kg	TM218		234 M	12.5 M	39.1 M	<10 M	439 M	148 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		258 M	<15 M	20.3 M	<15 M	658 M	186 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		116 M	<14 M	<14 M	<14 M	251 M	71.1 M
Benzo(a)pyrene	<15 µg/kg	TM218		218 M	<15 M	<15 M	<15 M	436 M	140 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		125 M	<18 M	<18 M	<18 M	266 M	88 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		42.9 M	<23 M	<23 M	<23 M	85.7 M	30.8 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		163 M	<24 M	<24 M	<24 M	314 M	108 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		4360	260	530	<118	4970	1640

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP26	CAEM TP26	CAEM TP27	CAEM TP27	CAEM TP28	CAEM TP28
			Depth (m)	0.50	2.00	0.50	2.00	0.50	2.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125252	7125253	7125254	7125255	7125256	7125257
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		100	100	99.5	100	108	104
Acenaphthene-d10 % recovery**	%	TM218		99.7	98.1	97.5	97.8	110	104
Phenanthrene-d10 % recovery**	%	TM218		99	97.3	96.2	96.1	103	102
Chrysene-d12 % recovery**	%	TM218		112	91.1	91.5	90.2	97.9	93.5
Perylene-d12 % recovery**	%	TM218		95.7	95.3	93.9	91.9	101	100
Naphthalene	<9 µg/kg	TM218		205 M	<9 M	48.2 M	<9 M	717 M	10 M
Acenaphthylene	<12 µg/kg	TM218		52.6 M	<12 M	22.3 M	<12 M	179 M	<12 M
Acenaphthene	<8 µg/kg	TM218		55 M	<8 M	44 M	<8 M	1330 M	<8 M
Fluorene	<10 µg/kg	TM218		79.3 M	<10 M	45.8 M	<10 M	3390 M	<10 M
Phenanthrene	<15 µg/kg	TM218		814 M	<15 M	315 M	22.6 M	9210 M	52.1 M
Anthracene	<16 µg/kg	TM218		194 M	<16 M	79.1 M	<16 M	2270 M	<16 M
Fluoranthene	<17 µg/kg	TM218		1530 M	<17 M	591 M	<17 M	2090 M	21.4 M
Pyrene	<15 µg/kg	TM218		1230 M	<15 M	461 M	<15 M	2620 M	29.3 M
Benz(a)anthracene	<14 µg/kg	TM218		997 M	<14 M	431 M	<14 M	1470 M	19.6 M
Chrysene	<10 µg/kg	TM218		850 M	<10 M	421 M	<10 M	1780 M	21.1 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		1090 M	<15 M	516 M	39.1 M	1260 M	88.4 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		441 M	<14 M	199 M	<14 M	544 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218		875 M	<15 M	420 M	<15 M	1020 M	<15 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		473 M	<18 M	262 M	<18 M	516 M	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		154 M	<23 M	94.1 M	<23 M	212 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		546 M	<24 M	307 M	<24 M	656 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		9590	<118	4260	<118	29300	242

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP29	CAEM TP29	CAEM TP30	CAEM TP30		
			Depth (m)	0.50	3.00	0.50	1.90		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013		
			Sample Time	.	.	.	.		
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013		
			SDG Ref	130323-78	130323-78	130323-78	130323-78		
			Lab Sample No.(s)	7125258	7125259	7125260	7125261		
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		99.4	100	104	97.7		
Acenaphthene-d10 % recovery**	%	TM218		100	98.4	105	99.1		
Phenanthrene-d10 % recovery**	%	TM218		98.9	97.6	104	97.4		
Chrysene-d12 % recovery**	%	TM218		93.4	92.9	100	89.3		
Perylene-d12 % recovery**	%	TM218		98.6	97	106	93.1		
Naphthalene	<9 µg/kg	TM218		28 M	109 M	93.6 #	<9 M		
Acenaphthylene	<12 µg/kg	TM218		<12 M	<12 M	30.1 #	<12 M		
Acenaphthene	<8 µg/kg	TM218		16.2 M	71.7 M	119 #	<8 M		
Fluorene	<10 µg/kg	TM218		33.5 M	187 M	326 #	25.5 M		
Phenanthrene	<15 µg/kg	TM218		79.4 M	370 M	1120 #	100 M		
Anthracene	<16 µg/kg	TM218		25.8 M	95 M	268 #	<16 M		
Fluoranthene	<17 µg/kg	TM218		55.5 M	33.9 M	673 #	<17 M		
Pyrene	<15 µg/kg	TM218		65.4 M	46.5 M	677 #	18.2 M		
Benz(a)anthracene	<14 µg/kg	TM218		35.7 M	30.2 M	401 #	15.7 M		
Chrysene	<10 µg/kg	TM218		48.8 M	31.9 M	437 #	18.8 M		
Benzo(b)fluoranthene	<15 µg/kg	TM218		56.6 M	40.2 M	425 #	26.8 M		
Benzo(k)fluoranthene	<14 µg/kg	TM218		17.5 M	<14 M	176 #	<14 M		
Benzo(a)pyrene	<15 µg/kg	TM218		42 M	<15 M	368 #	<15 M		
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		30.4 M	<18 M	232 #	<18 M		
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 M	<23 M	86.4 #	<23 M		
Benzo(g,h,i)perylene	<24 µg/kg	TM218		39 M	<24 M	301 #	<24 M		
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		574	1020	5730	205		

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP20	CAEM TP20	CAEM TP21	CAEM TP21	CAEM TP22	CAEM TP22
			Depth (m)	0.50	2.80	0.50	3.00	0.50	3.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125240	7125241	7125242	7125243	7125244	7125245
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		115	132	107	132	119	168
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		349000 M	458000 M	114000 M	1470000 M	221000 M	1430000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<50 M	<50 M	<25 M	<100 M	<50 M	<100 M
Benzene	<10 µg/kg	TM089		<100 M	<100 M	<50 M	<200 M	<100 M	247 M
Toluene	<2 µg/kg	TM089		<20 M	<20 M	<10 M	<40 M	<20 M	<40 M
Ethylbenzene	<3 µg/kg	TM089		<30 M	<30 M	<15 M	4730 M	<30 M	<60 M
m,p-Xylene	<6 µg/kg	TM089		<60 M	1680 M	<30 M	31200 M	<60 M	<120 M
o-Xylene	<3 µg/kg	TM089		<30 M	<30 M	<15 M	9590 M	<30 M	<60 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	1680	<9	40800	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	1680	<24	45500	<24	247
Aliphatics >C5-C6	<10 µg/kg	TM089		222	277	106	<200	122	2230
Aliphatics >C6-C8	<10 µg/kg	TM089		6280	10200	7470	17400	17000	204000
Aliphatics >C8-C10	<10 µg/kg	TM089		66700	74100	23200	272000	41500	374000
Aliphatics >C10-C12	<10 µg/kg	TM089		139000	193000	40400	572000	80500	359000
Aliphatics >C12-C16	<100 µg/kg	TM173		409000	166000	353000	334000	555000	229000
Aliphatics >C16-C21	<100 µg/kg	TM173		470000	16000	181000	67800	453000	72200
Aliphatics >C21-C35	<100 µg/kg	TM173		1020000	27000	200000	96600	408000	137000
Aliphatics >C35-C44	<100 µg/kg	TM173		274000	11100	69000	65800	90800	44500
Total Aliphatics >C12-C44	<100 µg/kg	TM173		2180000	220000	803000	564000	1510000	483000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<100	<100	<50	<200	<100	247
Aromatics >EC7-EC8	<10 µg/kg	TM089		<100	<100	<50	<200	<100	<200
Aromatics >EC8-EC10	<10 µg/kg	TM089		44500	51100	15400	227000	27700	249000
Aromatics >EC10-EC12	<10 µg/kg	TM089		92400	129000	27000	381000	53700	239000
Aromatics >EC12-EC16	<100 µg/kg	TM173		178000	109000	199000	292000	225000	92400
Aromatics >EC16-EC21	<100 µg/kg	TM173		242000	10900	77500	99200	231000	35800
Aromatics >EC21-EC35	<100 µg/kg	TM173		442000	23200	201000	40100	233000	60200
Aromatics >EC35-EC44	<100 µg/kg	TM173		173000	13300	193000	27800	82900	21700
Aromatics >EC40-EC44	<100 µg/kg	TM173		70000	5030	76400	10400	31300	7960
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1040000	156000	671000	459000	771000	210000
Total Aliphatics >C5-35	<100 µg/kg	TM173		2120000	486000	805000	1360000	1550000	1380000
Total Aromatics >C5-35	<100 µg/kg	TM173		999000	323000	521000	1040000	770000	677000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		3110000	809000	1330000	2400000	2320000	2050000

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample Ref.	CAEM TP20	CAEM TP20	CAEM TP21	CAEM TP21	CAEM TP22	CAEM TP22
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	0.50	2.80	0.50	3.00	0.50	3.40
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
		SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
(F)	Trigger breach confirmed	Lab Sample No.(s)	7125240	7125241	7125242	7125243	7125244	7125245
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	3560000	834000	1590000	2490000	2500000	2120000

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP23	CAEM TP23	CAEM TP24	CAEM TP24	CAEM TP25	CAEM TP25
			Depth (m)	0.50	3.20	0.50	1.40	0.50	2.30
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125246	7125247	7125248	7125249	7125250	7125251
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		109	137	129	174	40	94
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		73600 M	307000 M	17400 M	5130 M	2330 M	46500 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		93.2 M	<50 M	60.8 M	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		<10 M	<100 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<20 M	<2 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<30 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<60 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<30 M	<3 M	<3 M	<3 M	<3 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		145	538	48	49.7	27.8	36.3
Aliphatics >C6-C8	<10 µg/kg	TM089		8030	22100	2130	763	200	956
Aliphatics >C8-C10	<10 µg/kg	TM089		18500	61800	4680	1230	528	12300
Aliphatics >C10-C12	<10 µg/kg	TM089		20700	109000	4430	1360	732	15000
Aliphatics >C12-C16	<100 µg/kg	TM173		391000	61300	35700	5900	59700	23400
Aliphatics >C16-C21	<100 µg/kg	TM173		407000	6840	299000	18900	271000	88100
Aliphatics >C21-C35	<100 µg/kg	TM173		960000	15900	749000	52500	2270000	478000
Aliphatics >C35-C44	<100 µg/kg	TM173		217000	3060	20900	2770	189000	55600
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1970000	87100	1100000	80000	2790000	645000
Aromatics >EC5-EC7	<10 µg/kg	TM089		10.4	<100	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<100	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		12300	41200	3120	823	351	8220
Aromatics >EC10-EC12	<10 µg/kg	TM089		13800	72700	2960	904	488	10000
Aromatics >EC12-EC16	<100 µg/kg	TM173		139000	20500	14400	1840	21800	9100
Aromatics >EC16-EC21	<100 µg/kg	TM173		207000	7350	199000	11300	163000	57200
Aromatics >EC21-EC35	<100 µg/kg	TM173		466000	24600	529000	38900	1030000	261000
Aromatics >EC35-EC44	<100 µg/kg	TM173		151000	10400	21900	10600	187000	55800
Aromatics >EC40-EC44	<100 µg/kg	TM173		56000	4260	6440	4690	75200	22600
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		962000	62900	764000	62700	1400000	383000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1810000	277000	1090000	80700	2600000	618000
Total Aromatics >C5-35	<100 µg/kg	TM173		837000	166000	749000	53800	1210000	346000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		2640000	444000	1840000	134000	3810000	964000

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample Ref.	CAEM TP23	CAEM TP23	CAEM TP24	CAEM TP24	CAEM TP25	CAEM TP25
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	0.50	3.20	0.50	1.40	0.50	2.30
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
		SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
(F)	Trigger breach confirmed	Lab Sample No.(s)	7125246	7125247	7125248	7125249	7125250	7125251
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	3010000	457000	1890000	148000	4190000	1080000

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP26	CAEM TP26	CAEM TP27	CAEM TP27	CAEM TP28	CAEM TP28
			Depth (m)	0.50	2.00	0.50	2.00	0.50	2.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125252	7125253	7125254	7125255	7125256	7125257
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		65	48	72	77	41	112
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		6760 M	33600 M	1350 M	<44 M	37800 M	381 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	40.8 M	<5 M	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	2.19 M	<2 M	<2 M	2.22 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<6 M	<6 M	8.88 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	19.7 M	<3 M	<3 M	3.33 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	19.7	<9	<9	12.2
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		48.8	62.4	13.1	<10	39.4	16.7
Aliphatics >C6-C8	<10 µg/kg	TM089		1140	3390	61.2	<10	2680	59.9
Aliphatics >C8-C10	<10 µg/kg	TM089		1880	8920	208	<10	9910	59.9
Aliphatics >C10-C12	<10 µg/kg	TM089		1460	9120	540	<10	11100	110
Aliphatics >C12-C16	<100 µg/kg	TM173		51700	2090	12300	2290	736000	2940
Aliphatics >C16-C21	<100 µg/kg	TM173		177000	2430	20900	2020	986000	2810
Aliphatics >C21-C35	<100 µg/kg	TM173		2300000	16600	97000	7350	1080000	6250
Aliphatics >C35-C44	<100 µg/kg	TM173		310000	<100	40900	<100	163000	6290
Total Aliphatics >C12-C44	<100 µg/kg	TM173		2840000	21100	171000	11700	2960000	18300
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		1260	5950	164	<10	6610	55.5
Aromatics >EC10-EC12	<10 µg/kg	TM089		973	6080	360	<10	7410	73.3
Aromatics >EC12-EC16	<100 µg/kg	TM173		14200	1680	4560	1830	349000	2530
Aromatics >EC16-EC21	<100 µg/kg	TM173		101000	3450	13900	2990	643000	3950
Aromatics >EC21-EC35	<100 µg/kg	TM173		679000	24800	81400	17800	752000	19800
Aromatics >EC35-EC44	<100 µg/kg	TM173		214000	7040	57600	6480	178000	19900
Aromatics >EC40-EC44	<100 µg/kg	TM173		83700	2960	25600	2790	68200	10200
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1010000	36900	157000	29100	1920000	46200
Total Aliphatics >C5-35	<100 µg/kg	TM173		2540000	42600	131000	11700	2820000	12200
Total Aromatics >C5-35	<100 µg/kg	TM173		796000	41900	100000	22600	1760000	26400
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		3330000	84500	231000	34300	4580000	38700

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP26	CAEM TP26	CAEM TP27	CAEM TP27	CAEM TP28	CAEM TP28
			Depth (m)	0.50	2.00	0.50	2.00	0.50	2.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125252	7125253	7125254	7125255	7125256	7125257
			AGS Reference						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		3860000	91600	330000	40700	4920000	64800

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP29	CAEM TP29	CAEM TP30	CAEM TP30		
			Depth (m)	0.50	3.00	0.50	1.90		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013		
			Sample Time	.	.	.	.		
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013		
			SDG Ref	130323-78	130323-78	130323-78	130323-78		
			Lab Sample No.(s)	7125258	7125259	7125260	7125261		
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		61	115	80	129		
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		12700 M	39800 M	1560 #	1670 M		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<5 M	<5 #	<5 M		
Benzene	<10 µg/kg	TM089		<10 M	<10 M	<10 #	<10 M		
Toluene	<2 µg/kg	TM089		<2 M	<2 M	3.33 #	<2 M		
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 #	<3 M		
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	9.99 #	<6 M		
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	3.33 #	<3 M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	13.3	<9		
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	<24	<24		
Aliphatics >C5-C6	<10 µg/kg	TM089		11.2	19.2	22.2	62.2		
Aliphatics >C6-C8	<10 µg/kg	TM089		512	1580	81	264		
Aliphatics >C8-C10	<10 µg/kg	TM089		2400	9690	229	297		
Aliphatics >C10-C12	<10 µg/kg	TM089		4870	13200	634	509		
Aliphatics >C12-C16	<100 µg/kg	TM173		138000	135000	37600	10100		
Aliphatics >C16-C21	<100 µg/kg	TM173		194000	172000	87200	9890		
Aliphatics >C21-C35	<100 µg/kg	TM173		82200	62000	229000	17300		
Aliphatics >C35-C44	<100 µg/kg	TM173		6510	3290	55900	3250		
Total Aliphatics >C12-C44	<100 µg/kg	TM173		421000	373000	410000	40500		
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<10		
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10		
Aromatics >EC8-EC10	<10 µg/kg	TM089		1600	6460	165	199		
Aromatics >EC10-EC12	<10 µg/kg	TM089		3250	8820	422	340		
Aromatics >EC12-EC16	<100 µg/kg	TM173		34200	51200	17500	6090		
Aromatics >EC16-EC21	<100 µg/kg	TM173		78000	80400	49000	9020		
Aromatics >EC21-EC35	<100 µg/kg	TM173		91600	56200	141000	24800		
Aromatics >EC35-EC44	<100 µg/kg	TM173		11100	14300	57400	4430		
Aromatics >EC40-EC44	<100 µg/kg	TM173		1890	5240	23100	<100		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		215000	202000	265000	44300		
Total Aliphatics >C5-35	<100 µg/kg	TM173		422000	394000	355000	38400		
Total Aromatics >C5-35	<100 µg/kg	TM173		209000	203000	208000	40400		
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		631000	597000	564000	78800		

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample Ref.	CAEM TP29	CAEM TP29	CAEM TP30	CAEM TP30		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	0.50	3.00	0.50	1.90		
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
*	Subcontracted test.	Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013		
**	% 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	Sample Time	.	.	.	.		
		Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013		
		SDG Ref	130323-78	130323-78	130323-78	130323-78		
(F)	Trigger breach confirmed	Lab Sample No.(s)	7125258	7125259	7125260	7125261		
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	648000	615000	677000	86500		

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP20	CAEM TP20	CAEM TP21	CAEM TP21	CAEM TP22	CAEM TP22
			Depth (m)	0.50	2.80	0.50	3.00	0.50	3.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125240	7125241	7125242	7125243	7125244	7125245
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	96.8	101	103	106	106
Toluene-d8**	%	TM116		99.9	97.8	101	101	101	102
4-Bromofluorobenzene**	%	TM116		117	129	105	114	111	107
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<7	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<10	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<13 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<120 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<7 M	<140 M	409 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<220 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<220 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 M	<160 M	<160 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<8 M	<160 M	<160 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 M	<140 M	<140 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	23.2 M	<180 M	558 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<180 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 M	<140 M	<140 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	298 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<14	<280	<280	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP20	CAEM TP20	CAEM TP21	CAEM TP21	CAEM TP22	CAEM TP22
			Depth (m)	0.50	2.80	0.50	3.00	0.50	3.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125240	7125241	7125242	7125243	7125244	7125245
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<7 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<13 M	<260 M	<260 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		126 M	183 M	<80 M	20800 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	1210 #	<280 #	57900 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	8430 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		1110 M	428 M	740 M	13300 M	<100 M	4460 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<200 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<17 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		1690 M	764 M	1430 M	27700 M	378 M	6910 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<180 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		1110 #	1210 #	<160 #	16300 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<12 #	<240 #	<240 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		3730 #	2000 #	289 #	101000 #	<180 #	553 #
sec-Butylbenzene	<10 µg/kg	TM116		3060 M	499 M	1040 M	14400 M	<200 M	4090 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	264 M	<220 M	9600 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<120 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	614 M	953 M	16300 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<240 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<15	<300	<300	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<6 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<12	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	2650 M	<260 M	20600 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP20	CAEM TP20	CAEM TP21	CAEM TP21	CAEM TP22	CAEM TP22
			Depth (m)	0.50	2.80	0.50	3.00	0.50	3.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125240	7125241	7125242	7125243	7125244	7125245
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP23	CAEM TP23	CAEM TP24	CAEM TP24	CAEM TP25	CAEM TP25
			Depth (m)	0.50	3.20	0.50	1.40	0.50	2.30
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125246	7125247	7125248	7125249	7125250	7125251
			AGS Reference						
Dibromofluoromethane**	%	TM116		102	101	94.4	107	106	98.2
Toluene-d8**	%	TM116		101	100	96.5	103	99.6	98.9
4-Bromofluorobenzene**	%	TM116		109	108	130	109	115	123
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<4 M	<4 M	<80 M	<8 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<7	<7	<140	<14
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<10	<10	<200	<20
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<13 M	<260 M	<26 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<28 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<6 M	<120 M	<12 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<10 #	<200 #	<20 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<7 M	<140 M	<14 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<10 #	<200 #	<20 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<22 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<22 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<8 M	<8 M	<160 M	<16 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<10 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<24 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<28 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<8 M	<8 M	<160 M	<16 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<7 M	<140 M	<14 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<22 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<28 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<5 M	211 M	<100 M	<10 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<9 M	<180 M	<18 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<9 M	<180 M	<18 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<24 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<9 M	<180 M	<18 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<7 M	<140 M	<14 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<28 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<10 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<14	<14	<280	<28
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<20 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP23	CAEM TP23	CAEM TP24	CAEM TP24	CAEM TP25	CAEM TP25
			Depth (m)	0.50	3.20	0.50	1.40	0.50	2.30
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125246	7125247	7125248	7125249	7125250	7125251
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<7 #	<7 #	<140 #	<14 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<10 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<13 M	<260 M	<26 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<24 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<10 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<20 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<4 M	<4 M	<80 M	<8 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<14 #	<14 #	<280 #	<28 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<20 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<20 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<20 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	1270 M	<5 M	<5 M	<100 M	78.5 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<10 #	<200 #	<20 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<17 M	<17 M	<340 M	<34 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<20 M
Propylbenzene	<11 µg/kg	TM116		1040 M	2360 M	<11 M	<11 M	<220 M	117 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<9 M	<180 M	<18 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<8 #	<8 #	<160 #	<16 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<24 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<12 #	<12 #	<240 #	<24 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	383 #	<9 #	<9 #	<180 #	<18 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	1570 M	<10 M	<10 M	<200 M	115 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<22 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<6 M	<120 M	<12 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<10 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	1420 M	<10 M	<10 M	<200 M	<20 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<24 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<28 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<15	<15	<300	<30
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<6 #	<6 #	<120 #	<12 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<12	<12	<240	<24
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<13 M	<260 M	<26 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample Ref.	CAEM TP23	CAEM TP23	CAEM TP24	CAEM TP24	CAEM TP25	CAEM TP25
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	0.50	3.20	0.50	1.40	0.50	2.30
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
		SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
(F)	Trigger breach confirmed	Lab Sample No.(s)	7125246	7125247	7125248	7125249	7125250	7125251
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M	<6 M	<6 M	<120 M	<12 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP26	CAEM TP26	CAEM TP27	CAEM TP27	CAEM TP28	CAEM TP28
			Depth (m)	0.50	2.00	0.50	2.00	0.50	2.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125252	7125253	7125254	7125255	7125256	7125257
			AGS Reference						
Dibromofluoromethane**	%	TM116		107	101	96	105	106	103
Toluene-d8**	%	TM116		101	99.9	97.6	101	98.9	100
4-Bromofluorobenzene**	%	TM116		110	104	126	105	124	120
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<8 M	<80 M	<80 M	<8 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<14	<140	<140	<14
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<20	<200	<200	<20
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<26 M	<260 M	<260 M	<26 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 M	<28 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<12 M	<120 M	<120 M	<12 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<200 #	<200 #	<20 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<14 M	<140 M	503 M	<14 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<200 #	<200 #	<20 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<220 M	<220 M	<22 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<220 M	<220 M	<22 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<16 M	<160 M	<160 M	<16 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 M	<10 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 M	<24 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 M	<28 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<16 M	<160 M	<160 M	<16 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<14 M	<140 M	<140 M	<14 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<220 M	<220 M	<22 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 M	<28 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 M	<10 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<180 M	<180 M	<18 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<180 M	<180 M	<18 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 M	<24 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<180 M	<180 M	<18 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<14 M	<140 M	<140 M	<14 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 M	<28 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 M	<10 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<28	<280	<280	<28
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 M	<20 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP26	CAEM TP26	CAEM TP27	CAEM TP27	CAEM TP28	CAEM TP28
			Depth (m)	0.50	2.00	0.50	2.00	0.50	2.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125252	7125253	7125254	7125255	7125256	7125257
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<14 #	<140 #	<140 #	<14 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 M	<10 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<26 M	<260 M	<260 M	<26 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 M	<24 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 M	<10 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 M	<20 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<8 M	<80 M	<80 M	<8 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<28 #	<280 #	<280 #	<28 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 M	<20 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 M	<20 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 M	<20 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 M	<10 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<20 #	<200 #	<200 #	<20 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<34 M	<340 M	<340 M	<34 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 M	<20 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<220 M	<220 M	<22 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<18 M	<180 M	<180 M	<18 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<16 #	<160 #	<160 #	<16 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 M	<24 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<24 #	<240 #	<240 #	<24 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	<18 #	<180 #	1840 #	<18 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 M	<20 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<22 M	<220 M	<220 M	<22 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<12 M	<120 M	<120 M	<12 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<10 M	<100 M	<100 M	<10 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<20 M	<200 M	<200 M	<20 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<24 M	<240 M	<240 M	<24 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<28 M	<280 M	<280 M	<28 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<30	<300	<300	<30
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<12 #	<120 #	<120 #	<12 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<24	<240	<240	<24
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<26 M	<260 M	<260 M	<26 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP26	CAEM TP26	CAEM TP27	CAEM TP27	CAEM TP28	CAEM TP28
			Depth (m)	0.50	2.00	0.50	2.00	0.50	2.40
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013	22/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013	23/03/2013
			SDG Ref	130323-78	130323-78	130323-78	130323-78	130323-78	130323-78
			Lab Sample No.(s)	7125252	7125253	7125254	7125255	7125256	7125257
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<12 M	<120 M	<120 M	<12 M

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP29	CAEM TP29	CAEM TP30	CAEM TP30		
			Depth (m)	0.50	3.00	0.50	1.90		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013		
			Sample Time	.	.	.	.		
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013		
			SDG Ref	130323-78	130323-78	130323-78	130323-78		
			Lab Sample No.(s)	7125258	7125259	7125260	7125261		
			AGS Reference						
Dibromofluoromethane**	%	TM116		105	99.5	95.6	99		
Toluene-d8**	%	TM116		102	99.7	99.2	98.9		
4-Bromofluorobenzene**	%	TM116		104	119	121	119		
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<8 M	<8 #	<4 M		
Chloromethane	<7 µg/kg	TM116		<140	<14	<14	<7		
Vinyl Chloride	<10 µg/kg	TM116		<200	<20	<20	<10		
Bromomethane	<13 µg/kg	TM116		<260 M	<26 M	<26 #	<13 M		
Chloroethane	<14 µg/kg	TM116		<280 M	<28 M	<28 #	<14 M		
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<12 M	<12 #	<6 M		
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<20 #	<20 #	<10 #		
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<14 M	20.2 #	<7 M		
Dichloromethane	<10 µg/kg	TM116		<200 #	<20 #	<20 #	<10 #		
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<22 M	<22 #	<11 M		
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<22 M	<22 #	<11 M		
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<16 M	<16 #	<8 M		
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<10 M	<10 #	<5 M		
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<24 M	<24 #	<12 M		
Bromochloromethane	<14 µg/kg	TM116		<280 M	<28 M	<28 #	<14 M		
Chloroform	<8 µg/kg	TM116		<160 M	<16 M	<16 #	<8 M		
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<14 M	<14 #	<7 M		
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<22 M	<22 #	<11 M		
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<28 M	<28 #	<14 M		
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<10 M	<10 #	<5 M		
Benzene	<9 µg/kg	TM116		<180 M	<18 M	<18 #	<9 M		
Trichloroethene	<9 µg/kg	TM116		<180 M	<18 M	<18 #	<9 M		
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<24 M	<24 #	<12 M		
Dibromomethane	<9 µg/kg	TM116		<180 M	<18 M	<18 #	<9 M		
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<14 M	<14 #	<7 M		
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<28 M	<28 #	<14 M		
Toluene	<5 µg/kg	TM116		<100 M	<10 M	15.9 #	<5 M		
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<28	<28	<14		
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<20 M	<20 #	<10 M		

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP29	CAEM TP29	CAEM TP30	CAEM TP30		
			Depth (m)	0.50	3.00	0.50	1.90		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013		
			Sample Time	.	.	.	.		
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013		
			SDG Ref	130323-78	130323-78	130323-78	130323-78		
			Lab Sample No.(s)	7125258	7125259	7125260	7125261		
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<14 #	<14 #	<7 #		
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<10 M	<10 #	<5 M		
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<26 M	<26 #	<13 M		
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<24 M	<24 #	<12 M		
Chlorobenzene	<5 µg/kg	TM116		<100 M	<10 M	<10 #	<5 M		
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<20 M	<20 #	<10 M		
Ethylbenzene	<4 µg/kg	TM116		<80 M	<8 M	<8 #	<4 M		
p/m-Xylene	<14 µg/kg	TM116		<280 #	<28 #	<28 #	<14 #		
o-Xylene	<10 µg/kg	TM116		<200 M	<20 M	<20 #	<10 M		
Styrene	<10 µg/kg	TM116		<200 M	<20 M	<20 #	<10 M		
Bromoform	<10 µg/kg	TM116		<200 M	<20 M	<20 #	<10 M		
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<10 M	<10 #	<5 M		
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<20 #	<20 #	<10 #		
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<34 M	<34 #	<17 M		
Bromobenzene	<10 µg/kg	TM116		<200 M	<20 M	<20 #	<10 M		
Propylbenzene	<11 µg/kg	TM116		<220 M	<22 M	<22 #	<11 M		
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<18 M	<18 #	<9 M		
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<16 #	<16 #	<8 #		
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<24 M	<24 #	<12 M		
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<24 #	<24 #	<12 #		
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<18 #	<18 #	<9 #		
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<20 M	<20 #	<10 M		
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<22 M	<22 #	<11 M		
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<12 M	<12 #	<6 M		
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<10 M	<10 #	<5 M		
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<20 M	<20 #	<10 M		
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<24 M	<24 #	<12 M		
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<28 M	<28 #	<14 M		
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<30	<30	<15		
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<12 #	<12 #	<6 #		
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<24	<24	<12		
Naphthalene	<13 µg/kg	TM116		<260 M	<26 M	<26 #	<13 M		

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEM TP29	CAEM TP29	CAEM TP30	CAEM TP30		
			Depth (m)	0.50	3.00	0.50	1.90		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	22/03/2013	22/03/2013	22/03/2013	22/03/2013		
			Sample Time	.	.	.	.		
			Date Received	23/03/2013	23/03/2013	23/03/2013	23/03/2013		
			SDG Ref	130323-78	130323-78	130323-78	130323-78		
			Lab Sample No.(s)	7125258	7125259	7125260	7125261		
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<12 M	<12 #	<6 M		

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEM TP20 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125240 TM048	11/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAEM TP20 2.80 SOLID 22/03/2013 00:00:00 130323-78 7125241 TM048	11/04/13	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 Receieved SDG Original Sample Method Number	CAEM TP21 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125242 TM048	11/04/13	Paul Fenney	Loose fibres in soil	Trace (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM TP21 3.00 SOLID 22/03/2013 00:00:00 130323-78 7125243 TM048	11/04/13	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 Receieved SDG Original Sample Method Number	CAEM TP22 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125244 TM048	11/04/13	Martin Cotterell	Soil containing loose fibres and ACM debris	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEM TP22 3.40 SOLID 22/03/2013 00:00:00 130323-78 7125245 TM048	11/04/13	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 Receieved SDG Original Sample Method Number	CAEM TP23 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125246 TM048	11/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAEM TP23 3.20 SOLID 22/03/2013 00:00:00 130323-78 7125247 TM048	11/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAEM TP24 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125248 TM048	11/04/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM TP24 1.40 SOLID 22/03/2013 00:00:00 130323-78 7125249 TM048	11/04/13	Lauren Sargeant	Soil containing loose fibres and ACM debris	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM TP25 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125250 TM048	11/04/13	Lauren Sargeant	Soil containing loose fibres and ACM debris	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEM TP25 2.30 SOLID 22/03/2013 00:00:00 130323-78 7125251 TM048	11/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAEM TP26 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125252 TM048	11/04/13	Paul Fenney	Loose fibres in soil	Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM TP26 2.00 SOLID 22/03/2013 00:00:00 130323-78 7125253 TM048	11/04/13	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 Receieved SDG Original Sample Method Number	CAEM TP27 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125254 TM048	11/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAEM TP27 2.00 SOLID 22/03/2013 00:00:00 130323-78 7125255 TM048	11/04/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM TP28 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125256 TM048	11/04/13	Paul Fenney	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEM TP28 2.40 SOLID 22/03/2013 00:00:00 130323-78 7125257 TM048	11/04/13	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM TP29 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125258 TM048	11/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAEM TP29 3.00 SOLID 22/03/2013 00:00:00 130323-78 7125259 TM048	11/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAEM TP30 0.50 SOLID 22/03/2013 00:00:00 130323-78 7125260 TM048	11/04/13	Martin Cotterell	Loose fibres in soil	Trace (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEM TP30 1.90 SOLID 22/03/2013 00:00:00 130323-78 7125261 TM048	11/04/13	Paul Fenney	Loose fibres in soil	Not Detected (#)	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of NDPs (No determination possible)

Date Received : 23/03/2013 18:14:54

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
7125240	CAEM TP20	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125241	CAEM TP20	2.80	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125242	CAEM TP21	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125244	CAEM TP22	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125245	CAEM TP22	3.40	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125246	CAEM TP23	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125247	CAEM TP23	3.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125249	CAEM TP24	1.40	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125250	CAEM TP25	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125251	CAEM TP25	2.30	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125252	CAEM TP26	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125254	CAEM TP27	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125256	CAEM TP28	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125258	CAEM TP29	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125259	CAEM TP29	3.00	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125260	CAEM TP30	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7125261	CAEM TP30	1.90	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	7125240	7125241	7125242	7125243	7125244	7125245	7125246	7125247	7125248	7125249
Customer Sample Ref.	CAEM TP20	CAEM TP20	CAEM TP21	CAEM TP21	CAEM TP22	CAEM TP22	CAEM TP23	CAEM TP23	CAEM TP24	CAEM TP24
AGS Ref.										
Depth	0.50	2.80	0.50	3.00	0.50	3.40	0.50	3.20	0.50	1.40
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013
EPH CWG (Aliphatic) GC (S)	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
EPH CWG (Aromatic) GC (S)	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
GRO by GC-FID (S)	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
Metals in solid samples by OES	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
PAH by GCMS	02-Apr-2013	30-Mar-2013	31-Mar-2013	30-Mar-2013	02-Apr-2013	31-Mar-2013	31-Mar-2013	31-Mar-2013	30-Mar-2013	31-Mar-2013
pH	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
Sample description	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013
Total Organic Carbon				12-Apr-2013					12-Apr-2013	
Total Organic Carbon (Asb)	11-Apr-2013	11-Apr-2013	11-Apr-2013		12-Apr-2013	11-Apr-2013	11-Apr-2013	12-Apr-2013		12-Apr-2013
TPH CWG GC (S)	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
VOC MS (S)	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013

Lab Sample No(s)	7125250	7125251	7125252	7125253	7125254	7125255	7125256	7125257	7125258	7125259
Customer Sample Ref.	CAEM TP25	CAEM TP25	CAEM TP26	CAEM TP26	CAEM TP27	CAEM TP27	CAEM TP28	CAEM TP28	CAEM TP29	CAEM TP29
AGS Ref.										
Depth	0.50	2.30	0.50	2.00	0.50	2.00	0.50	2.40	0.50	3.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013
EPH CWG (Aliphatic) GC (S)	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
EPH CWG (Aromatic) GC (S)	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
GRO by GC-FID (S)	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
Metals in solid samples by OES	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
PAH by GCMS	31-Mar-2013	30-Mar-2013	31-Mar-2013	30-Mar-2013	30-Mar-2013	31-Mar-2013	31-Mar-2013	31-Mar-2013	31-Mar-2013	30-Mar-2013
pH	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
Sample description	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013
Total Organic Carbon				12-Apr-2013		12-Apr-2013		12-Apr-2013		
Total Organic Carbon (Asb)	11-Apr-2013	11-Apr-2013	11-Apr-2013		12-Apr-2013		11-Apr-2013		12-Apr-2013	11-Apr-2013
TPH CWG GC (S)	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
VOC MS (S)	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013

Lab Sample No(s)	7125260	7125261
Customer Sample Ref.	CAEM TP30	CAEM TP30
AGS Ref.		
Depth	0.50	1.90
Type	SOLID	SOLID
Asbestos ID in Solid Samples	11-Apr-2013	11-Apr-2013
EPH CWG (Aliphatic) GC (S)	03-Apr-2013	03-Apr-2013
EPH CWG (Aromatic) GC (S)	03-Apr-2013	03-Apr-2013
GRO by GC-FID (S)	02-Apr-2013	02-Apr-2013
Metals in solid samples by OES	02-Apr-2013	02-Apr-2013
PAH by GCMS	31-Mar-2013	31-Mar-2013
pH	02-Apr-2013	02-Apr-2013
Sample description	28-Mar-2013	28-Mar-2013
Total Organic Carbon (Asb)	11-Apr-2013	11-Apr-2013
TPH CWG GC (S)	03-Apr-2013	03-Apr-2013
VOC MS (S)	02-Apr-2013	02-Apr-2013

SDG:	130323-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0377
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219843
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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
§	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.

ALcontrol Laboratories

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Website: www.alcontrol.com

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	12 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130326-22
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	219862

We received 10 samples on Tuesday March 26, 2013 and 10 of these samples were scheduled for analysis which was completed on Friday April 12, 2013. 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

Alcontrol Laboratories is a trading division of ALcontrol UK Limited
Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7136315	CAV 121			25/03/2013
7136316	CAV 122			25/03/2013
7136317	CAV 123			25/03/2013
7136318	CAV 124			25/03/2013
7136319	CAV 125			25/03/2013
7136320	CAV 126			25/03/2013
7136321	CAV 127			25/03/2013
7136323	CAV 128			25/03/2013
7136324	CAV 129			25/03/2013
7136327	CAV 130			25/03/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

Lab Sample No(s)	7136315	7136316	7136317	7136318	7136319	7136320	7136321	7136323	7136324	7136327
Customer Sample Reference	CAV 121	CAV 122	CAV 123	CAV 124	CAV 125	CAV 126	CAV 127	CAV 128	CAV 129	CAV 130
AGS Reference										
Depth (m)										
Container	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar 400g Tub (ALE214) 60g VOC (ALE215)

Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 10		X		X		X		X		X		X		X		X		X		X	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 10	X		X		X		X		X		X		X		X		X		X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 10	X		X		X		X		X		X		X		X		X		X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 10		X		X		X		X		X		X		X		X		X		X	X
Metals in solid samples by OES	All	NDPs: 0 Tests: 10	X		X		X		X		X		X		X		X		X		X		
PAH by GCMS	All	NDPs: 0 Tests: 10	X		X		X		X		X		X		X		X		X		X		
pH	All	NDPs: 0 Tests: 10		X		X		X		X		X		X		X		X		X		X	
Sample description	All	NDPs: 0 Tests: 10	X		X		X		X		X		X		X		X		X		X		
Total Organic Carbon	All	NDPs: 9 Tests: 1	N		N		X		N		N		N		N		N		N		N		
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 9	X		X				X		X		X		X		X		X		X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 10	X		X		X		X		X		X		X		X		X		X		
VOC MS (S)	All	NDPs: 0 Tests: 10		X		X		X		X		X		X		X		X		X		X	X

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
7136315	CAV 121		Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	Stones	Vegetation
7136316	CAV 122		Dark Brown	Sand	0.1 - 2 mm	Stones	None
7136317	CAV 123		Light Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7136318	CAV 124		Dark Brown	Sandy Clay Loam	0.063 - 0.1 mm	Stones	None
7136319	CAV 125		Dark Brown	Clay Loam	0.063 - 0.1 mm	Stones	None
7136320	CAV 126		Dark Brown	Sand	0.1 - 2 mm	Stones	None
7136321	CAV 127		Light Brown	Silty Clay Loam	0.063 - 0.1 mm	Stones	None
7136323	CAV 128		Light Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7136324	CAV 129		Dark Brown	Sand	0.1 - 2 mm	Stones	Crushed Brick
7136327	CAV 130		Dark Brown	Sand	0.1 - 2 mm	Stones	Crushed Brick

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sample Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			CAV 121	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136315	
			CAV 122	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136316	
			CAV 123	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136317	
			CAV 124	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136318	
			CAV 125	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136319	
			CAV 126	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136320	
Soil Organic Matter (SOM)	<0.35 %	TM132									
										2.74 #	
pH	1 pH Units	TM133	7.9 M								
										8.35 M	
										7.72 M	
										7.68 M	
										7.8 M	
										8.65 M	
Arsenic	<0.6 mg/kg	TM181	25.5 M								
										24.1 M	
										61.2 M	
										27.3 M	
										40.8 M	
										38.9 M	
Cadmium	<0.02 mg/kg	TM181	1.09 M								
										0.608 M	
										2.69 M	
										0.602 M	
										1.57 M	
										0.486 M	
Chromium	<0.9 mg/kg	TM181	20.1 M								
										10.8 M	
										14.5 M	
										13.6 M	
										20.9 M	
										16.3 M	
Copper	<1.4 mg/kg	TM181	86.8 M								
										119 M	
										134 M	
										77.4 M	
										122 M	
										179 M	
Lead	<0.7 mg/kg	TM181	63.8 M								
										76.8 M	
										44.8 M	
										71.5 M	
										164 M	
										169 M	
Mercury	<0.14 mg/kg	TM181	<0.14 M								
										0.164 M	
										<0.14 M	
										0.228 M	
										0.151 M	
										1.74 M	
Nickel	<0.2 mg/kg	TM181	17.9 M								
										18 M	
										19.3 M	
										18 M	
										22.7 M	
										25.8 M	
Selenium	<1 mg/kg	TM181	<1 #								
										<1 #	
										<1 #	
										<1 #	
										<1 #	
										<1 #	
Vanadium	<0.2 mg/kg	TM181	19.7 #								
										14.9 #	
										18.6 #	
										17.1 #	
										22 #	
										20.6 #	
Zinc	<1.9 mg/kg	TM181	136 M								
										218 M	
										225 M	
										169 M	
										214 M	
										1270 M	
Soil Organic Matter (SOM)	<0.1 %	TM321	1.39								
										1.53	
										1.87	
										3.59	
										6.54	

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 127	CAV 128	CAV 129	CAV 130		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013		
			Sample Time	.	.	.	.		
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013		
			SDG Ref	130326-22	130326-22	130326-22	130326-22		
			Lab Sample No.(s)	7136321	7136323	7136324	7136327		
			AGS Reference						
pH	1 pH Units	TM133		8.13 M	6.47 M	10.7 M	11.4 M		
Arsenic	<0.6 mg/kg	TM181		37.4 M	75.5 M	10.8 M	16 M		
Cadmium	<0.02 mg/kg	TM181		0.622 M	1.86 M	0.0766 M	0.0792 M		
Chromium	<0.9 mg/kg	TM181		15.5 M	17.5 M	13.4 M	13.7 M		
Copper	<1.4 mg/kg	TM181		127 M	180 M	25.2 M	36.3 M		
Lead	<0.7 mg/kg	TM181		129 M	37.9 M	38.9 M	43.8 M		
Mercury	<0.14 mg/kg	TM181		0.384 M	<0.14 M	0.454 M	0.414 M		
Nickel	<0.2 mg/kg	TM181		19.3 M	20 M	14.8 M	15.7 M		
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #		
Vanadium	<0.2 mg/kg	TM181		20.9 #	24.7 #	13.1 #	11.8 #		
Zinc	<1.9 mg/kg	TM181		1530 M	168 M	140 M	172 M		
Soil Organic Matter (SOM)	<0.1 %	TM321		0.738	1.82	0.526	0.743		

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 121	CAV 122	CAV 123	CAV 124	CAV 125	CAV 126
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			SDG Ref	130326-22	130326-22	130326-22	130326-22	130326-22	130326-22
			Lab Sample No.(s)	7136315	7136316	7136317	7136318	7136319	7136320
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		107	104	102	105	100	102
Acenaphthene-d10 % recovery**	%	TM218		106	105	102	106	99.5	101
Phenanthrene-d10 % recovery**	%	TM218		100	105	101	106	98.1	101
Chrysene-d12 % recovery**	%	TM218		106	101	98.6	103	95	95.5
Perylene-d12 % recovery**	%	TM218		115	107	100	104	98.3	99.7
Naphthalene	<9 µg/kg	TM218		501 M	66.6 M	98.1 M	122 M	108 M	83.5 M
Acenaphthylene	<12 µg/kg	TM218		<12 M	22.1 M	<12 M	28.5 M	19.1 M	33 M
Acenaphthene	<8 µg/kg	TM218		233 M	67.2 M	<8 M	99.2 M	22.6 M	76.4 M
Fluorene	<10 µg/kg	TM218		490 M	67.8 M	26.2 M	289 M	28.9 M	84.5 M
Phenanthrene	<15 µg/kg	TM218		1030 M	454 M	75.3 M	673 M	128 M	764 M
Anthracene	<16 µg/kg	TM218		439 M	85.7 M	<16 M	235 M	34.9 M	192 M
Fluoranthene	<17 µg/kg	TM218		938 M	635 M	40.5 M	692 M	182 M	1470 M
Pyrene	<15 µg/kg	TM218		1120 M	553 M	45.9 M	888 M	167 M	1150 M
Benz(a)anthracene	<14 µg/kg	TM218		489 M	408 M	24.1 M	425 M	99.8 M	960 M
Chrysene	<10 µg/kg	TM218		541 M	358 M	26.7 M	426 M	98.5 M	863 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		737 M	620 M	43.2 M	472 M	116 M	1210 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		273 M	234 M	35.1 M	202 M	44.2 M	515 M
Benzo(a)pyrene	<15 µg/kg	TM218		474 M	463 M	51.2 M	379 M	85 M	983 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		326 M	346 M	<18 M	221 M	50.7 M	593 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		119 M	112 M	<23 M	83.1 M	<23 M	214 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		362 M	418 M	<24 M	267 M	59.5 M	706 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		8070	4910	466	5500	1240	9900

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 127	CAV 128	CAV 129	CAV 130		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013		
			Sample Time	.	.	.	.		
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013		
			SDG Ref	130326-22	130326-22	130326-22	130326-22		
			Lab Sample No.(s)	7136321	7136323	7136324	7136327		
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		95.2	101	102	111		
Acenaphthene-d10 % recovery**	%	TM218		97	101	107	115		
Phenanthrene-d10 % recovery**	%	TM218		96	99.4	107	115		
Chrysene-d12 % recovery**	%	TM218		92.1	91.7	105	111		
Perylene-d12 % recovery**	%	TM218		98.4	94.8	114	122		
Naphthalene	<9 µg/kg	TM218		189 M	102 M	80.2 M	120 M		
Acenaphthylene	<12 µg/kg	TM218		40.3 M	18.8 M	71 M	76.4 M		
Acenaphthene	<8 µg/kg	TM218		96 M	35.1 M	119 M	108 M		
Fluorene	<10 µg/kg	TM218		98.3 M	58.5 M	136 M	139 M		
Phenanthrene	<15 µg/kg	TM218		417 M	117 M	986 M	956 M		
Anthracene	<16 µg/kg	TM218		115 M	29.5 M	320 M	300 M		
Fluoranthene	<17 µg/kg	TM218		448 M	54.6 M	1760 M	1750 M		
Pyrene	<15 µg/kg	TM218		424 M	67.4 M	1520 M	1550 M		
Benz(a)anthracene	<14 µg/kg	TM218		263 M	28.4 M	967 M	957 M		
Chrysene	<10 µg/kg	TM218		277 M	34 M	931 M	911 M		
Benzo(b)fluoranthene	<15 µg/kg	TM218		406 M	28.8 M	1060 M	1040 M		
Benzo(k)fluoranthene	<14 µg/kg	TM218		142 M	<14 M	407 M	460 M		
Benzo(a)pyrene	<15 µg/kg	TM218		298 M	19.1 M	916 M	933 M		
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		182 M	<18 M	491 M	479 M		
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		67.8 M	<23 M	170 M	181 M		
Benzo(g,h,i)perylene	<24 µg/kg	TM218		215 M	<24 M	567 M	586 M		
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		3680	593	10500	10500		

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 121	CAV 122	CAV 123	CAV 124	CAV 125	CAV 126
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			SDG Ref	130326-22	130326-22	130326-22	130326-22	130326-22	130326-22
			Lab Sample No.(s)	7136315	7136316	7136317	7136318	7136319	7136320
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		137	73	50	126	74	93
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		120000 M	498 M	9510 M	250000 M	18300 M	<44 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<25 M	<5 M	<5 M	<50 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		77.5 M	<10 M	<10 M	<100 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<10 M	<2 M	<2 M	<20 M	<2 M	2.38 M
Ethylbenzene	<3 µg/kg	TM089		<15 M	<3 M	<3 M	<30 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<30 M	<6 M	<6 M	<60 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<15 M	<3 M	<3 M	<30 M	<3 M	<3 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		77.5	<24	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		2940	<10	14.6	3460	15.1	<10
Aliphatics >C6-C8	<10 µg/kg	TM089		42600	26	240	35900	331	<10
Aliphatics >C8-C10	<10 µg/kg	TM089		27100	68.4	2320	60800	6100	<10
Aliphatics >C10-C12	<10 µg/kg	TM089		17500	207	3230	65800	4640	<10
Aliphatics >C12-C16	<100 µg/kg	TM173		371000	162000	30400	124000	163000	5570
Aliphatics >C16-C21	<100 µg/kg	TM173		573000	215000	52400	160000	385000	18600
Aliphatics >C21-C35	<100 µg/kg	TM173		310000	901000	1420000	2220000	3140000	52700
Aliphatics >C35-C44	<100 µg/kg	TM173		48500	561000	56000	87800	242000	28200
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1300000	1840000	1560000	2590000	3930000	105000
Aromatics >EC5-EC7	<10 µg/kg	TM089		77.5	<10	<10	<100	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<50	<10	<10	<100	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		18100	48.4	1550	40500	4070	<10
Aromatics >EC10-EC12	<10 µg/kg	TM089		11700	138	2150	43900	3100	<10
Aromatics >EC12-EC16	<100 µg/kg	TM173		185000	29600	8360	55100	40800	2910
Aromatics >EC16-EC21	<100 µg/kg	TM173		298000	88700	19500	91000	208000	13400
Aromatics >EC21-EC35	<100 µg/kg	TM173		196000	310000	392000	589000	1320000	86300
Aromatics >EC35-EC44	<100 µg/kg	TM173		38100	203000	37200	76300	117000	77900
Aromatics >EC40-EC44	<100 µg/kg	TM173		13100	74000	8530	26700	40700	36500
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		717000	632000	457000	811000	1680000	180000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1340000	1280000	1510000	2670000	3700000	76900
Total Aromatics >C5-35	<100 µg/kg	TM173		708000	429000	423000	820000	1580000	103000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		2050000	1710000	1930000	3490000	5280000	179000

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample Ref.	CAV 121	CAV 122	CAV 123	CAV 124	CAV 125	CAV 126
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
		SDG Ref	130326-22	130326-22	130326-22	130326-22	130326-22	130326-22
(F)	Trigger breach confirmed	Lab Sample No.(s)	7136315	7136316	7136317	7136318	7136319	7136320
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2140000	2470000	2020000	3660000	5630000	286000

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 127	CAV 128	CAV 129	CAV 130		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013		
			Sample Time	.	.	.	.		
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013		
			SDG Ref	130326-22	130326-22	130326-22	130326-22		
			Lab Sample No.(s)	7136321	7136323	7136324	7136327		
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		101	116	77	79		
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		481 M	76200 M	363 M	3440 M		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<25 M	<5 M	<5 M		
Benzene	<10 µg/kg	TM089		<10 M	<50 M	<10 M	<10 M		
Toluene	<2 µg/kg	TM089		<2 M	<10 M	18.6 M	17.2 M		
Ethylbenzene	<3 µg/kg	TM089		3.9 M	<15 M	4.37 M	8.58 M		
m,p-Xylene	<6 µg/kg	TM089		<6 M	<30 M	15.3 M	23.6 M		
o-Xylene	<3 µg/kg	TM089		<3 M	<15 M	5.46 M	<3 M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	20.8	23.6		
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	43.8	49.4		
Aliphatics >C5-C6	<10 µg/kg	TM089		14.3	<50	14.2	30		
Aliphatics >C6-C8	<10 µg/kg	TM089		42.9	620	47	94.3		
Aliphatics >C8-C10	<10 µg/kg	TM089		85.8	11300	67.7	498		
Aliphatics >C10-C12	<10 µg/kg	TM089		160	34100	83	1450		
Aliphatics >C12-C16	<100 µg/kg	TM173		55700	136000	22900	18800		
Aliphatics >C16-C21	<100 µg/kg	TM173		125000	35500	64600	165000		
Aliphatics >C21-C35	<100 µg/kg	TM173		64900	<100	220000	<100		
Aliphatics >C35-C44	<100 µg/kg	TM173		10200	<100	86700	38000		
Total Aliphatics >C12-C44	<100 µg/kg	TM173		256000	171000	394000	221000		
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<50	<10	<10		
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<50	18.6	17.2		
Aromatics >EC8-EC10	<10 µg/kg	TM089		67.6	7520	71	364		
Aromatics >EC10-EC12	<10 µg/kg	TM089		107	22700	55.7	970		
Aromatics >EC12-EC16	<100 µg/kg	TM173		15800	23900	9640	13000		
Aromatics >EC16-EC21	<100 µg/kg	TM173		57600	15700	39200	62800		
Aromatics >EC21-EC35	<100 µg/kg	TM173		58200	24100	219000	179000		
Aromatics >EC35-EC44	<100 µg/kg	TM173		24200	7610	98600	79300		
Aromatics >EC40-EC44	<100 µg/kg	TM173		9330	2500	38400	34000		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		156000	71200	366000	334000		
Total Aliphatics >C5-35	<100 µg/kg	TM173		246000	217000	308000	185000		
Total Aromatics >C5-35	<100 µg/kg	TM173		132000	93800	268000	256000		
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		378000	311000	575000	442000		

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample Ref.	CAV 127	CAV 128	CAV 129	CAV 130		
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.		
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
*	Subcontracted test.	Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013		
**	% 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	Sample Time	.	.	.	.		
		Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013		
		SDG Ref	130326-22	130326-22	130326-22	130326-22		
(F)	Trigger breach confirmed	Lab Sample No.(s)	7136321	7136323	7136324	7136327		
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component	**LOD/Units**	**Method**						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	412000	319000	760000	559000		

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 121	CAV 122	CAV 123	CAV 124	CAV 125	CAV 126
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			SDG Ref	130326-22	130326-22	130326-22	130326-22	130326-22	130326-22
			Lab Sample No.(s)	7136315	7136316	7136317	7136318	7136319	7136320
			AGS Reference						
Dibromofluoromethane**	%	TM116		98.9 ♦	105	108	103	110	105 ♦
Toluene-d8**	%	TM116		101 ♦	95.6	99.9	97.5	99.8	101 ♦
4-Bromofluorobenzene**	%	TM116		133 ♦	130	108	127	108	118 ♦
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 ♦ M	<8 M	<80 M	<8 M	<80 M	<4 ♦ M
Chloromethane	<7 µg/kg	TM116		<7 ♦	<14	<140	<14	<140	<7 ♦
Vinyl Chloride	<10 µg/kg	TM116		<10 ♦	<20	<200	<20	<200	<10 ♦
Bromomethane	<13 µg/kg	TM116		<13 ♦ M	<26 M	<260 M	<26 M	<260 M	<13 ♦ M
Chloroethane	<14 µg/kg	TM116		<14 ♦ M	<28 M	<280 M	<28 M	<280 M	<14 ♦ M
Trichlorofluorormethane	<6 µg/kg	TM116		<6 ♦ M	<12 M	<120 M	<12 M	<120 M	<6 ♦ M
1,1-Dichloroethene	<10 µg/kg	TM116		<10 ♦ #	<20 #	<200 #	<20 #	<200 #	<10 ♦ #
Carbon Disulphide	<7 µg/kg	TM116		16.8 ♦ M	<14 M	<140 M	<14 M	<140 M	<7 ♦ M
Dichloromethane	<10 µg/kg	TM116		<10 ♦ #	<20 #	<200 #	<20 #	<200 #	<10 ♦ #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 ♦ M	<22 M	<220 M	<22 M	<220 M	<11 ♦ M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 ♦ M	<22 M	<220 M	<22 M	<220 M	<11 ♦ M
1,1-Dichloroethane	<8 µg/kg	TM116		<8 ♦ M	<16 M	<160 M	<16 M	<160 M	<8 ♦ M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 ♦ M	<10 M	<100 M	<10 M	<100 M	<5 ♦ M
2,2-Dichloropropane	<12 µg/kg	TM116		<12 ♦ M	<24 M	<240 M	<24 M	<240 M	<12 ♦ M
Bromochloromethane	<14 µg/kg	TM116		<14 ♦ M	<28 M	<280 M	<28 M	<280 M	<14 ♦ M
Chloroform	<8 µg/kg	TM116		<8 ♦ M	<16 M	<160 M	<16 M	<160 M	<8 ♦ M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 ♦ M	<14 M	<140 M	<14 M	<140 M	<7 ♦ M
1,1-Dichloropropene	<11 µg/kg	TM116		<11 ♦ M	<22 M	<220 M	<22 M	<220 M	<11 ♦ M
Carbontetrachloride	<14 µg/kg	TM116		<14 ♦ M	<28 M	<280 M	<28 M	<280 M	<14 ♦ M
1,2-Dichloroethane	<5 µg/kg	TM116		<5 ♦ M	<10 M	<100 M	<10 M	<100 M	<5 ♦ M
Benzene	<9 µg/kg	TM116		109 ♦ M	<18 M	<180 M	<18 M	<180 M	<9 ♦ M
Trichloroethene	<9 µg/kg	TM116		<9 ♦ M	<18 M	<180 M	24.1 M	<180 M	<9 ♦ M
1,2-Dichloropropane	<12 µg/kg	TM116		<12 ♦ M	<24 M	<240 M	<24 M	<240 M	<12 ♦ M
Dibromomethane	<9 µg/kg	TM116		<9 ♦ M	<18 M	<180 M	<18 M	<180 M	<9 ♦ M
Bromodichloromethane	<7 µg/kg	TM116		<7 ♦ M	<14 M	<140 M	<14 M	<140 M	<7 ♦ M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 ♦ M	<28 M	<280 M	<28 M	<280 M	<14 ♦ M
Toluene	<5 µg/kg	TM116		102 ♦ M	<10 M	<100 M	28 M	<100 M	8.59 ♦ M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14 ♦	<28	<280	<28	<280	<14 ♦
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 ♦ M	<20 M	<200 M	<20 M	<200 M	<10 ♦ M

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 121	CAV 122	CAV 123	CAV 124	CAV 125	CAV 126
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013	25/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			SDG Ref	130326-22	130326-22	130326-22	130326-22	130326-22	130326-22
			Lab Sample No.(s)	7136315	7136316	7136317	7136318	7136319	7136320
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 ♦ #	<14 #	<140 #	<14 #	<140 #	<7 ♦ #
Tetrachloroethene	<5 µg/kg	TM116		<5 ♦ M	<10 M	<100 M	<10 M	<100 M	<5 ♦ M
Dibromochloromethane	<13 µg/kg	TM116		<13 ♦ M	<26 M	<260 M	<26 M	<260 M	<13 ♦ M
1,2-Dibromoethane	<12 µg/kg	TM116		<12 ♦ M	<24 M	<240 M	<24 M	<240 M	<12 ♦ M
Chlorobenzene	<5 µg/kg	TM116		<5 ♦ M	<10 M	<100 M	<10 M	<100 M	<5 ♦ M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 ♦ M	<20 M	<200 M	<20 M	<200 M	<10 ♦ M
Ethylbenzene	<4 µg/kg	TM116		256 ♦ M	<8 M	<80 M	<8 M	<80 M	5.34 ♦ M
p/m-Xylene	<14 µg/kg	TM116		579 ♦ #	<28 #	<280 #	<28 #	<280 #	18.8 ♦ #
o-Xylene	<10 µg/kg	TM116		249 ♦ M	<20 M	<200 M	<20 M	<200 M	<10 ♦ M
Styrene	<10 µg/kg	TM116		<10 ♦ M	<20 M	<200 M	<20 M	<200 M	<10 ♦ M
Bromoform	<10 µg/kg	TM116		<10 ♦ M	<20 M	<200 M	<20 M	<200 M	<10 ♦ M
Isopropylbenzene	<5 µg/kg	TM116		248 ♦ M	<10 M	<100 M	19.1 M	<100 M	<5 ♦ M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 ♦ #	<20 #	<200 #	<20 #	<200 #	<10 ♦ #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 ♦ M	<34 M	<340 M	<34 M	<340 M	<17 ♦ M
Bromobenzene	<10 µg/kg	TM116		<10 ♦ M	<20 M	<200 M	<20 M	<200 M	<10 ♦ M
Propylbenzene	<11 µg/kg	TM116		382 ♦ M	<22 M	<220 M	73 M	<220 M	<11 ♦ M
2-Chlorotoluene	<9 µg/kg	TM116		<9 ♦ M	<18 M	<180 M	<18 M	<180 M	<9 ♦ M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		216 ♦ #	<16 #	<160 #	<16 #	<160 #	<8 ♦ #
4-Chlorotoluene	<12 µg/kg	TM116		<12 ♦ M	<24 M	<240 M	<24 M	<240 M	<12 ♦ M
tert-Butylbenzene	<12 µg/kg	TM116		<12 ♦ #	<24 #	<240 #	<24 #	<240 #	<12 ♦ #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		1500 ♦ #	<18 #	<180 #	56.8 #	<180 #	<9 ♦ #
sec-Butylbenzene	<10 µg/kg	TM116		300 ♦ M	<20 M	<200 M	<20 M	<200 M	<10 ♦ M
4-Isopropyltoluene	<11 µg/kg	TM116		<11 ♦ M	<22 M	<220 M	<22 M	<220 M	<11 ♦ M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 ♦ M	<12 M	<120 M	<12 M	<120 M	<6 ♦ M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 ♦ M	<10 M	<100 M	<10 M	<100 M	<5 ♦ M
n-Butylbenzene	<10 µg/kg	TM116		286 ♦ M	<20 M	<200 M	<20 M	<200 M	<10 ♦ M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 ♦ M	<24 M	<240 M	<24 M	<240 M	<12 ♦ M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 ♦ M	<28 M	<280 M	<28 M	<280 M	<14 ♦ M
Tert-amyl methyl ether	<15 µg/kg	TM116		<15 ♦	<30	<300	<30	<300	<15 ♦
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 ♦ #	<12 #	<120 #	<12 #	<120 #	<6 ♦ #
Hexachlorobutadiene	<12 µg/kg	TM116		<12 ♦	<24	<240	<24	<240	<12 ♦
Naphthalene	<13 µg/kg	TM116		549 ♦ M	<26 M	<260 M	<26 M	<260 M	<13 ♦ M

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sample Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			CAV 121	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136315	
			CAV 122	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136316	
			CAV 123	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136317	
			CAV 124	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136318	
			CAV 125	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136319	
			CAV 126	.	Soil/Solid	25/03/2013	.	26/03/2013	130326-22	7136320	
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 ♦ M								
			<12 M								
			<120 M								
			<12 M								
			<120 M								
			<6 ♦ M								

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 127	CAV 128	CAV 129	CAV 130		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013		
			Sample Time	.	.	.	.		
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013		
			SDG Ref	130326-22	130326-22	130326-22	130326-22		
			Lab Sample No.(s)	7136321	7136323	7136324	7136327		
			AGS Reference						
Dibromofluoromethane**	%	TM116		104 ♦	105	74.4 ♦	75.2 ♦		
Toluene-d8**	%	TM116		98.9 ♦	102	94.9 ♦	93.5 ♦		
4-Bromofluorobenzene**	%	TM116		112 ♦	103	133 ♦	109 ♦		
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 ♦ M	<80 M	<4 ♦ M	<4 ♦ M		
Chloromethane	<7 µg/kg	TM116		<7 ♦	<140	<7 ♦	<7 ♦		
Vinyl Chloride	<10 µg/kg	TM116		<10 ♦	<200	<10 ♦	<10 ♦		
Bromomethane	<13 µg/kg	TM116		<13 ♦ M	<260 M	<13 ♦ M	<13 ♦ M		
Chloroethane	<14 µg/kg	TM116		<14 ♦ M	<280 M	<14 ♦ M	<14 ♦ M		
Trichlorofluorormethane	<6 µg/kg	TM116		<6 ♦ M	<120 M	<6 ♦ M	<6 ♦ M		
1,1-Dichloroethene	<10 µg/kg	TM116		<10 ♦ #	<200 #	<10 ♦ #	<10 ♦ #		
Carbon Disulphide	<7 µg/kg	TM116		<7 ♦ M	<140 M	<7 ♦ M	8.53 ♦ M		
Dichloromethane	<10 µg/kg	TM116		<10 ♦ #	<200 #	<10 ♦ #	<10 ♦ #		
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 ♦ M	<220 M	<11 ♦ M	<11 ♦ M		
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 ♦ M	<220 M	<11 ♦ M	<11 ♦ M		
1,1-Dichloroethane	<8 µg/kg	TM116		<8 ♦ M	<160 M	<8 ♦ M	<8 ♦ M		
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 ♦ M	<100 M	<5 ♦ M	<5 ♦ M		
2,2-Dichloropropane	<12 µg/kg	TM116		<12 ♦ M	<240 M	<12 ♦ M	<12 ♦ M		
Bromochloromethane	<14 µg/kg	TM116		<14 ♦ M	<280 M	<14 ♦ M	<14 ♦ M		
Chloroform	<8 µg/kg	TM116		<8 ♦ M	<160 M	<8 ♦ M	<8 ♦ M		
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 ♦ M	<140 M	<7 ♦ M	<7 ♦ M		
1,1-Dichloropropene	<11 µg/kg	TM116		<11 ♦ M	<220 M	<11 ♦ M	<11 ♦ M		
Carbontetrachloride	<14 µg/kg	TM116		<14 ♦ M	<280 M	<14 ♦ M	<14 ♦ M		
1,2-Dichloroethane	<5 µg/kg	TM116		<5 ♦ M	<100 M	<5 ♦ M	<5 ♦ M		
Benzene	<9 µg/kg	TM116		<9 ♦ M	<180 M	16.8 ♦ M	21.9 ♦ M		
Trichloroethene	<9 µg/kg	TM116		<9 ♦ M	<180 M	<9 ♦ M	<9 ♦ M		
1,2-Dichloropropane	<12 µg/kg	TM116		<12 ♦ M	<240 M	<12 ♦ M	<12 ♦ M		
Dibromomethane	<9 µg/kg	TM116		<9 ♦ M	<180 M	<9 ♦ M	<9 ♦ M		
Bromodichloromethane	<7 µg/kg	TM116		<7 ♦ M	<140 M	<7 ♦ M	<7 ♦ M		
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 ♦ M	<280 M	<14 ♦ M	<14 ♦ M		
Toluene	<5 µg/kg	TM116		<5 ♦ M	<100 M	45.5 ♦ M	39.1 ♦ M		
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14 ♦	<280	<14 ♦	<14 ♦		
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 ♦ M	<200 M	<10 ♦ M	<10 ♦ M		

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 127	CAV 128	CAV 129	CAV 130		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013		
			Sample Time	.	.	.	.		
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013		
			SDG Ref	130326-22	130326-22	130326-22	130326-22		
			Lab Sample No.(s)	7136321	7136323	7136324	7136327		
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 ♦ #	<140 #	<7 ♦ #	<7 ♦ #		
Tetrachloroethene	<5 µg/kg	TM116		<5 ♦ M	<100 M	<5 ♦ M	<5 ♦ M		
Dibromochloromethane	<13 µg/kg	TM116		<13 ♦ M	<260 M	<13 ♦ M	<13 ♦ M		
1,2-Dibromoethane	<12 µg/kg	TM116		<12 ♦ M	<240 M	<12 ♦ M	<12 ♦ M		
Chlorobenzene	<5 µg/kg	TM116		<5 ♦ M	<100 M	<5 ♦ M	<5 ♦ M		
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 ♦ M	<200 M	<10 ♦ M	<10 ♦ M		
Ethylbenzene	<4 µg/kg	TM116		<4 ♦ M	<80 M	14.9 ♦ M	20.5 ♦ M		
p/m-Xylene	<14 µg/kg	TM116		<14 ♦ #	<280 #	46.3 ♦ #	55 ♦ #		
o-Xylene	<10 µg/kg	TM116		<10 ♦ M	<200 M	14.8 ♦ M	<10 ♦ M		
Styrene	<10 µg/kg	TM116		<10 ♦ M	<200 M	<10 ♦ M	<10 ♦ M		
Bromoform	<10 µg/kg	TM116		<10 ♦ M	<200 M	<10 ♦ M	<10 ♦ M		
Isopropylbenzene	<5 µg/kg	TM116		<5 ♦ M	<100 M	<5 ♦ M	<5 ♦ M		
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 ♦ #	<200 #	<10 ♦ #	<10 ♦ #		
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 ♦ M	<340 M	<17 ♦ M	<17 ♦ M		
Bromobenzene	<10 µg/kg	TM116		<10 ♦ M	<200 M	<10 ♦ M	<10 ♦ M		
Propylbenzene	<11 µg/kg	TM116		<11 ♦ M	<220 M	<11 ♦ M	<11 ♦ M		
2-Chlorotoluene	<9 µg/kg	TM116		<9 ♦ M	<180 M	<9 ♦ M	<9 ♦ M		
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 ♦ #	<160 #	<8 ♦ #	<8 ♦ #		
4-Chlorotoluene	<12 µg/kg	TM116		<12 ♦ M	<240 M	<12 ♦ M	<12 ♦ M		
tert-Butylbenzene	<12 µg/kg	TM116		<12 ♦ #	<240 #	<12 ♦ #	<12 ♦ #		
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 ♦ #	<180 #	44.3 ♦ #	<9 ♦ #		
sec-Butylbenzene	<10 µg/kg	TM116		<10 ♦ M	<200 M	<10 ♦ M	<10 ♦ M		
4-Isopropyltoluene	<11 µg/kg	TM116		<11 ♦ M	<220 M	<11 ♦ M	<11 ♦ M		
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 ♦ M	<120 M	<6 ♦ M	<6 ♦ M		
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 ♦ M	<100 M	<5 ♦ M	<5 ♦ M		
n-Butylbenzene	<10 µg/kg	TM116		<10 ♦ M	<200 M	<10 ♦ M	<10 ♦ M		
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 ♦ M	<240 M	<12 ♦ M	<12 ♦ M		
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 ♦ M	<280 M	<14 ♦ M	<14 ♦ M		
Tert-amyl methyl ether	<15 µg/kg	TM116		<15 ♦	<300	<15 ♦	<15 ♦		
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 ♦ #	<120 #	<6 ♦ #	<6 ♦ #		
Hexachlorobutadiene	<12 µg/kg	TM116		<12 ♦	<240	<12 ♦	<12 ♦		
Naphthalene	<13 µg/kg	TM116		<13 ♦ M	<260 M	<13 ♦ M	<13 ♦ M		

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAV 127	CAV 128	CAV 129	CAV 130		
			Depth (m)	.	.	.	.		
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
			Date Sampled	25/03/2013	25/03/2013	25/03/2013	25/03/2013		
			Sample Time	.	.	.	.		
			Date Received	26/03/2013	26/03/2013	26/03/2013	26/03/2013		
			SDG Ref	130326-22	130326-22	130326-22	130326-22		
			Lab Sample No.(s)	7136321	7136323	7136324	7136327		
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<6 ♦ M	<120 M	<6 ♦ M	<6 ♦ M		

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAV 121 SOLID 25/03/2013 00:00:00 130326-22 7136315 TM048	11/04/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV 122 SOLID 25/03/2013 00:00:00 130326-22 7136316 TM048	11/04/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV 123 SOLID 25/03/2013 00:00:00 130326-22 7136317 TM048	11/04/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV 124 SOLID 25/03/2013 00:00:00 130326-22 7136318 TM048	11/04/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV 125 SOLID 25/03/2013 00:00:00 130326-22 7136319 TM048	11/04/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAV 126 SOLID 25/03/2013 00:00:00 130326-22 7136320 TM048	12/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAV 127 SOLID 25/03/2013 00:00:00 130326-22 7136321 TM048	12/04/13	Martin Cotterell	Loose fibres in soil	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV 128 SOLID 25/03/2013 00:00:00 130326-22 7136323 TM048	12/04/13	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 Receieved SDG Original Sample Method Number	CAV 129 SOLID 25/03/2013 00:00:00 130326-22 7136324 TM048	12/04/13	Martin Cotterell	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 Receieved SDG Original Sample Method Number	CAV 130 SOLID 25/03/2013 00:00:00 130326-22 7136327 TM048	12/04/13	Lauren Sargeant	Loose fibres in soil	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of NDPs (No determination possible)

Date Received : 26/03/2013 10:18:51

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
7136315	CAV 121		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7136316	CAV 122		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7136318	CAV 124		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7136319	CAV 125		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7136320	CAV 126		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7136321	CAV 127		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7136323	CAV 128		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7136324	CAV 129		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7136327	CAV 130		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	7136315	7136316	7136317	7136318	7136319	7136320	7136321	7136323	7136324	7136327
Customer Sample Ref.	CAV 121	CAV 122	CAV 123	CAV 124	CAV 125	CAV 126	CAV 127	CAV 128	CAV 129	CAV 130
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013
EPH CWG (Aliphatic) GC (S)	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	05-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013
EPH CWG (Aromatic) GC (S)	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	05-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013
GRO by GC-FID (S)	03-Apr-2013	02-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	02-Apr-2013	03-Apr-2013	02-Apr-2013	02-Apr-2013
Metals in solid samples by OES	04-Apr-2013	03-Apr-2013	04-Apr-2013	03-Apr-2013	04-Apr-2013	03-Apr-2013	03-Apr-2013	04-Apr-2013	03-Apr-2013	03-Apr-2013
PAH by GCMS	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013
pH	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
Sample description	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013
Total Organic Carbon			12-Apr-2013							
Total Organic Carbon (Asb)	12-Apr-2013	12-Apr-2013		12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013
TPH CWG GC (S)	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	05-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013
VOC MS (S)	03-Apr-2013	02-Apr-2013	03-Apr-2013	02-Apr-2013	03-Apr-2013	02-Apr-2013	02-Apr-2013	03-Apr-2013	02-Apr-2013	02-Apr-2013

SDG:	130326-22	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0378
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	219862
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	15 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130327-20
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	220432

We received 7 samples on Wednesday March 27, 2013 and 7 of these samples were scheduled for analysis which was completed on Monday April 15, 2013. 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

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Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7143001	CAEMVTP31		1.00	26/03/2013
7143002	CAEMVTP31		3.00	26/03/2013
7143004	CAEMVTP32		1.00	26/03/2013
7143005	CAEMVTP32		2.20	26/03/2013
7143006	CAEMVTP33		0.30	26/03/2013
7143008	CAEMVTP33		1.00	26/03/2013
7143009	CAEMVTP33		1.80	26/03/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

		Lab Sample No(s)	7143001	7143002	7143004	7143005	7143006	7143008	7143009
		Customer Sample Reference	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33	CAEMVTP33
		AGS Reference							
		Depth (m)	1.00	3.00	1.00	2.20	0.30	1.00	1.80
		Container	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 7		X		X		X		X		X		X		X		X		X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 7	X		X		X		X		X		X		X		X		X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 7	X		X		X		X		X		X		X		X		X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 7		X		X		X		X		X		X		X		X		X	X
Metals in solid samples by OES	All	NDPs: 0 Tests: 7	X		X		X		X		X		X		X		X		X		
PAH by GCMS	All	NDPs: 0 Tests: 7	X		X		X		X		X		X		X		X		X		
pH	All	NDPs: 0 Tests: 7		X		X		X		X		X		X		X		X		X	
Sample description	All	NDPs: 0 Tests: 7	X		X		X		X		X		X		X		X		X		
Total Organic Carbon	All	NDPs: 4 Tests: 3	N				N		N		N										
				X											X			X			
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 4	X				X		X		X										
TPH CWG GC (S)	All	NDPs: 0 Tests: 7	X		X		X		X		X		X		X		X		X		
VOC MS (S)	All	NDPs: 0 Tests: 7		X		X		X		X		X		X		X		X			X

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
7143001	CAEMVTP31	1.00	Dark Brown	Loamy Sand	0.1 - 2 mm	Crushed Brick	Oil/Petroleum
7143002	CAEMVTP31	3.00	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7143004	CAEMVTP32	1.00	Black	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7143005	CAEMVTP32	2.20	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7143006	CAEMVTP33	0.30	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
7143008	CAEMVTP33	1.00	Dark Brown	Sand	0.1 - 2 mm	Oil/Petroleum	Stones
7143009	CAEMVTP33	1.80	Dark Brown	Sand	0.1 - 2 mm	Oil/Petroleum	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33
			Depth (m)	1.00	3.00	1.00	2.20	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013
			SDG Ref	130327-20	130327-20	130327-20	130327-20	130327-20	130327-20
			Lab Sample No.(s)	7143001	7143002	7143004	7143005	7143006	7143008
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132			1.2 #				0.638 #
pH	1 pH Units	TM133		8.17 M	7.12 M	7.32 M	7.71 M	8.39 M	7.56 M
Arsenic	<0.6 mg/kg	TM181		43.4 M	8.44 M	35 M	10.2 M	21.4 M	5.27 M
Cadmium	<0.02 mg/kg	TM181		0.769 M	0.61 M	0.534 M	0.682 M	1.34 M	0.459 M
Chromium	<0.9 mg/kg	TM181		25.8 M	13 M	10.9 M	22 M	43.1 M	14.1 M
Copper	<1.4 mg/kg	TM181		197 M	14.3 M	108 M	34.9 M	154 M	17 M
Lead	<0.7 mg/kg	TM181		268 M	16.7 M	173 M	124 M	44.8 M	19.8 M
Mercury	<0.14 mg/kg	TM181		0.317 M	<0.14 M	0.157 M	<0.14 M	0.186 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		23.6 M	24.3 M	62.2 M	26 M	39.6 M	28.1 M
Selenium	<1 mg/kg	TM181		1.22 #	<1 #	<1 #	<1 #	<1 #	<1 #
Zinc	<1.9 mg/kg	TM181		821 M	62.9 M	441 M	243 M	173 M	107 M
Soil Organic Matter (SOM)	<0.1 %	TM321		0.345		2.2	<0.1	0.859	

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample Ref.	CAEMVTP33
Depth (m)	1.80
Sample Type	Soil/Solid
Date Sampled	26/03/2013
Sample Time	.
Date Received	27/03/2013
SDG Ref	130327-20
Lab Sample No.(s)	7143009
AGS Reference	

Component	LOD/Units	Method	
Soil Organic Matter (SOM)	<0.35 %	TM132	0.938 #
pH	1 pH Units	TM133	7.56 M
Arsenic	<0.6 mg/kg	TM181	6.34 M
Cadmium	<0.02 mg/kg	TM181	0.173 M
Chromium	<0.9 mg/kg	TM181	12.5 M
Copper	<1.4 mg/kg	TM181	16.9 M
Lead	<0.7 mg/kg	TM181	20.4 M
Mercury	<0.14 mg/kg	TM181	<0.14 M
Nickel	<0.2 mg/kg	TM181	29.1 M
Selenium	<1 mg/kg	TM181	<1 #
Zinc	<1.9 mg/kg	TM181	109 M

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33
			Depth (m)	1.00	3.00	1.00	2.20	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013
			SDG Ref	130327-20	130327-20	130327-20	130327-20	130327-20	130327-20
			Lab Sample No.(s)	7143001	7143002	7143004	7143005	7143006	7143008
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		103	95.1	109	91.2	101	102
Acenaphthene-d10 % recovery**	%	TM218		103	97.1	110	91.8	100	101
Phenanthrene-d10 % recovery**	%	TM218		101	95.9	109	90.1	98.3	98.7
Chrysene-d12 % recovery**	%	TM218		96.6	89.8	103	82.9	93.5	91.9
Perylene-d12 % recovery**	%	TM218		101	92.8	106	85	97.2	95.8
Naphthalene	<9 µg/kg	TM218		165 M	608 M	398 M	300 M	61.8 M	76.9 M
Acenaphthylene	<12 µg/kg	TM218		65.2 M	20.2 M	123 M	<12 M	17.7 M	<12 M
Acenaphthene	<8 µg/kg	TM218		406 M	658 M	323 M	189 M	29.2 M	19.4 M
Fluorene	<10 µg/kg	TM218		411 M	2030 M	820 M	451 M	31.8 M	29.9 M
Phenanthrene	<15 µg/kg	TM218		1620 M	4660 M	2410 M	992 M	316 M	65 M
Anthracene	<16 µg/kg	TM218		393 M	745 M	530 M	133 M	62.4 M	<16 M
Fluoranthene	<17 µg/kg	TM218		2560 M	221 M	1640 M	149 M	514 M	28.2 M
Pyrene	<15 µg/kg	TM218		2080 M	970 M	1650 M	217 M	442 M	25.3 M
Benz(a)anthracene	<14 µg/kg	TM218		1420 M	136 M	729 M	48.8 M	334 M	<14 M
Chrysene	<10 µg/kg	TM218		1390 M	201 M	779 M	64.1 M	322 M	13.8 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		1800 M	28.4 M	763 M	69.3 M	439 M	43.6 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		747 M	26 M	351 M	22.6 M	180 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218		1590 M	65.2 M	657 M	41.3 M	357 M	<15 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		953 M	26.8 M	392 M	27.3 M	234 M	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		316 M	<23 M	145 M	<23 M	86.6 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		1170 M	41.1 M	457 M	34.9 M	282 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		17100	10400	12200	2740	3710	302

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample Ref.	CAEMVTP33
Depth (m)	1.80
Sample Type	Soil/Solid
Date Sampled	26/03/2013
Sample Time	.
Date Received	27/03/2013
SDG Ref	130327-20
Lab Sample No.(s)	7143009
AGS Reference	

Component	LOD/Units	Method	
Naphthalene-d8 % recovery**	%	TM218	102
Acenaphthene-d10 % recovery**	%	TM218	104
Phenanthrene-d10 % recovery**	%	TM218	99.2
Chrysene-d12 % recovery**	%	TM218	91
Perylene-d12 % recovery**	%	TM218	96
Naphthalene	<9 µg/kg	TM218	126 M
Acenaphthylene	<12 µg/kg	TM218	<12 M
Acenaphthene	<8 µg/kg	TM218	37.8 M
Fluorene	<10 µg/kg	TM218	67 M
Phenanthrene	<15 µg/kg	TM218	109 M
Anthracene	<16 µg/kg	TM218	<16 M
Fluoranthene	<17 µg/kg	TM218	68.1 M
Pyrene	<15 µg/kg	TM218	46.9 M
Benz(a)anthracene	<14 µg/kg	TM218	29.2 M
Chrysene	<10 µg/kg	TM218	19.9 M
Benzo(b)fluoranthene	<15 µg/kg	TM218	29.9 M
Benzo(k)fluoranthene	<14 µg/kg	TM218	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218	<15 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	534

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33
			Depth (m)	1.00	3.00	1.00	2.20	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013
			SDG Ref	130327-20	130327-20	130327-20	130327-20	130327-20	130327-20
			Lab Sample No.(s)	7143001	7143002	7143004	7143005	7143006	7143008
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		48	110	98	98	55	146
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		18500 M	26500 M	76900 M	175000 M	<44 M	382000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<5 M	<5 M	<50 M	<5 M	<50 M
Benzene	<10 µg/kg	TM089		<10 M	<10 M	50.4 M	<100 M	<10 M	<100 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	<20 M	<2 M	<20 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<30 M	<3 M	<30 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<60 M	<6 M	<60 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<30 M	<3 M	<30 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	50.4	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		18.9	35.3	189	495	<10	3100
Aliphatics >C6-C8	<10 µg/kg	TM089		335	959	10600	22100	<10	40500
Aliphatics >C8-C10	<10 µg/kg	TM089		2270	4200	23900	43800	<10	102000
Aliphatics >C10-C12	<10 µg/kg	TM089		8610	11100	15800	47500	<10	101000
Aliphatics >C12-C16	<100 µg/kg	TM173		93500	158000	255000	39500	43500	28800
Aliphatics >C16-C21	<100 µg/kg	TM173		96900	79900	192000	25200	57100	6040
Aliphatics >C21-C35	<100 µg/kg	TM173		487000	50100	182000	22500	295000	6910
Aliphatics >C35-C44	<100 µg/kg	TM173		73900	12000	62100	<100	88800	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		752000	300000	691000	87200	484000	41800
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	50.4	<100	<10	<100
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<100	<10	<100
Aromatics >EC8-EC10	<10 µg/kg	TM089		1520	2800	15900	29200	<10	68000
Aromatics >EC10-EC12	<10 µg/kg	TM089		5740	7380	10500	31600	<10	67400
Aromatics >EC12-EC16	<100 µg/kg	TM173		46800	161000	133000	20300	8050	12400
Aromatics >EC16-EC21	<100 µg/kg	TM173		84100	95400	185000	17000	24700	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		310000	64700	235000	30100	147000	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173		106000	15900	67900	11000	66100	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		42600	6040	25700	4740	28200	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		547000	337000	621000	78400	245000	12400
Total Aliphatics >C5-35	<100 µg/kg	TM173		689000	304000	679000	201000	396000	288000
Total Aromatics >C5-35	<100 µg/kg	TM173		448000	331000	579000	128000	179000	148000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1140000	636000	1260000	329000	575000	436000

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample Ref.	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	1.00	3.00	1.00	2.20	0.30	1.00
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013
		SDG Ref	130327-20	130327-20	130327-20	130327-20	130327-20	130327-20
(F)	Trigger breach confirmed	Lab Sample No.(s)	7143001	7143002	7143004	7143005	7143006	7143008
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1320000	664000	1390000	340000	730000	436000

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample Ref.	CAEMVTP33
Depth (m)	1.80
Sample Type	Soil/Solid
Date Sampled	26/03/2013
Sample Time	.
Date Received	27/03/2013
SDG Ref	130327-20
Lab Sample No.(s)	7143009
AGS Reference	

Component	LOD/Units	Method	
GRO Surrogate % recovery**	%	TM089	148
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	1280000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<100 M
Benzene	<10 µg/kg	TM089	<200 M
Toluene	<2 µg/kg	TM089	<40 M
Ethylbenzene	<3 µg/kg	TM089	<60 M
m,p-Xylene	<6 µg/kg	TM089	<120 M
o-Xylene	<3 µg/kg	TM089	<60 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	5880
Aliphatics >C6-C8	<10 µg/kg	TM089	94100
Aliphatics >C8-C10	<10 µg/kg	TM089	316000
Aliphatics >C10-C12	<10 µg/kg	TM089	389000
Aliphatics >C12-C16	<100 µg/kg	TM173	126000
Aliphatics >C16-C21	<100 µg/kg	TM173	13100
Aliphatics >C21-C35	<100 µg/kg	TM173	10700
Aliphatics >C35-C44	<100 µg/kg	TM173	2110
Total Aliphatics >C12-C44	<100 µg/kg	TM173	152000
Aromatics >EC5-EC7	<10 µg/kg	TM089	202
Aromatics >EC7-EC8	<10 µg/kg	TM089	<200
Aromatics >EC8-EC10	<10 µg/kg	TM089	210000
Aromatics >EC10-EC12	<10 µg/kg	TM089	260000
Aromatics >EC12-EC16	<100 µg/kg	TM173	48600
Aromatics >EC16-EC21	<100 µg/kg	TM173	9440
Aromatics >EC21-EC35	<100 µg/kg	TM173	15900
Aromatics >EC35-EC44	<100 µg/kg	TM173	3160
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	77100
Total Aliphatics >C5-35	<100 µg/kg	TM173	954000
Total Aromatics >C5-35	<100 µg/kg	TM173	544000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	1500000

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample Ref.	CAEMVTP33
#	ISO17025 accredited.		
M	*m*CERTS accredited.		
aq	Aqueous / settled sample.	Depth (m)	1.80
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	26/03/2013
*	Subcontracted test.	Sample Time	.
**	% 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	Date Received	27/03/2013
		SDG Ref	130327-20
(F)	Trigger breach confirmed	Lab Sample No.(s)	7143009
1-4&+§@	Sample deviation (see appendix)	AGS Reference	

Component	LOD/Units	Method	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1500000

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33
			Depth (m)	1.00	3.00	1.00	2.20	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013
			SDG Ref	130327-20	130327-20	130327-20	130327-20	130327-20	130327-20
			Lab Sample No.(s)	7143001	7143002	7143004	7143005	7143006	7143008
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	102	101	99.3	98.6	96.6
Toluene-d8**	%	TM116		101	97.6	99	99.4	98.6	110
4-Bromofluorobenzene**	%	TM116		103	123	107	110	104	115
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 M	<8 M	<80 M	<80 M	<4 M
Chloromethane	<7 µg/kg	TM116		<140	<7	<14	<140	<140	<7
Vinyl Chloride	<10 µg/kg	TM116		<200	<10	<20	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<13 M	<26 M	<260 M	<260 M	<13 M
Chloroethane	<14 µg/kg	TM116		<280 M	<14 M	<28 M	<280 M	<280 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 M	<12 M	<120 M	<120 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #	<20 #	<200 #	<200 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<7 M	<14 M	<140 M	<140 M	<7 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #	<20 #	<200 #	<200 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 M	<22 M	<220 M	<220 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 M	<22 M	<220 M	<220 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 M	<16 M	<160 M	<160 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 M	<10 M	<100 M	<100 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<24 M	<240 M	<240 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 M	<28 M	<280 M	<280 M	<14 M
Chloroform	<8 µg/kg	TM116		<160 M	<8 M	<16 M	<160 M	<160 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 M	<14 M	<140 M	<140 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 M	<22 M	<220 M	<220 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 M	<28 M	<280 M	<280 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<5 M	<10 M	<100 M	<100 M	<5 M
Benzene	<9 µg/kg	TM116		<180 M	<9 M	<18 M	<180 M	<180 M	119 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 M	<18 M	<180 M	<180 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<24 M	<240 M	<240 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 M	<18 M	<180 M	<180 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 M	<14 M	<140 M	<140 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 M	<28 M	<280 M	<280 M	<14 M
Toluene	<5 µg/kg	TM116		<100 M	<5 M	<10 M	<100 M	<100 M	<5 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<14	<28	<280	<280	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 M	<20 M	<200 M	<200 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33
			Depth (m)	1.00	3.00	1.00	2.20	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013
			SDG Ref	130327-20	130327-20	130327-20	130327-20	130327-20	130327-20
			Lab Sample No.(s)	7143001	7143002	7143004	7143005	7143006	7143008
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<7 #	<14 #	<140 #	<140 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<5 M	<10 M	<100 M	<100 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<13 M	<26 M	<260 M	<260 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<12 M	<24 M	<240 M	<240 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<10 M	<100 M	<100 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<10 M	<20 M	<200 M	<200 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<4 M	<8 M	<80 M	<80 M	27 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<14 #	<28 #	<280 #	<280 #	126 #
o-Xylene	<10 µg/kg	TM116		<200 M	<10 M	<20 M	<200 M	<200 M	12.3 M
Styrene	<10 µg/kg	TM116		<200 M	<10 M	<20 M	<200 M	<200 M	<10 M
Bromoform	<10 µg/kg	TM116		<200 M	<10 M	<20 M	<200 M	<200 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	33.1 M	<10 M	<100 M	<100 M	425 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<10 #	<20 #	<200 #	<200 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<17 M	<34 M	<340 M	<340 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<10 M	<20 M	<200 M	<200 M	<10 M
Propylbenzene	<11 µg/kg	TM116		<220 M	85.1 M	<22 M	<220 M	<220 M	748 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<9 M	<18 M	<180 M	<180 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<8 #	<16 #	<160 #	<160 #	1290 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<12 M	<24 M	<240 M	<240 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<12 #	<24 #	<240 #	<240 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<9 #	<18 #	296 #	<180 #	3770 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	164 M	<20 M	<200 M	<200 M	580 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<11 M	<22 M	<220 M	<220 M	566 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<12 M	<120 M	<120 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<10 M	<100 M	<100 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	317 M	<20 M	<200 M	<200 M	415 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<12 M	<24 M	<240 M	<240 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<14 M	<28 M	<280 M	<280 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<15	<30	<300	<300	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<6 #	<12 #	<120 #	<120 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<12	<24	<240	<240	<12
Naphthalene	<13 µg/kg	TM116		<260 M	<13 M	<26 M	<260 M	<260 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33
			Depth (m)	1.00	3.00	1.00	2.20	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013	26/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013	27/03/2013
			SDG Ref	130327-20	130327-20	130327-20	130327-20	130327-20	130327-20
			Lab Sample No.(s)	7143001	7143002	7143004	7143005	7143006	7143008
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<12 M	<120 M	<120 M	11 M

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample Ref.	CAEMVTP33
Depth (m)	1.80
Sample Type	Soil/Solid
Date Sampled	26/03/2013
Sample Time	.
Date Received	27/03/2013
SDG Ref	130327-20
Lab Sample No.(s)	7143009
AGS Reference	

Component	LOD/Units	Method	
Dibromofluoromethane**	%	TM116	98.4
Toluene-d8**	%	TM116	96.6
4-Bromofluorobenzene**	%	TM116	131
Dichlorodifluoromethane	<4 µg/kg	TM116	<4 M
Chloromethane	<7 µg/kg	TM116	<7
Vinyl Chloride	<10 µg/kg	TM116	<200
Bromomethane	<13 µg/kg	TM116	<13 M
Chloroethane	<14 µg/kg	TM116	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116	<10 #
Carbon Disulphide	<7 µg/kg	TM116	<7 M
Dichloromethane	<10 µg/kg	TM116	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116	<12 M
Bromochloromethane	<14 µg/kg	TM116	<14 M
Chloroform	<8 µg/kg	TM116	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116	<11 M
Carbontetrachloride	<14 µg/kg	TM116	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116	<5 M
Benzene	<9 µg/kg	TM116	221 M
Trichloroethene	<9 µg/kg	TM116	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116	<12 M
Dibromomethane	<9 µg/kg	TM116	<9 M
Bromodichloromethane	<7 µg/kg	TM116	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116	<14 M
Toluene	<5 µg/kg	TM116	<5 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	
			CAEMVTP33	
			Depth (m)	1.80
			Sample Type	Soil/Solid
			Date Sampled	26/03/2013
			Sample Time	.
			Date Received	27/03/2013
			SDG Ref	130327-20
			Lab Sample No.(s)	7143009
			AGS Reference	
1,3-Dichloropropane	<7 µg/kg	TM116	<7	#
Tetrachloroethene	<5 µg/kg	TM116	<5	M
Dibromochloromethane	<13 µg/kg	TM116	<13	M
1,2-Dibromoethane	<12 µg/kg	TM116	<12	M
Chlorobenzene	<5 µg/kg	TM116	<5	M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<10	M
Ethylbenzene	<4 µg/kg	TM116	48.8	M
p/m-Xylene	<14 µg/kg	TM116	33.7	#
o-Xylene	<10 µg/kg	TM116	17.9	M
Styrene	<10 µg/kg	TM116	<10	M
Bromoform	<10 µg/kg	TM116	<10	M
Isopropylbenzene	<5 µg/kg	TM116	575	M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<10	#
1,2,3-Trichloropropane	<17 µg/kg	TM116	<17	M
Bromobenzene	<10 µg/kg	TM116	<10	M
Propylbenzene	<11 µg/kg	TM116	1010	M
2-Chlorotoluene	<9 µg/kg	TM116	<9	M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	1350	#
4-Chlorotoluene	<12 µg/kg	TM116	<12	M
tert-Butylbenzene	<12 µg/kg	TM116	<12	#
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	30400	#
sec-Butylbenzene	<10 µg/kg	TM116	1110	M
4-Isopropyltoluene	<11 µg/kg	TM116	796	M
1,3-Dichlorobenzene	<6 µg/kg	TM116	<6	M
1,4-Dichlorobenzene	<5 µg/kg	TM116	<5	M
n-Butylbenzene	<10 µg/kg	TM116	716	M
1,2-Dichlorobenzene	<12 µg/kg	TM116	<12	M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<14	M
Tert-amyl methyl ether	<15 µg/kg	TM116	<15	
1,2,4-Trichlorobenzene	<6 µg/kg	TM116	<6	#
Hexachlorobutadiene	<12 µg/kg	TM116	<12	
Naphthalene	<13 µg/kg	TM116	<13	M

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Customer Sample Ref.			CAEMVTP33
Depth (m)			1.80
Sample Type			Soil/Solid
Date Sampled			26/03/2013
Sample Time			.
Date Received			27/03/2013
SDG Ref			130327-20
Lab Sample No.(s)			7143009
AGS Reference			
Component	**LOD/Units**	**Method**	
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEMVTP31 1.00 SOLID 26/03/2013 00:00:00 130327-20 7143001 TM048	12/04/13	Chris Swindells	Loose fibres in soil	Trace (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMVTP31 3.00 SOLID 26/03/2013 00:00:00 130327-20 7143002 TM048	12/04/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMVTP32 1.00 SOLID 26/03/2013 00:00:00 130327-20 7143004 TM048	12/04/13	Chris Swindells	Loose fibres in soil	Trace (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMVTP32 2.20 SOLID 26/03/2013 00:00:00 130327-20 7143005 TM048	12/04/13	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 Receieved SDG Original Sample Method Number	CAEMVTP33 0.30 SOLID 26/03/2013 00:00:00 130327-20 7143006 TM048	12/04/13	Chris Swindells	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAEMVTP33 1.00 SOLID 26/03/2013 00:00:00 130327-20 7143008 TM048	12/04/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMVTP33 1.80 SOLID 26/03/2013 00:00:00 130327-20 7143009 TM048	12/04/13	Chris Swindells	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Notification of NDPs (No determination possible)

Date Received : 27/03/2013 09:01:04

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
7143001	CAEMVTP31	1.00	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7143004	CAEMVTP32	1.00	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7143005	CAEMVTP32	2.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7143006	CAEMVTP33	0.30	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	7143001	7143002	7143004	7143005	7143006	7143008	7143009
Customer Sample Ref.	CAEMVTP31	CAEMVTP31	CAEMVTP32	CAEMVTP32	CAEMVTP33	CAEMVTP33	CAEMVTP33
AGS Ref.							
Depth	1.00	3.00	1.00	2.20	0.30	1.00	1.80
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	15-Apr-2013	15-Apr-2013	15-Apr-2013	15-Apr-2013	15-Apr-2013	15-Apr-2013	15-Apr-2013
EPH CWG (Aliphatic) GC (S)	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013
EPH CWG (Aromatic) GC (S)	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013
GRO by GC-FID (S)	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013
Metals in solid samples by OES	05-Apr-2013	08-Apr-2013	05-Apr-2013	08-Apr-2013	08-Apr-2013	08-Apr-2013	05-Apr-2013
PAH by GCMS	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013
pH	03-Apr-2013	04-Apr-2013	03-Apr-2013	04-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
Sample description	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
Total Organic Carbon		15-Apr-2013				15-Apr-2013	15-Apr-2013
Total Organic Carbon (Asb)	15-Apr-2013		15-Apr-2013	15-Apr-2013	15-Apr-2013		
TPH CWG GC (S)	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013	05-Apr-2013
VOC MS (S)	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013	04-Apr-2013

SDG:	130327-20	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0381
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220432
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	16 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130314-80
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	220533

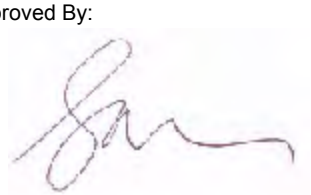
This report has been revised and directly supersedes 218017 in its entirety.

We received 18 samples on Thursday March 14, 2013 and 18 of these samples were scheduled for analysis which was completed on Tuesday April 16, 2013. 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

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7072594	CAU09		0.20	13/03/2013
7072596	CAU09		1.80	13/03/2013
7072597	CAU010		0.50	13/03/2013
7072598	CAU010		2.00	13/03/2013
7072600	CAU011		0.50	13/03/2013
7072601	CAU011		2.10	13/03/2013
7072602	CAU012		0.60	13/03/2013
7072603	CAU012		1.40	13/03/2013
7072605	CAU013		0.30	13/03/2013
7072606	CAU013		2.20	13/03/2013
7072607	CAU014		0.80	13/03/2013
7072609	CAU014		1.90	13/03/2013
7072610	CAU015		0.50	13/03/2013
7072613	CAU015		1.70	13/03/2013
7072615	CAU016		0.90	13/03/2013
7072616	CAU016		1.90	13/03/2013
7072618	CAU017		0.50	13/03/2013
7072619	CAU017		2.00	13/03/2013

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

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

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Results Legend

- X Test
- N No Determination Possible

Lab Sample No(s)			7072594			7072596			7072597			7072598			7072600			7072601			7072602			7072603			7072605			7072606			7072607			7072609			7072610			7072613
Customer Sample Reference			CAU09			CAU09			CAU010			CAU010			CAU011			CAU011			CAU012			CAU012			CAU013			CAU013			CAU014			CAU014			CAU015			CAU015
AGS Reference																																										
Depth (m)			0.20			1.80			0.50			2.00			0.50			2.10			0.60			1.40			0.30			2.20			0.80			1.90			0.50			1.70
Container			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 18		X			X			X			X			X			X			X			X			X			X			X			X			X		
Asbestos Quantification - Full	All	NDPs: 0 Tests: 3		X												X																									X		
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 18			X			X			X			X			X			X			X			X			X			X			X			X			X	
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Cadmium	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Chromium	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Copper	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Lead	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Mercury	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Nickel	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Selenium	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Vanadium	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X
	Zinc	NDPs: 0 Tests: 18	X			X			X			X			X			X			X			X			X			X			X			X			X			X

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7072594	CAU09		0.20	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072596	CAU09		1.80	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072597	CAU010		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072598	CAU010		2.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072600	CAU011		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072601	CAU011		2.10	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072602	CAU012		0.60	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072603	CAU012		1.40	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072605	CAU013		0.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072606	CAU013		2.20	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072607	CAU014		0.80	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072609	CAU014		1.90	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072610	CAU015		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072613	CAU015		1.70	250g Amber Jar (AL
PAH by GCMS	All	NDPs: 0 Tests: 18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
pH	All	NDPs: 0 Tests: 18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sample description	All	NDPs: 0 Tests: 18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Total Organic Carbon	All	NDPs: 13 Tests: 5	N	N	N	N	N	N	N	N	N	N	N	N	X	N	N	N	X	X	X	X	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
VOC MS (S)	All	NDPs: 0 Tests: 18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

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Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7072613	CAU015		1.70	400g Tub (ALE214)
							60g VOC (ALE215)
			7072615	CAU016		0.90	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072616	CAU016		1.90	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072618	CAU017		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072619	CAU017		2.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 18	X		X		X		X		X		X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 18		X		X		X		X			
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 18		X		X		X		X			
GRO by GC-FID (S)	All	NDPs: 0 Tests: 18	X		X		X		X		X		
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 18		X		X		X		X			
	Cadmium	NDPs: 0 Tests: 18		X		X		X		X			
	Chromium	NDPs: 0 Tests: 18		X		X		X		X			
	Copper	NDPs: 0 Tests: 18		X		X		X		X			
	Lead	NDPs: 0 Tests: 18		X		X		X		X			
	Mercury	NDPs: 0 Tests: 18		X		X		X		X			
	Nickel	NDPs: 0 Tests: 18		X		X		X		X			
	Selenium	NDPs: 0 Tests: 18		X		X		X		X			
	Vanadium	NDPs: 0 Tests: 18		X		X		X		X			
	Zinc	NDPs: 0 Tests: 18		X		X		X		X			
PAH by GCMS	All	NDPs: 0 Tests: 18		X		X		X		X			

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7072613	CAU015		1.70	400g Tub (ALE214)
							60g VOC (ALE215)
							250g Amber Jar (AL
			7072615	CAU016		0.90	400g Tub (ALE214)
							60g VOC (ALE215)
			7072616	CAU016		1.90	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072618	CAU017		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7072619	CAU017		2.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
pH	All	NDPs: 0 Tests: 18	X		X		X		X		X		X
Sample description	All	NDPs: 0 Tests: 18		X		X		X		X		X	
Total Organic Carbon	All	NDPs: 13 Tests: 5		N			X			N			X
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 13		X						X			
TPH CWG GC (S)	All	NDPs: 0 Tests: 18		X		X				X		X	
VOC MS (S)	All	NDPs: 0 Tests: 18	X		X		X		X		X		X

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

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
7072594	CAU09	0.20	Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	None
7072596	CAU09	1.80	Light Brown	Silt Loam	0.063 - 0.1 mm	Stones	None
7072597	CAU010	0.50	Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	Oil/Petroleum
7072598	CAU010	2.00	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7072600	CAU011	0.50	Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	None
7072601	CAU011	2.10	Light Brown	Silt Loam	0.063 - 0.1 mm	None	None
7072602	CAU012	0.60	Dark Brown	Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
7072603	CAU012	1.40	Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	None
7072605	CAU013	0.30	Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
7072606	CAU013	2.20	Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones	None
7072607	CAU014	0.80	Dark Brown	Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
7072609	CAU014	1.90	Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
7072610	CAU015	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	N/A	Stones
7072613	CAU015	1.70	Dark Brown	Silt Loam	0.063 - 0.1 mm	Stones	Oil/Petroleum
7072615	CAU016	0.90	Dark Brown	Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
7072616	CAU016	1.90	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7072618	CAU017	0.50	Black	Sand	0.1 - 2 mm	N/A	Stones
7072619	CAU017	2.00	Dark Brown	Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU09	CAU09	CAU010	CAU010	CAU011	CAU011
			Depth (m)	0.20	1.80	0.50	2.00	0.50	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072594	7072596	7072597	7072598	7072600	7072601
			AGS Reference						
pH	1 pH Units	TM133		8.03 M	6.98 M	7.98 M	6.98 M	7.78 M	5.67 M
Arsenic	<0.6 mg/kg	TM181		40.9 M	4.46 M	25.2 M	5.86 M	23.5 M	9.16 M
Cadmium	<0.02 mg/kg	TM181		0.88 M	0.547 M	0.755 M	0.761 M	0.73 M	0.432 M
Chromium	<0.9 mg/kg	TM181		9.96 M	13.9 M	16.6 M	15.1 M	12.2 M	11.5 M
Copper	<1.4 mg/kg	TM181		84.2 M	14.1 M	74.4 M	12 M	117 M	12.2 M
Lead	<0.7 mg/kg	TM181		250 M	18.3 M	145 M	13.1 M	73.6 M	14.7 M
Mercury	<0.14 mg/kg	TM181		0.784 M	<0.14 M	0.42 M	<0.14 M	0.29 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		13.9 M	35.7 M	14.5 M	52.2 M	22 M	11.6 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		12.4 #	12 #	16.7 #	13.1 #	13.5 #	12.2 #
Zinc	<1.9 mg/kg	TM181		1760 M	84.7 M	360 M	111 M	224 M	33.1 M
Soil Organic Matter (SOM)	<0.1 %	TM321		2.48	0.413	1.77	0.344	1.09	1.03

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU012	CAU012	CAU013	CAU013	CAU014	CAU014
			Depth (m)	0.60	1.40	0.30	2.20	0.80	1.90
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072602	7072603	7072605	7072606	7072607	7072609
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132			0.709 #			1.18 #	1.03 #
pH	1 pH Units	TM133		7.95 M	7.94 M	7.71 M	7.44 M	7.35 M	7.05 M
Arsenic	<0.6 mg/kg	TM181		19.8 M	6.5 M	22.9 M	4.8 M	12.2 M	7.52 M
Cadmium	<0.02 mg/kg	TM181		0.971 M	0.339 M	0.89 M	0.19 M	0.862 M	0.594 M
Chromium	<0.9 mg/kg	TM181		13.3 M	15.6 M	14.2 M	18.6 M	13.2 M	15.3 M
Copper	<1.4 mg/kg	TM181		200 M	4.09 M	78.3 M	17.9 M	37 M	30.3 M
Lead	<0.7 mg/kg	TM181		320 M	10.4 M	89.4 M	25.8 M	32.5 M	37.8 M
Mercury	<0.14 mg/kg	TM181		1.65 M	<0.14 M	2.18 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		35.9 M	23.8 M	24.1 M	29.4 M	15.4 M	25.6 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		13.6 #	12.5 #	16 #	14.9 #	18.2 #	13.4 #
Zinc	<1.9 mg/kg	TM181		480 M	60.9 M	162 M	85 M	278 M	237 M
Soil Organic Matter (SOM)	<0.1 %	TM321		3.32		1.78	0.971		

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU015	CAU015	CAU016	CAU016	CAU017	CAU017
			Depth (m)	0.50	1.70	0.90	1.90	0.50	2.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072610	7072613	7072615	7072616	7072618	7072619
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132					1.06 #		1.79 #
pH	1 pH Units	TM133		8.12 M	7.66 M	7.28 M	7 M	8.07 M	7.27 M
Arsenic	<0.6 mg/kg	TM181		21 M	54.3 M	28.5 M	6.99 M	39.2 M	15.4 M
Cadmium	<0.02 mg/kg	TM181		0.86 M	1.26 M	0.873 M	0.391 M	0.717 M	0.368 M
Chromium	<0.9 mg/kg	TM181		18 M	17.1 M	14.2 M	14.1 M	14.3 M	16 M
Copper	<1.4 mg/kg	TM181		48.1 M	160 M	75 M	11.6 M	96.3 M	16.5 M
Lead	<0.7 mg/kg	TM181		54.4 M	125 M	121 M	14.6 M	225 M	15.3 M
Mercury	<0.14 mg/kg	TM181		0.211 M	7.43 M	0.495 M	<0.14 M	0.233 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		23.9 M	25.6 M	17.6 M	24.1 M	19 M	11.5 M
Selenium	<1 mg/kg	TM181		<1 #	1.26 #	1.09 #	<1 #	<1 #	1.21 #
Vanadium	<0.2 mg/kg	TM181		19.3 #	18.6 #	17.5 #	9.47 #	20.2 #	16.7 #
Zinc	<1.9 mg/kg	TM181		157 M	198 M	204 M	58.3 M	254 M	44 M
Soil Organic Matter (SOM)	<0.1 %	TM321		1.03	2.65	3.09		1.23	

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU09	CAU09	CAU010	CAU010	CAU011	CAU011
			Depth (m)	0.20	1.80	0.50	2.00	0.50	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072594	7072596	7072597	7072598	7072600	7072601
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		112	113	95.3	114	108	112
Acenaphthene-d10 % recovery**	%	TM218		112	111	99.4	114	112	111
Phenanthrene-d10 % recovery**	%	TM218		112	109	96	114	107	109
Chrysene-d12 % recovery**	%	TM218		113	106	85.2	111	95.5	107
Perylene-d12 % recovery**	%	TM218		123	112	89.4	119	100	113
Naphthalene	<9 µg/kg	TM218		263 M	105 M	370 M	1050 M	333 M	79 M
Acenaphthylene	<12 µg/kg	TM218		43.7 M	<12 M	56.3 M	<12 M	28.1 M	<12 M
Acenaphthene	<8 µg/kg	TM218		76.7 M	<8 M	121 M	69.3 M	98.9 M	<8 M
Fluorene	<10 µg/kg	TM218		97.8 M	<10 M	148 M	325 M	99.9 M	<10 M
Phenanthrene	<15 µg/kg	TM218		438 M	38.1 M	510 M	201 M	483 M	31.2 M
Anthracene	<16 µg/kg	TM218		111 M	<16 M	127 M	42.5 M	130 M	<16 M
Fluoranthene	<17 µg/kg	TM218		797 M	19.3 M	699 M	35 M	781 M	28.9 M
Pyrene	<15 µg/kg	TM218		736 M	17.7 M	552 M	35 M	629 M	40.9 M
Benz(a)anthracene	<14 µg/kg	TM218		543 M	<14 M	388 M	18.3 M	485 M	<14 M
Chrysene	<10 µg/kg	TM218		550 M	15.4 M	369 M	21.3 M	437 M	18.3 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		812 M	45.3 M	588 M	35.5 M	657 M	47.3 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		311 M	<14 M	178 M	<14 M	236 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218		711 M	<15 M	417 M	21.7 M	501 M	21.9 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		457 M	<18 M	261 M	<18 M	301 M	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		165 M	<23 M	88.4 M	<23 M	107 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		566 M	<24 M	300 M	<24 M	351 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		6680	241	5170	1860	5660	267

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU012	CAU012	CAU013	CAU013	CAU014	CAU014
			Depth (m)	0.60	1.40	0.30	2.20	0.80	1.90
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072602	7072603	7072605	7072606	7072607	7072609
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		109	114	108	102	109	114
Acenaphthene-d10 % recovery**	%	TM218		117	114	112	109	118	114
Phenanthrene-d10 % recovery**	%	TM218		112	113	107	105	115	112
Chrysene-d12 % recovery**	%	TM218		101	108	96.4	90.6	102	111
Perylene-d12 % recovery**	%	TM218		108	114	102	95	108	120
Naphthalene	<9 µg/kg	TM218		574 M	65.1 M	819 M	67.8 M	301 M	54.3 M
Acenaphthylene	<12 µg/kg	TM218		65.5 M	<12 M	294 M	<12 M	<12 M	<12 M
Acenaphthene	<8 µg/kg	TM218		428 M	12.9 M	498 M	47.3 M	339 M	31.4 M
Fluorene	<10 µg/kg	TM218		744 M	33 M	896 M	96.4 M	619 M	92.3 M
Phenanthrene	<15 µg/kg	TM218		1990 M	55.9 M	1890 M	127 M	1650 M	102 M
Anthracene	<16 µg/kg	TM218		570 M	<16 M	577 M	<16 M	295 M	<16 M
Fluoranthene	<17 µg/kg	TM218		2310 M	29.9 M	912 M	<17 M	160 M	26.2 M
Pyrene	<15 µg/kg	TM218		2520 M	27.5 M	1310 M	22.2 M	514 M	44.3 M
Benz(a)anthracene	<14 µg/kg	TM218		1770 M	<14 M	613 M	20.9 M	112 M	<14 M
Chrysene	<10 µg/kg	TM218		1560 M	<10 M	578 M	13 M	113 M	18.5 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		2460 M	<15 M	740 M	<15 M	75 M	21.4 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		906 M	<14 M	247 M	<14 M	27.6 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218		1890 M	<15 M	532 M	<15 M	69 M	21.8 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		1100 M	<18 M	357 M	<18 M	29.3 M	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		399 M	<23 M	134 M	<23 M	<23 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		1200 M	<24 M	428 M	<24 M	37.1 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		20500	224	10800	395	4340	412

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU015	CAU015	CAU016	CAU016	CAU017	CAU017
			Depth (m)	0.50	1.70	0.90	1.90	0.50	2.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072610	7072613	7072615	7072616	7072618	7072619
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		91.3	106	99.6	99.4	96.9	92.5
Acenaphthene-d10 % recovery**	%	TM218		88.7	108	90.8	96.6	91.3	84.9
Phenanthrene-d10 % recovery**	%	TM218		86	107	89.9	94.1	98.1	83.2
Chrysene-d12 % recovery**	%	TM218		91.4	110	79	93.7	95.6	82.4
Perylene-d12 % recovery**	%	TM218		92.5	117	75.1	95.8	97.6	86.1
Naphthalene	<9 µg/kg	TM218		112 M	259 M	2360 M	423 M	170 M	557 M
Acenaphthylene	<12 µg/kg	TM218		<12 M	<12 M	<60 M	18.6 M	95.5 M	<12 M
Acenaphthene	<8 µg/kg	TM218		44.7 M	137 M	1210 M	406 M	69.8 M	551 M
Fluorene	<10 µg/kg	TM218		79.1 M	302 M	3570 M	1210 M	109 M	1440 M
Phenanthrene	<15 µg/kg	TM218		328 M	947 M	7980 M	2690 M	622 M	2720 M
Anthracene	<16 µg/kg	TM218		72.3 M	224 M	1370 M	511 M	182 M	469 M
Fluoranthene	<17 µg/kg	TM218		384 M	692 M	770 M	135 M	1140 M	152 M
Pyrene	<15 µg/kg	TM218		465 M	780 M	1910 M	560 M	958 M	718 M
Benz(a)anthracene	<14 µg/kg	TM218		278 M	384 M	391 M	71.6 M	743 M	91.4 M
Chrysene	<10 µg/kg	TM218		460 M	411 M	474 M	110 M	704 M	136 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		403 M	442 M	461 M	35 M	859 M	63.8 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		145 M	178 M	182 M	<14 M	429 M	23.3 M
Benzo(a)pyrene	<15 µg/kg	TM218		299 M	370 M	361 M	50.9 M	790 M	63 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		194 M	225 M	233 M	<18 M	501 M	45.1 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		74.7 M	81 M	<115 M	<23 M	174 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		231 M	269 M	332 M	<24 M	589 M	99.2 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		3570	5700	21600	6230	8130	7130

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU09	CAU09	CAU010	CAU010	CAU011	CAU011
			Depth (m)	0.20	1.80	0.50	2.00	0.50	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072594	7072596	7072597	7072598	7072600	7072601
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		62	127	103	128	93	129
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		51700 M	9570 M	33500 M	640000 M	76300 M	23200 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<5 M	<10 M	<50 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		17.7 M	1710 M	24.4 M	<100 M	16.4 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<4 M	<20 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<6 M	<30 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	14.7 M	<12 M	<60 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<6 M	<30 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	14.7	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	1720	24.4	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		278	174	249	1140	188	69.3
Aliphatics >C6-C8	<10 µg/kg	TM089		4750	1330	3560	37500	6400	2230
Aliphatics >C8-C10	<10 µg/kg	TM089		15900	1720	7800	163000	20800	5000
Aliphatics >C10-C12	<10 µg/kg	TM089		12100	2080	9980	198000	21000	7560
Aliphatics >C12-C16	<100 µg/kg	TM173		121000	10800	165000	239000	104000	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		90700	<100	68700	64800	59000	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		253000	<100	223000	6590	64000	14000
Aliphatics >C35-C44	<100 µg/kg	TM173		124000	<100	97900	1050	7110	4820
Total Aliphatics >C12-C44	<100 µg/kg	TM173		589000	10800	554000	312000	234000	18800
Aromatics >EC5-EC7	<10 µg/kg	TM089		17.7	1710	24.4	<100	16.4	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<20	<100	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		10600	1160	5200	109000	13900	3330
Aromatics >EC10-EC12	<10 µg/kg	TM089		8100	1390	6660	132000	14000	5040
Aromatics >EC12-EC16	<100 µg/kg	TM173		31200	3570	145000	99600	49000	4790
Aromatics >EC16-EC21	<100 µg/kg	TM173		46800	2250	88300	30800	47300	4590
Aromatics >EC21-EC35	<100 µg/kg	TM173		249000	8780	317000	17100	132000	22500
Aromatics >EC35-EC44	<100 µg/kg	TM173		190000	1890	139000	3340	46300	8600
Aromatics >EC40-EC44	<100 µg/kg	TM173		81200	<100	56000	<100	18200	3670
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		517000	16500	689000	151000	274000	40400
Total Aliphatics >C5-35	<100 µg/kg	TM173		498000	16100	478000	710000	275000	28900
Total Aromatics >C5-35	<100 µg/kg	TM173		346000	18900	562000	388000	256000	40200
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		845000	34900	1040000	1100000	531000	69100

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

TPH CWG (S)

Results Legend		Customer Sample R	CAU09	CAU09	CAU010	CAU010	CAU011	CAU011
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.20	1.80	0.50	2.00	0.50	2.10
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
		SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
(F)	Trigger breach confirmed	Lab Sample No.(s)	7072594	7072596	7072597	7072598	7072600	7072601
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1160000	36800	1280000	1100000	585000	82500

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU012	CAU012	CAU013	CAU013	CAU014	CAU014
			Depth (m)	0.60	1.40	0.30	2.20	0.80	1.90
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072602	7072603	7072605	7072606	7072607	7072609
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		107	101	119	125	123	126
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		276000 M	309000 M	1000000 M	27200 M	1440000 M	290000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<100 M	<100 M	<100 M	<5 M	<100 M	<100 M
Benzene	<10 µg/kg	TM089		<200 M	<200 M	653 M	<10 M	1350 M	<200 M
Toluene	<2 µg/kg	TM089		<40 M	<40 M	<40 M	<2 M	<40 M	<40 M
Ethylbenzene	<3 µg/kg	TM089		<60 M	<60 M	<60 M	<3 M	<60 M	<60 M
m,p-Xylene	<6 µg/kg	TM089		<120 M	<120 M	<120 M	<6 M	<120 M	<120 M
o-Xylene	<3 µg/kg	TM089		<60 M	<60 M	<60 M	<3 M	<60 M	<60 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	653	<24	1350	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		1360	<200	9810	101	13900	2260
Aliphatics >C6-C8	<10 µg/kg	TM089		42000	5280	220000	3940	454000	67800
Aliphatics >C8-C10	<10 µg/kg	TM089		66800	63000	274000	7970	460000	71700
Aliphatics >C10-C12	<10 µg/kg	TM089		72900	119000	190000	5910	122000	59900
Aliphatics >C12-C16	<100 µg/kg	TM173		502000	107000	245000	10900	165000	26800
Aliphatics >C16-C21	<100 µg/kg	TM173		568000	19700	194000	15900	78500	21800
Aliphatics >C21-C35	<100 µg/kg	TM173		667000	1250	164000	18100	33100	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		62900	4040	10300	<100	2920	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1800000	132000	613000	44900	280000	48600
Aromatics >EC5-EC7	<10 µg/kg	TM089		<200	<200	653	<10	1350	<200
Aromatics >EC7-EC8	<10 µg/kg	TM089		<200	<200	<200	<10	<200	<200
Aromatics >EC8-EC10	<10 µg/kg	TM089		44500	42000	183000	5320	307000	47800
Aromatics >EC10-EC12	<10 µg/kg	TM089		48600	79400	127000	3940	81100	39900
Aromatics >EC12-EC16	<100 µg/kg	TM173		130000	15700	132000	8870	116000	11700
Aromatics >EC16-EC21	<100 µg/kg	TM173		286000	9560	132000	12200	90200	7940
Aromatics >EC21-EC35	<100 µg/kg	TM173		558000	15900	143000	14200	63600	5310
Aromatics >EC35-EC44	<100 µg/kg	TM173		116000	2190	24200	<100	11300	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		43600	<100	22800	<100	3490	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1090000	43300	431000	35300	281000	25000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1920000	316000	1300000	62800	1330000	250000
Total Aromatics >C5-35	<100 µg/kg	TM173		1070000	163000	717000	44500	659000	113000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		2990000	478000	2010000	107000	1990000	363000

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

TPH CWG (S)

Results Legend		Customer Sample R	CAU012	CAU012	CAU013	CAU013	CAU014	CAU014
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.60	1.40	0.30	2.20	0.80	1.90
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
		SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
(F)	Trigger breach confirmed	Lab Sample No.(s)	7072602	7072603	7072605	7072606	7072607	7072609
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	3170000	485000	2050000	107000	2000000	363000

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU015	CAU015	CAU016	CAU016	CAU017	CAU017
			Depth (m)	0.50	1.70	0.90	1.90	0.50	2.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072610	7072613	7072615	7072616	7072618	7072619
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		90	111	121	81	45	107
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		2260 M	841000 M	449000 M	24800 M	6570 M	290000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<100 M	<100 M	<5 M	<5 M	<50 M
Benzene	<10 µg/kg	TM089		<10 M	755 M	<200 M	<10 M	<10 M	<100 M
Toluene	<2 µg/kg	TM089		<2 M	<40 M	<40 M	<2 M	<2 M	<20 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<60 M	<60 M	<3 M	<3 M	<30 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<120 M	<120 M	<6 M	<6 M	<60 M
o-Xylene	<3 µg/kg	TM089		<3 M	<60 M	<60 M	<3 M	<3 M	<30 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	755	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		17.6	8340	4310	56	26.4	766
Aliphatics >C6-C8	<10 µg/kg	TM089		234	276000	86600	1090	232	14900
Aliphatics >C8-C10	<10 µg/kg	TM089		456	219000	106000	4110	970	39900
Aliphatics >C10-C12	<10 µg/kg	TM089		746	115000	108000	10100	2810	125000
Aliphatics >C12-C16	<100 µg/kg	TM173		28300	153000	315000	250000	35900	1190000
Aliphatics >C16-C21	<100 µg/kg	TM173		71500	245000	211000	265000	47400	237000
Aliphatics >C21-C35	<100 µg/kg	TM173		202000	292000	439000	398000	221000	304000
Aliphatics >C35-C44	<100 µg/kg	TM173		45900	26800	123000	123000	55700	120000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		348000	717000	1090000	1040000	360000	1850000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	755	<200	<10	<10	<100
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<200	<200	<10	<10	<100
Aromatics >EC8-EC10	<10 µg/kg	TM089		304	146000	71000	2740	647	26600
Aromatics >EC10-EC12	<10 µg/kg	TM089		498	76600	72100	6710	1880	83300
Aromatics >EC12-EC16	<100 µg/kg	TM173		11700	40900	485000	136000	19300	374000
Aromatics >EC16-EC21	<100 µg/kg	TM173		24400	124000	292000	153000	27600	250000
Aromatics >EC21-EC35	<100 µg/kg	TM173		128000	176000	427000	176000	115000	350000
Aromatics >EC35-EC44	<100 µg/kg	TM173		58800	17000	154000	57900	53100	116000
Aromatics >EC40-EC44	<100 µg/kg	TM173		20600	4570	56500	22600	21700	44900
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		223000	358000	1360000	522000	215000	1090000
Total Aliphatics >C5-35	<100 µg/kg	TM173		303000	1310000	1270000	928000	308000	1910000
Total Aromatics >C5-35	<100 µg/kg	TM173		165000	564000	1350000	474000	164000	1080000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		468000	1870000	2620000	1400000	472000	3000000

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

TPH CWG (S)

Results Legend		Customer Sample R	CAU015	CAU015	CAU016	CAU016	CAU017	CAU017
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.50	1.70	0.90	1.90	0.50	2.00
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
		SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
(F)	Trigger breach confirmed	Lab Sample No.(s)	7072610	7072613	7072615	7072616	7072618	7072619
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	573000	1920000	2890000	1580000	581000	3230000

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU09	CAU09	CAU010	CAU010	CAU011	CAU011
			Depth (m)	0.20	1.80	0.50	2.00	0.50	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072594	7072596	7072597	7072598	7072600	7072601
			AGS Reference						
Dibromofluoromethane**	%	TM116		105	115	124	101	101	110
Toluene-d8**	%	TM116		103	99.2	104	101	100	99.4
4-Bromofluorobenzene**	%	TM116		106	122	132	104	121	117
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 M	<4 M	<80 M	<8 M	<4 M
Chloromethane	<7 µg/kg	TM116		<140	<7	<7	<140	<14	<7
Vinyl Chloride	<10 µg/kg	TM116		<200	<10	<10	<200	<20	<10
Bromomethane	<13 µg/kg	TM116		<260 M	<13 M	<13 M	<260 M	<26 M	<13 M
Chloroethane	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<28 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 M	<6 M	<120 M	<12 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #	<10 #	<200 #	<20 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	8.49 M	32.8 M	<140 M	51.1 M	<7 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #	<10 #	<200 #	<20 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 M	<11 M	<220 M	<22 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 M	<11 M	<220 M	<22 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 M	<8 M	<160 M	<16 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<10 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<24 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<28 M	<14 M
Chloroform	<8 µg/kg	TM116		<160 M	<8 M	<8 M	<160 M	<16 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 M	<7 M	<140 M	<14 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 M	<11 M	<220 M	<22 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<28 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<10 M	<5 M
Benzene	<9 µg/kg	TM116		<180 M	2780 M	141 M	<180 M	36.1 M	27.3 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 M	<9 M	<180 M	<18 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<24 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 M	<9 M	<180 M	<18 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 M	<7 M	<140 M	<14 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<28 M	<14 M
Toluene	<5 µg/kg	TM116		<100 M	<5 M	51.1 M	<100 M	33.7 M	10.2 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<14	<14	<280	<28	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<20 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU09	CAU09	CAU010	CAU010	CAU011	CAU011
			Depth (m)	0.20	1.80	0.50	2.00	0.50	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072594	7072596	7072597	7072598	7072600	7072601
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<7 #	<7 #	<140 #	<14 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<10 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<13 M	<13 M	<260 M	<26 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<24 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<10 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<20 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	19.8 M	101 M	<80 M	16.8 M	39.7 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	27.5 #	242 #	<280 #	43.7 #	31.3 #
o-Xylene	<10 µg/kg	TM116		<200 M	<10 M	101 M	<200 M	<20 M	<10 M
Styrene	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<20 M	<10 M
Bromoform	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<20 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	33.8 M	79.5 M	632 M	<10 M	13.1 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<10 #	<10 #	<200 #	<20 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<17 M	<17 M	<340 M	<34 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<20 M	<10 M
Propylbenzene	<11 µg/kg	TM116		<220 M	95.6 M	190 M	1570 M	<22 M	107 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<9 M	<9 M	<180 M	<18 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	20.3 #	86.9 #	<160 #	<16 #	59.6 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<24 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<12 #	<12 #	<240 #	<24 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		298 #	153 #	1620 #	872 #	47.5 #	1040 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	19.5 M	103 M	1030 M	<20 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<11 M	<11 M	<220 M	<22 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<6 M	<120 M	<12 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<10 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<10 M	<10 M	507 M	<20 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<24 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<28 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<15	<15	<300	<30	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<6 #	<6 #	<120 #	<12 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<12	<12	<240	<24	<12
Naphthalene	<13 µg/kg	TM116		<260 M	29.3 M	297 M	<260 M	177 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend		Customer Sample R	CAU09	CAU09	CAU010	CAU010	CAU011	CAU011
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.20	1.80	0.50	2.00	0.50	2.10
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
		SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
(F)	Trigger breach confirmed	Lab Sample No.(s)	7072594	7072596	7072597	7072598	7072600	7072601
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<6 M	<6 M	<120 M	<12 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU012	CAU012	CAU013	CAU013	CAU014	CAU014
			Depth (m)	0.60	1.40	0.30	2.20	0.80	1.90
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072602	7072603	7072605	7072606	7072607	7072609
			AGS Reference						
Dibromofluoromethane**	%	TM116		100	108	103	114	101	110
Toluene-d8**	%	TM116		98.3	94.7	102	101	101	105
4-Bromofluorobenzene**	%	TM116		117	123	106	109	108	122
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 M	<80 M	<4 M	<80 M	<4 M
Chloromethane	<7 µg/kg	TM116		<140	<7	<140	<7	<140	<7
Vinyl Chloride	<10 µg/kg	TM116		<200	<10	<200	<10	<200	<10
Bromomethane	<13 µg/kg	TM116		<260 M	<13 M	<260 M	<13 M	<260 M	<13 M
Chloroethane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<14 M	<280 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<6 M	<120 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<10 #	<200 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	35.6 M	<140 M	13.1 M	<140 M	<7 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<10 #	<200 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<11 M	<220 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<11 M	<220 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 M	<160 M	<8 M	<160 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<5 M	<100 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<12 M	<240 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<14 M	<280 M	<14 M
Chloroform	<8 µg/kg	TM116		<160 M	<8 M	<160 M	<8 M	<160 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 M	<140 M	<7 M	<140 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<11 M	<220 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<14 M	<280 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<5 M	<100 M	<5 M
Benzene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<9 M	<180 M	<9 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<9 M	<180 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<12 M	<240 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<9 M	<180 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 M	<140 M	<7 M	<140 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<14 M	<280 M	<14 M
Toluene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<5 M	<100 M	<5 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<14	<280	<14	<280	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<10 M	<200 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU012	CAU012	CAU013	CAU013	CAU014	CAU014
			Depth (m)	0.60	1.40	0.30	2.20	0.80	1.90
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072602	7072603	7072605	7072606	7072607	7072609
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<7 #	<140 #	<7 #	<140 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<5 M	<100 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<13 M	<260 M	<13 M	<260 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<12 M	<240 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<5 M	<100 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<10 M	<200 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		131 M	<4 M	223 M	7.26 M	<80 M	<4 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<14 #	674 #	17.1 #	<280 #	<14 #
o-Xylene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<10 M	<200 M	<10 M
Styrene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<10 M	<200 M	<10 M
Bromoform	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<10 M	<200 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		920 M	262 M	2340 M	36.4 M	1530 M	166 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<10 #	<200 #	<10 #	<200 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<17 M	<340 M	<17 M	<340 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<10 M	<200 M	<10 M	<200 M	<10 M
Propylbenzene	<11 µg/kg	TM116		1430 M	803 M	4010 M	45 M	2620 M	774 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<9 M	<180 M	<9 M	<180 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<8 #	740 #	<8 #	<160 #	<8 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<12 M	<240 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<12 #	<240 #	<12 #	<240 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		2340 #	<9 #	3740 #	<9 #	<180 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116		1010 M	<10 M	1950 M	70.9 M	1770 M	203 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<11 M	<220 M	<11 M	<220 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<120 M	<6 M	<120 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<100 M	<5 M	<100 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<10 M	932 M	<10 M	<200 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<12 M	<240 M	<12 M	<240 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<14 M	<280 M	<14 M	<280 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<15	<300	<15	<300	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<6 #	<120 #	<6 #	<120 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<12	<240	<12	<240	<12
Naphthalene	<13 µg/kg	TM116		<260 M	<13 M	1200 M	<13 M	<260 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend		Customer Sample R	CAU012	CAU012	CAU013	CAU013	CAU014	CAU014
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.60	1.40	0.30	2.20	0.80	1.90
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
		SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
(F)	Trigger breach confirmed	Lab Sample No.(s)	7072602	7072603	7072605	7072606	7072607	7072609
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<6 M	<120 M	<6 M	<120 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU015	CAU015	CAU016	CAU016	CAU017	CAU017
			Depth (m)	0.50	1.70	0.90	1.90	0.50	2.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072610	7072613	7072615	7072616	7072618	7072619
			AGS Reference						
Dibromofluoromethane**	%	TM116		100	100	102	103	108	104
Toluene-d8**	%	TM116		107	102	99.6	97.9	101	101
4-Bromofluorobenzene**	%	TM116		111	106	108	127	106	112
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<80 M	<80 M	<8 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<14	<140	<140	<14	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<20	<200	<200	<20	<200	<200
Bromomethane	<13 µg/kg	TM116		<26 M	<260 M	<260 M	<26 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<120 M	<120 M	<12 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<20 #	<200 #	<200 #	<20 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<14 M	248 M	288 M	<14 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		29.1 #	<200 #	<200 #	<20 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<16 M	<160 M	<160 M	<16 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<16 M	<160 M	<160 M	<16 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<14 M	<140 M	<140 M	<14 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<18 M	<180 M	<180 M	<18 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<18 M	<180 M	<180 M	<18 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<18 M	<180 M	<180 M	<18 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<140 M	<140 M	<14 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<28	<280	<280	<28	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU015	CAU015	CAU016	CAU016	CAU017	CAU017
			Depth (m)	0.50	1.70	0.90	1.90	0.50	2.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072610	7072613	7072615	7072616	7072618	7072619
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<14 #	<140 #	<140 #	<14 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<260 M	<260 M	<26 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<8 M	231 M	<80 M	<8 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<28 #	783 #	<280 #	<28 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<10 M	2900 M	375 M	<10 M	<100 M	251 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<200 #	<200 #	<20 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<34 M	<340 M	<340 M	<34 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<22 M	3380 M	746 M	<22 M	<220 M	597 M
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<180 M	<180 M	<18 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	413 #	<160 #	<16 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<240 #	<240 #	<24 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	2780 #	641 #	<18 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<20 M	1050 M	<200 M	61.2 M	<200 M	657 M
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	<220 M	<220 M	<22 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M	<120 M	<12 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<100 M	<100 M	<10 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<200 M	<200 M	<20 M	<200 M	1280 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<240 M	<240 M	<24 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<280 M	<280 M	<28 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<300	<300	<30	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<120 #	<120 #	<12 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<240	<240	<24	<240	<240
Naphthalene	<13 µg/kg	TM116		<26 M	<260 M	<260 M	<26 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAU015	CAU015	CAU016	CAU016	CAU017	CAU017
			Depth (m)	0.50	1.70	0.90	1.90	0.50	2.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013	13/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			SDG Ref	130314-80	130314-80	130314-80	130314-80	130314-80	130314-80
			Lab Sample No.(s)	7072610	7072613	7072615	7072616	7072618	7072619
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M	<120 M	<12 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

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 Receieved SDG Original Sample Method Number	CAU09 0.20 SOLID 13/03/2013 00:00:00 130314-80 7072594 TM048	28/3/13	Kevin Bowron	Soil containing loose fibres and ACM debris	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAU09 1.80 SOLID 13/03/2013 00:00:00 130314-80 7072596 TM048	28/3/13	Simon Postlewhite	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 Receieved SDG Original Sample Method Number	CAU010 0.50 SOLID 13/03/2013 00:00:00 130314-80 7072597 TM048	28/3/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAU010 2.00 SOLID 13/03/2013 00:00:00 130314-80 7072598 TM048	28/3/13	Simon Postlewhite	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 Receieved SDG Original Sample Method Number	CAU011 0.50 SOLID 13/03/2013 00:00:00 130314-80 7072600 TM048	28/3/13	Simon Postlewhite	Loose fibres in soil	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

		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 Receieved SDG Original Sample Method Number	CAU011 2.10 SOLID 13/03/2013 00:00:00 130314-80 7072601 TM048	28/3/13	Simon Postlewhite	Loose fibres in soil	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAU012 0.60 SOLID 13/03/2013 00:00:00 130314-80 7072602 TM048	28/3/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAU012 1.40 SOLID 13/03/2013 00:00:00 130314-80 7072603 TM048	28/3/13	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 Receieved SDG Original Sample Method Number	CAU013 0.30 SOLID 13/03/2013 00:00:00 130314-80 7072605 TM048	28/3/13	Kevin Bowron	Loose fibres in soil all removed	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAU013 2.20 SOLID 13/03/2013 00:00:00 130314-80 7072606 TM048	28/3/13	Simon Postlewhite	Loose fibres in soil	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAU014 0.80 SOLID 13/03/2013 00:00:00 130314-80 7072607 TM048	28/3/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

		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 Receieved SDG Original Sample Method Number	CAU014 1.90 SOLID 13/03/2013 00:00:00 130314-80 7072609 TM048	28/3/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAU015 0.50 SOLID 13/03/2013 00:00:00 130314-80 7072610 TM048	28/3/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAU015 1.70 SOLID 13/03/2013 00:00:00 130314-80 7072613 TM048	28/3/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAU016 0.90 SOLID 13/03/2013 00:00:00 130314-80 7072615 TM048	28/3/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAU016 1.90 SOLID 13/03/2013 00:00:00 130314-80 7072616 TM048	28/3/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAU017 0.50 SOLID 13/03/2013 00:00:00 130314-80 7072618 TM048	28/3/13	Kevin Bowron	Loose fibres in soil	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

		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 Receieved SDG Original Sample Method Number	CAU017 2.00 SOLID 13/03/2013 00:00:00 130314-80 7072619 TM048	28/3/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

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 Receieved SDG Original Sample Method Number	CAU09 0.20 SOLID 13/03/2013 00:00:00 130314-80 7072594 TM 304	None (#)	N/C	0.0257 (#)	0.0034 (#)	0.0291 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAU011 0.50 SOLID 13/03/2013 00:00:00 130314-80 7072600 TM 304	None (#)	N/C	0.0025 (#)	<0.001 (#)	0.0031 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAU015 0.50 SOLID 13/03/2013 00:00:00 130314-80 7072610 TM 304	Chrysotile (#)	N/C	0.0081 (#)	<0.001 (#)	0.0082 (#)

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

Notification of NDPs (No determination possible)

Date Received : 14/03/2013 14:23:14

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
7072594	CAU09	0.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072596	CAU09	1.80	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072597	CAU010	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072598	CAU010	2.00	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072600	CAU011	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072601	CAU011	2.10	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072602	CAU012	0.60	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072605	CAU013	0.30	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072606	CAU013	2.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072610	CAU015	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072613	CAU015	1.70	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072615	CAU016	0.90	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7072618	CAU017	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

Test Completion Dates

Lab Sample No(s)	7072594	7072596	7072597	7072598	7072600	7072601	7072602	7072603	7072605	7072606
Customer Sample Ref.	CAU09	CAU09	CAU010	CAU010	CAU011	CAU011	CAU012	CAU012	CAU013	CAU013
AGS Ref.										
Depth	0.20	1.80	0.50	2.00	0.50	2.10	0.60	1.40	0.30	2.20
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013
Asbestos Quantification - Full	16-Apr-2013				16-Apr-2013					
EPH CWG (Aliphatic) GC (S)	21-Mar-2013	21-Mar-2013	20-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
EPH CWG (Aromatic) GC (S)	21-Mar-2013	21-Mar-2013	20-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
GRO by GC-FID (S)	20-Mar-2013	19-Mar-2013	20-Mar-2013	20-Mar-2013	19-Mar-2013	19-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	19-Mar-2013
Metals in solid samples by OES	21-Mar-2013	20-Mar-2013	19-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	21-Mar-2013	20-Mar-2013	20-Mar-2013	21-Mar-2013
PAH by GCMS	19-Mar-2013	19-Mar-2013	20-Mar-2013	19-Mar-2013	20-Mar-2013	19-Mar-2013	20-Mar-2013	19-Mar-2013	20-Mar-2013	20-Mar-2013
pH	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013
Sample description	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013
Total Organic Carbon								02-Apr-2013		
Total Organic Carbon (Asb)	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013		02-Apr-2013	02-Apr-2013
TPH CWG GC (S)	21-Mar-2013	21-Mar-2013	20-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
VOC MS (S)	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013

Lab Sample No(s)	7072607	7072609	7072610	7072613	7072615	7072616	7072618	7072619
Customer Sample Ref.	CAU014	CAU014	CAU015	CAU015	CAU016	CAU016	CAU017	CAU017
AGS Ref.								
Depth	0.80	1.90	0.50	1.70	0.90	1.90	0.50	2.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013	28-Mar-2013
Asbestos Quantification - Full			16-Apr-2013					
EPH CWG (Aliphatic) GC (S)	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
EPH CWG (Aromatic) GC (S)	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
GRO by GC-FID (S)	20-Mar-2013	20-Mar-2013	19-Mar-2013	20-Mar-2013	20-Mar-2013	19-Mar-2013	20-Mar-2013	20-Mar-2013
Metals in solid samples by OES	21-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013
PAH by GCMS	20-Mar-2013	19-Mar-2013	21-Mar-2013	19-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
pH	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013	19-Mar-2013
Sample description	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013	15-Mar-2013
Total Organic Carbon	02-Apr-2013	02-Apr-2013				02-Apr-2013		02-Apr-2013
Total Organic Carbon (Asb)			02-Apr-2013	02-Apr-2013	02-Apr-2013		02-Apr-2013	
TPH CWG GC (S)	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
VOC MS (S)	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013

SDG:	130314-80	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0371
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	220533
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218017

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	18 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130316-49
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	221026

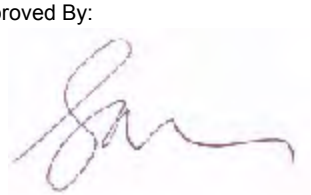
This report has been revised and directly supersedes 218190 in its entirety.

We received 35 samples on Saturday March 16, 2013 and 35 of these samples were scheduled for analysis which was completed on Thursday April 18, 2013. 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

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Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No.

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7085635	CAEMV096			14/03/2013
7085636	CAEMV097			14/03/2013
7085637	CAV018		0.20	14/03/2013
7085638	CAV018		1.70	14/03/2013
7085639	CAV019		0.40	14/03/2013
7085640	CAV019		2.10	14/03/2013
7085645	CAV020		0.20	14/03/2013
7085646	CAV020		1.50	14/03/2013
7085647	CAV021		0.30	14/03/2013
7085648	CAV021		1.90	14/03/2013
7085649	CAV022		0.50	14/03/2013
7085650	CAV022		1.50	14/03/2013
7085652	CAV023		0.20	14/03/2013
7085653	CAV023		1.50	14/03/2013
7085654	CAV024		0.10	14/03/2013
7085655	CAV024		1.70	14/03/2013
7085656	CAV025		0.30	15/03/2013
7085657	CAV025		1.50	15/03/2013
7085658	CAV026		0.10	15/03/2013
7085659	CAV026		1.00	15/03/2013
7085660	CAV027		0.10	15/03/2013
7085661	CAV027		1.50	15/03/2013
7085662	CAV028		0.40	15/03/2013
7085663	CAV028		2.10	15/03/2013
7085664	CAV029		0.20	15/03/2013
7085665	CAV029		0.80	15/03/2013
7085666	CAV030		0.20	15/03/2013
7085672	CAV030		0.50	15/03/2013
7085673	CAV031		0.30	15/03/2013
7085674	CAV032		0.10	15/03/2013
7085675	CAV032		0.80	15/03/2013
7085676	CAV033		0.30	15/03/2013
7085677	CAV033		1.00	15/03/2013
7085678	CAV034		0.30	15/03/2013
7085679	CAV034		1.00	15/03/2013

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

ALcontrol Laboratories

CERTIFICATE OF ANALYSIS

Validated

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

SOLID

Results Legend

X **Test**

N **No Determination Possible**

Lab Sample No(s)			7085635			7085636			7085637			7085638			7085639			7085640		
Customer Sample Reference			CAEMV096			CAEMV097			CAV018			CAV018			CAV019			CAV019		
AGS Reference																				
Depth (m)									0.20			1.70			0.40			2.10		
Container			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 35		X			X			X			X			X			X	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 35	X			X			X			X			X			X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 35	X			X			X			X			X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 35			X			X			X			X			X			X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Cadmium	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Chromium	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Copper	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Lead	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Mercury	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Nickel	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Selenium	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Vanadium	NDPs: 0 Tests: 35	X			X			X			X			X			X		
	Zinc	NDPs: 0 Tests: 35	X			X			X			X			X			X		
PAH by GCMS	All	NDPs: 0 Tests: 35	X			X			X			X			X			X		

Lab Sample No(s)			7085645			7085646			7085647			7085648			7085649			7085650			7085652			7085653
Customer Sample Reference			CAV020			CAV020			CAV021			CAV021			CAV022			CAV022			CAV023			CAV023
AGS Reference																								
Depth (m)			0.20			1.50			0.30			1.90			0.50			1.50			0.20			1.50
Container			250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 35		X			X			X			X			X			X			X		
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 35			X			X			X			X			X			X			X	
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Cadmium	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Chromium	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Copper	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Lead	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Mercury	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Nickel	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Selenium	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Vanadium	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
	Zinc	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X
PAH by GCMS	All	NDPs: 0 Tests: 35	X			X			X			X			X			X			X			X

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7085635	CAEMV096			250g Amber Jar (AL
			7085636	CAEMV097			400g Tub (ALE214)
			7085637	CAV018		0.20	60g VOC (ALE215)
			7085638	CAV018		1.70	250g Amber Jar (AL
			7085639	CAV019		0.40	400g Tub (ALE214)
			7085640	CAV019		2.10	60g VOC (ALE215)
			7085645	CAV020		0.20	250g Amber Jar (AL
			7085646	CAV020		1.50	400g Tub (ALE214)
			7085647	CAV021		0.30	60g VOC (ALE215)
			7085648	CAV021		1.90	250g Amber Jar (AL
			7085649	CAV022		0.50	400g Tub (ALE214)
			7085650	CAV022		1.50	60g VOC (ALE215)
			7085652	CAV023		0.20	250g Amber Jar (AL
			7085653	CAV023		1.50	400g Tub (ALE214)
							60g VOC (ALE215)
							250g Amber Jar (AL
pH	All	NDPs: 0 Tests: 35					
Sample description	All	NDPs: 0 Tests: 33					
Total Organic Carbon	All	NDPs: 25 Tests: 10					
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 25					
TPH CWG GC (S)	All	NDPs: 0 Tests: 35					
VOC MS (S)	All	NDPs: 0 Tests: 35					

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

SOLID

Results Legend

X Test

N No Determination Possible

Asbestos Identification (Soil)	All	NDPs: 0 Tests: 35	X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X
Asbestos Quantification - Full	All	NDPs: 0 Tests: 5												X										X									
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
GRO by GC-FID (S)	All	NDPs: 0 Tests: 35	X		X		X		X		X		X		X		X		X		X		X		X		X		X				
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Cadmium	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Chromium	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Copper	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Lead	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Mercury	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Nickel	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Selenium	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Vanadium	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
	Zinc	NDPs: 0 Tests: 35		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	

Lab Sample No(s)	7085653	7085654	7085655	7085656	7085657	7085658	7085659	7085660	7085661	7085662	7085663	7085664	7085665	7085666
Customer Sample Reference	CAV023	CAV024	CAV024	CAV025	CAV025	CAV026	CAV026	CAV027	CAV027	CAV028	CAV028	CAV029	CAV029	CAV030
AGS Reference														
Depth (m)	1.50	0.10	1.70	0.30	1.50	0.10	1.00	0.10	1.50	0.40	2.10	0.20	0.80	0.20
Container	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL	400g Tub (ALE214) / 60g VOC (ALE215) / 250g Amber Jar (AL

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7085653	CAV023		1.50	400g Tub (ALE214)
			7085654	CAV024		0.10	60g VOC (ALE215)
			7085655	CAV024		1.70	250g Amber Jar (AL
			7085656	CAV025		0.30	400g Tub (ALE214)
			7085657	CAV025		1.50	60g VOC (ALE215)
			7085658	CAV026		0.10	250g Amber Jar (AL
			7085659	CAV026		1.00	400g Tub (ALE214)
			7085660	CAV027		0.10	60g VOC (ALE215)
			7085661	CAV027		1.50	250g Amber Jar (AL
			7085662	CAV028		0.40	400g Tub (ALE214)
			7085663	CAV028		2.10	60g VOC (ALE215)
			7085664	CAV029		0.20	250g Amber Jar (AL
			7085665	CAV029		0.80	400g Tub (ALE214)
			7085666	CAV030		0.20	60g VOC (ALE215)
							250g Amber Jar (AL
							400g Tub (ALE214)
PAH by GCMS	All	NDPs: 0 Tests: 35					
pH	All	NDPs: 0 Tests: 35					
Sample description	All	NDPs: 0 Tests: 33					
Total Organic Carbon	All	NDPs: 25 Tests: 10					
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 25					
TPH CWG GC (S)	All	NDPs: 0 Tests: 35					
VOC MS (S)	All	NDPs: 0 Tests: 35					

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7085666	CAV030		0.20	60g VOC (ALE215)
			7085672	CAV030		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085673	CAV031		0.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085674	CAV032		0.10	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085675	CAV032		0.80	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085676	CAV033		0.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085677	CAV033		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085678	CAV034		0.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085679	CAV034		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 35		X		X	X
Asbestos Quantification - Full	All	NDPs: 0 Tests: 5				X	X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 35		X		X	X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 35		X		X	X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 35	X	X	X	X	X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 35		X		X	X
	Cadmium	NDPs: 0 Tests: 35		X		X	X
	Chromium	NDPs: 0 Tests: 35		X		X	X
	Copper	NDPs: 0 Tests: 35		X		X	X
	Lead	NDPs: 0 Tests: 35		X		X	X
	Mercury	NDPs: 0 Tests: 35		X		X	X
	Nickel	NDPs: 0 Tests: 35		X		X	X
	Selenium	NDPs: 0 Tests: 35		X		X	X
	Vanadium	NDPs: 0 Tests: 35		X		X	X
	Zinc	NDPs: 0 Tests: 35		X		X	X

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7085666	CAV030		0.20	60g VOC (ALE215)
			7085672	CAV030		0.50	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085673	CAV031		0.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085674	CAV032		0.10	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085675	CAV032		0.80	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085676	CAV033		0.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085677	CAV033		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085678	CAV034		0.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7085679	CAV034		1.00	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
PAH by GCMS	All	NDPs: 0 Tests: 35		X		X	X	X	X	X	X	X	X
pH	All	NDPs: 0 Tests: 35		X		X	X	X	X	X	X	X	X
Sample description	All	NDPs: 0 Tests: 33		X		X	X	X	X	X	X	X	X
Total Organic Carbon	All	NDPs: 25 Tests: 10		N		N	N	N	N	N	N	N	N
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 25		X		X	X	X	X	X	X	X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 35		X		X	X	X	X	X	X	X	X
VOC MS (S)	All	NDPs: 0 Tests: 35	X		X		X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

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
7085635	CAEMV096		Light Brown	Silt Loam	0.063 - 0.1 mm	None	None
7085636	CAEMV097		Grey	N/A	0.063 - 0.1 mm	Oil/Petroleum	None
7085637	CAV018	0.20	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	N/A	Stones
7085638	CAV018	1.70	Grey	Sandy Silt Loam	0.063 - 0.1 mm	None	None
7085639	CAV019	0.40	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7085640	CAV019	2.10	Light Brown	Silt Loam	0.063 - 0.1 mm	Stones	Vegetation
7085645	CAV020	0.20	Light Brown	Silt Loam	0.063 - 0.1 mm	Stones	Vegetation
7085646	CAV020	1.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Brick	Oil/Petroleum
7085647	CAV021	0.30	Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones	None
7085648	CAV021	1.90	Light Brown	Silt Loam	0.063 - 0.1 mm	Vegetation	None
7085649	CAV022	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
7085650	CAV022	1.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7085652	CAV023	0.20	Black	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7085653	CAV023	1.50	Black	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7085654	CAV024	0.10	Light Brown	Sandy Silt Loam	0.063 - 0.1 mm	None	Oil/Petroleum
7085655	CAV024	1.70	Light Brown	Silt Loam	0.063 - 0.1 mm	None	None
7085656	CAV025	0.30	Black	Loamy Sand	0.1 - 2 mm	Oil/Petroleum	Stones
7085657	CAV025	1.50	Black	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7085658	CAV026	0.10	Black	Sand	0.1 - 2 mm	Stones	Vegetation
7085659	CAV026	1.00	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	N/A
7085660	CAV027	0.10	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Brick
7085661	CAV027	1.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
7085662	CAV028	0.40	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085663	CAV028	2.10	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	None	None
7085664	CAV029	0.20	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085665	CAV029	0.80	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	None	None
7085666	CAV030	0.20	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085672	CAV030	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085673	CAV031	0.30	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085674	CAV032	0.10	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085675	CAV032	0.80	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085676	CAV033	0.30	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085677	CAV033	1.00	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
7085678	CAV034	0.30	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7085679	CAV034	1.00	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV096	CAEMV097	CAV018	CAV018	CAV019	CAV019
			Depth (m)	.	.	0.20	1.70	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085635	7085636	7085637	7085638	7085639	7085640
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132		0.815 #	0.914		1.1 #		1.28 #
pH	1 pH Units	TM133		6.05 M	7.57	8.2 M	11 M	8.23 M	6.62 M
Arsenic	<0.6 mg/kg	TM181		4.85 M	3.21	33.7 M	4.11 M	16.4 M	11.1 M
Cadmium	<0.02 mg/kg	TM181		0.0202 M	<0.02	1.31 M	0.0725 M	0.759 M	0.378 M
Chromium	<0.9 mg/kg	TM181		13.4 M	3.97	14.8 M	12.4 M	13.7 M	13.4 M
Copper	<1.4 mg/kg	TM181		2.81 M	8.58	100 M	4.34 M	37.3 M	11.8 M
Lead	<0.7 mg/kg	TM181		10.8 M	15.8	185 M	26.2 M	69.3 M	11.1 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14	0.986 M	0.544 M	0.307 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		16 M	3	24 M	11.5 M	23.6 M	28.4 M
Selenium	<1 mg/kg	TM181		<1 #	<1	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		14.1 #	4.49	20.4 #	12.9 #	14.1 #	12.7 #
Zinc	<1.9 mg/kg	TM181		28.7 M	42	399 M	49.3 M	455 M	58.1 M
Soil Organic Matter (SOM)	<0.1 %	TM321				2.14		1.42	

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV020	CAV020	CAV021	CAV021	CAV022	CAV022
			Depth (m)	0.20	1.50	0.30	1.90	0.50	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085645	7085646	7085647	7085648	7085649	7085650
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132					1.18 #		
pH	1 pH Units	TM133		8.35 M	7.91 M	8.22 M	6.26 M	8.51 M	7.76 M
Arsenic	<0.6 mg/kg	TM181		28.9 M	14.2 M	14.3 M	12.5 M	22.5 M	33.2 M
Cadmium	<0.02 mg/kg	TM181		0.869 M	0.622 M	0.774 M	0.301 M	1.12 M	1.21 M
Chromium	<0.9 mg/kg	TM181		19.1 M	106 M	18.2 M	22.9 M	17.7 M	59.9 M
Copper	<1.4 mg/kg	TM181		72.4 M	63.9 M	43.3 M	12.4 M	58.7 M	95.2 M
Lead	<0.7 mg/kg	TM181		87 M	91.2 M	35.2 M	18 M	85.2 M	997 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	0.301 M	0.248 M	<0.14 M	<0.14 M	1.94 M
Nickel	<0.2 mg/kg	TM181		29.9 M	15.1 M	32.9 M	24.8 M	28.7 M	25.6 M
Selenium	<1 mg/kg	TM181		2.82 #	1.5 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		23.4 #	70.3 #	19.4 #	21.7 #	22.8 #	28.6 #
Zinc	<1.9 mg/kg	TM181		301 M	123 M	117 M	54.2 M	242 M	300 M
Soil Organic Matter (SOM)	<0.1 %	TM321		0.704	2.3	0.79		1.43	1.84

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV023	CAV023	CAV024	CAV024	CAV025	CAV025
			Depth (m)	0.20	1.50	0.10	1.70	0.30	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085652	7085653	7085654	7085655	7085656	7085657
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132					1.6 #	21.7 #	
pH	1 pH Units	TM133		6.9 M	7.08 M	6.46 M	5.46 M	7.24 M	7.47 M
Arsenic	<0.6 mg/kg	TM181		36.8 M	60.8 M	37.8 M	10.7 M	29.8 M	23.6 M
Cadmium	<0.02 mg/kg	TM181		1.18 M	2.07 M	0.545 M	0.957 M	1.37 M	0.856 M
Chromium	<0.9 mg/kg	TM181		12.4 M	12.6 M	12 M	16.7 M	9.69 M	11.1 M
Copper	<1.4 mg/kg	TM181		84.2 M	196 M	39.9 M	8.74 M	112 M	72.9 M
Lead	<0.7 mg/kg	TM181		194 M	223 M	89.6 M	24.2 M	76.2 M	52.6 M
Mercury	<0.14 mg/kg	TM181		0.851 M	1.75 M	0.153 M	<0.14 M	<0.14 M	0.185 M
Nickel	<0.2 mg/kg	TM181		25.8 M	27.8 M	12.7 M	24.9 M	24.1 M	25.3 M
Selenium	<1 mg/kg	TM181		<1 #	1.05 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		18.4 #	19.2 #	15.6 #	19.7 #	13.8 #	14 #
Zinc	<1.9 mg/kg	TM181		377 M	451 M	168 M	67.9 M	171 M	122 M
Soil Organic Matter (SOM)	<0.1 %	TM321		2.65	4.9	1.32			2.81

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV026	CAV026	CAV027	CAV027	CAV028	CAV028
			Depth (m)	0.10	1.00	0.10	1.50	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085658	7085659	7085660	7085661	7085662	7085663
			AGS Reference						
Soil Organic Matter (SOM)	<0.35 %	TM132			58.8 #			6.83 #	1.81 #
pH	1 pH Units	TM133		7.45 M	6.53 M	7.89 M	7.62 M	6.96 M	6.82 M
Arsenic	<0.6 mg/kg	TM181		73.8 M	47.8 M	29.3 M	37 M	50.1 M	14.8 M
Cadmium	<0.02 mg/kg	TM181		1.1 M	1.05 M	0.627 M	0.75 M	1.03 M	0.202 M
Chromium	<0.9 mg/kg	TM181		12.8 M	194 M	15.7 M	16.4 M	14.3 M	11.5 M
Copper	<1.4 mg/kg	TM181		546 M	123 M	108 M	96.5 M	247 M	29.8 M
Lead	<0.7 mg/kg	TM181		229 M	1470 M	124 M	176 M	141 M	27.5 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	0.32 M	1.68 M	0.209 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		55.4 M	19.8 M	36.5 M	26.8 M	19.4 M	11 M
Selenium	<1 mg/kg	TM181		1.14 #	1.68 #	1.18 #	<1 #	1.29 #	<1 #
Vanadium	<0.2 mg/kg	TM181		19.2 #	16.4 #	22.1 #	22.3 #	25.8 #	15.7 #
Zinc	<1.9 mg/kg	TM181		674 M	769 M	269 M	361 M	198 M	69 M
Soil Organic Matter (SOM)	<0.1 %	TM321		1.92		1.99	1.72		

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV029	CAV029	CAV030	CAV030	CAV031	CAV032
			Depth (m)	0.20	0.80	0.20	0.50	0.30	0.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085664	7085665	7085666	7085672	7085673	7085674
			AGS Reference						
pH	1 pH Units	TM133		7.32 M	6.95 M	7.5 M	7.55 M	7.25 M	7.77 M
Arsenic	<0.6 mg/kg	TM181		29.7 M	33.2 M	45.1 M	30.4 M	38.7 M	36.1 M
Cadmium	<0.02 mg/kg	TM181		<0.02 M	0.542 M	1.08 M	0.436 M	0.75 M	0.598 M
Chromium	<0.9 mg/kg	TM181		251 M	17.5 M	15.8 M	12.8 M	16.8 M	16.2 M
Copper	<1.4 mg/kg	TM181		54.8 M	95.1 M	149 M	61.8 M	128 M	107 M
Lead	<0.7 mg/kg	TM181		56.5 M	50.1 M	211 M	44.8 M	131 M	102 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		23.8 M	25.7 M	28 M	15.3 M	26 M	27.6 M
Selenium	<1 mg/kg	TM181		1.14 #	1.01 #	1.17 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		118 #	23 #	24.5 #	19.6 #	24.8 #	23.5 #
Zinc	<1.9 mg/kg	TM181		148 M	117 M	526 M	128 M	260 M	154 M
Soil Organic Matter (SOM)	<0.1 %	TM321		1.16	2.21	2	2.34	0.886	4.18

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV032	CAV033	CAV033	CAV034	CAV034
			Depth (m)	0.80	0.30	1.00	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085675	7085676	7085677	7085678	7085679
			AGS Reference					
pH	1 pH Units	TM133		7.43 M	7.01 M	6.97 M	6.81 M	6.98 M
Arsenic	<0.6 mg/kg	TM181		13.1 M	34.8 M	8.23 M	8.46 M	11.9 M
Cadmium	<0.02 mg/kg	TM181		0.11 M	0.718 M	0.351 M	0.459 M	0.61 M
Chromium	<0.9 mg/kg	TM181		15.1 M	14.3 M	15.7 M	17.6 M	23 M
Copper	<1.4 mg/kg	TM181		17.8 M	111 M	17.9 M	18.2 M	39.7 M
Lead	<0.7 mg/kg	TM181		16.5 M	145 M	18.8 M	22.9 M	84 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		22.7 M	28.5 M	31.5 M	38 M	37.9 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		20.2 #	23.3 #	14.8 #	16.3 #	18.1 #
Zinc	<1.9 mg/kg	TM181		84.4 M	134 M	62 M	83.4 M	155 M
Soil Organic Matter (SOM)	<0.1 %	TM321		0.802	11.9	1.56	7.54	1.71

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV096	CAEMV097	CAV018	CAV018	CAV019	CAV019
			Depth (m)	.	.	0.20	1.70	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085635	7085636	7085637	7085638	7085639	7085640
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		101	94.3	97.8	96	103	98.5
Acenaphthene-d10 % recovery**	%	TM218		99.4	93.7	96.7	94.2	102	98.7
Phenanthrene-d10 % recovery**	%	TM218		97.5	94.1	95.6	93.3	102	96.5
Chrysene-d12 % recovery**	%	TM218		90.3	91.7	92.1	87.1	100	92.3
Perylene-d12 % recovery**	%	TM218		91	92.6	94.5	88.8	104	97.3
Naphthalene	<9 µg/kg	TM218		58.1 M	655	203 M	38.7 M	485 M	<9 M
Acenaphthylene	<12 µg/kg	TM218		<12 M	<12	36.5 M	<12 M	29.4 M	<12 M
Acenaphthene	<8 µg/kg	TM218		28.9 M	358	75.2 M	<8 M	156 M	<8 M
Fluorene	<10 µg/kg	TM218		55.2 M	1180	97.1 M	<10 M	241 M	<10 M
Phenanthrene	<15 µg/kg	TM218		122 M	2860	701 M	21.2 M	1160 M	24.9 M
Anthracene	<16 µg/kg	TM218		<16 M	431	165 M	<16 M	160 M	<16 M
Fluoranthene	<17 µg/kg	TM218		<17 M	163	1250 M	21.3 M	651 M	<17 M
Pyrene	<15 µg/kg	TM218		<15 M	570	1130 M	21.8 M	630 M	<15 M
Benz(a)anthracene	<14 µg/kg	TM218		<14 M	88.2	800 M	22.3 M	341 M	17.4 M
Chrysene	<10 µg/kg	TM218		<10 M	139	828 M	21.2 M	362 M	16.8 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 M	31.1	1010 M	30.2 M	402 M	34.9 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 M	<14	368 M	<14 M	161 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218		<15 M	31.7	795 M	20.2 M	319 M	<15 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 M	<18	478 M	<18 M	197 M	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 M	<23	170 M	<23 M	70.3 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 M	<24	551 M	<24 M	230 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		264	6500	8660	197	5590	<118

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV020	CAV020	CAV021	CAV021	CAV022	CAV022
			Depth (m)	0.20	1.50	0.30	1.90	0.50	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085645	7085646	7085647	7085648	7085649	7085650
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		105	110	102	95.4	107	109
Acenaphthene-d10 % recovery**	%	TM218		110	112	105	95	110	108
Phenanthrene-d10 % recovery**	%	TM218		108	110	107	93.8	109	103
Chrysene-d12 % recovery**	%	TM218		98.4	103	103	89.7	105	101
Perylene-d12 % recovery**	%	TM218		105	109	110	94.3	111	107
Naphthalene	<9 µg/kg	TM218		85.9 M	1550 M	176 M	21.8 M	84 M	241 M
Acenaphthylene	<12 µg/kg	TM218		23.1 M	180 M	206 M	<12 M	25.3 M	74.7 M
Acenaphthene	<8 µg/kg	TM218		22 M	1340 M	578 M	17.6 M	71 M	149 M
Fluorene	<10 µg/kg	TM218		26.6 M	1350 M	499 M	27.1 M	56.3 M	331 M
Phenanthrene	<15 µg/kg	TM218		460 M	7130 M	12500 M	44.9 M	841 M	888 M
Anthracene	<16 µg/kg	TM218		73.9 M	2080 M	4200 M	<16 M	156 M	306 M
Fluoranthene	<17 µg/kg	TM218		463 M	15000 M	22900 M	56.8 M	1050 M	1300 M
Pyrene	<15 µg/kg	TM218		502 M	10800 M	17300 M	51 M	1020 M	1210 M
Benz(a)anthracene	<14 µg/kg	TM218		332 M	10700 M	11200 M	46.3 M	714 M	776 M
Chrysene	<10 µg/kg	TM218		888 M	9660 M	8390 M	42.1 M	1360 M	1160 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		455 M	12200 M	7930 M	58.9 M	802 M	870 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		170 M	5310 M	3920 M	17.3 M	320 M	360 M
Benzo(a)pyrene	<15 µg/kg	TM218		360 M	11400 M	9570 M	44.9 M	778 M	693 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		217 M	6780 M	4130 M	26.1 M	470 M	427 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		111 M	2810 M	1170 M	<23 M	231 M	175 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		339 M	7300 M	4310 M	31.1 M	612 M	507 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		4530	106000	109000	486	8590	9470

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV023	CAV023	CAV024	CAV024	CAV025	CAV025
			Depth (m)	0.20	1.50	0.10	1.70	0.30	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085652	7085653	7085654	7085655	7085656	7085657
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		101	107	103	108	102	100
Acenaphthene-d10 % recovery**	%	TM218		99.6	109	103	108	102	99.9
Phenanthrene-d10 % recovery**	%	TM218		99.7	108	105	108	97.8	100
Chrysene-d12 % recovery**	%	TM218		106	102	98	103	92.2	105
Perylene-d12 % recovery**	%	TM218		106	105	104	108	84.2	106
Naphthalene	<9 µg/kg	TM218		305 M	340 M	53.8 M	<9 M	1700 M	601 M
Acenaphthylene	<12 µg/kg	TM218		46.6 M	27.7 M	<12 M	<12 M	<12 M	42.1 M
Acenaphthene	<8 µg/kg	TM218		122 M	120 M	20.1 M	<8 M	1490 M	415 M
Fluorene	<10 µg/kg	TM218		319 M	356 M	19.6 M	<10 M	2650 M	901 M
Phenanthrene	<15 µg/kg	TM218		1580 M	1130 M	110 M	18.2 M	3820 M	1510 M
Anthracene	<16 µg/kg	TM218		376 M	312 M	29.6 M	<16 M	901 M	497 M
Fluoranthene	<17 µg/kg	TM218		2420 M	1150 M	167 M	<17 M	1200 M	902 M
Pyrene	<15 µg/kg	TM218		2400 M	1430 M	213 M	<15 M	2210 M	1290 M
Benz(a)anthracene	<14 µg/kg	TM218		1320 M	606 M	131 M	<14 M	973 M	726 M
Chrysene	<10 µg/kg	TM218		1570 M	773 M	121 M	<10 M	961 M	798 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		1660 M	774 M	202 M	<15 M	990 M	779 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		563 M	286 M	78.9 M	<14 M	402 M	329 M
Benzo(a)pyrene	<15 µg/kg	TM218		1170 M	565 M	153 M	<15 M	786 M	634 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		772 M	351 M	89.4 M	<18 M	445 M	335 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		324 M	152 M	32.1 M	<23 M	202 M	141 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		1040 M	448 M	114 M	<24 M	492 M	421 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		16000	8820	1540	<118	19200	10300

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV026	CAV026	CAV027	CAV027	CAV028	CAV028
			Depth (m)	0.10	1.00	0.10	1.50	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085658	7085659	7085660	7085661	7085662	7085663
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		105	105	115	110	88.8	111
Acenaphthene-d10 % recovery**	%	TM218		104	104	114	108	98.1	111
Phenanthrene-d10 % recovery**	%	TM218		99.2	99	112	107	90.5	107
Chrysene-d12 % recovery**	%	TM218		84.2	91.5	105	99	86.4	101
Perylene-d12 % recovery**	%	TM218		75.8	92.4	105	98.8	92.6	102
Naphthalene	<9 µg/kg	TM218		272 M	2560 M	274 M	242 M	6330 M	529 M
Acenaphthylene	<12 µg/kg	TM218		27.6 M	<120 M	45.7 M	63.4 M	401 M	45 M
Acenaphthene	<8 µg/kg	TM218		32.3 M	160 M	341 M	77.9 M	1460 M	424 M
Fluorene	<10 µg/kg	TM218		62.9 M	190 M	312 M	137 M	3560 M	1370 M
Phenanthrene	<15 µg/kg	TM218		391 M	418 M	1430 M	945 M	4720 M	2510 M
Anthracene	<16 µg/kg	TM218		84 M	<160 M	336 M	234 M	950 M	488 M
Fluoranthene	<17 µg/kg	TM218		641 M	492 M	1840 M	1380 M	861 M	144 M
Pyrene	<15 µg/kg	TM218		682 M	422 M	1640 M	1320 M	1970 M	786 M
Benz(a)anthracene	<14 µg/kg	TM218		385 M	285 M	1270 M	700 M	577 M	90.3 M
Chrysene	<10 µg/kg	TM218		451 M	365 M	1270 M	682 M	554 M	113 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		566 M	367 M	1810 M	715 M	571 M	42.3 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		218 M	198 M	623 M	313 M	239 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218		396 M	303 M	1380 M	638 M	552 M	52.8 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		238 M	<180 M	782 M	357 M	319 M	22.9 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		89.8 M	<230 M	306 M	122 M	120 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		309 M	<240 M	946 M	458 M	421 M	36.1 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		4850	5760	14600	8380	23600	6660

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV029	CAV029	CAV030	CAV030	CAV031	CAV032
			Depth (m)	0.20	0.80	0.20	0.50	0.30	0.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085664	7085665	7085666	7085672	7085673	7085674
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		109	108	92.4	105	112	92.3
Acenaphthene-d10 % recovery**	%	TM218		109	109	94.6	106	111	93.9
Phenanthrene-d10 % recovery**	%	TM218		108	105	94.9	104	110	93.4
Chrysene-d12 % recovery**	%	TM218		101	96.3	92	96.8	100	84.5
Perylene-d12 % recovery**	%	TM218		102	98.3	96.9	99.5	99.7	83.6
Naphthalene	<9 µg/kg	TM218		140 M	400 M	108 M	18.9 M	117 M	85 M
Acenaphthylene	<12 µg/kg	TM218		26 M	74.7 M	46.2 M	17.6 M	22.6 M	29.7 M
Acenaphthene	<8 µg/kg	TM218		85.8 M	527 M	48.3 M	13.9 M	48.3 M	41.6 M
Fluorene	<10 µg/kg	TM218		264 M	1580 M	119 M	24.3 M	236 M	75.5 M
Phenanthrene	<15 µg/kg	TM218		843 M	2030 M	872 M	216 M	736 M	439 M
Anthracene	<16 µg/kg	TM218		274 M	701 M	259 M	40.2 M	148 M	90.7 M
Fluoranthene	<17 µg/kg	TM218		774 M	281 M	1590 M	236 M	236 M	480 M
Pyrene	<15 µg/kg	TM218		888 M	1080 M	1420 M	192 M	407 M	490 M
Benz(a)anthracene	<14 µg/kg	TM218		494 M	173 M	1040 M	112 M	162 M	305 M
Chrysene	<10 µg/kg	TM218		545 M	227 M	915 M	112 M	202 M	333 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		450 M	123 M	1040 M	129 M	181 M	422 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		182 M	45.5 M	378 M	52.8 M	54.9 M	142 M
Benzo(a)pyrene	<15 µg/kg	TM218		383 M	121 M	815 M	111 M	139 M	293 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		217 M	61.5 M	411 M	55.1 M	74.3 M	150 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		87.2 M	29.5 M	162 M	<23 M	34 M	64.1 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		270 M	89.2 M	478 M	69.8 M	105 M	184 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		5920	7550	9690	1400	2900	3630

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV032	CAV033	CAV033	CAV034	CAV034
			Depth (m)	0.80	0.30	1.00	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085675	7085676	7085677	7085678	7085679
			AGS Reference					
Naphthalene-d8 % recovery**	%	TM218		90.9	88.9	111	94.7	112
Acenaphthene-d10 % recovery**	%	TM218		91.4	91.3	113	101	115
Phenanthrene-d10 % recovery**	%	TM218		90.7	91.1	112	97.6	115
Chrysene-d12 % recovery**	%	TM218		82.5	86.3	97.4	93.8	112
Perylene-d12 % recovery**	%	TM218		82.8	90.3	98.5	98.4	119
Naphthalene	<9 µg/kg	TM218		<9 M	70.3 M	10.7 M	1430 M	1010 M
Acenaphthylene	<12 µg/kg	TM218		<12 M	17.5 M	<12 M	261 M	246 M
Acenaphthene	<8 µg/kg	TM218		<8 M	22.3 M	<8 M	917 M	709 M
Fluorene	<10 µg/kg	TM218		<10 M	64.3 M	13.2 M	2910 M	2020 M
Phenanthrene	<15 µg/kg	TM218		20.7 M	302 M	63.6 M	5140 M	2130 M
Anthracene	<16 µg/kg	TM218		<16 M	65.8 M	<16 M	1230 M	533 M
Fluoranthene	<17 µg/kg	TM218		<17 M	359 M	29.6 M	398 M	234 M
Pyrene	<15 µg/kg	TM218		<15 M	352 M	38.1 M	2260 M	739 M
Benz(a)anthracene	<14 µg/kg	TM218		<14 M	236 M	15.9 M	286 M	115 M
Chrysene	<10 µg/kg	TM218		<10 M	220 M	30.2 M	327 M	149 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 M	326 M	26.7 M	188 M	93 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 M	97.4 M	<14 M	66.4 M	31.8 M
Benzo(a)pyrene	<15 µg/kg	TM218		<15 M	240 M	<15 M	222 M	84.8 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 M	129 M	<18 M	101 M	35.1 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 M	44.3 M	<23 M	43.3 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 M	167 M	<24 M	158 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		<118	2710	228	15900	8130

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV096	CAEMV097	CAV018	CAV018	CAV019	CAV019
			Depth (m)	.	.	0.20	1.70	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085635	7085636	7085637	7085638	7085639	7085640
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		97	164	70	181	115	109
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		92300 M	1450000 #	9070 M	17500 M	186000 M	4400 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<100 #	<5 M	<5 M	<25 M	<5 M
Benzene	<10 µg/kg	TM089		<10 M	<200 #	25.6 M	<10 M	<50 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<40 #	18.3 M	<2 M	<10 M	4.72 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<60 #	<3 M	<3 M	<15 M	3.54 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<120 #	61 M	<6 M	<30 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<60 #	<3 M	<3 M	<15 M	20.1 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	61	<9	<9	20.1
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	105	<24	<24	28.4
Aliphatics >C5-C6	<10 µg/kg	TM089		85.4	3910	113	240	4070	57.8
Aliphatics >C6-C8	<10 µg/kg	TM089		3440	76500	368	2260	43300	303
Aliphatics >C8-C10	<10 µg/kg	TM089		25600	406000	1560	5020	47400	754
Aliphatics >C10-C12	<10 µg/kg	TM089		27600	416000	3530	3990	35900	1640
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	410000	49900	3790	71200	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		2440	392000	79900	7710	67600	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		5810	207000	159000	13300	91300	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	11200	36800	<100	23800	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		8250	1020000	325000	24800	254000	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<200	25.6	<10	<50	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<200	18.3	<10	<50	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		17100	271000	1100	3350	31600	532
Aromatics >EC10-EC12	<10 µg/kg	TM089		18400	277000	2350	2660	23900	1100
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	237000	14600	2470	26400	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	299000	42500	6020	39400	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		23800	187000	161000	28200	88700	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	17900	72800	7700	39700	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	5090	31200	2440	17900	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		23800	741000	291000	44400	194000	<100
Total Aliphatics >C5-35	<100 µg/kg	TM173		65000	1910000	294000	36300	361000	2760
Total Aromatics >C5-35	<100 µg/kg	TM173		59300	1270000	222000	42700	210000	1640
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		124000	3180000	516000	79000	571000	4400

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend		Customer Sample R	CAEMV096	CAEMV097	CAV018	CAV018	CAV019	CAV019
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	0.20	1.70	0.40	2.10
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
(F)	Trigger breach confirmed	Lab Sample No.(s)	7085635	7085636	7085637	7085638	7085639	7085640
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	124000	3210000	625000	86700	634000	4400

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV020	CAV020	CAV021	CAV021	CAV022	CAV022
			Depth (m)	0.20	1.50	0.30	1.90	0.50	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085645	7085646	7085647	7085648	7085649	7085650
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		90	110	99	109	88	57
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		2320 M	120000 M	12200 M	18800 M	477 M	62200 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<25 M	<5 M	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		<10 M	<50 M	<10 M	<10 M	<10 M	19.8 M
Toluene	<2 µg/kg	TM089		2.32 M	<10 M	40.3 M	<2 M	2.28 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<15 M	<3 M	96.4 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		6.96 M	<30 M	<6 M	298 M	7.98 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<15 M	<3 M	143 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	<9	441	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	40.3	537	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		13.9	1760	11.2	451	11.4	216
Aliphatics >C6-C8	<10 µg/kg	TM089		55.7	18000	475	4680	75.2	6030
Aliphatics >C8-C10	<10 µg/kg	TM089		227	22300	2960	3640	86.6	15800
Aliphatics >C10-C12	<10 µg/kg	TM089		1120	37600	4040	4240	140	17800
Aliphatics >C12-C16	<100 µg/kg	TM173		18900	68900	43800	8080	13900	380000
Aliphatics >C16-C21	<100 µg/kg	TM173		21000	85400	35300	6790	21800	411000
Aliphatics >C21-C35	<100 µg/kg	TM173		45600	147000	111000	806	72500	844000
Aliphatics >C35-C44	<100 µg/kg	TM173		10200	40700	31100	4420	23200	252000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		95600	342000	221000	20100	131000	1890000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<50	<10	<10	<10	19.8
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<50	40.3	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		159	14900	1970	2970	66.1	10500
Aromatics >EC10-EC12	<10 µg/kg	TM089		746	25000	2700	2820	93.5	11900
Aromatics >EC12-EC16	<100 µg/kg	TM173		5560	97500	8800	10600	8300	179000
Aromatics >EC16-EC21	<100 µg/kg	TM173		11400	254000	17000	11500	18100	315000
Aromatics >EC21-EC35	<100 µg/kg	TM173		69200	628000	93100	27200	110000	556000
Aromatics >EC35-EC44	<100 µg/kg	TM173		37500	207000	42500	8830	58900	224000
Aromatics >EC40-EC44	<100 µg/kg	TM173		15000	75800	14600	3770	24100	89900
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		124000	1190000	161000	58100	195000	1270000
Total Aliphatics >C5-35	<100 µg/kg	TM173		86800	381000	198000	28700	109000	1670000
Total Aromatics >C5-35	<100 µg/kg	TM173		87100	1020000	124000	55100	136000	1070000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		174000	1400000	321000	83800	245000	2750000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend		Customer Sample R	CAV020	CAV020	CAV021	CAV021	CAV022	CAV022
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.20	1.50	0.30	1.90	0.50	1.50
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
(F)	Trigger breach confirmed	Lab Sample No.(s)	7085645	7085646	7085647	7085648	7085649	7085650
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	222000	1650000	395000	97000	327000	3220000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV023	CAV023	CAV024	CAV024	CAV025	CAV025
			Depth (m)	0.20	1.50	0.10	1.70	0.30	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085652	7085653	7085654	7085655	7085656	7085657
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		106	89	74	101	57	100
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		50700 M	106000 M	968 M	1410 M	133000 M	79900 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<25 M	<25 M	<5 M	15.7 M	<10 M	<25 M
Benzene	<10 µg/kg	TM089		<50 M	<50 M	<10 M	<10 M	<20 M	<50 M
Toluene	<2 µg/kg	TM089		<10 M	<10 M	2.3 M	6.05 M	<4 M	<10 M
Ethylbenzene	<3 µg/kg	TM089		<15 M	<15 M	<3 M	6.05 M	<6 M	<15 M
m,p-Xylene	<6 µg/kg	TM089		<30 M	<30 M	<6 M	<6 M	<12 M	<30 M
o-Xylene	<3 µg/kg	TM089		<15 M	<15 M	4.6 M	10.9 M	<6 M	<15 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<45	<9	<9	10.9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<120	<24	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		143	96.9	16.1	14.5	116	149
Aliphatics >C6-C8	<10 µg/kg	TM089		6930	14300	89.7	171	6880	12100
Aliphatics >C8-C10	<10 µg/kg	TM089		15200	33900	177	307	30300	20900
Aliphatics >C10-C12	<10 µg/kg	TM089		11000	21100	329	401	45300	19600
Aliphatics >C12-C16	<100 µg/kg	TM173		162000	339000	33100	<100	373000	164000
Aliphatics >C16-C21	<100 µg/kg	TM173		251000	435000	92400	<100	218000	175000
Aliphatics >C21-C35	<100 µg/kg	TM173		229000	204000	139000	<100	320000	797000
Aliphatics >C35-C44	<100 µg/kg	TM173		70700	32500	37300	<100	54100	169000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		712000	1010000	302000	<100	965000	1310000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<50	<50	<10	<10	<20	58.3
Aromatics >EC7-EC8	<10 µg/kg	TM089		<50	<50	<10	<10	<20	<50
Aromatics >EC8-EC10	<10 µg/kg	TM089		10100	22600	129	221	20200	13900
Aromatics >EC10-EC12	<10 µg/kg	TM089		7320	14100	220	267	30200	13100
Aromatics >EC12-EC16	<100 µg/kg	TM173		58800	117000	32900	<100	471000	165000
Aromatics >EC16-EC21	<100 µg/kg	TM173		132000	220000	76500	<100	291000	148000
Aromatics >EC21-EC35	<100 µg/kg	TM173		307000	269000	148000	<100	396000	588000
Aromatics >EC35-EC44	<100 µg/kg	TM173		138000	90200	48900	<100	117000	226000
Aromatics >EC40-EC44	<100 µg/kg	TM173		54900	36000	20300	<100	45700	79800
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		635000	696000	306000	<100	1270000	1130000
Total Aliphatics >C5-35	<100 µg/kg	TM173		675000	1050000	265000	893	994000	1190000
Total Aromatics >C5-35	<100 µg/kg	TM173		515000	643000	258000	499	1210000	928000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1190000	1690000	523000	1390	2200000	2120000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend		Customer Sample R	CAV023	CAV023	CAV024	CAV024	CAV025	CAV025
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.20	1.50	0.10	1.70	0.30	1.50
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	15/03/2013	15/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
(F)	Trigger breach confirmed	Lab Sample No.(s)	7085652	7085653	7085654	7085655	7085656	7085657
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1400000	1810000	609000	1390	2370000	2510000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV026	CAV026	CAV027	CAV027	CAV028	CAV028
			Depth (m)	0.10	1.00	0.10	1.50	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085658	7085659	7085660	7085661	7085662	7085663
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		30	75	5	89	115	51
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		2270 M	1900000 M	500 M	43100 M	292000 M	32700 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<100 M	<5 M	<5 M	<25 M	<5 M
Benzene	<10 µg/kg	TM089		<10 M	<200 M	<10 M	<10 M	<50 M	<10 M
Toluene	<2 µg/kg	TM089		4.64 M	<40 M	3.57 M	<2 M	<10 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	5430 M	<3 M	<3 M	<15 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		8.12 M	44700 M	<6 M	<6 M	<30 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	27300 M	<3 M	<3 M	<15 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	72000	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	77400	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		19.7	208	20.2	99.2	94.2	380
Aliphatics >C6-C8	<10 µg/kg	TM089		85.8	12500	53.6	2720	7250	4190
Aliphatics >C8-C10	<10 µg/kg	TM089		269	457000	71.4	9970	38700	7330
Aliphatics >C10-C12	<10 µg/kg	TM089		1020	627000	179	14200	132000	9510
Aliphatics >C12-C16	<100 µg/kg	TM173		36000	124000	224000	224000	333000	257000
Aliphatics >C16-C21	<100 µg/kg	TM173		61100	89400	87300	218000	127000	140000
Aliphatics >C21-C35	<100 µg/kg	TM173		275000	158000	58900	1200000	536000	512000
Aliphatics >C35-C44	<100 µg/kg	TM173		66300	28600	8990	358000	226000	119000
Total Aliphatics >C12-C44	<100 µg/kg	TM173		438000	399000	379000	2000000	1220000	1030000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<200	<10	<10	<50	10.6
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<200	<10	<10	<50	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		187	382000	51.2	6650	25800	4890
Aromatics >EC10-EC12	<10 µg/kg	TM089		682	418000	119	9470	88000	6340
Aromatics >EC12-EC16	<100 µg/kg	TM173		25600	81500	326000	77000	1010000	389000
Aromatics >EC16-EC21	<100 µg/kg	TM173		47000	62900	148000	155000	198000	192000
Aromatics >EC21-EC35	<100 µg/kg	TM173		301000	242000	119000	856000	410000	349000
Aromatics >EC35-EC44	<100 µg/kg	TM173		97200	73600	27000	335000	201000	112000
Aromatics >EC40-EC44	<100 µg/kg	TM173		33700	29300	9310	128000	74000	43400
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		470000	460000	620000	1420000	1820000	1040000
Total Aliphatics >C5-35	<100 µg/kg	TM173		373000	1470000	371000	1670000	1170000	930000
Total Aromatics >C5-35	<100 µg/kg	TM173		374000	1190000	593000	1100000	1730000	942000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		747000	2650000	964000	2780000	2910000	1870000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend		Customer Sample R	CAV026	CAV026	CAV027	CAV027	CAV028	CAV028
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.10	1.00	0.10	1.50	0.40	2.10
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
(F)	Trigger breach confirmed	Lab Sample No.(s)	7085658	7085659	7085660	7085661	7085662	7085663
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	911000	2760000	1000000	3470000	3330000	2100000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV029	CAV029	CAV030	CAV030	CAV031	CAV032
			Depth (m)	0.20	0.80	0.20	0.50	0.30	0.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085664	7085665	7085666	7085672	7085673	7085674
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		51	120	71	99	33	25
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		12200 M	47300 M	31000 M	6990 M	8670 M	512 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<5 M	<5 M	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	2.46 M	<2 M	2.38 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<6 M	<6 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 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		12.8	54.7	19.2	13.5	14.3	<10
Aliphatics >C6-C8	<10 µg/kg	TM089		291	3860	341	72.6	215	29.8
Aliphatics >C8-C10	<10 µg/kg	TM089		1880	11700	3900	664	1240	51.2
Aliphatics >C10-C12	<10 µg/kg	TM089		5250	14300	14500	3480	3820	227
Aliphatics >C12-C16	<100 µg/kg	TM173		130000	244000	121000	23800	50400	26400
Aliphatics >C16-C21	<100 µg/kg	TM173		117000	218000	135000	24600	68800	42700
Aliphatics >C21-C35	<100 µg/kg	TM173		356000	164000	312000	44100	72000	69500
Aliphatics >C35-C44	<100 µg/kg	TM173		97400	39000	76300	22500	19200	24600
Total Aliphatics >C12-C44	<100 µg/kg	TM173		700000	664000	644000	115000	211000	163000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		1260	7800	2600	443	826	36.9
Aromatics >EC10-EC12	<10 µg/kg	TM089		3500	9550	9670	2320	2550	151
Aromatics >EC12-EC16	<100 µg/kg	TM173		78100	134000	44900	10400	37800	8170
Aromatics >EC16-EC21	<100 µg/kg	TM173		85000	149000	84400	14000	49200	19000
Aromatics >EC21-EC35	<100 µg/kg	TM173		243000	156000	234000	48100	70000	65100
Aromatics >EC35-EC44	<100 µg/kg	TM173		89700	45700	85700	38200	25000	36000
Aromatics >EC40-EC44	<100 µg/kg	TM173		33900	16900	33100	16900	9100	15600
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		496000	485000	449000	111000	182000	128000
Total Aliphatics >C5-35	<100 µg/kg	TM173		610000	655000	586000	96700	197000	139000
Total Aromatics >C5-35	<100 µg/kg	TM173		411000	456000	375000	75200	160000	92500
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1020000	1110000	962000	172000	357000	232000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend		Customer Sample R	CAV029	CAV029	CAV030	CAV030	CAV031	CAV032
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.20	0.80	0.20	0.50	0.30	0.10
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
(F)	Trigger breach confirmed	Lab Sample No.(s)	7085664	7085665	7085666	7085672	7085673	7085674
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1210000	1200000	1120000	233000	401000	292000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV032	CAV033	CAV033	CAV034	CAV034
			Depth (m)	0.80	0.30	1.00	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085675	7085676	7085677	7085678	7085679
			AGS Reference					
GRO Surrogate % recovery**	%	TM089		93	7	83	125	114
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		<44 M	2770 M	1350 M	170000 M	124000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<5 M	<5 M	<25 M	<25 M
Benzene	<10 µg/kg	TM089		<10 M	<10 M	<10 M	<50 M	<50 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	<10 M	<10 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<15 M	<15 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M	<6 M	<30 M	<30 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<15 M	<15 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		<10	<10	<10	56	209
Aliphatics >C6-C8	<10 µg/kg	TM089		<10	23.6	26.9	3870	7130
Aliphatics >C8-C10	<10 µg/kg	TM089		<10	197	127	21100	17000
Aliphatics >C10-C12	<10 µg/kg	TM089		<10	1440	661	78300	52900
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	48600	7410	274000	246000
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	74100	7350		271000
Aliphatics >C16-C35	<100 µg/kg	TM173					182000	
Aliphatics >C21-C35	<100 µg/kg	TM173		1610	84000	<100		710000
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	22900	<100	14700	78500
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1610	230000	14800	470000	1310000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<50	<50
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<50	<50
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10	132	89.6	14100	11300
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10	961	440	52200	35300
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	13500	5990	292000	436000
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	28500	4460	143000	285000
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	65700	<100	120000	653000
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	23400	<100	28100	105000
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	8330	<100		38900
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		<100	131000	10400	583000	1480000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1610	208000	15600	559000	1300000
Total Aromatics >C5-35	<100 µg/kg	TM173		<100	109000	11000	621000	1420000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

TPH CWG (S)

Results Legend		Customer Sample R	CAV032	CAV033	CAV033	CAV034	CAV034
#	ISO17025 accredited.						
M	*m*CERTS accredited.						
aq	Aqueous / settled sample.	Depth (m)	0.80	0.30	1.00	0.30	1.00
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.
**	% 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	Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49
(F)	Trigger breach confirmed	Lab Sample No.(s)	7085675	7085676	7085677	7085678	7085679
1-4&+§@	Sample deviation (see appendix)	AGS Reference					

Component	LOD/Units	Method					
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	1610	317000	26600	1180000	2730000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1610	363000	26600	1220000	2910000

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV096	CAEMV097	CAV018	CAV018	CAV019	CAV019
			Depth (m)	.	.	0.20	1.70	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085635	7085636	7085637	7085638	7085639	7085640
			AGS Reference						
Dibromofluoromethane**	%	TM116		96.2	99.1	98.4	87.4	99.9	99.1
Toluene-d8**	%	TM116		101	87.1	98.6	99.3	100	100
4-Bromofluorobenzene**	%	TM116		97.6	103	116	94	105	102
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<4	<80 M	<4 M	<80 M	<4 M
Chloromethane	<7 µg/kg	TM116		<7	<7	<140	<7	<140	<7
Vinyl Chloride	<10 µg/kg	TM116		<10	<10	<200	<10	<200	<10
Bromomethane	<13 µg/kg	TM116		<13 M	<13	<260 M	<13 M	<260 M	<13 M
Chloroethane	<14 µg/kg	TM116		<14 M	<14	<280 M	<14 M	<280 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<6	<120 M	<6 M	<120 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<10	<200 #	<10 #	<200 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<7 M	9.76	<140 M	30.5 M	<140 M	<7 M
Dichloromethane	<10 µg/kg	TM116		<10 #	<10	<200 #	<10 #	<200 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<11	<220 M	<11 M	<220 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<11	<220 M	<11 M	<220 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<8	<160 M	<8 M	<160 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<5	<100 M	<5 M	<100 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12	<240 M	<12 M	<240 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<14 M	<14	<280 M	<14 M	<280 M	<14 M
Chloroform	<8 µg/kg	TM116		<8 M	<8	<160 M	<8 M	<160 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<7	<140 M	<7 M	<140 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<11	<220 M	<11 M	<220 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<14	<280 M	<14 M	<280 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<5	<100 M	<5 M	<100 M	<5 M
Benzene	<9 µg/kg	TM116		<9 M	<9	<180 M	<9 M	<180 M	<9 M
Trichloroethene	<9 µg/kg	TM116		<9 M	<9	<180 M	<9 M	<180 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12	<240 M	<12 M	<240 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<9 M	<9	<180 M	<9 M	<180 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<7	<140 M	<7 M	<140 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<14	<280 M	<14 M	<280 M	<14 M
Toluene	<5 µg/kg	TM116		<5 M	<5	<100 M	<5 M	<100 M	<5 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<14	<280	<14	<280	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<10	<200 M	<10 M	<200 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV096	CAEMV097	CAV018	CAV018	CAV019	CAV019
			Depth (m)	.	.	0.20	1.70	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085635	7085636	7085637	7085638	7085639	7085640
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<7	<140 #	<7 #	<140 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<5	<100 M	<5 M	<100 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<13	<260 M	<13 M	<260 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<12	<240 M	<12 M	<240 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<5 M	<5	<100 M	<5 M	<100 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<10	<200 M	<10 M	<200 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<4 M	<4	<80 M	<4 M	333 M	7.45 M
p/m-Xylene	<14 µg/kg	TM116		<14 #	<14	<280 #	66.4 #	732 #	<14 #
o-Xylene	<10 µg/kg	TM116		<10 M	<10	<200 M	32.5 M	405 M	<10 M
Styrene	<10 µg/kg	TM116		<10 M	<10	<200 M	<10 M	<200 M	<10 M
Bromoform	<10 µg/kg	TM116		<10 M	<10	<200 M	<10 M	<200 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		<5 M	974	<100 M	29.1 M	327 M	<5 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<10	<200 #	<10 #	<200 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<17	<340 M	<17 M	<340 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<10 M	<10	<200 M	<10 M	<200 M	<10 M
Propylbenzene	<11 µg/kg	TM116		<11 M	2250	<220 M	55 M	471 M	<11 M
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<9	<180 M	<9 M	<180 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	<8	<160 #	84.8 #	682 #	<8 #
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<12	<240 M	<12 M	<240 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<12	<240 #	<12 #	<240 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 #	385	<180 #	272 #	2850 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116		<10 M	2100	<200 M	46.6 M	309 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<11	<220 M	<11 M	<220 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<6	<120 M	<6 M	<120 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<5	<100 M	<5 M	<100 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<10 M	2920	<200 M	<10 M	<200 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<12	<240 M	<12 M	<240 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<14	<280 M	<14 M	<280 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<15	<300	<15	<300	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<6	<120 #	<6 #	<120 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<12	<240	<12	<240	<12
Naphthalene	<13 µg/kg	TM116		<13 M	<13	<260 M	<13 M	<260 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV096	CAEMV097	CAV018	CAV018	CAV019	CAV019
			Depth (m)	.	.	0.20	1.70	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085635	7085636	7085637	7085638	7085639	7085640
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<6 M	<6	<120 M	<6 M	<120 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV020	CAV020	CAV021	CAV021	CAV022	CAV022
			Depth (m)	0.20	1.50	0.30	1.90	0.50	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085645	7085646	7085647	7085648	7085649	7085650
			AGS Reference						
Dibromofluoromethane**	%	TM116		98.1	98.5	104	100	101	101
Toluene-d8**	%	TM116		101	101	102	98.7	99.6	101
4-Bromofluorobenzene**	%	TM116		103	107	102	109	106	117
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<4 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<7	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<10	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<13 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<6 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<10 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<7 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<10 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<11 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<11 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<8 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<8 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<7 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<11 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	25.4 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<9 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<9 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<7 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	11 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<14	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV020	CAV020	CAV021	CAV021	CAV022	CAV022
			Depth (m)	0.20	1.50	0.30	1.90	0.50	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085645	7085646	7085647	7085648	7085649	7085650
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<7 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<13 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<80 M	47.8 M	<80 M	230 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<280 #	74.9 #	<280 #	376 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<200 M	290 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	30.2 M	<100 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<10 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<17 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	58.5 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<9 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	5940 #	<160 #	815 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<12 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	920 #	<180 #	479 #	<180 #	932 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<200 M	329 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<11 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<6 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<5 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<10 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<12 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<14 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<15	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<6 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<12	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<13 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV020	CAV020	CAV021	CAV021	CAV022	CAV022
			Depth (m)	0.20	1.50	0.30	1.90	0.50	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013	14/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085645	7085646	7085647	7085648	7085649	7085650
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<6 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV023	CAV023	CAV024	CAV024	CAV025	CAV025
			Depth (m)	0.20	1.50	0.10	1.70	0.30	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085652	7085653	7085654	7085655	7085656	7085657
			AGS Reference						
Dibromofluoromethane**	%	TM116		105	102	100	96.4	101	105
Toluene-d8**	%	TM116		102	102	99.4	95.9	101	102
4-Bromofluorobenzene**	%	TM116		105	108	122	115	112	106
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<4 M	<4 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<7	<7	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<10	<10	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<13 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<6 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<10 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<7 M	10.4 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<10 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<8 M	<8 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<8 M	<8 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<7 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	20.4 M	<9 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<9 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<9 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<7 M	<7 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	7.92 M	<5 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<14	<14	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV023	CAV023	CAV024	CAV024	CAV025	CAV025
			Depth (m)	0.20	1.50	0.10	1.70	0.30	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085652	7085653	7085654	7085655	7085656	7085657
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<7 #	<7 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<13 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	6.06 M	<4 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	16.2 #	<14 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<10 #	<10 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<17 M	<17 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<9 M	<9 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<8 #	<8 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<12 #	<12 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	20.2 #	<9 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<11 M	<11 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<6 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<5 M	<5 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<10 M	<10 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<12 M	<12 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<14 M	<14 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<15	<15	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<6 #	<6 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<12	<12	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<13 M	<13 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV023	CAV023	CAV024	CAV024	CAV025	CAV025
			Depth (m)	0.20	1.50	0.10	1.70	0.30	1.50
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	14/03/2013	14/03/2013	14/03/2013	14/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085652	7085653	7085654	7085655	7085656	7085657
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<6 M	<6 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV026	CAV026	CAV027	CAV027	CAV028	CAV028
			Depth (m)	0.10	1.00	0.10	1.50	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085658	7085659	7085660	7085661	7085662	7085663
			AGS Reference						
Dibromofluoromethane**	%	TM116		103	101	101	101	101	101
Toluene-d8**	%	TM116		99.8	100	96	98.7	99.2	97.9
4-Bromofluorobenzene**	%	TM116		113	107	123	111	120	119
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<800 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<1400	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<2000	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<2600 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<2800 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<1200 M	<120 M	<120 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<2000 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<1400 M	<140 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<2000 #	<200 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<2200 M	<220 M	<220 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<2200 M	<220 M	<220 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<1600 M	<160 M	<160 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<1000 M	<100 M	<100 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<2400 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<2800 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<1600 M	<160 M	<160 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<1400 M	<140 M	<140 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<2200 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<2800 M	<280 M	<280 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<1000 M	<100 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<1800 M	<180 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<1800 M	<180 M	<180 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<2400 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<1800 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<1400 M	<140 M	<140 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<2800 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		148 M	<1000 M	<100 M	<100 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<2800	<280	<280	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<2000 M	<200 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV026	CAV026	CAV027	CAV027	CAV028	CAV028
			Depth (m)	0.10	1.00	0.10	1.50	0.40	2.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085658	7085659	7085660	7085661	7085662	7085663
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<1400 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<1000 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<2600 M	<260 M	<260 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<2400 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<1000 M	<100 M	<100 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<2000 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	4230 M	<80 M	<80 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	53700 #	<280 #	<280 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<200 M	24500 M	<200 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<2000 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<2000 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	13700 M	<100 M	<100 M	<100 M	174 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<2000 #	<200 #	<200 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<3400 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<2000 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	25200 M	<220 M	<220 M	<220 M	402 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<1800 M	<180 M	<180 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	95500 #	<160 #	<160 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<2400 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<2400 #	<240 #	<240 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	328000 #	<180 #	<180 #	30200 #	511 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	44200 M	<200 M	<200 M	<200 M	326 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	44700 M	<220 M	<220 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<1200 M	<120 M	<120 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<1000 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	33800 M	<200 M	<200 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<2400 M	<240 M	<240 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<2800 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<3000	<300	<300	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<1200 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<2400	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	15900 M	<260 M	<260 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend		Customer Sample R	CAV026	CAV026	CAV027	CAV027	CAV028	CAV028
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.10	1.00	0.10	1.50	0.40	2.10
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
(F)	Trigger breach confirmed	Lab Sample No.(s)	7085658	7085659	7085660	7085661	7085662	7085663
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<1200 M	<120 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV029	CAV029	CAV030	CAV030	CAV031	CAV032
			Depth (m)	0.20	0.80	0.20	0.50	0.30	0.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085664	7085665	7085666	7085672	7085673	7085674
			AGS Reference						
Dibromofluoromethane**	%	TM116		99.4	99.5	101	103	103	102
Toluene-d8**	%	TM116		99.9	101	102	100	99.5	100
4-Bromofluorobenzene**	%	TM116		106	107	109	105	111	109
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<280	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV029	CAV029	CAV030	CAV030	CAV031	CAV032
			Depth (m)	0.20	0.80	0.20	0.50	0.30	0.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085664	7085665	7085666	7085672	7085673	7085674
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<280 #	<280 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<160 #	<160 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<240 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	<180 #	<180 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<300	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV029	CAV029	CAV030	CAV030	CAV031	CAV032
			Depth (m)	0.20	0.80	0.20	0.50	0.30	0.10
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085664	7085665	7085666	7085672	7085673	7085674
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV032	CAV033	CAV033	CAV034	CAV034
			Depth (m)	0.80	0.30	1.00	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085675	7085676	7085677	7085678	7085679
			AGS Reference					
Dibromofluoromethane**	%	TM116		108	102	104	104	107
Toluene-d8**	%	TM116		98.2	99.7	99.3	100	102
4-Bromofluorobenzene**	%	TM116		118	114	118	111	117
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<80 M	<4 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<7	<140	<7	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<10	<200	<10	<200	<200
Bromomethane	<13 µg/kg	TM116		<13 M	<260 M	<13 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<120 M	<6 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<200 #	<10 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<7 M	<140 M	<7 M	<140 M	206 M
Dichloromethane	<10 µg/kg	TM116		<10 #	<200 #	<10 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<220 M	<11 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<220 M	<11 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<160 M	<8 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<8 M	<160 M	<8 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<140 M	<7 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<220 M	<11 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<9 M	<180 M	<9 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<9 M	<180 M	<9 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<9 M	<180 M	<9 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<140 M	<7 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<280	<14	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV032	CAV033	CAV033	CAV034	CAV034
			Depth (m)	0.80	0.30	1.00	0.30	1.00
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49
			Lab Sample No.(s)	7085675	7085676	7085677	7085678	7085679
			AGS Reference					
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<140 #	<7 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<260 M	<13 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<4 M	<80 M	<4 M	<80 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		<14 #	<280 #	<14 #	<280 #	<280 #
o-Xylene	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<100 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<200 #	<10 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<340 M	<17 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<11 M	<220 M	<11 M	<220 M	477 M
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<180 M	<9 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	<160 #	<8 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<240 #	<12 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 #	<180 #	<9 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<200 M	954 M
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<220 M	<11 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<120 M	<6 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<100 M	<5 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<200 M	<10 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<240 M	<12 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<280 M	<14 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<300	<15	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<120 #	<6 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<240	<12	<240	<240
Naphthalene	<13 µg/kg	TM116		<13 M	<260 M	<13 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

VOC MS (S)

Results Legend		Customer Sample R	CAV032	CAV033	CAV033	CAV034	CAV034
#	ISO17025 accredited.						
M	*m*CERTS accredited.						
aq	Aqueous / settled sample.	Depth (m)	0.80	0.30	1.00	0.30	1.00
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.
**	% 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	Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-49	130316-49	130316-49	130316-49	130316-49
(F)	Trigger breach confirmed	Lab Sample No.(s)	7085675	7085676	7085677	7085678	7085679
1-4&+§@	Sample deviation (see appendix)	AGS Reference					

Component	LOD/Units	Method					
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<6 M	<120 M	<6 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

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 Receieved SDG Original Sample Method Number	CAEMV096 SOLID 14/03/2013 00:00:00 130316-49 7085635 TM048	26/03/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAEMV097 SOLID 14/03/2013 00:00:00 130316-49 7085636 TM048	26/03/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV018 0.20 SOLID 14/03/2013 00:00:00 130316-49 7085637 TM048	26/03/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV018 1.70 SOLID 14/03/2013 00:00:00 130316-49 7085638 TM048	26/03/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV019 0.40 SOLID 14/03/2013 00:00:00 130316-49 7085639 TM048	26/03/13	Kevin Bowron	Soil containing loose fibres and ACM debris	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

		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 Receieved SDG Original Sample Method Number	CAV019 2.10 SOLID 14/03/2013 00:00:00 130316-49 7085640 TM048	27/03/13	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 Receieved SDG Original Sample Method Number	CAV020 0.20 SOLID 14/03/2013 00:00:00 130316-49 7085645 TM048	27/03/13	Lauren Sargeant	Loose fibres in soil	Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV020 1.50 SOLID 14/03/2013 00:00:00 130316-49 7085646 TM048	27/03/13	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV021 0.30 SOLID 14/03/2013 00:00:00 130316-49 7085647 TM048	26/03/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV021 1.90 SOLID 14/03/2013 00:00:00 130316-49 7085648 TM048	26/03/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV022 0.50 SOLID 14/03/2013 00:00:00 130316-49 7085649 TM048	26/03/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

		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 Receieved SDG Original Sample Method Number	CAV022 1.50 SOLID 14/03/2013 00:00:00 130316-49 7085650 TM048	26/03/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV023 0.20 SOLID 14/03/2013 00:00:00 130316-49 7085652 TM048	26/03/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV023 1.50 SOLID 14/03/2013 00:00:00 130316-49 7085653 TM048	27/3/13	Kevin Bowron	Soil containing loose fibres and acm debris	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV024 0.10 SOLID 14/03/2013 00:00:00 130316-49 7085654 TM048	27/3/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV024 1.70 SOLID 14/03/2013 00:00:00 130316-49 7085655 TM048	27/3/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV025 0.30 SOLID 15/03/2013 00:00:00 130316-49 7085656 TM048	27/3/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

		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 Receieved SDG Original Sample Method Number	CAV025 1.50 SOLID 15/03/2013 00:00:00 130316-49 7085657 TM048	27/3/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV026 0.10 SOLID 15/03/2013 00:00:00 130316-49 7085658 TM048	27/3/13	Kevin Bowron	Soil containing looose fibres and acm debris	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV026 1.00 SOLID 15/03/2013 00:00:00 130316-49 7085659 TM048	27/3/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV027 0.10 SOLID 15/03/2013 00:00:00 130316-49 7085660 TM048	27/3/13	Kevin Bowron	Soil containing loose fibres and debris typical of asbestos lagging	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV027 1.50 SOLID 15/03/2013 00:00:00 130316-49 7085661 TM048	02/04/13	Kevin Bowron	Soil containing loose fibres & ACM debris	Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV028 0.40 SOLID 15/03/2013 00:00:00 130316-49 7085662 TM048	02/04/13	Paul Fenney	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

		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 Receieved SDG Original Sample Method Number	CAV028 2.10 SOLID 15/03/2013 00:00:00 130316-49 7085663 TM048	02/04/13	Kevin Bowron	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV029 0.20 SOLID 15/03/2013 00:00:00 130316-49 7085664 TM048	02/04/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV029 0.80 SOLID 15/03/2013 00:00:00 130316-49 7085665 TM048	02/04/13	Kevin Bowron	Soil containing loose fibres & ACM debris	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV030 0.20 SOLID 15/03/2013 00:00:00 130316-49 7085666 TM048	02/04/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV030 0.50 SOLID 15/03/2013 00:00:00 130316-49 7085672 TM048	02/04/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV031 0.30 SOLID 15/03/2013 00:00:00 130316-49 7085673 TM048	02/04/13	Kevin Bowron	Soil containing loose fibres & ACM debris	Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

		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 Receieved SDG Original Sample Method Number	CAV032 0.10 SOLID 15/03/2013 00:00:00 130316-49 7085674 TM048	02/04/13	Lauren Sargeant	Soil containing loose and ACM debris	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV032 0.80 SOLID 15/03/2013 00:00:00 130316-49 7085675 TM048	02/04/13	Paul Fenney	Soil containing loose and ACM debris	Not Detected (#)	Trace (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV033 0.30 SOLID 15/03/2013 00:00:00 130316-49 7085676 TM048	02/04/13	Kevin Bowron	Soil containing loose fibres & debris typical of Asbestos lagging	Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV033 1.00 SOLID 15/03/2013 00:00:00 130316-49 7085677 TM048	02/04/13	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 Receieved SDG Original Sample Method Number	CAV034 0.30 SOLID 15/03/2013 00:00:00 130316-49 7085678 TM048	02/04/13	Kevin Bowron	Soil containing loose fibres & ACM debris	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV034 1.00 SOLID 15/03/2013 00:00:00 130316-49 7085679 TM048	02/04/13	Kevin Bowron	Soil containing ACM debris	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

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 Receieved SDG Original Sample Method Number	CAV026 0.10 SOLID 15/03/2013 00:00:00 130316-49 7085658 TM 304	None (#)	N/C	0.0034 (#)	<0.001 (#)	0.0043 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV029 0.20 SOLID 15/03/2013 00:00:00 130316-49 7085664 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV031 0.30 SOLID 15/03/2013 00:00:00 130316-49 7085673 TM 304	None (#)	N/C	0.0049 (#)	0.0012 (#)	0.0061 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV033 0.30 SOLID 15/03/2013 00:00:00 130316-49 7085676 TM 304	None (#)	N/C	0.0013 (#)	0.0013 (#)	0.0026 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV034 0.30 SOLID 15/03/2013 00:00:00 130316-49 7085678 TM 304	None (#)	N/C	0.0317 (#)	<0.001 (#)	0.032 (#)

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Notification of NDPs (No determination possible)

Date Received : 16/03/2013 15:50:14

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
7085637	CAV018	0.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085639	CAV019	0.40	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085645	CAV020	0.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085646	CAV020	1.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085647	CAV021	0.30	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085649	CAV022	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085650	CAV022	1.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085652	CAV023	0.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085653	CAV023	1.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085654	CAV024	0.10	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085657	CAV025	1.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085658	CAV026	0.10	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085660	CAV027	0.10	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085661	CAV027	1.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085664	CAV029	0.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085665	CAV029	0.80	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085666	CAV030	0.20	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085672	CAV030	0.50	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085673	CAV031	0.30	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085674	CAV032	0.10	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085675	CAV032	0.80	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085676	CAV033	0.30	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085677	CAV033	1.00	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085678	CAV034	0.30	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7085679	CAV034	1.00	Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Test Completion Dates

Lab Sample No(s)	7085635	7085636	7085637	7085638	7085639	7085640	7085645	7085646	7085647	7085648
Customer Sample Ref.	CAEMV096	CAEMV097	CAV018	CAV018	CAV019	CAV019	CAV020	CAV020	CAV021	CAV021
AGS Ref.										
Depth			0.20	1.70	0.40	2.10	0.20	1.50	0.30	1.90
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013
EPH CWG (Aliphatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	25-Mar-2013
EPH CWG (Aromatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	25-Mar-2013
GRO by GC-FID (S)	25-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	25-Mar-2013	23-Mar-2013	24-Mar-2013	25-Mar-2013	23-Mar-2013	23-Mar-2013
Metals in solid samples by OES	22-Mar-2013	25-Mar-2013	25-Mar-2013	22-Mar-2013	25-Mar-2013	22-Mar-2013	22-Mar-2013	26-Mar-2013	25-Mar-2013	22-Mar-2013
PAH by GCMS	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	23-Mar-2013	22-Mar-2013	22-Mar-2013	23-Mar-2013	22-Mar-2013
pH	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
Sample description	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	21-Mar-2013	20-Mar-2013
Total Organic Carbon	27-Mar-2013	27-Mar-2013		27-Mar-2013		27-Mar-2013				27-Mar-2013
Total Organic Carbon (Asb)			27-Mar-2013		27-Mar-2013		27-Mar-2013	27-Mar-2013	27-Mar-2013	
TPH CWG GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	25-Mar-2013
VOC MS (S)	22-Mar-2013	22-Mar-2013	23-Mar-2013	22-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	22-Mar-2013

Lab Sample No(s)	7085649	7085650	7085652	7085653	7085654	7085655	7085656	7085657	7085658	7085659
Customer Sample Ref.	CAV022	CAV022	CAV023	CAV023	CAV024	CAV024	CAV025	CAV025	CAV026	CAV026
AGS Ref.										
Depth	0.50	1.50	0.20	1.50	0.10	1.70	0.30	1.50	0.10	1.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013	27-Mar-2013
Asbestos Quantification - Full									18-Apr-2013	
EPH CWG (Aliphatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	26-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
EPH CWG (Aromatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	26-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
GRO by GC-FID (S)	24-Mar-2013	24-Mar-2013	24-Mar-2013	25-Mar-2013	23-Mar-2013	23-Mar-2013	25-Mar-2013	25-Mar-2013	24-Mar-2013	25-Mar-2013
Metals in solid samples by OES	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	22-Mar-2013
PAH by GCMS	22-Mar-2013	22-Mar-2013	24-Mar-2013	24-Mar-2013	23-Mar-2013	23-Mar-2013	22-Mar-2013	24-Mar-2013	23-Mar-2013	23-Mar-2013
pH	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
Sample description	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	21-Mar-2013	21-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013
Total Organic Carbon						28-Mar-2013	28-Mar-2013			28-Mar-2013
Total Organic Carbon (Asb)	27-Mar-2013	27-Mar-2013	27-Mar-2013	28-Mar-2013	28-Mar-2013			28-Mar-2013	28-Mar-2013	
TPH CWG GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	26-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
VOC MS (S)	24-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	22-Mar-2013	24-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013

Lab Sample No(s)	7085660	7085661	7085662	7085663	7085664	7085665	7085666	7085672	7085673	7085674
Customer Sample Ref.	CAV027	CAV027	CAV028	CAV028	CAV029	CAV029	CAV030	CAV030	CAV031	CAV032
AGS Ref.										
Depth	0.10	1.50	0.40	2.10	0.20	0.80	0.20	0.50	0.30	0.10
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	27-Mar-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
Asbestos Quantification - Full					18-Apr-2013				18-Apr-2013	
EPH CWG (Aliphatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
EPH CWG (Aromatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
GRO by GC-FID (S)	24-Mar-2013	23-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013
Metals in solid samples by OES	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
PAH by GCMS	23-Mar-2013	23-Mar-2013	24-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	24-Mar-2013	24-Mar-2013	23-Mar-2013	22-Mar-2013
pH	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
Sample description	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013
Total Organic Carbon			03-Apr-2013	03-Apr-2013						
Total Organic Carbon (Asb)	28-Mar-2013	03-Apr-2013			03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
TPH CWG GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
VOC MS (S)	24-Mar-2013	23-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013

CERTIFICATE OF ANALYSIS

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Lab Sample No(s)	7085675	7085676	7085677	7085678	7085679
Customer Sample Ref.	CAV032	CAV033	CAV033	CAV034	CAV034
AGS Ref.					
Depth	0.80	0.30	1.00	0.30	1.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013	02-Apr-2013
Asbestos Quantification - Full		18-Apr-2013		18-Apr-2013	
EPH CWG (Aliphatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	27-Mar-2013	25-Mar-2013
EPH CWG (Aromatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	27-Mar-2013	25-Mar-2013
GRO by GC-FID (S)	23-Mar-2013	24-Mar-2013	23-Mar-2013	24-Mar-2013	24-Mar-2013
Metals in solid samples by OES	25-Mar-2013	25-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013
PAH by GCMS	24-Mar-2013	24-Mar-2013	22-Mar-2013	24-Mar-2013	22-Mar-2013
pH	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
Sample description	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013
Total Organic Carbon (Asb)	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013	03-Apr-2013
TPH CWG GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	27-Mar-2013	25-Mar-2013
VOC MS (S)	23-Mar-2013	24-Mar-2013	23-Mar-2013	24-Mar-2013	24-Mar-2013

SDG:	130316-49	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221026
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	218190

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Project Jonah site office
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Llandarcy
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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

Date:	19 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130316-56
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	221099

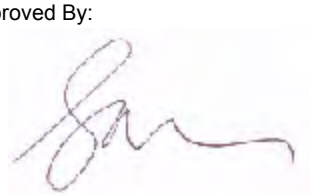
This report has been revised and directly supersedes 217650 in its entirety.

We received 20 samples on Saturday March 16, 2013 and 20 of these samples were scheduled for analysis which was completed on Friday April 19, 2013. 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

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7086003	CAV101			15/03/2013
7086004	CAV102			15/03/2013
7086005	CAV103			15/03/2013
7086006	CAV104			15/03/2013
7086007	CAV105			15/03/2013
7086008	CAV106			15/03/2013
7086009	CAV107			15/03/2013
7086010	CAV108			15/03/2013
7086011	CAV109			15/03/2013
7086012	CAV110			15/03/2013
7086013	CAV111			15/03/2013
7086014	CAV112			15/03/2013
7086015	CAV113			15/03/2013
7086016	CAV114			15/03/2013
7086017	CAV115			15/03/2013
7086018	CAV116			15/03/2013
7086019	CAV117			15/03/2013
7086020	CAV118			15/03/2013
7086021	CAV119			15/03/2013
7086022	CAV120			15/03/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7086003	CAV101			250g Amber Jar (AL
			7086003	CAV101			400g Tub (ALE214)
			7086003	CAV101			60g VOC (ALE215)
			7086004	CAV102			250g Amber Jar (AL
			7086004	CAV102			400g Tub (ALE214)
			7086004	CAV102			60g VOC (ALE215)
			7086005	CAV103			250g Amber Jar (AL
			7086005	CAV103			400g Tub (ALE214)
			7086005	CAV103			60g VOC (ALE215)
			7086006	CAV104			250g Amber Jar (AL
			7086006	CAV104			400g Tub (ALE214)
			7086006	CAV104			60g VOC (ALE215)
			7086007	CAV105			250g Amber Jar (AL
			7086007	CAV105			400g Tub (ALE214)
			7086007	CAV105			60g VOC (ALE215)
			7086008	CAV106			250g Amber Jar (AL
			7086008	CAV106			400g Tub (ALE214)
			7086008	CAV106			60g VOC (ALE215)
			7086009	CAV107			250g Amber Jar (AL
			7086009	CAV107			400g Tub (ALE214)
			7086009	CAV107			60g VOC (ALE215)
			7086010	CAV108			250g Amber Jar (AL
			7086010	CAV108			400g Tub (ALE214)
			7086010	CAV108			60g VOC (ALE215)
			7086011	CAV109			250g Amber Jar (AL
			7086011	CAV109			400g Tub (ALE214)
			7086011	CAV109			60g VOC (ALE215)
			7086012	CAV110			250g Amber Jar (AL
			7086012	CAV110			400g Tub (ALE214)
			7086012	CAV110			60g VOC (ALE215)
			7086013	CAV111			250g Amber Jar (AL
			7086013	CAV111			400g Tub (ALE214)
			7086013	CAV111			60g VOC (ALE215)
			7086014	CAV112			250g Amber Jar (AL
			7086014	CAV112			400g Tub (ALE214)
			7086014	CAV112			60g VOC (ALE215)
			7086015	CAV113			250g Amber Jar (AL
			7086015	CAV113			400g Tub (ALE214)
			7086015	CAV113			60g VOC (ALE215)
			7086016	CAV114			250g Amber Jar (AL
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 20					
Asbestos Quantification - Full	All	NDPs: 0 Tests: 7					
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 20					
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 20					
GRO by GC-FID (S)	All	NDPs: 0 Tests: 20					
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 20					
	Cadmium	NDPs: 0 Tests: 20					
	Chromium	NDPs: 0 Tests: 20					
	Copper	NDPs: 0 Tests: 20					
	Lead	NDPs: 0 Tests: 20					
	Mercury	NDPs: 0 Tests: 20					
	Nickel	NDPs: 0 Tests: 20					
	Selenium	NDPs: 0 Tests: 20					
	Vanadium	NDPs: 0 Tests: 20					
	Zinc	NDPs: 0 Tests: 20					

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
PAH by GCMS	All	NDPs: 0 Tests: 20	7086003	CAV101			250g Amber Jar (AL
			7086004	CAV102			400g Tub (ALE214)
			7086005	CAV103			60g VOC (ALE215)
			7086006	CAV104			250g Amber Jar (AL
			7086007	CAV105			400g Tub (ALE214)
			7086008	CAV106			60g VOC (ALE215)
			7086009	CAV107			250g Amber Jar (AL
			7086010	CAV108			400g Tub (ALE214)
			7086011	CAV109			60g VOC (ALE215)
			7086012	CAV110			250g Amber Jar (AL
			7086013	CAV111			400g Tub (ALE214)
			7086014	CAV112			60g VOC (ALE215)
			7086015	CAV113			250g Amber Jar (AL
			7086016	CAV114			400g Tub (ALE214)
							60g VOC (ALE215)
							250g Amber Jar (AL
pH	All	NDPs: 0 Tests: 20					
Sample description	All	NDPs: 0 Tests: 20					
Total Organic Carbon	All	NDPs: 20 Tests: 0					
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 20					
TPH CWG GC (S)	All	NDPs: 0 Tests: 20					
VOC MS (S)	All	NDPs: 0 Tests: 20					

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7086016	CAV114			400g Tub (ALE214)
			7086016	CAV114			60g VOC (ALE215)
			7086016	CAV114			250g Amber Jar (AL
			7086017	CAV115			400g Tub (ALE214)
			7086017	CAV115			60g VOC (ALE215)
			7086017	CAV115			250g Amber Jar (AL
			7086018	CAV116			400g Tub (ALE214)
			7086018	CAV116			60g VOC (ALE215)
			7086018	CAV116			250g Amber Jar (AL
			7086019	CAV117			400g Tub (ALE214)
			7086019	CAV117			60g VOC (ALE215)
			7086019	CAV117			250g Amber Jar (AL
			7086020	CAV118			400g Tub (ALE214)
			7086020	CAV118			60g VOC (ALE215)
			7086020	CAV118			250g Amber Jar (AL
			7086021	CAV119			400g Tub (ALE214)
			7086021	CAV119			60g VOC (ALE215)
			7086021	CAV119			250g Amber Jar (AL
			7086022	CAV120			400g Tub (ALE214)
			7086022	CAV120			60g VOC (ALE215)
Asbestos Identification (Soil)	All	NDPs: 0 Tests: 20	X		X		X		X		X		X		X		X	
Asbestos Quantification - Full	All	NDPs: 0 Tests: 7			X		X				X							
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 20		X		X		X		X		X		X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 20		X		X		X		X		X		X				
GRO by GC-FID (S)	All	NDPs: 0 Tests: 20	X		X		X		X		X		X		X			X
Metals by iCap-OES (Soil)	Arsenic	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Cadmium	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Chromium	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Copper	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Lead	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Mercury	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Nickel	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Selenium	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Vanadium	NDPs: 0 Tests: 20		X		X		X		X		X		X				
	Zinc	NDPs: 0 Tests: 20		X		X		X		X		X		X				

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7086016	CAV114			400g Tub (ALE214)
							60g VOC (ALE215)
			7086017	CAV115			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7086018	CAV116			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7086019	CAV117			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7086020	CAV118			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7086021	CAV119			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7086022	CAV120			250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
PAH by GCMS	All	NDPs: 0 Tests: 20					X X X X X X X X X X
pH	All	NDPs: 0 Tests: 20					X X X X X X X X X X
Sample description	All	NDPs: 0 Tests: 20					X X X X X X X X X X
Total Organic Carbon	All	NDPs: 20 Tests: 0					N N N N N N N N N N
Total Organic Carbon (Asb)	All	NDPs: 0 Tests: 20					X X X X X X X X X X
TPH CWG GC (S)	All	NDPs: 0 Tests: 20					X X X X X X X X X X
VOC MS (S)	All	NDPs: 0 Tests: 20					X X X X X X X X X X

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

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
7086003	CAV101		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	N/A	Stones
7086004	CAV102		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7086005	CAV103		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Brick	Stones
7086006	CAV104		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7086007	CAV105		Dark Brown	Sand	0.1 - 2 mm	Brick	Stones
7086008	CAV106		Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
7086009	CAV107		Black	Loamy Sand	0.1 - 2 mm	Brick	Oil/Petroleum
7086010	CAV108		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
7086011	CAV109		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7086012	CAV110		Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	Oil/Petroleum	Stones
7086013	CAV111		Dark Brown	Loamy Sand	0.1 - 2 mm	Brick	Stones
7086014	CAV112		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Brick	Oil/Petroleum
7086015	CAV113		Black	Silt Loam	0.063 - 0.1 mm	Stones	N/A
7086016	CAV114		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
7086017	CAV115		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	N/A	Stones
7086018	CAV116		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	N/A	Stones
7086019	CAV117		Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
7086020	CAV118		Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
7086021	CAV119		Light Brown	Silt Loam	0.063 - 0.1 mm	Stones	None
7086022	CAV120		Black	Sandy Clay Loam	0.1 - 2 mm	Brick	Stones

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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV101	CAV102	CAV103	CAV104	CAV105	CAV106
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086003	7086004	7086005	7086006	7086007	7086008
			AGS Reference						
pH	1 pH Units	TM133		7.86 M	7.89 M	7.87 M	7.88 M	8.07 M	8.06 M
Arsenic	<0.6 mg/kg	TM181		80.4 M	30.8 M	23.9 M	35.9 M	40.9 M	133 M
Cadmium	<0.02 mg/kg	TM181		1.23 M	0.944 M	1.13 M	1.2 M	1.16 M	1.65 M
Chromium	<0.9 mg/kg	TM181		12.2 M	11.5 M	13 M	17.3 M	31.7 M	14.4 M
Copper	<1.4 mg/kg	TM181		245 M	126 M	89.6 M	277 M	191 M	718 M
Lead	<0.7 mg/kg	TM181		291 M	128 M	101 M	138 M	277 M	425 M
Mercury	<0.14 mg/kg	TM181		0.525 M	0.322 M	0.224 M	0.227 M	0.811 M	1.66 M
Nickel	<0.2 mg/kg	TM181		21 M	16 M	17.5 M	34.7 M	26.2 M	26.3 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		18 #	14.5 #	20.4 #	19.7 #	60.1 #	20.3 #
Zinc	<1.9 mg/kg	TM181		1360 M	550 M	924 M	480 M	397 M	2680 M
Soil Organic Matter (SOM)	<0.1 %	TM321		1.97	2.58	2.92	4.29	1.95	2.5

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV107	CAV108	CAV109	CAV110	CAV111	CAV112
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086009	7086010	7086011	7086012	7086013	7086014
			AGS Reference						
pH	1 pH Units	TM133		7.71 M	8.25 M	8.02 M	7.37 M	7.94 M	8.16 M
Arsenic	<0.6 mg/kg	TM181		65.7 M	10.1 M	55.3 M	24.6 M	63 M	73.6 M
Cadmium	<0.02 mg/kg	TM181		1.21 M	0.35 M	1.1 M	1.2 M	1.06 M	1.56 M
Chromium	<0.9 mg/kg	TM181		10.5 M	7.79 M	11.3 M	14.6 M	9.85 M	13.7 M
Copper	<1.4 mg/kg	TM181		180 M	38.7 M	153 M	84.1 M	334 M	189 M
Lead	<0.7 mg/kg	TM181		342 M	62.2 M	650 M	136 M	200 M	176 M
Mercury	<0.14 mg/kg	TM181		1.97 M	0.667 M	1.63 M	2.22 M	0.739 M	2.51 M
Nickel	<0.2 mg/kg	TM181		18.3 M	7.98 M	15.7 M	21.8 M	19.5 M	24 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		13.5 #	9.49 #	17.1 #	17.5 #	14.1 #	16.6 #
Zinc	<1.9 mg/kg	TM181		7210 M	233 M	2010 M	297 M	1160 M	234 M
Soil Organic Matter (SOM)	<0.1 %	TM321		1.76	1.06	2.59	3.2	<0.1	3.79

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV113	CAV114	CAV115	CAV116	CAV117	CAV118
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086015	7086016	7086017	7086018	7086019	7086020
			AGS Reference						
pH	1 pH Units	TM133		5.96 M	7.89 M	7.5 M	7.66 M	7.8 M	7.79 M
Arsenic	<0.6 mg/kg	TM181		43.7 M	35.3 M	21.2 M	18.5 M	26.1 M	15.1 M
Cadmium	<0.02 mg/kg	TM181		1.38 M	1.57 M	1.03 M	0.877 M	0.913 M	0.543 M
Chromium	<0.9 mg/kg	TM181		13.7 M	18.5 M	19.2 M	16.9 M	15.3 M	18.1 M
Copper	<1.4 mg/kg	TM181		264 M	102 M	60.8 M	46.5 M	110 M	30.3 M
Lead	<0.7 mg/kg	TM181		74.4 M	224 M	93.7 M	50.5 M	91.3 M	66.1 M
Mercury	<0.14 mg/kg	TM181		0.298 M	1.83 M	0.775 M	0.589 M	1.25 M	0.285 M
Nickel	<0.2 mg/kg	TM181		28.3 M	30.6 M	24.1 M	25.9 M	26.5 M	17.6 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		21.7 #	20.1 #	20.3 #	15.9 #	20.8 #	17.4 #
Zinc	<1.9 mg/kg	TM181		150 M	326 M	876 M	252 M	371 M	158 M
Soil Organic Matter (SOM)	<0.1 %	TM321		6.05	3.98	4.46	1.51	0.961	1.38

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV119	CAV120			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	15/03/2013	15/03/2013			
			Sample Time	.	.			
			Date Received	16/03/2013	16/03/2013			
			SDG Ref	130316-56	130316-56			
			Lab Sample No.(s)	7086021	7086022			
			AGS Reference					
pH	1 pH Units	TM133		7.46 M	7.8 M			
Arsenic	<0.6 mg/kg	TM181		41.6 M	31.9 M			
Cadmium	<0.02 mg/kg	TM181		1.15 M	0.848 M			
Chromium	<0.9 mg/kg	TM181		27.9 M	15.9 M			
Copper	<1.4 mg/kg	TM181		110 M	140 M			
Lead	<0.7 mg/kg	TM181		114 M	192 M			
Mercury	<0.14 mg/kg	TM181		1.45 M	0.475 M			
Nickel	<0.2 mg/kg	TM181		23.7 M	28.1 M			
Selenium	<1 mg/kg	TM181		<1 #	<1 #			
Vanadium	<0.2 mg/kg	TM181		26.4 #	22.2 #			
Zinc	<1.9 mg/kg	TM181		175 M	463 M			
Soil Organic Matter (SOM)	<0.1 %	TM321		6.25	3.55			

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV101	CAV102	CAV103	CAV104	CAV105	CAV106
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086003	7086004	7086005	7086006	7086007	7086008
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		101	101	96.9	101	96.7	94.4
Acenaphthene-d10 % recovery**	%	TM218		102	101	98	102	98	93.7
Phenanthrene-d10 % recovery**	%	TM218		101	99.9	97.5	103	98.3	92.3
Chrysene-d12 % recovery**	%	TM218		99.7	99.5	96.8	103	98	90.3
Perylene-d12 % recovery**	%	TM218		105	110	108	112	104	93.3
Naphthalene	<9 µg/kg	TM218		141 M	50.4 M	32.7 M	1810 M	109 M	116 M
Acenaphthylene	<12 µg/kg	TM218		23.9 M	<12 M	<12 M	36.3 M	30.4 M	29 M
Acenaphthene	<8 µg/kg	TM218		38.3 M	17 M	11.5 M	97.4 M	20.7 M	42.4 M
Fluorene	<10 µg/kg	TM218		57.1 M	34 M	25.5 M	84.3 M	33.8 M	60.4 M
Phenanthrene	<15 µg/kg	TM218		361 M	293 M	120 M	300 M	311 M	367 M
Anthracene	<16 µg/kg	TM218		87.5 M	87.2 M	41.6 M	73.6 M	72.2 M	107 M
Fluoranthene	<17 µg/kg	TM218		584 M	602 M	141 M	697 M	608 M	721 M
Pyrene	<15 µg/kg	TM218		505 M	575 M	176 M	583 M	553 M	641 M
Benz(a)anthracene	<14 µg/kg	TM218		363 M	447 M	99.9 M	607 M	428 M	491 M
Chrysene	<10 µg/kg	TM218		451 M	424 M	109 M	528 M	419 M	610 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		458 M	593 M	140 M	720 M	639 M	715 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		177 M	224 M	46 M	321 M	237 M	274 M
Benzo(a)pyrene	<15 µg/kg	TM218		356 M	453 M	110 M	639 M	471 M	538 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		222 M	266 M	67.1 M	352 M	321 M	357 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		75.2 M	111 M	<23 M	124 M	102 M	122 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		262 M	316 M	82.6 M	394 M	389 M	70.8 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		4160	4490	1200	7360	4740	5260

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV107	CAV108	CAV109	CAV110	CAV111	CAV112
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086009	7086010	7086011	7086012	7086013	7086014
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		96.3	103	103	112	104	101
Acenaphthene-d10 % recovery**	%	TM218		99.1	104	102	114	105	102
Phenanthrene-d10 % recovery**	%	TM218		98.5	105	102	115	106	101
Chrysene-d12 % recovery**	%	TM218		95.8	107	94.7	115	106	97.6
Perylene-d12 % recovery**	%	TM218		97.3	114	95.6	123	113	104
Naphthalene	<9 µg/kg	TM218		587 M	112 M	38.1 M	160 M	74.8 M	712 M
Acenaphthylene	<12 µg/kg	TM218		44.5 M	28.8 M	<12 M	33.3 M	17.3 M	<12 M
Acenaphthene	<8 µg/kg	TM218		187 M	40.8 M	72.2 M	75.7 M	37.2 M	31.4 M
Fluorene	<10 µg/kg	TM218		482 M	64.1 M	111 M	132 M	45 M	134 M
Phenanthrene	<15 µg/kg	TM218		997 M	327 M	354 M	460 M	276 M	195 M
Anthracene	<16 µg/kg	TM218		182 M	105 M	82.1 M	222 M	72.1 M	34.7 M
Fluoranthene	<17 µg/kg	TM218		635 M	544 M	423 M	707 M	468 M	214 M
Pyrene	<15 µg/kg	TM218		594 M	600 M	402 M	751 M	500 M	180 M
Benz(a)anthracene	<14 µg/kg	TM218		326 M	338 M	151 M	440 M	342 M	117 M
Chrysene	<10 µg/kg	TM218		362 M	432 M	146 M	451 M	379 M	171 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		342 M	474 M	184 M	596 M	512 M	182 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		129 M	212 M	88.6 M	239 M	152 M	72.8 M
Benzo(a)pyrene	<15 µg/kg	TM218		268 M	377 M	150 M	521 M	388 M	107 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		143 M	259 M	93.5 M	334 M	233 M	83 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		48.8 M	85 M	37.5 M	126 M	80.7 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		180 M	310 M	122 M	439 M	291 M	104 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		5510	4310	2460	5690	3870	2340

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV113	CAV114	CAV115	CAV116	CAV117	CAV118
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086015	7086016	7086017	7086018	7086019	7086020
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		106	100	111	108	98.8	108
Acenaphthene-d10 % recovery**	%	TM218		108	102	113	110	96.9	109
Phenanthrene-d10 % recovery**	%	TM218		106	100	114	112	95.3	111
Chrysene-d12 % recovery**	%	TM218		104	98.4	111	112	89.4	110
Perylene-d12 % recovery**	%	TM218		112	107	118	120	85.4	116
Naphthalene	<9 µg/kg	TM218		1020 M	221 M	1030 M	265 M	129 M	743 M
Acenaphthylene	<12 µg/kg	TM218		40.1 M	30.1 M	50.1 M	27 M	47.5 M	45.7 M
Acenaphthene	<8 µg/kg	TM218		279 M	51.8 M	278 M	143 M	179 M	168 M
Fluorene	<10 µg/kg	TM218		778 M	77.2 M	652 M	286 M	399 M	507 M
Phenanthrene	<15 µg/kg	TM218		1980 M	350 M	969 M	658 M	1170 M	962 M
Anthracene	<16 µg/kg	TM218		370 M	82.9 M	317 M	303 M	366 M	323 M
Fluoranthene	<17 µg/kg	TM218		2000 M	509 M	670 M	728 M	1010 M	785 M
Pyrene	<15 µg/kg	TM218		2420 M	474 M	639 M	814 M	981 M	867 M
Benz(a)anthracene	<14 µg/kg	TM218		1290 M	360 M	334 M	426 M	455 M	441 M
Chrysene	<10 µg/kg	TM218		2180 M	454 M	352 M	382 M	490 M	452 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		1470 M	672 M	434 M	406 M	439 M	572 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		532 M	259 M	179 M	157 M	186 M	211 M
Benzo(a)pyrene	<15 µg/kg	TM218		1190 M	498 M	327 M	394 M	422 M	473 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		618 M	364 M	209 M	199 M	253 M	288 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		254 M	141 M	76.7 M	72.5 M	91.3 M	103 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		776 M	444 M	256 M	260 M	310 M	396 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		17200	4990	6770	5520	6920	7340

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV119	CAV120				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	15/03/2013	15/03/2013				
			Sample Time	.	.				
			Date Received	16/03/2013	16/03/2013				
			SDG Ref	130316-56	130316-56				
			Lab Sample No.(s)	7086021	7086022				
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		100	98.5				
Acenaphthene-d10 % recovery**	%	TM218		101	98.2				
Phenanthrene-d10 % recovery**	%	TM218		99.5	98.4				
Chrysene-d12 % recovery**	%	TM218		99.5	95.4				
Perylene-d12 % recovery**	%	TM218		99.8	99.1				
Naphthalene	<9 µg/kg	TM218		1330 M	204 M				
Acenaphthylene	<12 µg/kg	TM218		47.6 M	23.8 M				
Acenaphthene	<8 µg/kg	TM218		142 M	42.8 M				
Fluorene	<10 µg/kg	TM218		499 M	84 M				
Phenanthrene	<15 µg/kg	TM218		763 M	381 M				
Anthracene	<16 µg/kg	TM218		175 M	123 M				
Fluoranthene	<17 µg/kg	TM218		414 M	611 M				
Pyrene	<15 µg/kg	TM218		447 M	595 M				
Benz(a)anthracene	<14 µg/kg	TM218		274 M	421 M				
Chrysene	<10 µg/kg	TM218		253 M	451 M				
Benzo(b)fluoranthene	<15 µg/kg	TM218		262 M	581 M				
Benzo(k)fluoranthene	<14 µg/kg	TM218		104 M	222 M				
Benzo(a)pyrene	<15 µg/kg	TM218		234 M	475 M				
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		131 M	280 M				
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		46.4 M	103 M				
Benzo(g,h,i)perylene	<24 µg/kg	TM218		164 M	309 M				
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		5280	4910				

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV101	CAV102	CAV103	CAV104	CAV105	CAV106
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086003	7086004	7086005	7086006	7086007	7086008
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		74	47	96	64	49	89
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		46200 M	1970 M	5550 M	1600 M	9870 M	15300 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<5 M	<5 M	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089		18.7 M	<10 M	<10 M	<10 M	<10 M	<10 M
Toluene	<2 µg/kg	TM089		<2 M	<2 M	<2 M	<2 M	2.26 M	<2 M
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089		<6 M	9.52 M	<6 M	7.44 M	11.3 M	<6 M
o-Xylene	<3 µg/kg	TM089		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	9.52	<9	<9	11.3	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		<24	<24	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089		739	25	26.4	33.5	46.3	136
Aliphatics >C6-C8	<10 µg/kg	TM089		9690	100	422	134	134	1870
Aliphatics >C8-C10	<10 µg/kg	TM089		12100	389	1300	211	1970	3500
Aliphatics >C10-C12	<10 µg/kg	TM089		9320	708	1760	641	3840	4470
Aliphatics >C12-C16	<100 µg/kg	TM173		46000	36900	67500	10100	26200	51300
Aliphatics >C16-C21	<100 µg/kg	TM173		132000	238000	304000	75500	98800	128000
Aliphatics >C21-C35	<100 µg/kg	TM173		472000	1710000	1270000	606000	702000	714000
Aliphatics >C35-C44	<100 µg/kg	TM173		40700	183000	267000	59700	133000	80900
Total Aliphatics >C12-C44	<100 µg/kg	TM173		691000	2170000	1900000	751000	960000	974000
Aromatics >EC5-EC7	<10 µg/kg	TM089		18.7	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		8070	269	869	148	1320	2330
Aromatics >EC10-EC12	<10 µg/kg	TM089		6210	472	1170	428	2560	2980
Aromatics >EC12-EC16	<100 µg/kg	TM173		18700	15400	22400	3430	6790	19400
Aromatics >EC16-EC21	<100 µg/kg	TM173		88300	174000	168000	47400	47800	85700
Aromatics >EC21-EC35	<100 µg/kg	TM173		288000	816000	689000	320000	344000	411000
Aromatics >EC35-EC44	<100 µg/kg	TM173		76000	216000	232000	97100	145000	109000
Aromatics >EC40-EC44	<100 µg/kg	TM173		36500	88600	90300	39600	58800	49200
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		471000	1220000	1110000	468000	544000	625000
Total Aliphatics >C5-35	<100 µg/kg	TM173		682000	1990000	1640000	693000	833000	903000
Total Aromatics >C5-35	<100 µg/kg	TM173		409000	1010000	881000	371000	403000	521000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		1090000	2990000	2520000	1060000	1240000	1420000

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

TPH CWG (S)

Results Legend		Customer Sample R	CAV101	CAV102	CAV103	CAV104	CAV105	CAV106
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
(F)	Trigger breach confirmed	Lab Sample No.(s)	7086003	7086004	7086005	7086006	7086007	7086008
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1210000	3390000	3020000	1220000	1510000	1610000

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV107	CAV108	CAV109	CAV110	CAV111	CAV112
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086009	7086010	7086011	7086012	7086013	7086014
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		118	98	90	90	71	152
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		325000 M	38800 M	14500 M	25200 M	10000 M	1360000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<50 M	<10 M	<5 M	<5 M	<5 M	<100 M
Benzene	<10 µg/kg	TM089		<100 M	31.4 M	11.6 M	21.3 M	20.9 M	<200 M
Toluene	<2 µg/kg	TM089		439 M	<4 M	<2 M	<2 M	<2 M	<40 M
Ethylbenzene	<3 µg/kg	TM089		<30 M	<6 M	<3 M	<3 M	<3 M	<60 M
m,p-Xylene	<6 µg/kg	TM089		<60 M	<12 M	89.3 M	<6 M	182 M	<120 M
o-Xylene	<3 µg/kg	TM089		<30 M	<6 M	<3 M	<3 M	<3 M	<60 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		<9	<9	89.3	<9	182	<180
sum of detected BTEX by GC	<24 µg/kg	TM089		439	31.4	101	<24	203	<480
Aliphatics >C5-C6	<10 µg/kg	TM089		6350	551	136	80	194	1240
Aliphatics >C6-C8	<10 µg/kg	TM089		83900	12300	2240	2950	3140	94900
Aliphatics >C8-C10	<10 µg/kg	TM089		77000	9650	3290	5790	2030	398000
Aliphatics >C10-C12	<10 µg/kg	TM089		63700	5930	3910	7490	1840	363000
Aliphatics >C12-C16	<100 µg/kg	TM173		175000	70400	68000	175000	55200	272000
Aliphatics >C16-C21	<100 µg/kg	TM173		270000	195000	346000	399000	154000	82900
Aliphatics >C21-C35	<100 µg/kg	TM173		1020000	1390000	1630000	1080000	397000	148000
Aliphatics >C35-C44	<100 µg/kg	TM173		58600	84600	168000	141000	55500	10900
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1530000	1740000	2210000	1790000	662000	514000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<100	31.4	11.6	21.3	20.9	<200
Aromatics >EC7-EC8	<10 µg/kg	TM089		439	<20	<10	<10	<10	<200
Aromatics >EC8-EC10	<10 µg/kg	TM089		51300	6430	2280	3860	1540	265000
Aromatics >EC10-EC12	<10 µg/kg	TM089		42500	3960	2610	4990	1230	242000
Aromatics >EC12-EC16	<100 µg/kg	TM173		85600	21100	31700	81400	16500	78400
Aromatics >EC16-EC21	<100 µg/kg	TM173		226000	108000	277000	408000	88100	43700
Aromatics >EC21-EC35	<100 µg/kg	TM173		906000	629000	1150000	923000	231000	179000
Aromatics >EC35-EC44	<100 µg/kg	TM173		120000	88100	260000	234000	72000	32400
Aromatics >EC40-EC44	<100 µg/kg	TM173		56000	34900	115000	94600	30900	11600
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1340000	846000	1720000	1650000	408000	333000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1700000	1680000	2060000	1670000	614000	1360000
Total Aromatics >C5-35	<100 µg/kg	TM173		1310000	769000	1470000	1420000	339000	808000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		3010000	2450000	3520000	3090000	953000	2170000

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

TPH CWG (S)

Results Legend		Customer Sample R	CAV107	CAV108	CAV109	CAV110	CAV111	CAV112
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
(F)	Trigger breach confirmed	Lab Sample No.(s)	7086009	7086010	7086011	7086012	7086013	7086014
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	3190000	2620000	3950000	3470000	1080000	2210000

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

TPH CWG (S)

Results Legend		Customer Sample R	CAV113	CAV114	CAV115	CAV116	CAV117	CAV118
#	ISO17025 accredited.							
M	*m*CERTS 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							
1-4&+§@	Sample deviation (see appendix)							
		Depth (m)	.	.	.	.	.	.
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
		Sample Time	.	.	.	.	.	.
		Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
		Lab Sample No.(s)	7086015	7086016	7086017	7086018	7086019	7086020
		AGS Reference						

Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	28	81	90	110	75	93
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	38400 M	34300 M	37300 M	39900 M	1090 M	27800 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5 M	<5 M	<5 M	<5 M	<5 M	<5 M
Benzene	<10 µg/kg	TM089	<10 M	119 M	<10 M	37.8 M	15 M	<10 M
Toluene	<2 µg/kg	TM089	<2 M	<2 M	<2 M	<2 M	<2 M	<2 M
Ethylbenzene	<3 µg/kg	TM089	<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
m,p-Xylene	<6 µg/kg	TM089	<6 M	<6 M	<6 M	<6 M	11.5 M	132 M
o-Xylene	<3 µg/kg	TM089	<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	11.5	132
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	119	<24	37.8	26.5	132
Aliphatics >C5-C6	<10 µg/kg	TM089	52.2	1410	36.6	40.1	29.9	26.6
Aliphatics >C6-C8	<10 µg/kg	TM089	1660	27200	1770	5980	405	2090
Aliphatics >C8-C10	<10 µg/kg	TM089	8680	2790	7320	7440	173	6170
Aliphatics >C10-C12	<10 µg/kg	TM089	13300	527	14000	12900	204	9160
Aliphatics >C12-C16	<100 µg/kg	TM173	129000	155000	460000	310000	112000	166000
Aliphatics >C16-C21	<100 µg/kg	TM173	46500	173000	340000	453000	509000	298000
Aliphatics >C21-C35	<100 µg/kg	TM173	90300	162000	272000	1010000	1580000	474000
Aliphatics >C35-C44	<100 µg/kg	TM173	12200	35100	60400	205000	347000	109000
Total Aliphatics >C12-C44	<100 µg/kg	TM173	278000	526000	1130000	1980000	2550000	1050000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<10	119	<10	37.8	15	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089	5790	1860	4880	4960	125	4250
Aromatics >EC10-EC12	<10 µg/kg	TM089	8880	352	9310	8580	136	6110
Aromatics >EC12-EC16	<100 µg/kg	TM173	185000	49900	243000	148000	53000	91000
Aromatics >EC16-EC21	<100 µg/kg	TM173	69700	95700	234000	316000	312000	181000
Aromatics >EC21-EC35	<100 µg/kg	TM173	191000	254000	221000	647000	858000	288000
Aromatics >EC35-EC44	<100 µg/kg	TM173	64100	112000	82800	207000	262000	101000
Aromatics >EC40-EC44	<100 µg/kg	TM173	22500	44300	31200	80400	101000	37600
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	509000	512000	781000	1320000	1490000	661000
Total Aliphatics >C5-35	<100 µg/kg	TM173	290000	522000	1100000	1800000	2200000	956000
Total Aromatics >C5-35	<100 µg/kg	TM173	460000	402000	713000	1120000	1220000	571000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	750000	925000	1810000	2920000	3420000	1530000

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

TPH CWG (S)

Results Legend		Customer Sample R	CAV113	CAV114	CAV115	CAV116	CAV117	CAV118
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.	.	.	.	.
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
*	Subcontracted test.	Sample Time	.	.	.	.	.	.
**	% 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	Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
(F)	Trigger breach confirmed	Lab Sample No.(s)	7086015	7086016	7086017	7086018	7086019	7086020
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	826000	1070000	1950000	3330000	4030000	1740000

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

TPH CWG (S)

Results Legend		Customer Sample R	CAV119	CAV120				
#	ISO17025 accredited.							
M	*m*CERTS 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	Depth (m)	.	.				
		Sample Type	Soil/Solid	Soil/Solid				
		Date Sampled	15/03/2013	15/03/2013				
		Sample Time	.	.				
		Date Received	16/03/2013	16/03/2013				
		SDG Ref	130316-56	130316-56				
(F)	Trigger breach confirmed	Lab Sample No.(s)	7086021	7086022				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	196	85				
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	806000 M	48500 M				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<100 M	<5 M				
Benzene	<10 µg/kg	TM089	<200 M	<10 M				
Toluene	<2 µg/kg	TM089	<40 M	<2 M				
Ethylbenzene	<3 µg/kg	TM089	<60 M	<3 M				
m,p-Xylene	<6 µg/kg	TM089	<120 M	<6 M				
o-Xylene	<3 µg/kg	TM089	<60 M	<3 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	581	30.5				
Aliphatics >C6-C8	<10 µg/kg	TM089	65300	767				
Aliphatics >C8-C10	<10 µg/kg	TM089	231000	11200				
Aliphatics >C10-C12	<10 µg/kg	TM089	213000	17400				
Aliphatics >C12-C16	<100 µg/kg	TM173	312000	194000				
Aliphatics >C16-C21	<100 µg/kg	TM173	147000	130000				
Aliphatics >C21-C35	<100 µg/kg	TM173	248000	366000				
Aliphatics >C35-C44	<100 µg/kg	TM173	60800	62900				
Total Aliphatics >C12-C44	<100 µg/kg	TM173	769000	754000				
Aromatics >EC5-EC7	<10 µg/kg	TM089	<200	<10				
Aromatics >EC7-EC8	<10 µg/kg	TM089	<200	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089	154000	7490				
Aromatics >EC10-EC12	<10 µg/kg	TM089	142000	11600				
Aromatics >EC12-EC16	<100 µg/kg	TM173	198000	56300				
Aromatics >EC16-EC21	<100 µg/kg	TM173	106000	81200				
Aromatics >EC21-EC35	<100 µg/kg	TM173	233000	283000				
Aromatics >EC35-EC44	<100 µg/kg	TM173	88600	93800				
Aromatics >EC40-EC44	<100 µg/kg	TM173	29000	35000				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	625000	515000				
Total Aliphatics >C5-35	<100 µg/kg	TM173	1220000	720000				
Total Aromatics >C5-35	<100 µg/kg	TM173	833000	440000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	2050000	1160000				

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

TPH CWG (S)

Results Legend		Customer Sample R	CAV119	CAV120				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.				
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid				
*	Subcontracted test.	Date Sampled	15/03/2013	15/03/2013				
**	% 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	Sample Time	.	.				
		Date Received	16/03/2013	16/03/2013				
		SDG Ref	130316-56	130316-56				
(F)	Trigger breach confirmed	Lab Sample No.(s)	7086021	7086022				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2200000	1320000				

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV101	CAV102	CAV103	CAV104	CAV105	CAV106
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086003	7086004	7086005	7086006	7086007	7086008
			AGS Reference						
Dibromofluoromethane**	%	TM116		105	103	107	100	109	115
Toluene-d8**	%	TM116		101	99.3	99.4	96.7	99.2	99.9
4-Bromofluorobenzene**	%	TM116		106	109	112	115	106	104
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	238 M	552 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	116 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<280	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV101	CAV102	CAV103	CAV104	CAV105	CAV106
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086003	7086004	7086005	7086006	7086007	7086008
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	104 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<280 #	<280 #	<280 #	308 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<160 #	<160 #	<160 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<240 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	<180 #	<180 #	<180 #	<180 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<300	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV101	CAV102	CAV103	CAV104	CAV105	CAV106
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086003	7086004	7086005	7086006	7086007	7086008
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV107	CAV108	CAV109	CAV110	CAV111	CAV112
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086009	7086010	7086011	7086012	7086013	7086014
			AGS Reference						
Dibromofluoromethane**	%	TM116		107	116	100	102	106	91.9
Toluene-d8**	%	TM116		101	103	109	102	103	83.9
4-Bromofluorobenzene**	%	TM116		103	99.6	113	106	105	72.9
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	<4 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<140	<140	<7
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<200	<200	<10
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<13 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	46.3 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<14 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<5 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	492 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<14 M
Toluene	<5 µg/kg	TM116		233 M	223 M	<100 M	<100 M	267 M	934 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<280	<280	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV107	CAV108	CAV109	CAV110	CAV111	CAV112
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086009	7086010	7086011	7086012	7086013	7086014
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<140 #	<140 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		317 M	133 M	<80 M	<80 M	136 M	1170 M
p/m-Xylene	<14 µg/kg	TM116		630 #	577 #	<280 #	<280 #	562 #	1830 #
o-Xylene	<10 µg/kg	TM116		308 M	<200 M	<200 M	<200 M	<200 M	860 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<10 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	2350 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<340 M	<340 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<10 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	411 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		1350 #	<160 #	<160 #	<160 #	<160 #	2770 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<240 #	<240 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		894 #	<180 #	<180 #	<180 #	<180 #	3540 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<300	<300	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<120 #	<120 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<240	<240	<12
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	1900 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend		Customer Sample R	CAV107	CAV108	CAV109	CAV110	CAV111	CAV112
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
*	Subcontracted test.	Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
**	% 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	Sample Time	.	.	.	.	.	.
		Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
		SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
(F)	Trigger breach confirmed	Lab Sample No.(s)	7086009	7086010	7086011	7086012	7086013	7086014
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M	<120 M	<120 M	<120 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV113	CAV114	CAV115	CAV116	CAV117	CAV118
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086015	7086016	7086017	7086018	7086019	7086020
			AGS Reference						
Dibromofluoromethane**	%	TM116		104	102	104	104	106	106
Toluene-d8**	%	TM116		96.7	101	99.8	99.9	99.8	100
4-Bromofluorobenzene**	%	TM116		113	112	110	109	109	107
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<140	<140	<140	<140	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<200	<200	<200	<200	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<160 M	<160 M	<160 M	<160 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
Benzene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M	<140 M	<140 M	<140 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280	<280	<280	<280	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV113	CAV114	CAV115	CAV116	CAV117	CAV118
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086015	7086016	7086017	7086018	7086019	7086020
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #	<140 #	<140 #	<140 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M	<80 M	<80 M	<80 M	146 M
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #	<280 #	<280 #	<280 #	392 #
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #	<200 #	<200 #	<200 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M	<340 M	<340 M	<340 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
Propylbenzene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M	<180 M	<180 M	<180 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<160 #	<160 #	<160 #	<160 #	<160 #	409 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #	<240 #	<240 #	<240 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<180 #	<180 #	<180 #	<180 #	<180 #	483 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M	<220 M	<220 M	<220 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M	<100 M	<100 M	<100 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M	<200 M	<200 M	<200 M	<200 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M	<240 M	<240 M	<240 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M	<280 M	<280 M	<280 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300	<300	<300	<300	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #	<120 #	<120 #	<120 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240	<240	<240	<240	<240
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M	<260 M	<260 M	<260 M	<260 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV113	CAV114	CAV115	CAV116	CAV117	CAV118
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013	15/03/2013
			Sample Time	.	.	.	.	.	.
			Date Received	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013	16/03/2013
			SDG Ref	130316-56	130316-56	130316-56	130316-56	130316-56	130316-56
			Lab Sample No.(s)	7086015	7086016	7086017	7086018	7086019	7086020
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M	<120 M	<120 M	<120 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV119	CAV120			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	15/03/2013	15/03/2013			
			Sample Time	.	.			
			Date Received	16/03/2013	16/03/2013			
			SDG Ref	130316-56	130316-56			
			Lab Sample No.(s)	7086021	7086022			
			AGS Reference					
Dibromofluoromethane**	%	TM116		105	106			
Toluene-d8**	%	TM116		100	100			
4-Bromofluorobenzene**	%	TM116		109	112			
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<80 M			
Chloromethane	<7 µg/kg	TM116		<140	<140			
Vinyl Chloride	<10 µg/kg	TM116		<200	<200			
Bromomethane	<13 µg/kg	TM116		<260 M	<260 M			
Chloroethane	<14 µg/kg	TM116		<280 M	<280 M			
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<120 M			
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<200 #			
Carbon Disulphide	<7 µg/kg	TM116		<140 M	<140 M			
Dichloromethane	<10 µg/kg	TM116		<200 #	<200 #			
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<220 M			
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<220 M			
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<160 M			
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<100 M			
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M			
Bromochloromethane	<14 µg/kg	TM116		<280 M	<280 M			
Chloroform	<8 µg/kg	TM116		<160 M	<160 M			
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<140 M			
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<220 M			
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<280 M			
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<100 M			
Benzene	<9 µg/kg	TM116		<180 M	<180 M			
Trichloroethene	<9 µg/kg	TM116		<180 M	<180 M			
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<240 M			
Dibromomethane	<9 µg/kg	TM116		<180 M	<180 M			
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<140 M			
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<280 M			
Toluene	<5 µg/kg	TM116		<100 M	<100 M			
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<280			
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<200 M			

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV119	CAV120			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	15/03/2013	15/03/2013			
			Sample Time	.	.			
			Date Received	16/03/2013	16/03/2013			
			SDG Ref	130316-56	130316-56			
			Lab Sample No.(s)	7086021	7086022			
			AGS Reference					
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<140 #			
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<100 M			
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<260 M			
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<240 M			
Chlorobenzene	<5 µg/kg	TM116		<100 M	<100 M			
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<200 M			
Ethylbenzene	<4 µg/kg	TM116		<80 M	<80 M			
p/m-Xylene	<14 µg/kg	TM116		<280 #	<280 #			
o-Xylene	<10 µg/kg	TM116		<200 M	<200 M			
Styrene	<10 µg/kg	TM116		<200 M	<200 M			
Bromoform	<10 µg/kg	TM116		<200 M	<200 M			
Isopropylbenzene	<5 µg/kg	TM116		474 M	<100 M			
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<200 #			
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<340 M			
Bromobenzene	<10 µg/kg	TM116		<200 M	<200 M			
Propylbenzene	<11 µg/kg	TM116		823 M	<220 M			
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<180 M			
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		404 #	<160 #			
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<240 M			
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<240 #			
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		797 #	<180 #			
sec-Butylbenzene	<10 µg/kg	TM116		492 M	<200 M			
4-Isopropyltoluene	<11 µg/kg	TM116		<220 M	<220 M			
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<120 M			
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<100 M			
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<200 M			
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<240 M			
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<280 M			
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<300			
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<120 #			
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<240			
Naphthalene	<13 µg/kg	TM116		<260 M	<260 M			

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

VOC MS (S)

Results Legend		Customer Sample R	CAV119	CAV120				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.							
diss.filt	Dissolved / filtered sample.	Depth (m)	.	.				
tot.unfilt	Total / unfiltered sample.	Sample Type	Soil/Solid	Soil/Solid				
*	Subcontracted test.	Date Sampled	15/03/2013	15/03/2013				
**	% 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	Sample Time	.	.				
		Date Received	16/03/2013	16/03/2013				
		SDG Ref	130316-56	130316-56				
(F)	Trigger breach confirmed	Lab Sample No.(s)	7086021	7086022				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<120 M	<120 M				

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

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 Receieved SDG Original Sample Method Number	CAV101 SOLID 15/03/2013 00:00:00 130316-56 7086003 TM048	22/03/13	Lauren Sargeant	Loose fibres in soil	Detected (#)	Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV102 SOLID 15/03/2013 00:00:00 130316-56 7086004 TM048	22/03/13	Paul Fenney	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 Receieved SDG Original Sample Method Number	CAV103 SOLID 15/03/2013 00:00:00 130316-56 7086005 TM048	22/03/13	Paul Fenney	Loose fibres in soil	Not Detected (#)	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV104 SOLID 15/03/2013 00:00:00 130316-56 7086006 TM048	22/03/13	Lauren Sargeant	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 Receieved SDG Original Sample Method Number	CAV105 SOLID 15/03/2013 00:00:00 130316-56 7086007 TM048	22/03/13	Lauren Sargeant	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

		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 Receieved SDG Original Sample Method Number	CAV106 SOLID 15/03/2013 00:00:00 130316-56 7086008 TM048	22/03/13	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 Receieved SDG Original Sample Method Number	CAV107 SOLID 15/03/2013 00:00:00 130316-56 7086009 TM048	22/03/13	Paul Fenney	Soil containing loose fibres and material typical of AC	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV108 SOLID 15/03/2013 00:00:00 130316-56 7086010 TM048	22/03/13	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 Receieved SDG Original Sample Method Number	CAV109 SOLID 15/03/2013 00:00:00 130316-56 7086011 TM048	22/03/13	Lauren Sargeant	Soil containing loose fibres and ACM debris	Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV110 SOLID 15/03/2013 00:00:00 130316-56 7086012 TM048	22/03/13	Paul Fenney	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 Receieved SDG Original Sample Method Number	CAV111 SOLID 15/03/2013 00:00:00 130316-56 7086013 TM048	25/03/13	Kevin Bowron	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

		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 Receieved SDG Original Sample Method Number	CAV112 SOLID 15/03/2013 00:00:00 130316-56 7086014 TM048	25/03/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV113 SOLID 15/03/2013 00:00:00 130316-56 7086015 TM048	25/03/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV114 SOLID 15/03/2013 00:00:00 130316-56 7086016 TM048	25/03/13	Simon Postlewhite	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 Receieved SDG Original Sample Method Number	CAV115 SOLID 15/03/2013 00:00:00 130316-56 7086017 TM048	25/03/13	Simon Postlewhite	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 Receieved SDG Original Sample Method Number	CAV116 SOLID 15/03/2013 00:00:00 130316-56 7086018 TM048	25/03/13	Simon Postlewhite	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 Receieved SDG Original Sample Method Number	CAV117 SOLID 15/03/2013 00:00:00 130316-56 7086019 TM048	25/03/13	Simon Postlewhite	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

		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 Receieved SDG Original Sample Method Number	CAV118 SOLID 15/03/2013 00:00:00 130316-56 7086020 TM048	25/03/13	Kevin Bowron	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 Receieved SDG Original Sample Method Number	CAV119 SOLID 15/03/2013 00:00:00 130316-56 7086021 TM048	26/03/13	Simon Postlewhite	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 Receieved SDG Original Sample Method Number	CAV120 SOLID 15/03/2013 00:00:00 130316-56 7086022 TM048	26/03/13	Simon Postlewhite	Loose fibres in soil	Not Detected (#)	Trace (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

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 Receieved SDG Original Sample Method Number	CAV101 SOLID 15/03/2013 00:00:00 130316-56 7086003 TM 304	None (#)	N/C	0.5905 (#)	<0.001 (#)	0.5909 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV103 SOLID 15/03/2013 00:00:00 130316-56 7086005 TM 304	None (#)	N/C	0.0011 (#)	<0.001 (#)	0.0015 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV106 SOLID 15/03/2013 00:00:00 130316-56 7086008 TM 304	Amosite (#)	N/C	0.0168 (#)	0.0014 (#)	0.0182 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV109 SOLID 15/03/2013 00:00:00 130316-56 7086011 TM 304	None (#)	N/C	0.0017 (#)	<0.001 (#)	0.0019 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV115 SOLID 15/03/2013 00:00:00 130316-56 7086017 TM 304	Crocidolite (#)	N/C	0.7446 (#)	0.0061 (#)	0.7507 (#)

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

		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 Receieved SDG Original Sample Method Number	CAV116 SOLID 15/03/2013 00:00:00 130316-56 7086018 TM 304	None (#)	N/C	0.0023 (#)	<0.001 (#)	0.0029 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	CAV118 SOLID 15/03/2013 00:00:00 130316-56 7086020 TM 304	None (#)	N/C	0.0020 (#)	0.0010 (#)	0.003 (#)

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

Notification of NDPs (No determination possible)

Date Received : 16/03/2013 18:09:25

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
7086003	CAV101		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086004	CAV102		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086005	CAV103		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086006	CAV104		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086007	CAV105		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086008	CAV106		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086009	CAV107		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086010	CAV108		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086011	CAV109		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086012	CAV110		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086013	CAV111		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086014	CAV112		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086015	CAV113		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086016	CAV114		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086017	CAV115		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086018	CAV116		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086019	CAV117		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086020	CAV118		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086021	CAV119		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos
7086022	CAV120		Total Organic Carbon	Unsuitable for analysis due to potential Asbestos

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

Test Completion Dates

Lab Sample No(s)	7086003	7086004	7086005	7086006	7086007	7086008	7086009	7086010	7086011	7086012
Customer Sample Ref.	CAV101	CAV102	CAV103	CAV104	CAV105	CAV106	CAV107	CAV108	CAV109	CAV110
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
Asbestos Quantification - Full	19-Apr-2013		18-Apr-2013			19-Apr-2013			18-Apr-2013	
EPH CWG (Aliphatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
EPH CWG (Aromatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
GRO by GC-FID (S)	25-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	25-Mar-2013	25-Mar-2013	24-Mar-2013	24-Mar-2013
Metals in solid samples by OES	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
PAH by GCMS	23-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	22-Mar-2013	24-Mar-2013	23-Mar-2013	25-Mar-2013	23-Mar-2013
pH	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013
Sample description	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013
Total Organic Carbon (Asb)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
TPH CWG GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
VOC MS (S)	23-Mar-2013	23-Mar-2013	24-Mar-2013	23-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013

Lab Sample No(s)	7086013	7086014	7086015	7086016	7086017	7086018	7086019	7086020	7086021	7086022
Customer Sample Ref.	CAV111	CAV112	CAV113	CAV114	CAV115	CAV116	CAV117	CAV118	CAV119	CAV120
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	27-Mar-2013	27-Mar-2013
Asbestos Quantification - Full					19-Apr-2013	19-Apr-2013		19-Apr-2013		
EPH CWG (Aliphatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	25-Mar-2013
EPH CWG (Aromatic) GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	25-Mar-2013
GRO by GC-FID (S)	24-Mar-2013	24-Mar-2013	25-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013	24-Mar-2013
Metals in solid samples by OES	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013
PAH by GCMS	23-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	23-Mar-2013	22-Mar-2013	23-Mar-2013	23-Mar-2013	22-Mar-2013
pH	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	22-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013	21-Mar-2013
Sample description	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	20-Mar-2013	21-Mar-2013	20-Mar-2013
Total Organic Carbon (Asb)	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	26-Mar-2013	27-Mar-2013	27-Mar-2013
TPH CWG GC (S)	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	25-Mar-2013	26-Mar-2013	25-Mar-2013
VOC MS (S)	24-Mar-2013	23-Mar-2013	23-Mar-2013	24-Mar-2013	23-Mar-2013	24-Mar-2013	23-Mar-2013	24-Mar-2013	23-Mar-2013	23-Mar-2013

SDG:	130316-56	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0372
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221099
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	217650

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Llandarcy
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Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

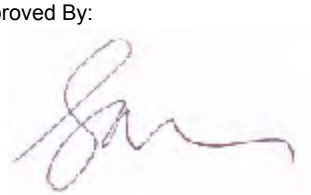
Date:	23 April 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130408-12
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	221630

We received 8 samples on Monday April 08, 2013 and 8 of these samples were scheduled for analysis which was completed on Tuesday April 23, 2013. 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

Alcontrol Laboratories is a trading division of ALcontrol UK Limited
Registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No.

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7199418	CAEM 037 HS BASE			04/04/2013
7199416	CAEM 050 HS BASE			04/04/2013
7199420	CAEM 077 HS BASE			04/04/2013
7199419	CAEM 037 HS SIDE			04/04/2013
7199417	CAEM 050 HS SIDE			04/04/2013
7199421	CAEM 077 HS SIDE			04/04/2013
7199414	CAV131		0.30	04/04/2013
7199415	CAV131		1.70	04/04/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7199418	CAEM 037 HS BASE			250g Amber Jar (AL
			7199416	CAEM 050 HS BASE			60g VOC (ALE215)
			7199420	CAEM 077 HS BASE			250g Amber Jar (AL
			7199419	CAEM 037 HS SIDE			60g VOC (ALE215)
			7199417	CAEM 050 HS SIDE			250g Amber Jar (AL
			7199421	CAEM 077 HS SIDE			60g VOC (ALE215)
			7199414	CAV131		0.30	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
			7199415	CAV131		1.70	250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 1					X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 8	X	X	X	X	X	X	X	X	X	X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 8	X	X	X	X	X	X	X	X	X	X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 8	X	X	X	X	X	X	X	X	X	X
Metals in solid samples by OES	All	NDPs: 0 Tests: 2					X	X
PAH by GCMS	All	NDPs: 0 Tests: 8	X	X	X	X	X	X	X	X	X	X
pH	All	NDPs: 0 Tests: 2					X	X
Sample description	All	NDPs: 0 Tests: 8	X	X	X	X	X	X	X	X	X	X
Total Organic Carbon	All	NDPs: 0 Tests: 2					X	X
TPH CWG GC (S)	All	NDPs: 0 Tests: 8	X	X	X	X	X	X	X	X	X	X
VOC MS (S)	All	NDPs: 0 Tests: 8	X	X	X	X	X	X	X	X	X	X

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
7199418	CAEM 037 HS BASE		Dark Brown	Sandy Silt Loam	0.1 - 2 mm	None	None
7199416	CAEM 050 HS BASE		Grey	Sandy Silt Loam	0.1 - 2 mm	Stones	None
7199420	CAEM 077 HS BASE		Grey	Silty Clay Loam	0.063 - 0.1 mm	Brick	None
7199419	CAEM 037 HS SIDE		Dark Brown	Silt Loam	0.063 - 0.1 mm	Oil/Petroleum	None
7199417	CAEM 050 HS SIDE		Grey	Silty Clay Loam	0.063 - 0.1 mm	Oil/Petroleum	None
7199421	CAEM 077 HS SIDE		Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	Stones	Oil/Petroleum
7199414	CAV131	0.30	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
7199415	CAV131	1.70	Dark Brown	Silt Loam	0.063 - 0.1 mm	None	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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R							
			CAV131	CAV131						
Depth (m)			0.30	1.70						
Sample Type			Soil/Solid	Soil/Solid						
Date Sampled			04/04/2013	04/04/2013						
Sample Time			.	.						
Date Received			08/04/2013	08/04/2013						
SDG Ref			130408-12	130408-12						
Lab Sample No.(s)			7199414	7199415						
AGS Reference										
Soil Organic Matter (SOM)	<0.35 %	TM132	1.51 #	9.72 #						
pH	1 pH Units	TM133	7.99 M	6.55 M						
Arsenic	<0.6 mg/kg	TM181	23.1 M	52.7 M						
Cadmium	<0.02 mg/kg	TM181	2.06 M	1.03 M						
Chromium	<0.9 mg/kg	TM181	13.7 M	12.1 M						
Copper	<1.4 mg/kg	TM181	47.3 M	69.5 M						
Lead	<0.7 mg/kg	TM181	84.9 M	36.4 M						
Mercury	<0.14 mg/kg	TM181	<0.14 M	<0.14 M						
Nickel	<0.2 mg/kg	TM181	17.5 M	11.9 M						
Selenium	<1 mg/kg	TM181	<1 #	1.55 #						
Zinc	<1.9 mg/kg	TM181	206 M	110 M						

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM 037 HS BAS E	CAEM 050 HS BAS E	CAEM 077 HS BAS E	CAEM 037 HS SID E	CAEM 050 HS SID E	CAEM 077 HS SID E
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013
			Sample Time	.	.	.	.	.	.
			Date Received	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013
			SDG Ref	130408-12	130408-12	130408-12	130408-12	130408-12	130408-12
			Lab Sample No.(s)	7199418	7199416	7199420	7199419	7199417	7199421
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		91.5	101	107	106	98.3	101
Acenaphthene-d10 % recovery**	%	TM218		87	99.3	106	95.3	96.4	99.7
Phenanthrene-d10 % recovery**	%	TM218		82.6	95.5	104	89.3	96.2	98.2
Chrysene-d12 % recovery**	%	TM218		78.2	91.7	94.5	85.7	89.7	91.3
Perylene-d12 % recovery**	%	TM218		81.1	95.8	95	85.9	94.1	94
Naphthalene	<9 µg/kg	TM218		630 M	<9 M	56.9 M	917 M	293 M	18200 M
Acenaphthylene	<12 µg/kg	TM218		<12 M	<12 M	<12 M	<12 M	<12 M	<12 M
Acenaphthene	<8 µg/kg	TM218		25.1 M	<8 M	<8 M	46.3 M	45.8 M	26.9 M
Fluorene	<10 µg/kg	TM218		32.5 M	<10 M	<10 M	88 M	63.8 M	15.6 M
Phenanthrene	<15 µg/kg	TM218		81.2 M	<15 M	<15 M	84.8 M	73.9 M	41.7 M
Anthracene	<16 µg/kg	TM218		<16 M	<16 M	<16 M	<16 M	<16 M	<16 M
Fluoranthene	<17 µg/kg	TM218		44.5 M	<17 M	<17 M	<17 M	26 M	<17 M
Pyrene	<15 µg/kg	TM218		40.9 M	<15 M	<15 M	<15 M	33 M	<15 M
Benz(a)anthracene	<14 µg/kg	TM218		<14 M	<14 M	<14 M	<14 M	<14 M	<14 M
Chrysene	<10 µg/kg	TM218		18.2 M	<10 M	<10 M	<10 M	<10 M	<10 M
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 M	<15 M	<15 M	<15 M	<15 M	<15 M
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 M	<14 M	<14 M	<14 M	<14 M	<14 M
Benzo(a)pyrene	<15 µg/kg	TM218		<15 M	<15 M	<15 M	<15 M	<15 M	<15 M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 M	<18 M	<18 M	<18 M	<18 M	<18 M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 M	<23 M	<23 M	<23 M	<23 M	<23 M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 M	<24 M	<24 M	<24 M	<24 M	<24 M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		872	<118	<118	1140	536	18300

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV131	CAV131				
			Depth (m)	0.30	1.70				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	04/04/2013	04/04/2013				
			Sample Time	.	.				
			Date Received	08/04/2013	08/04/2013				
			SDG Ref	130408-12	130408-12				
			Lab Sample No.(s)	7199414	7199415				
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		91.4	129				
Acenaphthene-d10 % recovery**	%	TM218		91.8	128				
Phenanthrene-d10 % recovery**	%	TM218		89	129				
Chrysene-d12 % recovery**	%	TM218		86.5	129				
Perylene-d12 % recovery**	%	TM218		92.7	131				
Naphthalene	<9 µg/kg	TM218		26.5 M	1620 M				
Acenaphthylene	<12 µg/kg	TM218		<12 M	75.8 M				
Acenaphthene	<8 µg/kg	TM218		61.5 M	99.6 M				
Fluorene	<10 µg/kg	TM218		53.8 M	166 M				
Phenanthrene	<15 µg/kg	TM218		300 M	187 M				
Anthracene	<16 µg/kg	TM218		60.7 M	187 M				
Fluoranthene	<17 µg/kg	TM218		350 M	145 M				
Pyrene	<15 µg/kg	TM218		275 M	157 M				
Benz(a)anthracene	<14 µg/kg	TM218		227 M	104 M				
Chrysene	<10 µg/kg	TM218		244 M	115 M				
Benzo(b)fluoranthene	<15 µg/kg	TM218		308 M	102 M				
Benzo(k)fluoranthene	<14 µg/kg	TM218		115 M	44.7 M				
Benzo(a)pyrene	<15 µg/kg	TM218		245 M	75.6 M				
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		146 M	44.5 M				
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		52.1 M	<23 M				
Benzo(g,h,i)perylene	<24 µg/kg	TM218		166 M	49 M				
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		2630	3170				

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM 037 HS BAS E	CAEM 050 HS BAS E	CAEM 077 HS BAS E	CAEM 037 HS SID E	CAEM 050 HS SID E	CAEM 077 HS SID E
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013
			Sample Time	.	.	.	.	.	.
			Date Received	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013
			SDG Ref	130408-12	130408-12	130408-12	130408-12	130408-12	130408-12
			Lab Sample No.(s)	7199418	7199416	7199420	7199419	7199417	7199421
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		133	113	129	111	109	146
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		2290000 3 M	19800 M	295000 M	132000 M	181000 M	1890000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<100 M	<5 M	<50 M	<25 M	140 M	<100 M
Benzene	<10 µg/kg	TM089		4820 M	84.8 M	286 M	<50 M	188 M	1760 M
Toluene	<2 µg/kg	TM089		<40 M	<2 M	<20 M	<10 M	<20 M	<40 M
Ethylbenzene	<3 µg/kg	TM089		<60 M	<3 M	<30 M	<15 M	<30 M	<60 M
m,p-Xylene	<6 µg/kg	TM089		82800 M	<6 M	<60 M	<30 M	<60 M	<120 M
o-Xylene	<3 µg/kg	TM089		<60 M	<3 M	<30 M	<15 M	<30 M	<60 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089		82800	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089		87600	84.8	286	<24	188	1760
Aliphatics >C5-C6	<10 µg/kg	TM089		24700 3	120	7140	1120	191	60800
Aliphatics >C6-C8	<10 µg/kg	TM089		1070000 3	7170	135000	32500	26800	1090000
Aliphatics >C8-C10	<10 µg/kg	TM089		595000 3	4610	57500	37400	37100	324000
Aliphatics >C10-C12	<10 µg/kg	TM089		70200 3	2870	34100	21300	55200	122000
Aliphatics >C12-C16	<100 µg/kg	TM173		105000	12200	9640	77100	216000	24000
Aliphatics >C16-C21	<100 µg/kg	TM173		22300	9770	8950	21200	34300	5030
Aliphatics >C21-C35	<100 µg/kg	TM173		65700	30300	42000	53000	105000	34000
Aliphatics >C35-C44	<100 µg/kg	TM173		4130	4640	<100	1550	77600	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		197000	56800	60600	153000	432000	63100
Aromatics >EC5-EC7	<10 µg/kg	TM089		4820 3	84.8	286	<50	188	1760
Aromatics >EC7-EC8	<10 µg/kg	TM089		<200 3	<10	<100	<50	<100	<200
Aromatics >EC8-EC10	<10 µg/kg	TM089		479000 3	3070	38300	24900	24800	216000
Aromatics >EC10-EC12	<10 µg/kg	TM089		46800 3	1920	22700	14200	36800	81100
Aromatics >EC12-EC16	<100 µg/kg	TM173		39300	6010	7000	63700	106000	31000
Aromatics >EC16-EC21	<100 µg/kg	TM173		13400	8210	3860	15200	30300	7130
Aromatics >EC21-EC35	<100 µg/kg	TM173		135000	36200	39700	165000	125000	67600
Aromatics >EC35-EC44	<100 µg/kg	TM173		35200	9120	8930	20000	132000	8330
Aromatics >EC40-EC44	<100 µg/kg	TM173		4480	1350	<100	3580	49600	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		223000	59500	59500	264000	393000	114000
Total Aliphatics >C5-35	<100 µg/kg	TM173		1950000	67000	294000	244000	474000	1660000
Total Aromatics >C5-35	<100 µg/kg	TM173		718000	55500	112000	284000	323000	405000
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		2670000	122000	406000	527000	797000	2060000

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAEM 037 HS BAS E	CAEM 050 HS BAS E	CAEM 077 HS BAS E	CAEM 037 HS SID E	CAEM 050 HS SID E	CAEM 077 HS SID E
#	ISO17025 accredited.	Depth (m)	.	.	.	.	.	.
M	*m*CERTS accredited.	Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.	Date Sampled	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013
diss.filt	Dissolved / filtered sample.	Sample Time	.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.	Date Received	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013
*	Subcontracted test.	SDG Ref	130408-12	130408-12	130408-12	130408-12	130408-12	130408-12
**	% 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	Lab Sample No.(s)	7199418	7199416	7199420	7199419	7199417	7199421
(F)	Trigger breach confirmed	AGS Reference						
1-4&+§@	Sample deviation (see appendix)							

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2710000	136000	415000	549000	1010000	2070000

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAV131	CAV131				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.30	1.70				
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid				
tot.unfilt	Total / unfiltered sample.	Date Sampled	04/04/2013	04/04/2013				
*	Subcontracted test.	Sample Time	.	.				
**	% 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	Date Received	08/04/2013	08/04/2013				
		SDG Ref	130408-12	130408-12				
(F)	Trigger breach confirmed	Lab Sample No.(s)	7199414	7199415				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	87	94				
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	255 M	237000 M				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5 M	<25 M				
Benzene	<10 µg/kg	TM089	<10 M	<50 M				
Toluene	<2 µg/kg	TM089	5.01 M	<10 M				
Ethylbenzene	<3 µg/kg	TM089	<3 M	<15 M				
m,p-Xylene	<6 µg/kg	TM089	9.02 M	<30 M				
o-Xylene	<3 µg/kg	TM089	3.01 M	<15 M				
sum of detected mpo xylene by GC	<9 µg/kg	TM089	12	<9				
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24				
Aliphatics >C5-C6	<10 µg/kg	TM089	16	1580				
Aliphatics >C6-C8	<10 µg/kg	TM089	71.2	80600				
Aliphatics >C8-C10	<10 µg/kg	TM089	33.1	57900				
Aliphatics >C10-C12	<10 µg/kg	TM089	54.1	35000				
Aliphatics >C12-C16	<100 µg/kg	TM173	3020	106000				
Aliphatics >C16-C21	<100 µg/kg	TM173	4890	54100				
Aliphatics >C21-C35	<100 µg/kg	TM173	21400	75000				
Aliphatics >C35-C44	<100 µg/kg	TM173	<100	<100				
Total Aliphatics >C12-C44	<100 µg/kg	TM173	29300	235000				
Aromatics >EC5-EC7	<10 µg/kg	TM089	<10	86.7				
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10	<50				
Aromatics >EC8-EC10	<10 µg/kg	TM089	36.1	38600				
Aromatics >EC10-EC12	<10 µg/kg	TM089	36.1	23300				
Aromatics >EC12-EC16	<100 µg/kg	TM173	1650	68200				
Aromatics >EC16-EC21	<100 µg/kg	TM173	4440	41800				
Aromatics >EC21-EC35	<100 µg/kg	TM173	27700	149000				
Aromatics >EC35-EC44	<100 µg/kg	TM173	26000	15500				
Aromatics >EC40-EC44	<100 µg/kg	TM173	11600	<100				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	59800	275000				
Total Aliphatics >C5-35	<100 µg/kg	TM173	29500	410000				
Total Aromatics >C5-35	<100 µg/kg	TM173	33800	321000				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173	63300	731000				

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	CAV131	CAV131				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.30	1.70				
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid				
tot.unfilt	Total / unfiltered sample.	Date Sampled	04/04/2013	04/04/2013				
*	Subcontracted test.	Sample Time	.	.				
**	% 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	Date Received	08/04/2013	08/04/2013				
		SDG Ref	130408-12	130408-12				
(F)	Trigger breach confirmed	Lab Sample No.(s)	7199414	7199415				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	89300	747000				

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM 037 HS BAS E	CAEM 050 HS BAS E	CAEM 077 HS BAS E	CAEM 037 HS SID E	CAEM 050 HS SID E	CAEM 077 HS SID E
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013
			Sample Time	.	.	.	.	.	.
			Date Received	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013
			SDG Ref	130408-12	130408-12	130408-12	130408-12	130408-12	130408-12
			Lab Sample No.(s)	7199418	7199416	7199420	7199419	7199417	7199421
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	93.8	94.8	100	100	99.2
Toluene-d8**	%	TM116		106	106	100	102	98	102
4-Bromofluorobenzene**	%	TM116		108	111	134	109	131	114
Dichlorodifluoromethane	<4 µg/kg	TM116		<80 M	<4 M	<4 M	<80 M	<4 M	<80 M
Chloromethane	<7 µg/kg	TM116		<140	<7	<7	<140	<7	<140
Vinyl Chloride	<10 µg/kg	TM116		<200	<10	<10	<200	<10	<200
Bromomethane	<13 µg/kg	TM116		<260 M	<13 M	<13 M	<260 M	<13 M	<260 M
Chloroethane	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<14 M	<280 M
Trichlorofluorormethane	<6 µg/kg	TM116		<120 M	<6 M	<6 M	<120 M	<6 M	<120 M
1,1-Dichloroethene	<10 µg/kg	TM116		<200 #	<10 #	<10 #	<200 #	<10 #	<200 #
Carbon Disulphide	<7 µg/kg	TM116		<140 M	89.5 M	22 M	<140 M	10.6 M	<140 M
Dichloromethane	<10 µg/kg	TM116		<200 #	<10 #	<10 #	<200 #	<10 #	<200 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<220 M	<11 M	<11 M	<220 M	<11 M	<220 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<220 M	<11 M	<11 M	<220 M	<11 M	<220 M
1,1-Dichloroethane	<8 µg/kg	TM116		<160 M	<8 M	<8 M	<160 M	<8 M	<160 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<5 M	<100 M
2,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<12 M	<240 M
Bromochloromethane	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<14 M	<280 M
Chloroform	<8 µg/kg	TM116		<160 M	<8 M	<8 M	<160 M	<8 M	<160 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<140 M	<7 M	<7 M	<140 M	<7 M	<140 M
1,1-Dichloropropene	<11 µg/kg	TM116		<220 M	<11 M	<11 M	<220 M	<11 M	<220 M
Carbontetrachloride	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<14 M	<280 M
1,2-Dichloroethane	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<5 M	<100 M
Benzene	<9 µg/kg	TM116		6300 M	<9 M	164 M	<180 M	<9 M	<180 M
Trichloroethene	<9 µg/kg	TM116		<180 M	<9 M	<9 M	<180 M	<9 M	<180 M
1,2-Dichloropropane	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<12 M	<240 M
Dibromomethane	<9 µg/kg	TM116		<180 M	<9 M	<9 M	<180 M	<9 M	<180 M
Bromodichloromethane	<7 µg/kg	TM116		<140 M	<7 M	<7 M	<140 M	<7 M	<140 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<14 M	<280 M
Toluene	<5 µg/kg	TM116		<100 M	<5 M	16.7 M	<100 M	<5 M	<100 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<280	<14	<14	<280	<14	<280
1,1,2-Trichloroethane	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<10 M	<200 M

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM 037 HS BAS E	CAEM 050 HS BAS E	CAEM 077 HS BAS E	CAEM 037 HS SID E	CAEM 050 HS SID E	CAEM 077 HS SID E
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013
			Sample Time	.	.	.	.	.	.
			Date Received	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013
			SDG Ref	130408-12	130408-12	130408-12	130408-12	130408-12	130408-12
			Lab Sample No.(s)	7199418	7199416	7199420	7199419	7199417	7199421
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<140 #	<7 #	<7 #	<140 #	<7 #	<140 #
Tetrachloroethene	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<5 M	<100 M
Dibromochloromethane	<13 µg/kg	TM116		<260 M	<13 M	<13 M	<260 M	<13 M	<260 M
1,2-Dibromoethane	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<12 M	<240 M
Chlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<5 M	<100 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<10 M	<200 M
Ethylbenzene	<4 µg/kg	TM116		272 M	<4 M	96.3 M	<80 M	<4 M	<80 M
p/m-Xylene	<14 µg/kg	TM116		109000 #	<14 #	107 #	<280 #	<14 #	<280 #
o-Xylene	<10 µg/kg	TM116		<200 M	<10 M	111 M	<200 M	<10 M	<200 M
Styrene	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<10 M	<200 M
Bromoform	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<10 M	<200 M
Isopropylbenzene	<5 µg/kg	TM116		7960 M	<5 M	691 M	1540 M	284 M	3970 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<200 #	<10 #	<10 #	<200 #	<10 #	<200 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<340 M	<17 M	<17 M	<340 M	<17 M	<340 M
Bromobenzene	<10 µg/kg	TM116		<200 M	<10 M	<10 M	<200 M	<10 M	<200 M
Propylbenzene	<11 µg/kg	TM116		9020 M	<11 M	1850 M	2690 M	290 M	10100 M
2-Chlorotoluene	<9 µg/kg	TM116		<180 M	<9 M	<9 M	<180 M	<9 M	<180 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		11200 #	<8 #	<8 #	861 #	<8 #	<160 #
4-Chlorotoluene	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<12 M	<240 M
tert-Butylbenzene	<12 µg/kg	TM116		<240 #	<12 #	<12 #	<240 #	<12 #	<240 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		31400 #	<9 #	64.6 #	10500 #	<9 #	911 #
sec-Butylbenzene	<10 µg/kg	TM116		<200 M	<10 M	148 M	1530 M	323 M	764 M
4-Isopropyltoluene	<11 µg/kg	TM116		858 M	<11 M	<11 M	418 M	<11 M	<220 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<6 M	<120 M	<6 M	<120 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<100 M	<5 M	<5 M	<100 M	<5 M	<100 M
n-Butylbenzene	<10 µg/kg	TM116		<200 M	<10 M	668 M	<200 M	<10 M	3920 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<240 M	<12 M	<12 M	<240 M	<12 M	<240 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<280 M	<14 M	<14 M	<280 M	<14 M	<280 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<300	<15	<15	<300	<15	<300
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<120 #	<6 #	<6 #	<120 #	<6 #	<120 #
Hexachlorobutadiene	<12 µg/kg	TM116		<240	<12	<12	<240	<12	<240
Naphthalene	<13 µg/kg	TM116		899 M	<13 M	102 M	1450 M	305 M	6280 M

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEM 037 HS BAS E	CAEM 050 HS BAS E	CAEM 077 HS BAS E	CAEM 037 HS SID E	CAEM 050 HS SID E	CAEM 077 HS SID E
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013	04/04/2013
			Sample Time	.	.	.	.	.	.
			Date Received	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013	08/04/2013
			SDG Ref	130408-12	130408-12	130408-12	130408-12	130408-12	130408-12
			Lab Sample No.(s)	7199418	7199416	7199420	7199419	7199417	7199421
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<120 M	<6 M	<6 M	<120 M	<6 M	<120 M

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV131	CAV131				
			Depth (m)	0.30	1.70				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	04/04/2013	04/04/2013				
			Sample Time	.	.				
			Date Received	08/04/2013	08/04/2013				
			SDG Ref	130408-12	130408-12				
			Lab Sample No.(s)	7199414	7199415				
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	102				
Toluene-d8**	%	TM116		98.8	102				
4-Bromofluorobenzene**	%	TM116		122	107				
Dichlorodifluoromethane	<4 µg/kg	TM116		<8 M	<80 M				
Chloromethane	<7 µg/kg	TM116		<14	<140				
Vinyl Chloride	<10 µg/kg	TM116		<20	<200				
Bromomethane	<13 µg/kg	TM116		<26 M	<260 M				
Chloroethane	<14 µg/kg	TM116		<28 M	<280 M				
Trichlorofluorormethane	<6 µg/kg	TM116		<12 M	<120 M				
1,1-Dichloroethene	<10 µg/kg	TM116		<20 #	<200 #				
Carbon Disulphide	<7 µg/kg	TM116		<14 M	<140 M				
Dichloromethane	<10 µg/kg	TM116		<20 #	<200 #				
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<22 M	<220 M				
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<22 M	<220 M				
1,1-Dichloroethane	<8 µg/kg	TM116		<16 M	<160 M				
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<10 M	<100 M				
2,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M				
Bromochloromethane	<14 µg/kg	TM116		<28 M	<280 M				
Chloroform	<8 µg/kg	TM116		<16 M	<160 M				
1,1,1-Trichloroethane	<7 µg/kg	TM116		<14 M	<140 M				
1,1-Dichloropropene	<11 µg/kg	TM116		<22 M	<220 M				
Carbontetrachloride	<14 µg/kg	TM116		<28 M	<280 M				
1,2-Dichloroethane	<5 µg/kg	TM116		<10 M	<100 M				
Benzene	<9 µg/kg	TM116		<18 M	<180 M				
Trichloroethene	<9 µg/kg	TM116		<18 M	<180 M				
1,2-Dichloropropane	<12 µg/kg	TM116		<24 M	<240 M				
Dibromomethane	<9 µg/kg	TM116		<18 M	<180 M				
Bromodichloromethane	<7 µg/kg	TM116		<14 M	<140 M				
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<28 M	<280 M				
Toluene	<5 µg/kg	TM116		<10 M	<100 M				
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<28	<280				
1,1,2-Trichloroethane	<10 µg/kg	TM116		<20 M	<200 M				

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAV131	CAV131				
			Depth (m)	0.30	1.70				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	04/04/2013	04/04/2013				
			Sample Time	.	.				
			Date Received	08/04/2013	08/04/2013				
			SDG Ref	130408-12	130408-12				
			Lab Sample No.(s)	7199414	7199415				
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<14 #	<140 #				
Tetrachloroethene	<5 µg/kg	TM116		<10 M	<100 M				
Dibromochloromethane	<13 µg/kg	TM116		<26 M	<260 M				
1,2-Dibromoethane	<12 µg/kg	TM116		<24 M	<240 M				
Chlorobenzene	<5 µg/kg	TM116		<10 M	<100 M				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<20 M	<200 M				
Ethylbenzene	<4 µg/kg	TM116		<8 M	<80 M				
p/m-Xylene	<14 µg/kg	TM116		<28 #	<280 #				
o-Xylene	<10 µg/kg	TM116		<20 M	<200 M				
Styrene	<10 µg/kg	TM116		<20 M	<200 M				
Bromoform	<10 µg/kg	TM116		<20 M	<200 M				
Isopropylbenzene	<5 µg/kg	TM116		<10 M	1040 M				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<20 #	<200 #				
1,2,3-Trichloropropane	<17 µg/kg	TM116		<34 M	<340 M				
Bromobenzene	<10 µg/kg	TM116		<20 M	<200 M				
Propylbenzene	<11 µg/kg	TM116		<22 M	1510 M				
2-Chlorotoluene	<9 µg/kg	TM116		<18 M	<180 M				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<16 #	819 #				
4-Chlorotoluene	<12 µg/kg	TM116		<24 M	<240 M				
tert-Butylbenzene	<12 µg/kg	TM116		<24 #	<240 #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<18 #	8230 #				
sec-Butylbenzene	<10 µg/kg	TM116		<20 M	736 M				
4-Isopropyltoluene	<11 µg/kg	TM116		<22 M	623 M				
1,3-Dichlorobenzene	<6 µg/kg	TM116		<12 M	<120 M				
1,4-Dichlorobenzene	<5 µg/kg	TM116		<10 M	<100 M				
n-Butylbenzene	<10 µg/kg	TM116		<20 M	<200 M				
1,2-Dichlorobenzene	<12 µg/kg	TM116		<24 M	<240 M				
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<28 M	<280 M				
Tert-amyl methyl ether	<15 µg/kg	TM116		<30	<300				
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<12 #	<120 #				
Hexachlorobutadiene	<12 µg/kg	TM116		<24	<240				
Naphthalene	<13 µg/kg	TM116		129 M	2570 M				

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend		Customer Sample R	CAV131	CAV131				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	0.30	1.70				
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid				
tot.unfilt	Total / unfiltered sample.	Date Sampled	04/04/2013	04/04/2013				
*	Subcontracted test.	Sample Time	.	.				
**	% 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	Date Received	08/04/2013	08/04/2013				
		SDG Ref	130408-12	130408-12				
(F)	Trigger breach confirmed	Lab Sample No.(s)	7199414	7199415				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						
Component	**LOD/Units**	**Method**						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116	<12 M	<120 M				

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	CAV131 0.30 SOLID 04/04/2013 00:00:00 130408-12 7199414 TM048	19/04/13	Simon Postlewhite	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
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)		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	7199418	7199416	7199420	7199419	7199417	7199421	7199414	7199415
Customer Sample Ref.	CAEM 037 HS BASE	CAEM 050 HS BASE	CAEM 077 HS BASE	CAEM 037 HS SIDE	CAEM 050 HS SIDE	CAEM 077 HS SIDE	CAV131	CAV131
AGS Ref.								
Depth							0.30	1.70
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples							19-Apr-2013	
EPH CWG (Aliphatic) GC (S)	15-Apr-2013	15-Apr-2013	12-Apr-2013	15-Apr-2013	15-Apr-2013	15-Apr-2013	12-Apr-2013	15-Apr-2013
EPH CWG (Aromatic) GC (S)	15-Apr-2013	15-Apr-2013	12-Apr-2013	15-Apr-2013	15-Apr-2013	15-Apr-2013	12-Apr-2013	15-Apr-2013
GRO by GC-FID (S)	11-Apr-2013	10-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	11-Apr-2013	10-Apr-2013	11-Apr-2013
Metals in solid samples by OES							11-Apr-2013	12-Apr-2013
PAH by GCMS	12-Apr-2013	12-Apr-2013	15-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	12-Apr-2013	16-Apr-2013
pH							12-Apr-2013	11-Apr-2013
Sample description	09-Apr-2013	09-Apr-2013	09-Apr-2013	09-Apr-2013	09-Apr-2013	09-Apr-2013	09-Apr-2013	09-Apr-2013
Total Organic Carbon							22-Apr-2013	11-Apr-2013
TPH CWG GC (S)	15-Apr-2013	15-Apr-2013	12-Apr-2013	15-Apr-2013	15-Apr-2013	15-Apr-2013	12-Apr-2013	15-Apr-2013
VOC MS (S)	11-Apr-2013	11-Apr-2013	10-Apr-2013	11-Apr-2013	11-Apr-2013	12-Apr-2013	12-Apr-2013	11-Apr-2013

SDG:	130408-12	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0386
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	221630
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Llandarcy
SA10 6HJ

Attention: Selina Bamforth

CERTIFICATE OF ANALYSIS

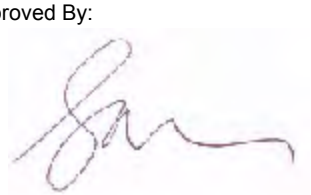
Date:	19 May 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130504-78
Your Reference:	Commercial Area
Location:	Coed Darcy Urban Village
Report No:	225045

We received 14 samples on Saturday May 04, 2013 and 14 of these samples were scheduled for analysis which was completed on Sunday May 19, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7361392	CAEMV037 A			02/05/2013
7361394	CAEMV037 B			02/05/2013
7361395	CAEMV037 C			02/05/2013
7361400	CAEMV037 D			03/05/2013
7361401	CAEMV037 E			03/05/2013
7361403	CAEMV037 F			03/05/2013
7361404	CAEMV037 G			03/05/2013
7361405	CAEMV037 H			03/05/2013
7361409	CAEMV037 I			03/05/2013
7361412	EM LEACH 1			03/05/2013
7361413	EM LEACH 2			03/05/2013
7361414	EM LEACH 3			03/05/2013
7361397	SP87A-4			02/05/2013
7361398	SP87A-5			02/05/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

Lab Sample No(s)	7361392	7361394	7361395	7361400	7361401	7361403	7361404	7361405	7361409	7361412	7361413	7361414	7361397	7361398
Customer Sample Reference	CAEMV037 A	CAEMV037 B	CAEMV037 C	CAEMV037 D	CAEMV037 E	CAEMV037 F	CAEMV037 G	CAEMV037 H	CAEMV037 I	EM LEACH 1	EM LEACH 2	EM LEACH 3	SP87A-4	SP87A-5
AGS Reference														
Depth (m)														
Container	250g Amber Jar (AL	60g VOC (ALE215)	250g Amber Jar (AL	60g VOC (ALE215)	250g Amber Jar (AL	60g VOC (ALE215)	250g Amber Jar (AL	60g VOC (ALE215)	250g Amber Jar (AL	60g VOC (ALE215)	400g Tub (ALE214)	400g Tub (ALE214)	400g Tub (ALE214)	250g Amber Jar (AL	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)	250g Amber Jar (AL	400g Tub (ALE214)	60g VOC (ALE215)

Ammoniacal Nitrogen	All	NDPs: 0 Tests: 3											X	X	X						
Anions by Kone (w)	All	NDPs: 0 Tests: 3											X	X	X						
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 2														X			X		
CEN Readings	All	NDPs: 0 Tests: 3											X	X	X						
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 3											X	X	X						
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 0 Tests: 3											X	X	X						
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2														X			X		
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 0 Tests: 3											X	X	X						
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 2														X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2																X			X
GRO by GC-FID (W)	All	NDPs: 0 Tests: 3											X	X	X						
Mercury Dissolved	All	NDPs: 0 Tests: 3											X	X	X						
Metals by iCap-OES Dissolved (W)	All	NDPs: 0 Tests: 3											X	X	X						
Metals in solid samples by OES	All	NDPs: 0 Tests: 2														X			X		
Nitrite by Kone (w)	All	NDPs: 0 Tests: 3											X	X	X						

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

SOLID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
			7361392	CAEMV037 A			250g Amber Jar (AL
			7361394	CAEMV037 B			60g VOC (ALE215)
			7361395	CAEMV037 C			250g Amber Jar (AL
			7361400	CAEMV037 D			60g VOC (ALE215)
			7361401	CAEMV037 E			250g Amber Jar (AL
			7361403	CAEMV037 F			60g VOC (ALE215)
			7361404	CAEMV037 G			250g Amber Jar (AL
			7361405	CAEMV037 H			60g VOC (ALE215)
			7361409	CAEMV037 I			250g Amber Jar (AL
			7361412	EM LEACH 1			60g VOC (ALE215)
			7361413	EM LEACH 2			400g Tub (ALE214)
			7361414	EM LEACH 3			400g Tub (ALE214)
			7361397	SP87A-4			250g Amber Jar (AL
			7361398	SP87A-5			400g Tub (ALE214)
							60g VOC (ALE215)
							250g Amber Jar (AL
							400g Tub (ALE214)
							60g VOC (ALE215)
PAH in waters by GC-MS (diss.filt)	All	NDPs: 0 Tests: 3					
pH	All	NDPs: 0 Tests: 2					
Sample description	All	NDPs: 0 Tests: 14					
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2					
Total Organic Carbon	All	NDPs: 0 Tests: 2					
TPH CWG Filtered (W)	All	NDPs: 0 Tests: 3					
TPH CWG GC (S)	All	NDPs: 0 Tests: 2					
VOC MS (S)	All	NDPs: 0 Tests: 11					
VOC MS (W)	All	NDPs: 0 Tests: 3					

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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
7361392	CAEMV037 A		Light Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7361394	CAEMV037 B		Light Brown	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7361395	CAEMV037 C		Light Brown	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7361400	CAEMV037 D		Light Brown	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	Stones
7361401	CAEMV037 E		Light Brown	Sand	0.1 - 2 mm	Metal	Stones
7361403	CAEMV037 F		Light Brown	Sandy Loam	0.1 - 2 mm	Stones	None
7361404	CAEMV037 G		Light Brown	Loamy Sand	0.1 - 2 mm	Stones	Oil/Petroleum
7361405	CAEMV037 H		Light Brown	Loamy Sand	0.1 - 2 mm	Stones	Oil/Petroleum
7361409	CAEMV037 I		Light Brown	Sandy Loam	0.1 - 2 mm	Stones	Oil/Petroleum
7361412	EM LEACH 1		Light Brown	Sandy Loam	0.1 - 2 mm	Stones	None
7361413	EM LEACH 2		Light Brown	Sandy Loam	0.1 - 2 mm	Stones	None
7361414	EM LEACH 3		Light Brown	Sandy Loam	0.1 - 2 mm	Stones	None
7361397	SP87A-4		Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
7361398	SP87A-5		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 ocurring 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.

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	SP87A-4	SP87A-5			
			Depth (m)	.	.			
			Sample Type	Soil/Solid	Soil/Solid			
			Date Sampled	02/05/2013	02/05/2013			
			Sample Time	.	.			
			Date Received	04/05/2013	04/05/2013			
			SDG Ref	130504-78	130504-78			
			Lab Sample No.(s)	7361397	7361398			
			AGS Reference					
Soil Organic Matter (SOM)	<0.35 %	TM132		0.914 #	0.702 #			
pH	1 pH Units	TM133		8.39 M	7.8 M			
Arsenic	<0.6 mg/kg	TM181		24.4 M	34.7 M			
Cadmium	<0.02 mg/kg	TM181		2.28 M	2.07 M			
Chromium	<0.9 mg/kg	TM181		36.6 M	35 M			
Copper	<1.4 mg/kg	TM181		16.6 M	19.7 M			
Lead	<0.7 mg/kg	TM181		134 M	138 M			
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M			
Nickel	<0.2 mg/kg	TM181		31.2 M	33.2 M			
Selenium	<1 mg/kg	TM181		3.99 #	4.39 #			
Zinc	<1.9 mg/kg	TM181		882 M	905 M			

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	SP87A-4	SP87A-5				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	02/05/2013	02/05/2013				
			Sample Time	.	.				
			Date Received	04/05/2013	04/05/2013				
			SDG Ref	130504-78	130504-78				
			Lab Sample No.(s)	7361397	7361398				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	SP87A-4	SP87A-5				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	02/05/2013	02/05/2013				
			Sample Time	.	.				
			Date Received	04/05/2013	04/05/2013				
			SDG Ref	130504-78	130504-78				
			Lab Sample No.(s)	7361397	7361398				
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100				
Acenaphthylene	<100 µg/kg	TM157		<100	<100				
Acenaphthene	<100 µg/kg	TM157		<100	<100				
Anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100				
Chrysene	<100 µg/kg	TM157		<100	<100				
Fluoranthene	<100 µg/kg	TM157		<100	<100				
Fluorene	<100 µg/kg	TM157		<100	<100				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100				
Phenanthrene	<100 µg/kg	TM157		<100	<100				
Pyrene	<100 µg/kg	TM157		<100	<100				
Naphthalene	<100 µg/kg	TM157		<100	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	SP87A-4	SP87A-5				
			Depth (m)	.	.				
			Sample Type	Soil/Solid	Soil/Solid				
			Date Sampled	02/05/2013	02/05/2013				
			Sample Time	.	.				
			Date Received	04/05/2013	04/05/2013				
			SDG Ref	130504-78	130504-78				
			Lab Sample No.(s)	7361397	7361398				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		138	125				
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089		<44 M	<44 M				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089		<5 M	<5 M				
Benzene	<10 µg/kg	TM089		<10 M	<10 M				
Toluene	<2 µg/kg	TM089		<2 M	<2 M				
Ethylbenzene	<3 µg/kg	TM089		<3 M	<3 M				
m,p-Xylene	<6 µg/kg	TM089		<6 M	<6 M				
o-Xylene	<3 µg/kg	TM089		3.63 M	<3 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		<10	<10				
Aliphatics >C6-C8	<10 µg/kg	TM089		<10	<10				
Aliphatics >C8-C10	<10 µg/kg	TM089		<10	<10				
Aliphatics >C10-C12	<10 µg/kg	TM089		<10	<10				
Aliphatics >C12-C16	<100 µg/kg	TM173		1660	<100				
Aliphatics >C16-C21	<100 µg/kg	TM173		2650	<100				
Aliphatics >C21-C35	<100 µg/kg	TM173		26300	<100				
Aliphatics >C35-C44	<100 µg/kg	TM173		9070	<100				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		39700	<100				
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10	<10				
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10	<10				
Aromatics >EC12-EC16	<100 µg/kg	TM173		3090	1930				
Aromatics >EC16-EC21	<100 µg/kg	TM173		5950	3050				
Aromatics >EC21-EC35	<100 µg/kg	TM173		38500	15400				
Aromatics >EC35-EC44	<100 µg/kg	TM173		21700	6260				
Aromatics >EC40-EC44	<100 µg/kg	TM173		9030	2340				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		69300	26700				
Total Aliphatics >C5-35	<100 µg/kg	TM173		30600	<100				
Total Aromatics >C5-35	<100 µg/kg	TM173		47600	20400				
Total Aliphatics & Aromatics >C5-35	<100 µg/kg	TM173		78200	20400				

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

TPH CWG (S)

Results Legend		Customer Sample R	SP87A-4	SP87A-5				
#	ISO17025 accredited.							
M	*m*CERTS accredited.							
aq	Aqueous / settled sample.	Depth (m)	.	.				
diss.filt	Dissolved / filtered sample.	Sample Type	Soil/Solid	Soil/Solid				
tot.unfilt	Total / unfiltered sample.	Date Sampled	02/05/2013	02/05/2013				
*	Subcontracted test.	Sample Time	.	.				
**	% 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	Date Received	04/05/2013	04/05/2013				
		SDG Ref	130504-78	130504-78				
(F)	Trigger breach confirmed	Lab Sample No.(s)	7361397	7361398				
1-4&+§@	Sample deviation (see appendix)	AGS Reference						

Component	LOD/Units	Method						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	109000	26700				

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV037 A	CAEMV037 B	CAEMV037 C	CAEMV037 D	CAEMV037 E	CAEMV037 F
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/05/2013	02/05/2013	02/05/2013	03/05/2013	03/05/2013	03/05/2013
			Sample Time	.	.	.	.	.	.
			Date Received	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013
			SDG Ref	130504-78	130504-78	130504-78	130504-78	130504-78	130504-78
			Lab Sample No.(s)	7361392	7361394	7361395	7361400	7361401	7361403
			AGS Reference						
Dibromofluoromethane**	%	TM116		101	103	99.9	103	105	101
Toluene-d8**	%	TM116		99.6	101	101	101	100	99.4
4-Bromofluorobenzene**	%	TM116		117	117	113	112	116	126
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<4 M	<4 M	<4 M	<4 M	<4 M
Chloromethane	<7 µg/kg	TM116		<7	<7	<7	<7	<7	<7
Vinyl Chloride	<10 µg/kg	TM116		<10	<10	<10	<10	<10	<10
Bromomethane	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M	<13 M	<13 M
Chloroethane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M	<6 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<7 M	<7 M
Dichloromethane	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<8 M	<8 M	<8 M	<8 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M	<14 M
Chloroform	<8 µg/kg	TM116		<8 M	<8 M	<8 M	<8 M	<8 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<7 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<5 M	<5 M	27.1 M	<5 M	<5 M
Benzene	<9 µg/kg	TM116		<9 M	<9 M	170 M	<9 M	<9 M	<9 M
Trichloroethene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<9 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<9 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<7 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M	<14 M
Toluene	<5 µg/kg	TM116		<5 M	<5 M	184 M	<5 M	<5 M	<5 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<14	<14	<14	<14	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV037 A	CAEMV037 B	CAEMV037 C	CAEMV037 D	CAEMV037 E	CAEMV037 F
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/05/2013	02/05/2013	02/05/2013	03/05/2013	03/05/2013	03/05/2013
			Sample Time	.	.	.	.	.	.
			Date Received	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013
			SDG Ref	130504-78	130504-78	130504-78	130504-78	130504-78	130504-78
			Lab Sample No.(s)	7361392	7361394	7361395	7361400	7361401	7361403
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<7 #	<7 #	<7 #	<7 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M	<13 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<4 M	<4 M	158 M	<4 M	<4 M	<4 M
p/m-Xylene	<14 µg/kg	TM116		<14 #	<14 #	548 #	<14 #	<14 #	<14 #
o-Xylene	<10 µg/kg	TM116		<10 M	<10 M	133 M	<10 M	<10 M	<10 M
Styrene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
Bromoform	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		<5 M	<5 M	13.9 M	<5 M	<5 M	<5 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<10 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<17 M	<17 M	<17 M	<17 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
Propylbenzene	<11 µg/kg	TM116		<11 M	<11 M	17.6 M	<11 M	<11 M	<11 M
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<9 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	<8 #	15.2 #	<8 #	<8 #	<8 #
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<12 #	<12 #	<12 #	<12 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 #	<9 #	84.9 #	<9 #	<9 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M	<6 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<15	<15	<15	<15	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<6 #	<6 #	<6 #	<6 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<12	<12	<12	<12	<12
Naphthalene	<13 µg/kg	TM116		<13 M	<13 M	30.9 M	<13 M	<13 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV037 A	CAEMV037 B	CAEMV037 C	CAEMV037 D	CAEMV037 E	CAEMV037 F
			Depth (m)	.	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	02/05/2013	02/05/2013	02/05/2013	03/05/2013	03/05/2013	03/05/2013
			Sample Time	.	.	.	.	.	.
			Date Received	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013
			SDG Ref	130504-78	130504-78	130504-78	130504-78	130504-78	130504-78
			Lab Sample No.(s)	7361392	7361394	7361395	7361400	7361401	7361403
			AGS Reference						
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M	<6 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV037 G	CAEMV037 H	CAEMV037 I	SP87A-4	SP87A-5
			Depth (m)	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	03/05/2013	03/05/2013	03/05/2013	02/05/2013	02/05/2013
			Sample Time	.	.	.	.	.
			Date Received	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013
			SDG Ref	130504-78	130504-78	130504-78	130504-78	130504-78
			Lab Sample No.(s)	7361404	7361405	7361409	7361397	7361398
			AGS Reference					
Dibromofluoromethane**	%	TM116		101	100	101	111	104
Toluene-d8**	%	TM116		98.6	99.9	99.3	102	103
4-Bromofluorobenzene**	%	TM116		120	121	114	101	98.5
Dichlorodifluoromethane	<4 µg/kg	TM116		<4 M	<4 M	<4 M	<4 M	<4 M
Chloromethane	<7 µg/kg	TM116		<7	<7	<7	<7	<7
Vinyl Chloride	<10 µg/kg	TM116		<10	<10	<10	<10	<10
Bromomethane	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M	<13 M
Chloroethane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M	<6 M
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<7 M
Dichloromethane	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<10 #
Methyl Tertiary Butyl Ether	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M
trans-1,2-Dichloroethene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M	<8 M	<8 M	<8 M	<8 M
cis-1,2-Dichloroethene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M
2,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M
Bromochloromethane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M
Chloroform	<8 µg/kg	TM116		<8 M	<8 M	<8 M	<8 M	<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<7 M
1,1-Dichloropropene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M
Carbontetrachloride	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M
Benzene	<9 µg/kg	TM116		96.1 M	<9 M	<9 M	<9 M	<9 M
Trichloroethene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<9 M
1,2-Dichloropropane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M
Dibromomethane	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<7 M
cis-1,3-Dichloropropene	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M
Toluene	<5 µg/kg	TM116		6.44 M	<5 M	<5 M	<5 M	<5 M
trans-1,3-Dichloropropene	<14 µg/kg	TM116		<14	<14	<14	<14	<14
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV037 G	CAEMV037 H	CAEMV037 I	SP87A-4	SP87A-5
			Depth (m)	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	03/05/2013	03/05/2013	03/05/2013	02/05/2013	02/05/2013
			Sample Time	.	.	.	.	.
			Date Received	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013
			SDG Ref	130504-78	130504-78	130504-78	130504-78	130504-78
			Lab Sample No.(s)	7361404	7361405	7361409	7361397	7361398
			AGS Reference					
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #	<7 #	<7 #	<7 #	<7 #
Tetrachloroethene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M
Dibromochloromethane	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M	<13 M
1,2-Dibromoethane	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M
Chlorobenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M
Ethylbenzene	<4 µg/kg	TM116		<4 M	<4 M	<4 M	<4 M	<4 M
p/m-Xylene	<14 µg/kg	TM116		<14 #	<14 #	<14 #	<14 #	<14 #
o-Xylene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M
Styrene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M
Bromoform	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M
Isopropylbenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #	<10 #	<10 #	<10 #	<10 #
1,2,3-Trichloropropane	<17 µg/kg	TM116		<17 M	<17 M	<17 M	<17 M	<17 M
Bromobenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M
Propylbenzene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M
2-Chlorotoluene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 #	<8 #	<8 #	<8 #	<8 #
4-Chlorotoluene	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M
tert-Butylbenzene	<12 µg/kg	TM116		<12 #	<12 #	<12 #	<12 #	<12 #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 #	<9 #	<9 #	<9 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M
4-Isopropyltoluene	<11 µg/kg	TM116		<11 M	<11 M	<11 M	<11 M	<11 M
1,3-Dichlorobenzene	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M	<6 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M	<5 M	<5 M	<5 M	<5 M
n-Butylbenzene	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 M
1,2-Dichlorobenzene	<12 µg/kg	TM116		<12 M	<12 M	<12 M	<12 M	<12 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M	<14 M	<14 M	<14 M	<14 M
Tert-amyl methyl ether	<15 µg/kg	TM116		<15	<15	<15	<15	<15
1,2,4-Trichlorobenzene	<6 µg/kg	TM116		<6 #	<6 #	<6 #	<6 #	<6 #
Hexachlorobutadiene	<12 µg/kg	TM116		<12	<12	<12	<12	<12
Naphthalene	<13 µg/kg	TM116		<13 M	<13 M	<13 M	<13 M	<13 M

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	CAEMV037 G	CAEMV037 H	CAEMV037 I	SP87A-4	SP87A-5
			Depth (m)	.	.	.	.	.
			Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
			Date Sampled	03/05/2013	03/05/2013	03/05/2013	02/05/2013	02/05/2013
			Sample Time	.	.	.	.	.
			Date Received	04/05/2013	04/05/2013	04/05/2013	04/05/2013	04/05/2013
			SDG Ref	130504-78	130504-78	130504-78	130504-78	130504-78
			Lab Sample No.(s)	7361404	7361405	7361409	7361397	7361398
			AGS Reference					
1,2,3-Trichlorobenzene	<6 µg/kg	TM116		<6 M	<6 M	<6 M	<6 M	<6 M

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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 Receieved SDG Original Sample Method Number	SP87A-4 SOLID 02/05/2013 00:00:00 130504-78 7361397 TM048	16/05/13	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 Receieved SDG Original Sample Method Number	SP87A-5 SOLID 02/05/2013 00:00:00 130504-78 7361398 TM048	16/05/13	Lauren Sargeant	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.115	**Moisture Content Ratio (%)**	27.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	78.3
Particle Size <4mm	>95%		

Case				
SDG	130504-78			
Lab Sample Number(s)	7361412			
Sampled Date	03-May-2013			
Customer Sample Ref.	EM LEACH 1			
Depth (m)				

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Arsenic	0.0353	<0.00012	0.353	<0.0012	-	-	-
Barium	-	-	-	-	-	-	-
Cadmium	0.00118	<0.0001	0.0118	<0.001	-	-	-
Chromium	0.0035	<0.00022	0.035	<0.0022	-	-	-
Copper	1.53	<0.0085	15.3	<0.085	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Molybdenum	-	-	-	-	-	-	-
Nickel	0.377	<0.00015	3.77	<0.0015	-	-	-
Lead	0.274	<0.00002	2.74	<0.0002	-	-	-
Antimony	-	-	-	-	-	-	-
Selenium	0.0764	<0.00039	0.764	<0.0039	-	-	-
Zinc	0.0768	<0.00041	0.768	<0.0041	-	-	-
Chloride	-	-	-	-	-	-	-
Fluoride	-	-	-	-	-	-	-
Sulphate (soluble)	-	-	-	-	-	-	-
Total Dissolved Solids	-	-	-	-	-	-	-
Total Monohydric Phenols (W)	-	-	-	-	-	-	-
Dissolved Organic Carbon	-	-	-	-	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.61
Conductivity (µS/cm)	12.60
Temperature (°C)	20.90
Volume Leachant (Litres)	0.875
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALcontrol cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
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SDG	130504-78
Lab Sample Number(s)	7361412
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 1
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	0.353	<0.01	3.53	<0.1	-	-	-
Aromatics >EC16-EC21	0.264	<0.01	2.64	<0.1	-	-	-
Aromatics >EC21-EC35	0.044	<0.01	0.44	<0.1	-	-	-
Total Aromatics >EC12-EC35	0.661	<0.01	6.61	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	1.42	<0.01	14.2	<0.1	-	-	-
Nitrite as NO2	0.2	<0.05	2	<0.5	-	-	-
Calcium	1110	<0.12	11100	<1.2	-	-	-
Magnesium	<0.036	<0.036	<0.36	<0.36	-	-	-
Naphthalene (diss.filt)	0.00278	<0.0002	0.0278	<0.002	-	-	-
Total Ammonium as NH4	3.38	<0.3	33.8	<3	-	-	-
Acenaphthene (diss.filt)	0.00235	<0.00003	0.0235	<0.0003	-	-	-
Nitrate as NO3	<0.3	<0.3	<3	<3	-	-	-
Acenaphthylene (diss.filt)	0.000388	<0.000022	0.00388	<0.00022	-	-	-
Fluoranthene (diss.filt)	0.0000468	<0.000034	0.000468	<0.00034	-	-	-
Anthracene (diss.filt)	0.000363	<0.00003	0.00363	<0.0003	-	-	-
Phenanthrene (diss.filt)	0.00439	<0.000044	0.0439	<0.00044	-	-	-
Fluorene (diss.filt)	0.00385	<0.000028	0.0385	<0.00028	-	-	-
Chrysene (diss.filt)	0.00003	<0.000026	0.0003	<0.00026	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.61
Conductivity (µS/cm)	12.60
Temperature (°C)	20.90
Volume Leachant (Litres)	0.875
Volume of Eluate VE1 (Litres)	

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19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.115	**Moisture Content Ratio (%)**	27.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	78.3
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361412
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 1
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Pyrene (diss.filt)	0.000142	<0.00003	0.00142	<0.0003	-	-	-
Benzo(a)anthracene (diss.filt)	0.0000342	<0.000034	0.000342	<0.00034	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000046	<0.000046	<0.00046	<0.00046	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000054	<0.000054	<0.00054	<0.00054	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000018	<0.000018	<0.00018	<0.00018	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000032	<0.000032	<0.00032	<0.00032	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000032	<0.000032	<0.00032	<0.00032	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000028	<0.000028	<0.00028	<0.00028	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.0144	<0.000682	0.144	<0.00682	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	0.754	<0.05	7.54	<0.5	-	-	-
Aliphatics C5-C6	0.014	<0.01	0.14	<0.1	-	-	-
Aliphatics >C6-C8	0.027	<0.01	0.27	<0.1	-	-	-
Aliphatics >C8-C10	0.101	<0.01	1.01	<0.1	-	-	-
Aliphatics >C10-C12	0.325	<0.01	3.25	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	0.071	<0.01	0.71	<0.1	-	-	-
Aromatics >EC10-EC12	0.217	<0.01	2.17	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.61
Conductivity (µS/cm)	12.60
Temperature (°C)	20.90
Volume Leachant (Litres)	0.875
Volume of Eluate VE1 (Litres)	

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19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.115	**Moisture Content Ratio (%)**	27.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	78.3
Particle Size <4mm	>95%		

Case				
SDG	130504-78			
Lab Sample Number(s)	7361412			
Sampled Date	03-May-2013			
Customer Sample Ref.	EM LEACH 1			
Depth (m)				

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.61
Conductivity (µS/cm)	12.60
Temperature (°C)	20.90
Volume Leachant (Litres)	0.875
Volume of Eluate VE1 (Litres)	

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19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.115	**Moisture Content Ratio (%)**	27.8
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Case	
SDG	130504-78
Lab Sample Number(s)	7361412
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 1
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
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CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
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Case	
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Lab Sample Number(s)	7361412
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 1
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
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PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
p/m-Xylene	0.00299	<0.001	0.0299	<0.01	-	-	-
o-Xylene	0.00307	<0.001	0.0307	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	0.00127	<0.001	0.0127	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	0.00688	<0.001	0.0688	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.61
Conductivity (µS/cm)	12.60
Temperature (°C)	20.90
Volume Leachant (Litres)	0.875
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALcontrol cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.115	**Moisture Content Ratio (%)**	27.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	78.3
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361412
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 1
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	0.00351	<0.001	0.0351	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.61
Conductivity (µS/cm)	12.60
Temperature (°C)	20.90
Volume Leachant (Litres)	0.875
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.119	**Moisture Content Ratio (%)**	31.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	75.9
Particle Size <4mm	>95%		

Case				
SDG	130504-78			
Lab Sample Number(s)	7361413			
Sampled Date	03-May-2013			
Customer Sample Ref.	EM LEACH 2			
Depth (m)				

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Arsenic	0.0536	<0.00012	0.536	<0.0012	-	-	-
Barium	-	-	-	-	-	-	-
Cadmium	0.00142	<0.0001	0.0142	<0.001	-	-	-
Chromium	0.00785	<0.00022	0.0785	<0.0022	-	-	-
Copper	2.11	<0.0085	21.1	<0.085	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Molybdenum	-	-	-	-	-	-	-
Nickel	0.538	<0.00015	5.38	<0.0015	-	-	-
Lead	0.35	<0.00002	3.5	<0.0002	-	-	-
Antimony	-	-	-	-	-	-	-
Selenium	0.125	<0.00039	1.25	<0.0039	-	-	-
Zinc	0.0813	<0.00041	0.813	<0.0041	-	-	-
Chloride	-	-	-	-	-	-	-
Fluoride	-	-	-	-	-	-	-
Sulphate (soluble)	-	-	-	-	-	-	-
Total Dissolved Solids	-	-	-	-	-	-	-
Total Monohydric Phenols (W)	-	-	-	-	-	-	-
Dissolved Organic Carbon	-	-	-	-	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.53
Conductivity (µS/cm)	13.80
Temperature (°C)	20.90
Volume Leachant (Litres)	0.871
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.119	**Moisture Content Ratio (%)**	31.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	75.9
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361413
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 2
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	0.387	<0.01	3.87	<0.1	-	-	-
Aromatics >EC16-EC21	0.294	<0.01	2.94	<0.1	-	-	-
Aromatics >EC21-EC35	0.047	<0.01	0.47	<0.1	-	-	-
Total Aromatics >EC12-EC35	0.728	<0.01	7.28	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	1.49	<0.01	14.9	<0.1	-	-	-
Nitrite as NO2	0.139	<0.05	1.39	<0.5	-	-	-
Calcium	1160	<0.12	11600	<1.2	-	-	-
Magnesium	<0.036	<0.036	<0.36	<0.36	-	-	-
Naphthalene (diss.filt)	0.00289	<0.0002	0.0289	<0.002	-	-	-
Total Ammonium as NH4	3.33	<0.3	33.3	<3	-	-	-
Acenaphthene (diss.filt)	0.00255	<0.00003	0.0255	<0.0003	-	-	-
Nitrate as NO3	<0.3	<0.3	<3	<3	-	-	-
Acenaphthylene (diss.filt)	0.000405	<0.000022	0.00405	<0.00022	-	-	-
Fluoranthene (diss.filt)	0.0000541	<0.000034	0.000541	<0.00034	-	-	-
Anthracene (diss.filt)	0.000361	<0.00003	0.00361	<0.0003	-	-	-
Phenanthrene (diss.filt)	0.00431	<0.000044	0.0431	<0.00044	-	-	-
Fluorene (diss.filt)	0.00407	<0.000028	0.0407	<0.00028	-	-	-
Chrysene (diss.filt)	0.0000341	<0.000026	0.000341	<0.00026	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.53
Conductivity (µS/cm)	13.80
Temperature (°C)	20.90
Volume Leachant (Litres)	0.871
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.119	**Moisture Content Ratio (%)**	31.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	75.9
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361413
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 2
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Pyrene (diss.filt)	0.000154	<0.00003	0.00154	<0.0003	-	-	-
Benzo(a)anthracene (diss.filt)	0.0000374	<0.000034	0.000374	<0.00034	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000046	<0.000046	<0.00046	<0.00046	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000054	<0.000054	<0.00054	<0.00054	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000018	<0.000018	<0.00018	<0.00018	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000032	<0.000032	<0.00032	<0.00032	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000032	<0.000032	<0.00032	<0.00032	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000028	<0.000028	<0.00028	<0.00028	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.0149	<0.000682	0.149	<0.00682	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	0.758	<0.05	7.58	<0.5	-	-	-
Aliphatics C5-C6	0.013	<0.01	0.13	<0.1	-	-	-
Aliphatics >C6-C8	0.025	<0.01	0.25	<0.1	-	-	-
Aliphatics >C8-C10	0.092	<0.01	0.92	<0.1	-	-	-
Aliphatics >C10-C12	0.335	<0.01	3.35	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	0.068	<0.01	0.68	<0.1	-	-	-
Aromatics >EC10-EC12	0.224	<0.01	2.24	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.53
Conductivity (µS/cm)	13.80
Temperature (°C)	20.90
Volume Leachant (Litres)	0.871
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.119	**Moisture Content Ratio (%)**	31.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	75.9
Particle Size <4mm	>95%		

Case				
SDG	130504-78			
Lab Sample Number(s)	7361413			
Sampled Date	03-May-2013			
Customer Sample Ref.	EM LEACH 2			
Depth (m)				

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	0.004	<0.003	0.04	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	0.00358	<0.003	0.0358	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.53
Conductivity (µS/cm)	13.80
Temperature (°C)	20.90
Volume Leachant (Litres)	0.871
Volume of Eluate VE1 (Litres)	

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CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.119	**Moisture Content Ratio (%)**	31.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	75.9
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361413
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 2
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.53
Conductivity (µS/cm)	13.80
Temperature (°C)	20.90
Volume Leachant (Litres)	0.871
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALcontrol cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.119	**Moisture Content Ratio (%)**	31.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	75.9
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361413
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 2
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
p/m-Xylene	0.00261	<0.001	0.0261	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	0.00104	<0.001	0.0104	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	0.00541	<0.001	0.0541	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.53
Conductivity (µS/cm)	13.80
Temperature (°C)	20.90
Volume Leachant (Litres)	0.871
Volume of Eluate VE1 (Litres)	

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19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.119	**Moisture Content Ratio (%)**	31.8
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	75.9
Particle Size <4mm	>95%		

Case				
SDG	130504-78			
Lab Sample Number(s)	7361413			
Sampled Date	03-May-2013			
Customer Sample Ref.	EM LEACH 2			
Depth (m)				

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	0.00236	<0.001	0.0236	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.53
Conductivity (µS/cm)	13.80
Temperature (°C)	20.90
Volume Leachant (Litres)	0.871
Volume of Eluate VE1 (Litres)	

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Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.130	**Moisture Content Ratio (%)**	45
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	69
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361414
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 3
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Arsenic	0.0657	<0.00012	0.657	<0.0012	-	-	-
Barium	-	-	-	-	-	-	-
Cadmium	0.00319	<0.0001	0.0319	<0.001	-	-	-
Chromium	0.0112	<0.00022	0.112	<0.0022	-	-	-
Copper	2.65	<0.0085	26.5	<0.085	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Molybdenum	-	-	-	-	-	-	-
Nickel	0.627	<0.00015	6.27	<0.0015	-	-	-
Lead	0.419	<0.00002	4.19	<0.0002	-	-	-
Antimony	-	-	-	-	-	-	-
Selenium	0.16	<0.00039	1.6	<0.0039	-	-	-
Zinc	0.108	<0.00041	1.08	<0.0041	-	-	-
Chloride	-	-	-	-	-	-	-
Fluoride	-	-	-	-	-	-	-
Sulphate (soluble)	-	-	-	-	-	-	-
Total Dissolved Solids	-	-	-	-	-	-	-
Total Monohydric Phenols (W)	-	-	-	-	-	-	-
Dissolved Organic Carbon	-	-	-	-	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.56
Conductivity (µS/cm)	15.50
Temperature (°C)	20.60
Volume Leachant (Litres)	0.860
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.130	**Moisture Content Ratio (%)**	45
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	69
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361414
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 3
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	0.409	<0.01	4.09	<0.1	-	-	-
Aromatics >EC16-EC21	0.317	<0.01	3.17	<0.1	-	-	-
Aromatics >EC21-EC35	0.059	<0.01	0.59	<0.1	-	-	-
Total Aromatics >EC12-EC35	0.785	<0.01	7.85	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	1.41	<0.01	14.1	<0.1	-	-	-
Nitrite as NO2	0.136	<0.05	1.36	<0.5	-	-	-
Calcium	1470	<0.12	14700	<1.2	-	-	-
Magnesium	<0.036	<0.036	<0.36	<0.36	-	-	-
Naphthalene (diss.filt)	0.00356	<0.0002	0.0356	<0.002	-	-	-
Total Ammonium as NH4	3.91	<0.3	39.1	<3	-	-	-
Acenaphthene (diss.filt)	0.00238	<0.00003	0.0238	<0.0003	-	-	-
Nitrate as NO3	<0.3	<0.3	<3	<3	-	-	-
Acenaphthylene (diss.filt)	0.000385	<0.000022	0.00385	<0.00022	-	-	-
Fluoranthene (diss.filt)	0.0000492	<0.000034	0.000492	<0.00034	-	-	-
Anthracene (diss.filt)	0.000356	<0.00003	0.00356	<0.0003	-	-	-
Phenanthrene (diss.filt)	0.00391	<0.000044	0.0391	<0.00044	-	-	-
Fluorene (diss.filt)	0.00315	<0.000028	0.0315	<0.00028	-	-	-
Chrysene (diss.filt)	0.0000306	<0.000026	0.000306	<0.00026	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.56
Conductivity (µS/cm)	15.50
Temperature (°C)	20.60
Volume Leachant (Litres)	0.860
Volume of Eluate VE1 (Litres)	

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19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.130	**Moisture Content Ratio (%)**	45
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	69
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361414
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 3
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Pyrene (diss.filt)	0.000154	<0.00003	0.00154	<0.0003	-	-	-
Benzo(a)anthracene (diss.filt)	0.0000404	<0.000034	0.000404	<0.00034	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000046	<0.000046	<0.00046	<0.00046	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000054	<0.000054	<0.00054	<0.00054	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000018	<0.000018	<0.00018	<0.00018	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000032	<0.000032	<0.00032	<0.00032	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000032	<0.000032	<0.00032	<0.00032	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000028	<0.000028	<0.00028	<0.00028	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.014	<0.000682	0.14	<0.00682	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	0.623	<0.05	6.23	<0.5	-	-	-
Aliphatics C5-C6	0.016	<0.01	0.16	<0.1	-	-	-
Aliphatics >C6-C8	0.029	<0.01	0.29	<0.1	-	-	-
Aliphatics >C8-C10	0.095	<0.01	0.95	<0.1	-	-	-
Aliphatics >C10-C12	0.243	<0.01	2.43	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	0.076	<0.01	0.76	<0.1	-	-	-
Aromatics >EC10-EC12	0.162	<0.01	1.62	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.56
Conductivity (µS/cm)	15.50
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CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.130	**Moisture Content Ratio (%)**	45
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	69
Particle Size <4mm	>95%		

Case				
SDG	130504-78			
Lab Sample Number(s)	7361414			
Sampled Date	03-May-2013			
Customer Sample Ref.	EM LEACH 3			
Depth (m)				

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	0.007	<0.003	0.07	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.56
Conductivity (µS/cm)	15.50
Temperature (°C)	20.60
Volume Leachant (Litres)	0.860
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALcontrol cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
19/05/2013 18:47:42

18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.130	**Moisture Content Ratio (%)**	45
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	69
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361414
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 3
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	0.00132	<0.001	0.0132	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.56
Conductivity (µS/cm)	15.50
Temperature (°C)	20.60
Volume Leachant (Litres)	0.860
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALcontrol cannot be held responsible for any discrepancies with current legislation
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18:47:33 19/05/2013

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.130	**Moisture Content Ratio (%)**	45
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	69
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361414
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 3
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
p/m-Xylene	0.00548	<0.001	0.0548	<0.01	-	-	-
o-Xylene	0.00503	<0.001	0.0503	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	0.00162	<0.001	0.0162	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	0.00843	<0.001	0.0843	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.56
Conductivity (µS/cm)	15.50
Temperature (°C)	20.60
Volume Leachant (Litres)	0.860
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

CEN 10:1 STAGE BATCH TEST

WAC ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	Coed Darcy Urban Village
Mass Sample taken (kg)	0.130	**Moisture Content Ratio (%)**	45
Mass of dry sample (kg)	0.175	**Dry Matter Content Ratio (%)**	69
Particle Size <4mm	>95%		

Case	
SDG	130504-78
Lab Sample Number(s)	7361414
Sampled Date	03-May-2013
Customer Sample Ref.	EM LEACH 3
Depth (m)	

Solid Waste Analysis	**Result**			
Total Organic Carbon (%)	-	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	-	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	-	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	0.00418	<0.001	0.0418	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	09-May-2013
pH (pH Units)	12.56
Conductivity (µS/cm)	15.50
Temperature (°C)	20.60
Volume Leachant (Litres)	0.860
Volume of Eluate VE1 (Litres)	

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CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**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		
PM114		Leaching Procedure for CEN Two Stage BatchTest 2:1/8:1 Cumulative		
PM115		Leaching Procedure for CEN One Stage Leach Test 2:1 & 10:1 1 Step		
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material		
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser		
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS		
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		
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS		
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone		
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID		
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID		
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters		
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES		
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry		
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers		
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters		
TM228	US EPA Method 6010B	Determination of Major Cations in Water by iCap 6500 Duo ICP-OES		
TM245	By GC-FID	Determination of GRO by Headspace in waters		
TM321		Organic matter Content of Soil By Titration		

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

CERTIFICATE OF ANALYSIS

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	7361392	7361394	7361395	7361400	7361401	7361403	7361404	7361405	7361409	7361412
Customer Sample Ref.	CAEMV037 A	CAEMV037 B	CAEMV037 C	CAEMV037 D	CAEMV037 E	CAEMV037 F	CAEMV037 G	CAEMV037 H	CAEMV037 I	EM LEACH 1
AGS Ref.										
Depth										
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Ammoniacal Nitrogen										14-May-2013
Anions by Kone (w)										14-May-2013
CEN 10:1 Leachate (1 Stage)										09-May-2013
CEN Readings										14-May-2013
Dissolved Metals by ICP-MS										14-May-2013
EPH CWG (Aliphatic) Filtered GC (W)										15-May-2013
EPH CWG (Aromatic) Filtered GC (W)										15-May-2013
GRO by GC-FID (W)										14-May-2013
Mercury Dissolved										14-May-2013
Metals by iCap-OES Dissolved (W)										14-May-2013
Nitrite by Kone (w)										14-May-2013
PAH in waters by GC-MS (diss.filt)										14-May-2013
Sample description	08-May-2013	08-May-2013	08-May-2013	08-May-2013	08-May-2013	08-May-2013	08-May-2013	08-May-2013	08-May-2013	08-May-2013
TPH CWG Filtered (W)										15-May-2013
VOC MS (S)	13-May-2013	13-May-2013	13-May-2013	13-May-2013	13-May-2013	13-May-2013	13-May-2013	13-May-2013	13-May-2013	
VOC MS (W)										14-May-2013

Lab Sample No(s)	7361413	7361414	7361397	7361398
Customer Sample Ref.	EM LEACH 2	EM LEACH 3	SP87A-4	SP87A-5
AGS Ref.				
Depth				
Type	SOLID	SOLID	SOLID	SOLID
Ammoniacal Nitrogen	14-May-2013	14-May-2013		
Anions by Kone (w)	14-May-2013	14-May-2013		
Asbestos ID in Solid Samples			17-May-2013	17-May-2013
CEN 10:1 Leachate (1 Stage)	09-May-2013	09-May-2013		
CEN Readings	14-May-2013	14-May-2013		
Dissolved Metals by ICP-MS	14-May-2013	14-May-2013		
EPH CWG (Aliphatic) Filtered GC (W)	15-May-2013	15-May-2013		
EPH CWG (Aliphatic) GC (S)			14-May-2013	14-May-2013
EPH CWG (Aromatic) Filtered GC (W)	15-May-2013	15-May-2013		
EPH CWG (Aromatic) GC (S)			14-May-2013	14-May-2013
GRO by GC-FID (S)			14-May-2013	14-May-2013
GRO by GC-FID (W)	14-May-2013	14-May-2013		
Mercury Dissolved	14-May-2013	14-May-2013		
Metals by iCap-OES Dissolved (W)	14-May-2013	14-May-2013		
Metals in solid samples by OES			14-May-2013	14-May-2013
Nitrite by Kone (w)	14-May-2013	14-May-2013		
PAH in waters by GC-MS (diss.filt)	14-May-2013	14-May-2013		
pH			10-May-2013	10-May-2013
Sample description	08-May-2013	08-May-2013	08-May-2013	08-May-2013
Semi Volatile Organic Compounds			14-May-2013	14-May-2013
Total Organic Carbon			19-May-2013	19-May-2013
TPH CWG Filtered (W)	15-May-2013	15-May-2013		
TPH CWG GC (S)			14-May-2013	14-May-2013
VOC MS (S)			13-May-2013	13-May-2013
VOC MS (W)	14-May-2013	14-May-2013		

SDG:	130504-78	**Location:**	Coed Darcy Urban Village	**Order Number:**	CD0401
Job:	H_ATKINS_LDC-109	**Customer:**	Atkins Global Ltd	**Report Number:**	225045
Client Reference:	Commercial Area	**Attention:**	Selina Bamforth	**Superseded Report:**	

Appendix
General

1. Results are expressed on a dry weight basis (dried at 35ºC) 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 2 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 Dimethyphenol, 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**
§	**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.

ALcontrol Laboratories

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Attention: Adam Putt

CERTIFICATE OF ANALYSIS

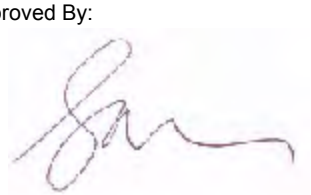
Date:	29 May 2013
Customer:	H_ATKINS_LDC
Sample Delivery Group (SDG):	130518-16
Your Reference:	
Location:	Coed Darcy
Report No:	226536

We received 11 samples on Saturday May 18, 2013 and 11 of these samples were scheduled for analysis which was completed on Wednesday May 29, 2013. 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

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CERTIFICATE OF ANALYSIS

SDG:	130518-16	**Location:**	Coed Darcy	**Order Number:**	CD0413
Job:	H_ATKINS_LDC-133	**Customer:**	Atkins Global Ltd	**Report Number:**	226536
Client Reference:		**Attention:**	Adam Putt	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
7432918	MSMW067			16/05/2013
7432922	MSMW0700			16/05/2013
7432915	MSMW068D			16/05/2013
7432916	MSMW068DZ			16/05/2013
7432917	MSMW068S			16/05/2013
7432921	MSMW070SZ			16/05/2013
7432919	PIB004			16/05/2013
7432920	PIBH005			16/05/2013
7432923	SUMP1			16/05/2013
7432924	SUMP2			16/05/2013
7432925	SUMP3			16/05/2013

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

CERTIFICATE OF ANALYSIS

SDG:	130518-16	**Location:**	Coed Darcy	**Order Number:**	CD0413
Job:	H_ATKINS_LDC-133	**Customer:**	Atkins Global Ltd	**Report Number:**	226536
Client Reference:		**Attention:**	Adam Putt	**Superseded Report:**	

LIQUID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 11	7432918	MSMW067			1l Glass bottle (ALE)
			7432922	MSMW0700			1l Glass bottle (ALE)
			7432915	MSMW068D			1l Glass bottle (ALE)
			7432916	MSMW068DZ			1l Glass bottle (ALE)
			7432917	MSMW068S			1l Glass bottle (ALE)
			7432921	MSMW070SZ			1l Glass bottle (ALE)
			7432919	PIB004			1l Glass bottle (ALE)
			7432920	PIBH005			1l Glass bottle (ALE)
Anions by Kone (w)	All	NDPs: 0 Tests: 10					1plastic (ALE221)
BOD True Total	All	NDPs: 0 Tests: 11					1plastic (ALE221)
COD Unfiltered	All	NDPs: 0 Tests: 11					1plastic (ALE221)
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 11					1plastic (ALE221)
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 11					H2SO4 (ALE244)
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 11					1l Glass bottle (ALE)
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 11					1l Glass bottle (ALE)
GRO by GC-FID (W)	All	NDPs: 0 Tests: 11					Vial (ALE297)
Mercury Dissolved	All	NDPs: 0 Tests: 11					1l Glass bottle (ALE)
Nitrite by Kone (w)	All	NDPs: 0 Tests: 11					1plastic (ALE221)
pH Value	All	NDPs: 0 Tests: 11					1plastic (ALE221)
Phenols by HPLC (W)	All	NDPs: 0 Tests: 11					H2SO4 (ALE244)
Suspended Solids	All	NDPs: 0 Tests: 11					1plastic (ALE221)
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 11					1l Glass bottle (ALE)

CERTIFICATE OF ANALYSIS

SDG:	130518-16	**Location:**	Coed Darcy	**Order Number:**	CD0413
Job:	H_ATKINS_LDC-133	**Customer:**	Atkins Global Ltd	**Report Number:**	226536
Client Reference:		**Attention:**	Adam Putt	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container
TPH CWG (W)	All	NDPs: 0 Tests: 11	7432918	MSMW067			1l Glass bottle (ALE)
			7432922	MSMW0700			1l Glass bottle (ALE)
			7432915	MSMW068D			1l Glass bottle (ALE)
			7432916	MSMW068DZ			1l Glass bottle (ALE)
			7432917	MSMW068S			1l Glass bottle (ALE)
			7432921	MSMW070SZ			1l Glass bottle (ALE)
			7432919	PIB004			1l Glass bottle (ALE)
			7432920	PIBH005			1l Glass bottle (ALE)
VOC MS (W)	All	NDPs: 0 Tests: 11	7432918	MSMW067			Vial (ALE297)
			7432922	MSMW0700			Vial (ALE297)
			7432915	MSMW068D			Vial (ALE297)
			7432916	MSMW068DZ			Vial (ALE297)
			7432917	MSMW068S			Vial (ALE297)
			7432921	MSMW070SZ			Vial (ALE297)
			7432919	PIB004			Vial (ALE297)
			7432920	PIBH005			Vial (ALE297)

CERTIFICATE OF ANALYSIS

SDG:	130518-16	**Location:**	Coed Darcy	**Order Number:**	CD0413
Job:	H_ATKINS_LDC-133	**Customer:**	Atkins Global Ltd	**Report Number:**	226536
Client Reference:		**Attention:**	Adam Putt	**Superseded Report:**	

LIQUID

Results Legend

X Test

N No Determination Possible

			Lab Sample No(s)	7432923					7432924					7432925				
			Customer Sample Reference	SUMP1					SUMP2					SUMP3				
			AGS Reference															
			Depth (m)															
			Container	1l Glass bottle (ALE	1plastic (ALE221)	H2SO4 (ALE244)	HNO3 Filtered (ALE	Vial (ALE297)	1l Glass bottle (ALE	1plastic (ALE221)	H2SO4 (ALE244)	HNO3 Filtered (ALE	Vial (ALE297)	1l Glass bottle (ALE	1plastic (ALE221)	H2SO4 (ALE244)	HNO3 Filtered (ALE	Vial (ALE297)
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 11				X				X						X		
Anions by ion Chromatography	All	NDPs: 0 Tests: 1														X		
Anions by Kone (w)	All	NDPs: 0 Tests: 10			X					X								
BOD True Total	All	NDPs: 0 Tests: 11			X					X						X		
COD Unfiltered	All	NDPs: 0 Tests: 11			X					X						X		
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 11			X					X						X		
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 11					X					X						X
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 11		X					X					X				
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 11		X					X					X				
GRO by GC-FID (W)	All	NDPs: 0 Tests: 11						X					X					X
Mercury Dissolved	All	NDPs: 0 Tests: 11		X					X					X				
Nitrite by Kone (w)	All	NDPs: 0 Tests: 11			X					X						X		
pH Value	All	NDPs: 0 Tests: 11			X					X						X		
Phenols by HPLC (W)	All	NDPs: 0 Tests: 11				X					X						X	
Suspended Solids	All	NDPs: 0 Tests: 11			X					X						X		

CERTIFICATE OF ANALYSIS

SDG:	130518-16	**Location:**	Coed Darcy	**Order Number:**	CD0413
Job:	H_ATKINS_LDC-133	**Customer:**	Atkins Global Ltd	**Report Number:**	226536
Client Reference:		**Attention:**	Adam Putt	**Superseded Report:**	

LIQUID

Results Legend

X **Test**

N **No Determination Possible**

			Lab Sample No(s)	7432923	7432924	7432925
			Customer Sample Reference	SUMP1	SUMP2	SUMP3
			AGS Reference			
			Depth (m)			
			Container	1l Glass bottle (ALE	1l Glass bottle (ALE	1l Glass bottle (ALE
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 11		X	X	X
TPH CWG (W)	All	NDPs: 0 Tests: 11		X	X	X
VOC MS (W)	All	NDPs: 0 Tests: 11				

CERTIFICATE OF ANALYSIS

SDG:	130518-16	**Location:**	Coed Darcy	**Order Number:**	CD0413
Job:	H_ATKINS_LDC-133	**Customer:**	Atkins Global Ltd	**Report Number:**	226536
Client Reference:		**Attention:**	Adam Putt	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS 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
1-4&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample R	MSMW067	MSMW0700	MSMW068D	MSMW068DZ	MSMW068S	MSMW070SZ
			Depth (m)	.	.	.	.	.	.
			Sample Type	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)	Water(GW/SW)
			Date Sampled	16/05/2013	16/05/2013	16/05/2013	16/05/2013	16/05/2013	16/05/2013
			Sample Time	.	.	.	.	.	.
			Date Received	18/05/2013	18/05/2013	18/05/2013	18/05/2013	18/05/2013	18/05/2013
			SDG Ref	130518-16	130518-16	130518-16	130518-16	130518-16	130518-16
			Lab Sample No.(s)	7432918	7432922	7432915	7432916	7432917	7432921
			AGS Reference						
Suspended solids, Total	<2 mg/l	TM022		52 #	182 #	5 #	21 #	43 #	89 #
BOD, unfiltered	<1 mg/l	TM045		5.2 #	<2.5 #	<1.5 #	5.03 #	<1.5 #	<10 #
Ammoniacal Nitrogen as NH4	<0.3 mg/l	TM099		0.534 #	0.909 #	1.18 #	<0.3 #	<0.3 #	5.64 #
COD, unfiltered	<7 mg/l	TM107		101 #	49.6 #	45.7 #	30 #	33.4 #	239 #
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120		0.532 #	0.393 #	0.425 #	0.742 #	0.417 #	0.567 #
Arsenic (diss.filt)	<0.12 µg/l	TM152		19.3 #	4.67 #	0.471 #	1.2 #	1.17 #	33.5 #
Cadmium (diss.filt)	<0.1 µg/l	TM152		<0.1 #	<0.1 #	0.343 #	<0.1 #	<0.1 #	<0.1 #
Chromium (diss.filt)	<0.22 µg/l	TM152		3.42 #	1.47 #	1.32 #	3.34 #	1.45 #	1.74 #
Copper (diss.filt)	<0.85 µg/l	TM152		<0.85 #	<0.85 #	1.09 #	1.14 #	0.887 #	<0.85 #
Lead (diss.filt)	<0.02 µg/l	TM152		0.291 #	0.347 #	0.028 #	0.229 #	0.06 #	0.046 #
Nickel (diss.filt)	<0.15 µg/l	TM152		0.86 #	1.92 #	15.8 #	51.3 #	2.17 #	1 #
Selenium (diss.filt)	<0.39 µg/l	TM152		0.573 #	0.405 #	<0.39 #	0.553 #	0.396 #	<0.39 #
Zinc (diss.filt)	<0.41 µg/l	TM152		2.38 #	2.33 #	5.66 #	4.42 #	5.81 #	3.22 #
Mercury (diss.filt)	<0.01 µg/l	TM183		<0.01 #	<0.01 #	<0.01 #	<0.01 #	<0.01 #	<0.01 #
Nitrite as NO2	<0.05 mg/l	TM184		<0.05 2 #	<0.05 2 #	<0.05 2 #	<0.05 2 #	<0.05 2 #	<0.05 2 #
Phosphate (ortho) as PO4	<0.05 mg/l	TM184		<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #	<0.05 #
Nitrate as NO3	<0.3 mg/l	TM184		<0.3 #	<0.3 #	<0.3 #	<0.3 #	<0.3 #	0.557 #
pH	<1 pH Units	TM256		7.67 #	7.56 #	6.93 #	6.87 #	7.85 #	7.31 #
Phenols, Total Detected monohydric	<0.016 mg/l	TM259		<0.016 #	<0.016 #	<0.016 #	<0.016 #	<0.016 #	<0.016 #