

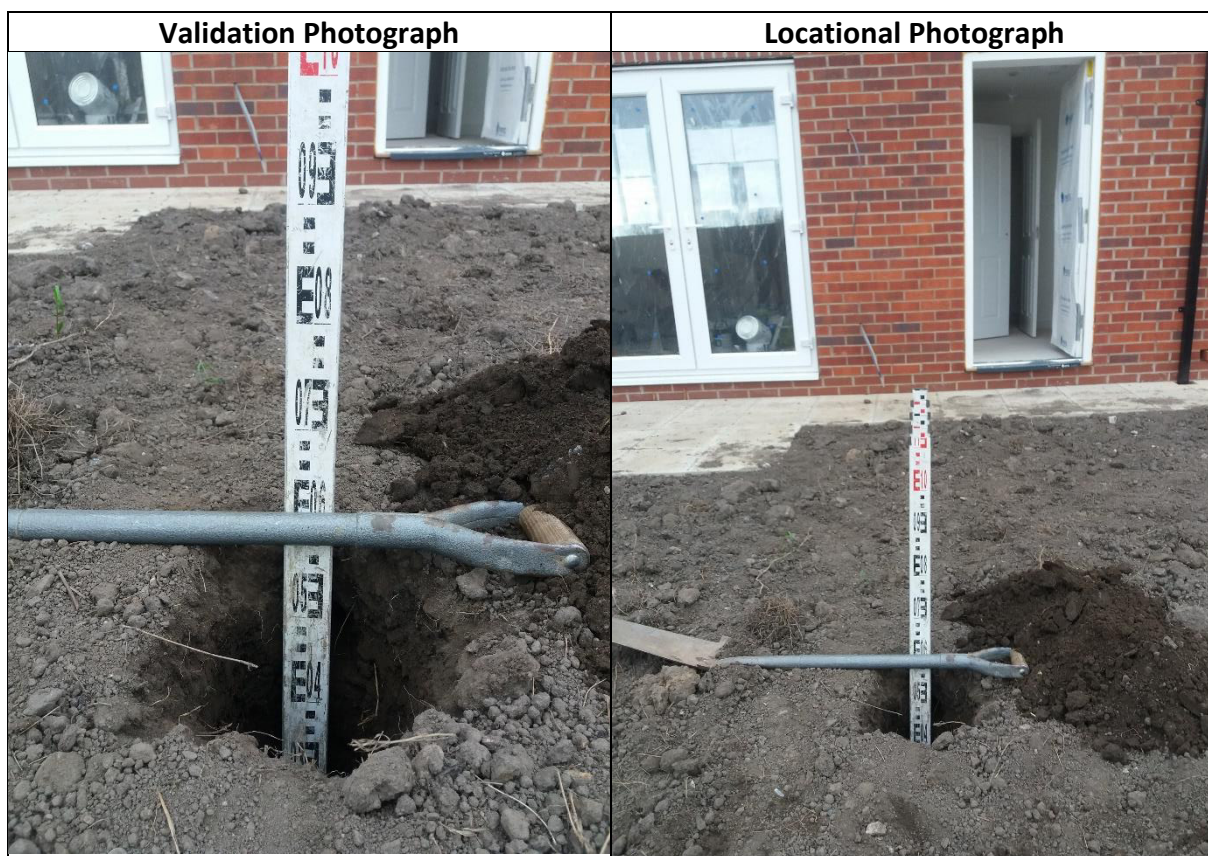


PLOT NUMBER: 42

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 18/7/2018
Consultant: A.Reavley

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	0 mm bgl
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
N/A

GARDEN VALIDATION: PASS



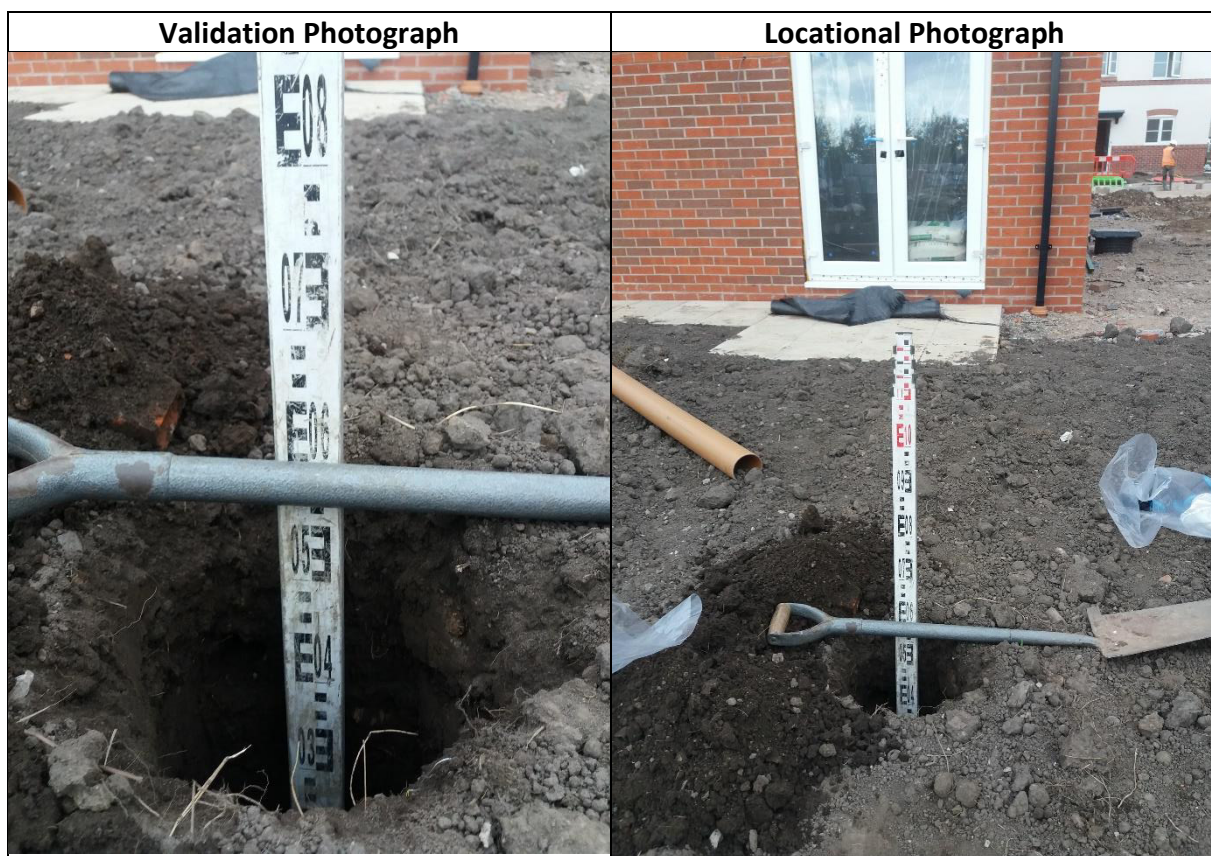


PLOT NUMBER: 43

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 18/7/2018
Consultant: A.Reavley

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	0 mm bgl
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
Topsoil samples taken at 0.20 and 0.50m bgl respectively.

GARDEN VALIDATION: PASS



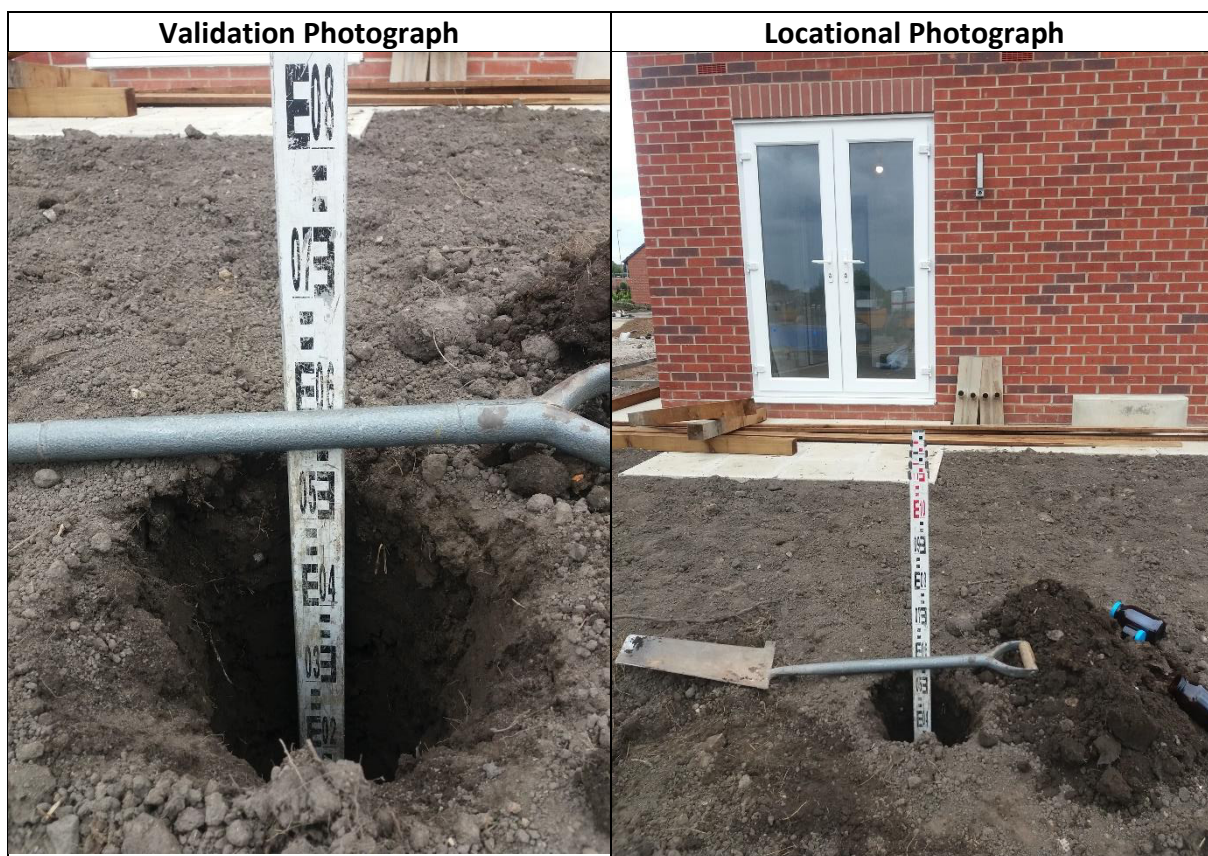


PLOT NUMBER: 117

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 18/7/2018
Consultant: A.Reavley

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	0 mm bgl
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
Topsoil samples taken at 0.20 and 0.50m bgl respectively.

GARDEN VALIDATION: PASS





SUITABILITY CRITERIA





Table 3.2: Validation Testing Summary

Determinand	Units	Screening Value for Use within Private Gardens	Maximum Concentration within Upper Topsoil	Maximum Concentration within Lower Topsoil	Screening Value Source
Inorganic Metals and Asbestos					
Arsenic	mg/kg	37	25	17	(i)
Cadmium	mg/kg	11	4	4	(i)
Chromium (VI)	mg/kg	6	<1	<1	(i)
Lead	mg/kg	200	150	130	(iv)
Inorganic Mercury	mg/kg	40	<1	<1	(i)
Nickel	mg/kg	130	21	23	(i)
Selenium	mg/kg	250	<3	<3	(i)
Copper	mg/kg	2,400	180	170	(i)
Zinc	mg/kg	3,700	130	100	(i)
Cyanide	mg/kg	791	<1	<1	(v)
Asbestos	%	None Detected	None Detected	None Detected.	N/A
Polycyclic Aromatic Hydrocarbons					
Phenol	mg/kg	200	<0.1	<0.1	(ii)
Naphthalene	mg/kg	5.6	<0.1	<0.1	(ii)
Acenaphthylene	mg/kg	420	<0.1	<0.1	(ii)
Acenaphthene	mg/kg	510	<0.1	<0.1	(ii)
Fluorene	mg/kg	400	<0.1	<0.1	(ii)
Phenanthrene	mg/kg	220	0.5	0.7	(ii)
Anthracene	mg/kg	2,400	<0.1	0.2	(ii)
Fluoranthene	mg/kg	280	0.9	1.4	(ii)
Pyrene	mg/kg	1200	0.9	1.2	(ii)
Benzo(a)Anthracene	mg/kg	2.7	0.4	0.6	(ii)
Chrysene	mg/kg	22	0.4	0.5	(ii)
Benzo(b)Fluoranthene	mg/kg	3.3	0.4	0.5	(ii)
Benzo(k)Fluoranthene	mg/kg	93	0.3	0.4	(ii)
Benzo(a)Pyrene	mg/kg	2.7	0.4	0.5	(ii)
Indeno(123-cd)Pyrene	mg/kg	36	0.2	0.3	(ii)
Dibenzo(a,h)Anthracene	mg/kg	0.28	0.1	0.1	(ii)
Benzo(ghi)Perylene	mg/kg	340	0.3	0.3	(ii)
Total Petroleum Hydrocarbons					
TPH C ₅ -C ₆	mg/kg	78	<0.10	<0.10	(iii)
TPH C ₆ -C ₈	mg/kg	230	<0.10	<0.10	(iii)
TPH C ₈ -C ₁₀	mg/kg	65	<0.10	<0.10	(iii)
TPH C ₁₀ -C ₁₂	mg/kg	180	⁽¹³⁾ <1	⁽¹³⁾ <1	(iii)
TPH C ₁₂ -C ₁₆	mg/kg	330	⁽¹³⁾ 130	⁽¹³⁾ <1	(iii)
TPH C ₁₆ -C ₂₁	mg/kg	540	⁽¹³⁾ 330	⁽¹³⁾ 8	(iii)
TPH C ₂₁ -C ₃₅	mg/kg	1,500	⁽¹³⁾ 320	⁽¹³⁾ 46	(iii)
TPH C ₃₅ -C ₄₄	mg/kg	1,500	⁽¹³⁾ 27	⁽¹³⁾ 10	(iii)
Screening Value Source (i) LQM/CIEH Suitable For Use Level (S4UL) (2015); (ii) S4UL –Assessment Approach of 3% SOM; (iii) S4UL –3% SOM and assumed worst case aliphatic / aromatic compound; (iv) Defra Category 4 Screening Level (2014); (v) CLEA v1.06 Derived Value.					





SOIL CHEMICAL ANALYSIS



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Certificate of Analysis

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Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Report Number: 572763-1

Date of Report: 01-Jun-2016

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Sabine Sargeant

Customer Job Reference: 101754

Customer Purchase Order: 001151

Customer Site Reference: Scotchbarn Lane

Date Job Received at SAL: 18-May-2016

Date Analysis Started: 26-May-2016

Date Analysis Completed: 01-Jun-2016

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with SAL SOPs

All results have been reviewed in accordance with Section 25 of the SAL Quality Manual



Report checked
and authorised by :
Emma Spear
Project Manager

Issued by :
Emma Spear
Project Manager



SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Bulk Product Analysed as Bulk Product Asbestos ID					
SAL Reference				572763 004	
Customer Sample Reference				TP102	
Bottom Depth				0.4	
Date Sampled				17-MAY-2016	
Type				Fill	
Determinand	Method	Test Sample	LOD	Units	
Asbestos	T27	AR			Chrysotile Fibres Detected

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference				572763 001	572763 003	572763 005	572763 006	572763 007	
Customer Sample Reference				TP101	TP102	TP103	TP103	TP104	
Bottom Depth				1	0.4	0.2	0.7	0.2	
Date Sampled				17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type				Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	11	7.2	7.4	7.4	18
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
MCERTS Preparation									
SAL Reference					572763 008	572763 009	572763 011	572763 012	572763 013
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107
Bottom Depth					2	2	0.5	2.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	7.3	11	18	18	9.7
Retained on 10mm sieve	T2	M40	0.1	%	-	-	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference					572763 015	572763 016	572763 017	572763 018	572763 019
Customer Sample Reference					TP108	TP109	TP110	TP111	TP112
Bottom Depth					0.1	0.5	0.4	0.3	0.1
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	8.2	14	18	18	35
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil		Analysed as Soil							
PAH US EPA 16 (B and K split)									
SAL Reference					572763 011	572763 012	572763 013	572763 015	572763 016
Customer Sample Reference					TP106	TP106	TP107	TP108	TP109
Bottom Depth					0.5	2.1	0.5	0.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	1.7	1.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	0.5	0.3
Fluoranthene	T207	M105	0.1	mg/kg	0.5	<0.1	2.2	3.3	2.0
Pyrene	T207	M105	0.1	mg/kg	0.5	<0.1	2.0	3.3	2.0
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.3	<0.1	1.0	2.3	1.1
Chrysene	T207	M105	0.1	mg/kg	0.3	<0.1	1.2	2.6	1.3
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.3	<0.1	1.4	3.3	1.4
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.1	<0.1	0.4	0.5	0.3
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	2.2	1.0
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.1	<0.1	0.6	1.2	0.5
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.3	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.1	<0.1	0.8	1.5	0.6
PAH(total)	T207	M105	0.1	mg/kg	2.6	<0.1	12	23	12

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil		Analysed as Soil							
PAH US EPA 16 (B and K split)									
SAL Reference				572763 017	572763 018	572763 019	572763 020	572763 022	
Customer Sample Reference				TP110	TP111	TP112	TP112	TP113	
Bottom Depth				0.4	0.3	0.1	0.9	0.5	
Date Sampled				17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type				Clay	Topsoil	Topsoil	Sandy Soil	Clay	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.6	0.2	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.5	0.9	0.2	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.5	1.0	0.3	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.6	1.2	0.3	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	0.2	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.8	0.2	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.2	0.5	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.3	0.6	0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1	5.1	9.4	2.5	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 023	572763 025	572763 028	572763 029	572763 031
Customer Sample Reference					TP113	WS102	WS104	WS105	WS108
Bottom Depth					1.4	0.2	0.2	0.1	0.2
Date Sampled					17-MAY-2016	18-MAY-2016	18-MAY-2016	18-MAY-2016	19-MAY-2016
Type					Clay	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.7	0.2	0.3	0.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.7	0.6	0.6	0.5
Pyrene	T207	M105	0.1	mg/kg	<0.1	1.6	0.6	0.6	0.5
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	1.0	0.3	0.3	0.2
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.9	0.3	0.3	0.2
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.2	0.5	0.5	0.3
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.8	0.3	0.3	0.2
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.2	0.2	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.6	0.2	0.2	0.2
PAH(total)	T207	M105	0.1	mg/kg	<0.1	9.5	3.3	3.4	2.3

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 032	572763 033	572763 035	572763 039	
Customer Sample Reference					WS108	WS109	WS110	WS113	
Bottom Depth					0.5	0.3	1.2	0.7	
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type					Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.4	<0.1	
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	
Fluoranthene	T207	M105	0.1	mg/kg	0.3	1.0	0.8	<0.1	
Pyrene	T207	M105	0.1	mg/kg	0.3	0.9	0.7	<0.1	
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Chrysene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.1	0.7	0.4	<0.1	
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.3	<0.1	<0.1	
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.3	<0.1	
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
PAH(total)	T207	M105	0.1	mg/kg	0.9	6.5	3.9	<0.1	

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH									
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104
Bottom Depth					1	0.4	0.2	0.7	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) 2	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) 6	(13) 2	(13) <1	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) <1	(13) 10	(13) 13	(13) <1	(13) 2
TPH (C21-C35)	T206	M105	1	mg/kg	(13) <1	(13) 36	(13) 150	(13) <1	(13) 7
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) 20	(13) 77	(13) 2	(13) <1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH									
SAL Reference					572763 008	572763 009	572763 011	572763 012	572763 013
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107
Bottom Depth					2	2	0.5	2.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	0.84	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13,9) <10
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(9,13) <10
TPH (C16-C21)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) 1	(13) <1	(9,13) <10
TPH (C21-C35)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) 10	(13) <1	(13) 11
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) 10

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH									
SAL Reference					572763 015	572763 016	572763 017	572763 018	572763 019
Customer Sample Reference					TP108	TP109	TP110	TP111	TP112
Bottom Depth					0.1	0.5	0.4	0.3	0.1
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) 3	(13) 2	(13) <1	(13) <1	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) 35	(13) 18	(13) <1	(13) 3	(13) 3
TPH (C21-C35)	T206	M105	1	mg/kg	(13) 340	(13) 73	(13) <1	(13) 15	(13) 14
TPH (C35-C44)	T8	M105	1	mg/kg	(13) 120	(13) 23	(13) <1	(13) <1	(13) 1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH									
SAL Reference					572763 020	572763 022	572763 023	572763 025	572763 028
Customer Sample Reference					TP112	TP113	TP113	WS102	WS104
Bottom Depth					0.9	0.5	1.4	0.2	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016	18-MAY-2016
Type					Sandy Soil	Clay	Clay	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) 6	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) 1	(13) <1	(13) <1	(13) 33	(13) 1
TPH (C21-C35)	T206	M105	1	mg/kg	(13) 9	(13) <1	(13) <1	(13) 180	(13) 11
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) 65	(13) <1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH									
SAL Reference					572763 029	572763 031	572763 032	572763 033	572763 035
Customer Sample Reference					WS105	WS108	WS108	WS109	WS110
Bottom Depth					0.1	0.2	0.5	0.3	1.2
Date Sampled					18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) 3	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) 3	(13) <1	(13) <1	(13) 9	(13) 5
TPH (C21-C35)	T206	M105	1	mg/kg	(13) 12	(13) 6	(13) 7	(13) 17	(13) 14
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) 1	(13) 1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH					
SAL Reference					572763 039
Customer Sample Reference					WS113
Bottom Depth					0.7
Date Sampled					19-MAY-2016
Type					Topsoil
Determinand	Method	Test Sample	LOD	Units	
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) <1
TPH (C21-C35)	T206	M105	1	mg/kg	(13) <1
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
pH and Sulphate									
SAL Reference				572763 028	572763 029	572763 031	572763 032	572763 033	
Customer Sample Reference				WS104	WS105	WS108	WS108	WS109	
Bottom Depth				0.2	0.1	0.2	0.5	0.3	
Date Sampled				18-MAY-2016	18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type				Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil pH and Sulphate									
SAL Reference		572763 035	572763 039	572763 040					
Customer Sample Reference		WS110	WS113	WS113					
Bottom Depth		1.2	0.7	1.4					
Date Sampled		19-MAY-2016	19-MAY-2016	19-MAY-2016					
Type		Topsoil	Topsoil	Topsoil					
Determinand	Method	Test Sample	LOD	Units					
pH	T7	AR			-	-	7.6		
SO4(2:1)	T6	AR	100	mg/l	170	<100	<100		

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil Miscellaneous									
SAL Reference					572763 001	572763 002	572763 003	572763 005	572763 006
Customer Sample Reference					TP101	TP101	TP102	TP103	TP103
Bottom Depth					1	2.2	0.4	0.2	0.7
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	-	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	310	<100	<100

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 007	572763 009	572763 011	572763 012	572763 013
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107
Bottom Depth					0.2	2	0.5	2.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	-	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	650

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil Miscellaneous									
SAL Reference					572763 014	572763 015	572763 016	572763 017	572763 018
Customer Sample Reference					TP107	TP108	TP109	TP110	TP111
Bottom Depth					1.2	0.1	0.5	0.4	0.3
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Topsoil	Sandy Soil	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			-	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	130	<100	<100	<100

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Miscellaneous Analysed as Soil									
SAL Reference					572763 019	572763 020	572763 022	572763 023	572763 025
Customer Sample Reference					TP112	TP112	TP113	TP113	WS102
Bottom Depth					0.1	0.9	0.5	1.4	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Miscellaneous Analysed as Soil									
SAL Reference					572763 028	572763 029	572763 031	572763 032	572763 033
Customer Sample Reference					WS104	WS105	WS108	WS108	WS109
Bottom Depth					0.2	0.1	0.2	0.5	0.3
Date Sampled					18-MAY-2016	18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763								
Project Site: Scotchbarn Lane								
Customer Reference: 101754								
Soil			Analysed as Soil					
Miscellaneous								
SAL Reference					572763 035	572763 039	572763 040	
Customer Sample Reference					WS110	WS113	WS113	
Bottom Depth					1.2	0.7	1.4	
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type					Topsoil	Topsoil	Topsoil	
Determinand		Method	Test Sample	LOD	Units			
Asbestos ID		T27	AR			N.D.	N.D.	-
SO4(2:1)		T6	AR	100	mg/l	170	<100	<100

Index to symbols used in 572763-1

Value	Description
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
N.D.	Not Detected
13	Results have been blank corrected.
9	LOD raised due to dilution of sample
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was sub-contracted to REC Asbestos.
"Fill" samples are outside the scope of our MCERTS accreditation. Results are UKAS only.

Method Index

Value	Description
T7	Probe
T54	GC/MS (Headspace)
T546	Colorimetry (CF)
T162	Grav (1 Dec) (105 C)
T27	PLM
T207	GC/MS (MCERTS)
T8	GC/FID
T6	ICP/OES
T206	GC/FID (MCERTS)
T2	Grav

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Asbestos	T27	AR			SU	004
Moisture @105C	T162	AR	0.1	%	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
Retained on 10mm sieve	T2	M40	0.1	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Arsenic	T6	M40	2	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cadmium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chromium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Lead	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Mercury	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Selenium	T6	M40	3	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Copper	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Nickel	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Zinc	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(Total)	T6	M40	0.01	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(2:1)	T6	AR	100	mg/l	N	001-003,005-007,009,011-020,022-023,025,028-029,031-033,035,039-040
Chromium VI	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Barium	T6	M40	1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Beryllium	T6	M40	2	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Boron (water-soluble)	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cyanide(Total)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenols(Mono)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Vanadium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Naphthalene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthylene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Fluorene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenanthrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Anthracene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chrysene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
PAH(total)	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C10-C12)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C12-C16)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C16-C21)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C21-C35)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C35-C44)	T8	M105	1	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			U	002,009,014,040
Asbestos ID	T27	AR			SU	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039



Concept Life Sciences

Certificate of Analysis

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Report Number: 640278-1

Date of Report: 22-Mar-2017

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Louise Stock

Customer Job Reference: 103358

Customer Purchase Order: 002602

Customer Site Reference: Scotchbarn Lane

Date Job Received at Concept: 16-Mar-2017

Date Analysis Started: 20-Mar-2017

Date Analysis Completed: 22-Mar-2017

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

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Tests covered by this certificate were conducted in accordance with Concept SOPs



Report checked
and authorised by :
Aleksandra Pacula
Project Manager

Issued by :
Aleksandra Pacula
Project Manager

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358							
Soil		Analysed as Soil					
Partial UKWIR suite 1							
Concept Reference		640278 002		640278 010		640278 018	
Customer Sample Reference		TP201		TP205		TP207	
Bottom Depth		1.3		0.9		0.9	
Date Sampled		15-MAR-2017		15-MAR-2017		15-MAR-2017	
Type		Sandy Soil		Sandy Soil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units			
pH	T7	AR			7.8	6.3	7.9
Electrical Conductivity	T7	A40	10	µS/cm	1500	1600	650
Redox Potential	T7	A40		mV	-51	-38	-100

Concept Reference: 640278							
Project Site: Scotchbarn Lane							
Customer Reference: 103358							
Soil		Analysed as Soil					
Partial UKWIR suite 2							
Concept Reference					640278 013	640278 016	640278 020
Customer Sample Reference					TP208	TP209	TP206
Bottom Depth					0.9	0.9	0.65
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units			
Electrical Conductivity	T7	A40	10	µS/cm	1500	1400	1600
pH	T7	A40			9.9	10.1	8.3
Redox Potential	T7	A40		mV	-120	-120	-89
TPH (C11-C20)	T8	AR	1	mg/kg	⁽¹³⁾ 1	⁽¹³⁾ 5	⁽¹³⁾ 4
TPH (C20-C40)	T8	AR	1	mg/kg	⁽¹³⁾ 10	⁽¹³⁾ 63	⁽¹³⁾ 16
Total Petroleum Hydrocarbons (C5 - C10 aliphatic/aromatic)	T85	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358								
Soil Partial UKWIR suite 3			Analysed as Soil					
Concept Reference			640278 006		640278 027		640278 028	
Customer Sample Reference			TP203		TP211		TP211	
Bottom Depth			0.9		0.9		1.4	
Date Sampled			15-MAR-2017		15-MAR-2017		15-MAR-2017	
Type			Sandy Soil		Sandy Soil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units				
Electrical Conductivity	T7	A40	10	µS/cm	1400	1800	1700	
pH	T7	A40			7.3	8.0	8.1	
Redox Potential	T7	A40		mV	-49	11	9	
TPH (C11-C20)	T8	AR	1	mg/kg	⁽¹³⁾ <1	⁽¹³⁾ <1	⁽¹³⁾ <1	
TPH (C20-C40)	T8	AR	1	mg/ka	⁽¹³⁾ 5	⁽¹³⁾ g	⁽¹³⁾ <1	

Concept Reference: 640278									
Project Site: Scotchbarn Lane									
Customer Reference: 103358									
Soil					Analysed as Soil				
Phenols (Speciated)									
Concept Reference					640278 006	640278 013	640278 016	640278 020	640278 027
Customer Sample Reference					TP203	TP208	TP209	TP206	TP211
Bottom Depth					0.9	0.9	0.9	0.65	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand		Method	Test Sample	LOD	Units				
Phenol		T149	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01
Cresols		T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01
Xylenols		T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01

Concept Reference: 640278					
Project Site: Scotchbarn Lane					
Customer Reference: 103358					
Soil			Analysed as Soil		
Phenols (Speciated)					
Concept Reference					640278 028
Customer Sample Reference					TP211
Bottom Depth					1.4
Date Sampled					15-MAR-2017
Type					Sandy Soil
Determinand	Method	Test Sample	LOD	Units	
Phenol	T149	AR	0.01	mg/kg	<0.01
Cresols	T16	AR	0.01	mg/kg	<0.01
Xylenols	T16	AR	0.01	mg/kg	<0.01

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil SVOC 625 + Tentatively Identified Compounds									
Concept Reference				640278 002	640278 006	640278 010	640278 013	640278 016	
Customer Sample Reference				TP201	TP203	TP205	TP208	TP209	
Bottom Depth				1.3	0.9	0.9	0.9	0.9	
Date Sampled				15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
Phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(36,62) <0.5	-	(36,62) <0.5	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	-	(36,62) <0.5	(62,36) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil
Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(62,36) <0.5	-	(62,36) <0.5	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	-	(36,62) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	-	0.6	0.2
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	0.2	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.4	-	0.7	0.3
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	-	0.5	0.3
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.2	-	0.3	0.2
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	-	0.3	0.2
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.1	-	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.2	-	0.1	<0.1



Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	0.1	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(62,36) <0.5	-	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	(36,62) <0.5	(36,62) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(36,62) <0.5	-	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	(62,36) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	0.2	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	0.2	<0.1
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.3	0.1	<0.1
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.6	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278									
Project Site: Scotchbarn Lane									
Customer Reference: 103358									
Soil Analysed as Soil									
SVOC 625 + Tentatively Identified Compounds									
Concept Reference		640278 018		640278 020		640278 027		640278 028	
Customer Sample Reference		TP207		TP206		TP211		TP211	
Bottom Depth		0.9		0.65		0.9		1.4	
Date Sampled		15-MAR-2017		15-MAR-2017		15-MAR-2017		15-MAR-2017	
Type		Sandy Soil		Sandy Soil		Sandy Soil		Sandy Soil	
Determinand		Method	Test Sample	LOD	Units				
Benzo(ghi)Perylene		T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil Miscellaneous								
Concept Reference		640278 012	640278 015	640278 024				
Customer Sample Reference		TP208	TP209	TP210				
Bottom Depth		0.3	0.3	0.9				
Date Sampled		15-MAR-2017	15-MAR-2017	15-MAR-2017				
Type		Sandy Soil	Sandy Soil	Sandy Soil				
Determinand	Method	Test Sample	LOD	Units				
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	

Index to symbols used in 640278-1

Value	Description
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
A40	Assisted dried < 40C
N.D.	Not Detected
110	LOD raised due to low internal standard recovery.
62	LOD was raised due to the method performance of the analytical procedure used
13	Results have been blank corrected.
36	LOD Raised due to low Matrix spike recovery
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was subcontracted to REC Asbestos.

Method Index

Value	Description
T8	GC/FID
T921	Colorimetry (CF) (MCERT)
T16	GC/MS
T27	PLM
T6	ICP/OES
T207	GC/MS (MCERTS)
T85	Calc
T149	GC/MS (SIR)
T7	Probe
T2	Grav
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
pH	T7	AR			M	002,010,012,015,018,024
Electrical Conductivity	T7	A40	10	µS/cm	N	002,006,010,013,016,018,020,027-028
Redox Potential	T7	A40		mV	N	002,006,010,013,016,018,020,027-028
Phenol	T207	M105	0.1	mg/kg	M	002,010,018
Phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-methyl phenol	T207	M105	0.1	mg/kg	M	002,010,018
2-methyl phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3/4-Methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
3/4-Methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachloroethane	T207	M105	0.1	mg/kg	U	002,010,018
Hexachloroethane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Nitrobenzene	T207	M105	0.1	mg/kg	M	002,010,018
Nitrobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Isophorone	T207	M105	0.1	mg/kg	U	002,010,018
Isophorone	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitrophenol	T207	M105	0.1	mg/kg	U	002,010,018
2-Nitrophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Naphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Naphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chloroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobutadiene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
Hexachlorobutadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Chloronaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
2-Chloronaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitroaniline	T207	M105	0.1	mg/kg	M	002,010,018
2-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dimethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Dimethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	U	002,010,018
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Acenaphthylene	T207	M105	0.1	mg/kg	U	002,010,018
Acenaphthylene	T207	M105	0.1	mg/kg	M	002,010,018
Acenaphthylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Acenaphthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzofuran	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	M	002,010,018
Dibenzofuran	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Diethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
Diethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
4-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pentachlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Phenanthrene	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T207	M105	0.1	mg/kg	U	002,010,018
Pentachlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Carbazole	T207	M105	0.1	mg/kg	U	002,010,018
Phenanthrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-butylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Carbazole	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T207	M105	0.1	mg/kg	U	002,010,018
Di-n-butylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Chrysene	T207	M105	0.1	mg/kg	M	002,010,018
Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Chrysene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	002,010,018
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
SVOC screen (extra peaks)	T16	M105	10	mg/kg	N	002,006,010,013,016,018,020,027-028
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Total Petroleum Hydrocarbons (C5 - C10 aliphatic/aromatic)	T85	AR	0.010	mg/kg	N	013,016,020
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
Phenol	T149	AR	0.01	mg/kg	U	006,013,016,020,027-028
Cresols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Xylenols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Asbestos ID	T27	AR			SU	012,015,024
Arsenic	T6	M40	2	mg/kg	M	012,015,024
Cadmium	T6	M40	1	mg/kg	M	012,015,024
Chromium	T6	M40	1	mg/kg	M	012,015,024
Lead	T6	M40	1	mg/kg	M	012,015,024

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Mercury	T6	M40	1	mg/kg	M	012,015,024
Selenium	T6	M40	3	mg/kg	M	012,015,024
Copper	T6	M40	1	mg/kg	M	012,015,024
Nickel	T6	M40	1	mg/kg	M	012,015,024
Zinc	T6	M40	1	mg/kg	M	012,015,024
SO ₄ (Total)	T6	A40	0.01	%	N	012,015,024
SO ₄ (2:1)	T6	AR	0.1	g/l	N	012,015,024
Chromium VI	T6	AR	1	mg/kg	N	012,015,024
Barium	T6	A40	1	mg/kg	U	012,015,024
Beryllium	T6	A40	2	mg/kg	U	012,015,024
Boron (water-soluble)	T6	AR	1	mg/kg	N	012,015,024
Cyanide(Total)	T921	AR	1	mg/kg	M	012,015,024
Phenols(Mono)	T921	AR	1	mg/kg	M	012,015,024
Vanadium	T6	M40	1	mg/kg	M	012,015,024
pH	T7	A40			U	006,013,016,020,027-028
TPH (C11-C20)	T8	AR	1	mg/kg	U	006,013,016,020,027-028
TPH (C20-C40)	T8	AR	1	mg/kg	N	006,013,016,020,027-028
Moisture @105C	T162	AR	0.1	%	N	002,010,012,015,018,024
Retained on 10mm sieve	T2	M40	0.1	%	N	002,010,012,015,018,024



Concept Life Sciences

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 753078-1

Date of Report: 26-Jul-2018

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Mr Phil Hill

Customer Job Reference: 103358

Customer Purchase Order: 005146

Customer Site Reference: Scotchbarn Lane

Date Job Received at Concept: 18-Jul-2018

Date Analysis Started: 19-Jul-2018

Date Analysis Completed: 26-Jul-2018

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with Section 25 of the Concept Life Sciences, Analytical Services Quality Manual



Report checked
and authorised by :
Chloe Kitto
Customer Service Advisor

Issued by :
Chloe Kitto
Customer Service Advisor



Concept Reference: 753078 Project Site: Scotchbarn Lane Customer Reference: 103358						
Soil		Analysed as Soil				
MCERTS Preparation						
Concept Reference						753078 006
Customer Sample Reference						Plot 117 TS2
Depth						0.5
Date Sampled						18-JUL-2018
Matrix Class						Topsoil
Determinand	Method	Test Sample	LOD	Units		
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	
Moisture @105C	T162	AR	0.1	%	19	

Produced by Concept Life Sciences, Hadfield House, Hadfield Street, Cornbrook, Manchester, M16 9FE

Concept Reference: 753078 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil REC Ltd 002S					
Concept Reference					753078 006
Customer Sample Reference					Plot 117 TS2
Depth					0.5
Date Sampled					18-JUL-2018
Matrix Class					Topsoil
Determinand	Method	Test Sample	LOD	Units	
Arsenic	T6	M40	2	mg/kg	17
Cadmium	T6	M40	1	mg/kg	4
Chromium	T6	M40	1	mg/kg	28
Lead	T6	M40	1	mg/kg	130
Mercury	T6	M40	1	mg/kg	<1
Selenium	T6	M40	3	mg/kg	<3
Copper	T6	M40	1	mg/kg	170
Nickel	T6	M40	1	mg/kg	23
Zinc	T6	M40	1	mg/kg	130
pH	T7	A40			6.8
SO4(Total)	T6	A40	0.01	%	0.08
SO4(2:1)	T6	A40	100	mg/l	<100
Chromium VI	T6	A40	1	mg/kg	<1
Barium	T6	A40	1	mg/kg	120
Beryllium	T6	A40	2	mg/kg	<2
Boron (water-soluble)	T6	A40	1	mg/kg	<1
Cyanide(Total)	T921	AR	1	mg/kg	<1
Phenols(Mono)	T921	AR	1	mg/kg	<1
Vanadium	T6	M40	1	mg/kg	29

Concept Reference: 753078 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil PAH US EPA 16 (B and K split) and Phenol									
Concept Reference				753078 001	753078 002	753078 003	753078 004	753078 005	
Customer Sample Reference				Plot 41 TS1	Plot 41 TS2	Plot 43 TS1	Plot 43 TS2	Plot 117 TS1	
Depth				0.2	0.5	0.2	0.5	0.2	
Date Sampled				18-JUL-2018	18-JUL-2018	18-JUL-2018	18-JUL-2018	18-JUL-2018	
Matrix Class				Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.2	0.1	0.2	0.7	0.5
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	0.4	0.3	0.5	1.4	0.9
Pyrene	T207	M105	0.1	mg/kg	0.4	0.3	0.5	1.2	0.9
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.2	0.2	0.2	0.6	0.4
Chrysene	T207	M105	0.1	mg/kg	0.2	0.2	0.2	0.5	0.4
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.3	0.2	0.3	0.5	0.4
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.2	0.1	0.2	0.4	0.3
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.2	0.2	0.2	0.5	0.4
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.1	<0.1	0.1	0.3	0.2
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.1	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.2	0.1	0.2	0.3	0.3
PAH(total)	T207	M105	0.1	mg/kg	2.4	1.7	2.6	6.8	4.7
Phenol	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 753078 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil PAH US EPA 16 (B and K split) and Phenol					
Concept Reference					753078 006
Customer Sample Reference					Plot 117 TS2
Depth					0.5
Date Sampled					18-JUL-2018
Matrix Class					Topsoil
Determinand	Method	Test Sample	LOD	Units	
Naphthalene	T207	M105	0.1	mg/kg	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	0.3
Pyrene	T207	M105	0.1	mg/kg	0.3
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.2
Chrysene	T207	M105	0.1	mg/kg	0.2
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.2
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.2
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1
PAH(total)	T207	M105	0.1	mg/kg	1.6
Phenol	T207	M105	0.1	mg/kg	<0.1

Concept Reference: 753078 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil REC Banded TPH									
Concept Reference				753078 001	753078 002	753078 003	753078 004	753078 005	
Customer Sample Reference				Plot 41 TS1	Plot 41 TS2	Plot 43 TS1	Plot 43 TS2	Plot 117 TS1	
Depth				0.2	0.5	0.2	0.5	0.2	
Date Sampled				18-JUL-2018	18-JUL-2018	18-JUL-2018	18-JUL-2018	18-JUL-2018	
Matrix Class				Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C35-C44)	T8	M105	1	mg/kg	(13) 8	(13) 8	(13) 9	(13) 10	(13) 27
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) 37
TPH (C12-C16)	T206	M105	1	mg/kg	(13) 1	(13) <1	(13) <1	(13) <1	(13) 130
TPH (C16-C21)	T206	M105	1	mg/kg	(13) 10	(13) 6	(13) 6	(13) 8	(13) 330
TPH (C21-C35)	T206	M105	1	mg/kg	(13) 41	(13) 30	(13) 40	(13) 46	(13) 320

Concept Reference: 753078 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil REC Banded TPH					
Concept Reference					753078 006
Customer Sample Reference					Plot 117 TS2
Depth					0.5
Date Sampled					18-JUL-2018
Matrix Class					Topsoil
Determinand	Method	Test Sample	LOD	Units	
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10
TPH (C35-C44)	T8	M105	1	mg/kg	⁽¹³⁾ 7
TPH (C10-C12)	T206	M105	1	mg/kg	⁽¹³⁾ <1
TPH (C12-C16)	T206	M105	1	mg/kg	⁽¹³⁾ <1
TPH (C16-C21)	T206	M105	1	mg/kg	⁽¹³⁾ 8
TPH (C21-C35)	T206	M105	1	mg/kg	⁽¹³⁾ 34

Concept Reference: 753078 Project Site: Scotchbarn Lane Customer Reference: 103358									
Soil					Analysed as Soil				
Asbestos									
Concept Reference					753078 001	753078 002	753078 003	753078 004	753078 005
Customer Sample Reference					Plot 41 TS1	Plot 41 TS2	Plot 43 TS1	Plot 43 TS2	Plot 117 TS1
Depth					0.2	0.5	0.2	0.5	0.2
Date Sampled					18-JUL-2018	18-JUL-2018	18-JUL-2018	18-JUL-2018	18-JUL-2018
Matrix Class					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand		Method	Test Sample	LOD	Units				
Asbestos ID		T27	A40			N.D.	N.D.	N.D.	N.D.

Concept Reference: 753078 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil Asbestos					
Concept Reference					753078 006
Customer Sample Reference					Plot 117 TS2
Depth					0.5
Date Sampled					18-JUL-2018
Matrix Class					Topsoil
Determinand	Method	Test Sample	LOD	Units	
Asbestos ID	T27	A40			N.D.

Index to symbols used in 753078-1

Value	Description
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
A40	Assisted dried < 40C
N.D.	Not Detected
13	Results have been blank corrected.
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited

N	Analysis is not UKAS accredited
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Notes

Asbestos testing was subcontracted to REC Asbestos.

Method Index

Value	Description
T162	Grav (1 Dec) (105 C)
T8	GC/FID
T54	GC/MS (Headspace)
T921	Colorimetry (CF) (MCERT)
T206	GC/FID (MCERTS)
T207	GC/MS (MCERTS)
T2	Grav
T7	Probe
T27	PLM
T6	ICP/OES

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Arsenic	T6	M40	2	mg/kg	M	001-006
Cadmium	T6	M40	1	mg/kg	M	001-006
Chromium	T6	M40	1	mg/kg	M	001-006
Lead	T6	M40	1	mg/kg	M	001-006
Mercury	T6	M40	1	mg/kg	M	001-006
Selenium	T6	M40	3	mg/kg	M	001-006
Copper	T6	M40	1	mg/kg	M	001-006
Nickel	T6	M40	1	mg/kg	M	001-006
Zinc	T6	M40	1	mg/kg	M	001-006
pH	T7	A40			M	001-006
SO4(Total)	T6	A40	0.01	%	N	001-006
SO4(2:1)	T6	A40	100	mg/l	N	001-006
Chromium VI	T6	A40	1	mg/kg	N	001-006
Barium	T6	A40	1	mg/kg	U	001-006
Beryllium	T6	A40	2	mg/kg	U	001-006
Boron (water-soluble)	T6	A40	1	mg/kg	N	001-006
Cyanide(Total)	T921	AR	1	mg/kg	M	001-006
Phenols(Mono)	T921	AR	1	mg/kg	M	001-006
Vanadium	T6	M40	1	mg/kg	M	001-006
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001-006
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001-006
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001-006
TPH (C35-C44)	T8	M105	1	mg/kg	N	001-006
TPH (C10-C12)	T206	M105	1	mg/kg	M	001-006
TPH (C12-C16)	T206	M105	1	mg/kg	M	001-006
TPH (C16-C21)	T206	M105	1	mg/kg	M	001-006
TPH (C21-C35)	T206	M105	1	mg/kg	M	001-006
Retained on 10mm sieve	T2	M40	0.1	%	N	001-006
Moisture @105C	T162	AR	0.1	%	N	001-006
Naphthalene	T207	M105	0.1	mg/kg	M	001-006
Acenaphthylene	T207	M105	0.1	mg/kg	U	001-006
Acenaphthene	T207	M105	0.1	mg/kg	M	001-006
Fluorene	T207	M105	0.1	mg/kg	M	001-006
Phenanthrene	T207	M105	0.1	mg/kg	M	001-006
Anthracene	T207	M105	0.1	mg/kg	U	001-006
Fluoranthene	T207	M105	0.1	mg/kg	M	001-006
Pyrene	T207	M105	0.1	mg/kg	M	001-006
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001-006
Chrysene	T207	M105	0.1	mg/kg	M	001-006
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001-006
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001-006
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001-006
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001-006
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001-006
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001-006

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
PAH(total)	T207	M105	0.1	mg/kg	U	001-006
Phenol	T207	M105	0.1	mg/kg	M	001-006
Asbestos ID	T27	A40			SU	001-006



Concept Life Sciences

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 755556-1

Date of Report: 02-Aug-2018

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Mr Phil Hill

Customer Job Reference: 103358

Customer Purchase Order: 005146

Customer Site Reference: Scotchbarn Lane

Date Job Received at Concept: 18-Jul-2018

Date Analysis Started: 30-Jul-2018

Date Analysis Completed: 02-Aug-2018

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with Section 25 of the Concept Life Sciences, Analytical Services Quality Manual

Report checked
and authorised by :
Aneta Dybek-Echtermeyer
Customer Service Advisor

Issued by :
Aneta Dybek-Echtermeyer
Customer Service Advisor 

Concept Reference: 755556 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil REC TOC and SOM					
Concept Reference				755556 001	
Customer Sample Reference				Plot 117 TS1 (753078/005)	
Top Depth				0.2	
Depth				0.2	
Date Sampled				18-JUL-2018	
Determinand	Method	Test Sample	LOD	Units	
Soil Organic Matter	T287	A40	0.1	%	5.6
Total Organic Carbon	T21	A40	0.1	%	3.3

Index to symbols used in 755556-1

Value	Description
A40	Assisted dried < 40C
N	Analysis is not UKAS accredited

Method Index

Value	Description
T287	Calc TOC/0.58
T21	OX/IR

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Soil Organic Matter	T287	A40	0.1	%	N	001
Total Organic Carbon	T21	A40	0.1	%	N	001

John Fenlon
Bellway Homes Limited (North West)
2 Alderman Road
Hunts Cross
Liverpool
Merseyside
L24 9LR

BY Email john.fenlon@bellway.co.uk

Dear John,

Garden Validation – Scotchbarn Lane, Knowsley – Plots 11 and 40.

Background and Objectives

In accordance with the Remediation Strategy ref 103358p2r2, dated November 2017, the following is required across the whole site:

Depth Requirement for Gardens

- ▶ A total clean cover system comprising a minimum thickness of 600 mm;
- ▶ A minimum topsoil thickness of 150 mm; and,
- ▶ The remainder of the clean cover system shall be comprised of subsoil.

Validation Requirement

- ▶ Independent validation of works by Geo-Environmental Consultant;
- ▶ Visual inspection and chemical laboratory validation sampling; and
- ▶ Production of validation letter reports for the clean cover system.

Table 1: Chemical Validation Testing Requirement

Source	Source of Material			
	Greenfield	Remediated	Brownfield	Unknown
Gardens	1 per 250m ³	1 per 100 m ³	1 per 50 m ³	1 per 50 m ³
Soft Landscaping	1 per 250m ³	1 per 150 m ³	1 per 150 m ³	1 per 150 m ³
Other Fill Materials	1 per 250m ³	1 per 250m ³	1 per 250m ³	1 per 250m ³

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VALIDATION WORKS COMPLETED TO DATE

Table 2 shows a summary of validated plots to date.

Table 2: Summary of Validated Plots

Validated Plots [w/ 600mm Cover System]	Letter Reference
7-10	01v103358
1-2, 5	02v103358
6, 34-39, 118-119	03v103358
41-43 & 117	04v103358
11 & 40	05v103358
Total = 22	

Table 3: Approximate total soil volumes of rear gardens

Material	Volume (m ³)
Topsoil	2,300
Subsoil	6,900

VALIDATION WORKS COMPLETED DURING SITE VISIT OF 14th September 2018

An engineer from REC attended site on 14th September 2018 to confirm the thickness of the topsoil and subsoil placed in the rear gardens of Plots 11 and 40. For the avoidance of doubt, REC can confirm that this report refers to 2 No. detached residential properties.

▶ Depth Validation

In total, two excavations (one in each rear garden as illustrated in Figure 1. below) were advanced by hand with the resulting strata encountered listed in individual certificates presented below. The excavations were completed to confirm that the required amount of cover system has been installed in the rear of the properties.

REC can confirm that our independent inspection provides sufficient visual evidence that the required 600mm clean cover system depth has been put in place within the **rear** residential garden areas of Plots 11 and 40.

▶ Physical Validation

Upon inspection of the topsoil and subsoil material of the plots that have been successfully validated, the REC Engineer did not encounter any potentially deleterious or unsuitable materials discernible by the naked eye; for example ceramic materials, metal objects, plastics, treated wood or textiles, etc.

It should be noted that the visual inspection undertaken was of stockpile surfaces and of the arisings brought to the surface as part of the sampling exercise at each plot; and not of all the material used across the entirety of the site and therefore there may be deleterious materials present which were not encountered during this validation visit.





TOPSOIL

Source Chemical Testing Certificates

An engineer from site visited site on two separate occasions on the 17th- 19th May 2016 and 15th March 2017 to undertake phase II ground investigations. These investigations found that the topsoil situated on site to be suitable for reuse in the garden areas. The certificates from the laboratory analysis are attached to this letter report.

Yours Sincerely,

For and on behalf of REC Ltd

Calum Dowd
Consultant

Approved and Authorised

Ged Sojka
Operations Director

Enclosed:

Sketch Location Plan of Validation Pits

Plot Inspection Records (including photographs and description)

Table 3: Screening Values for Materials within Residential Soft Landscaping Areas

Chemical Analysis Certificates





Figure 1: Sketch Plot Validation Pit Location



- - Validated Plots during Site Visit on 18th July 2018
- - Previously Validated Plots





PLOT INSPECTION RECORD



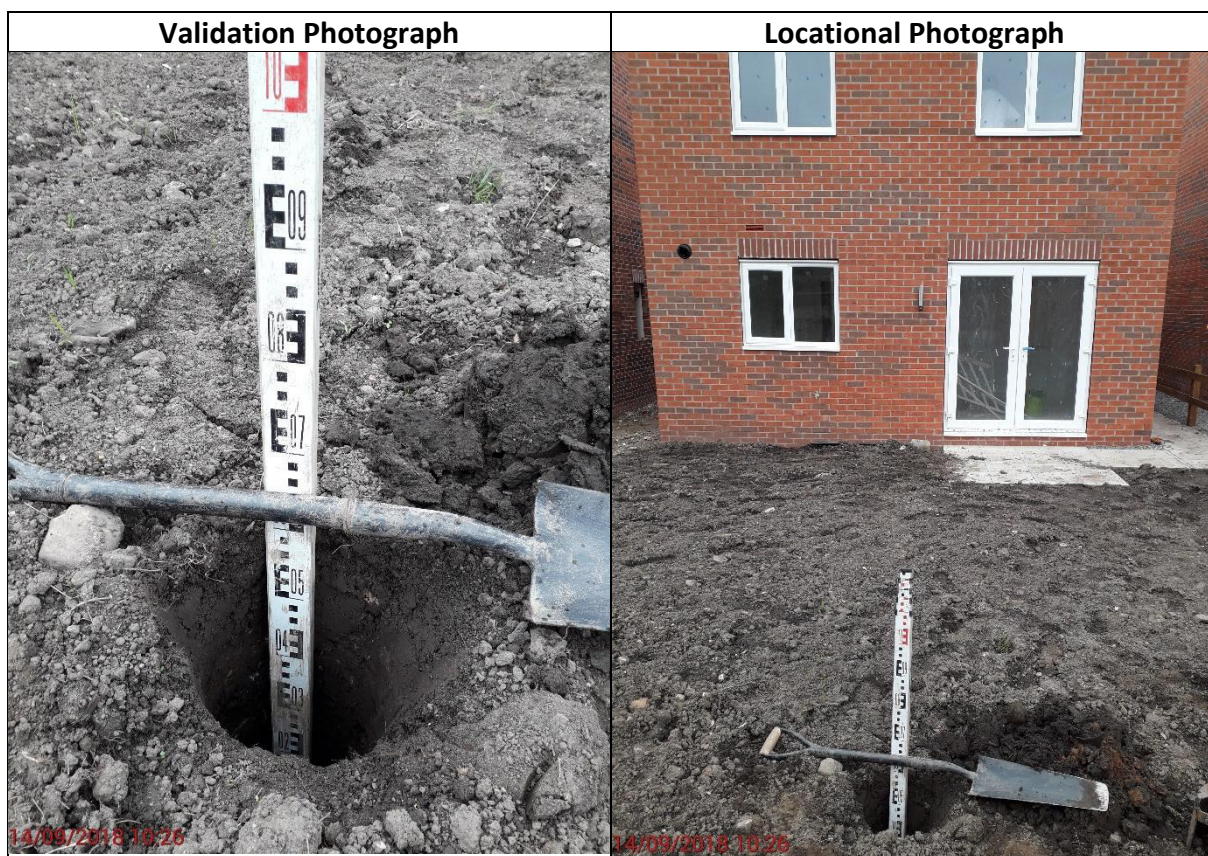


PLOT NUMBER: 11

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 14/09/2018
Consultant: C. Dowd

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	0 mm bgl
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:

GARDEN VALIDATION: PASS



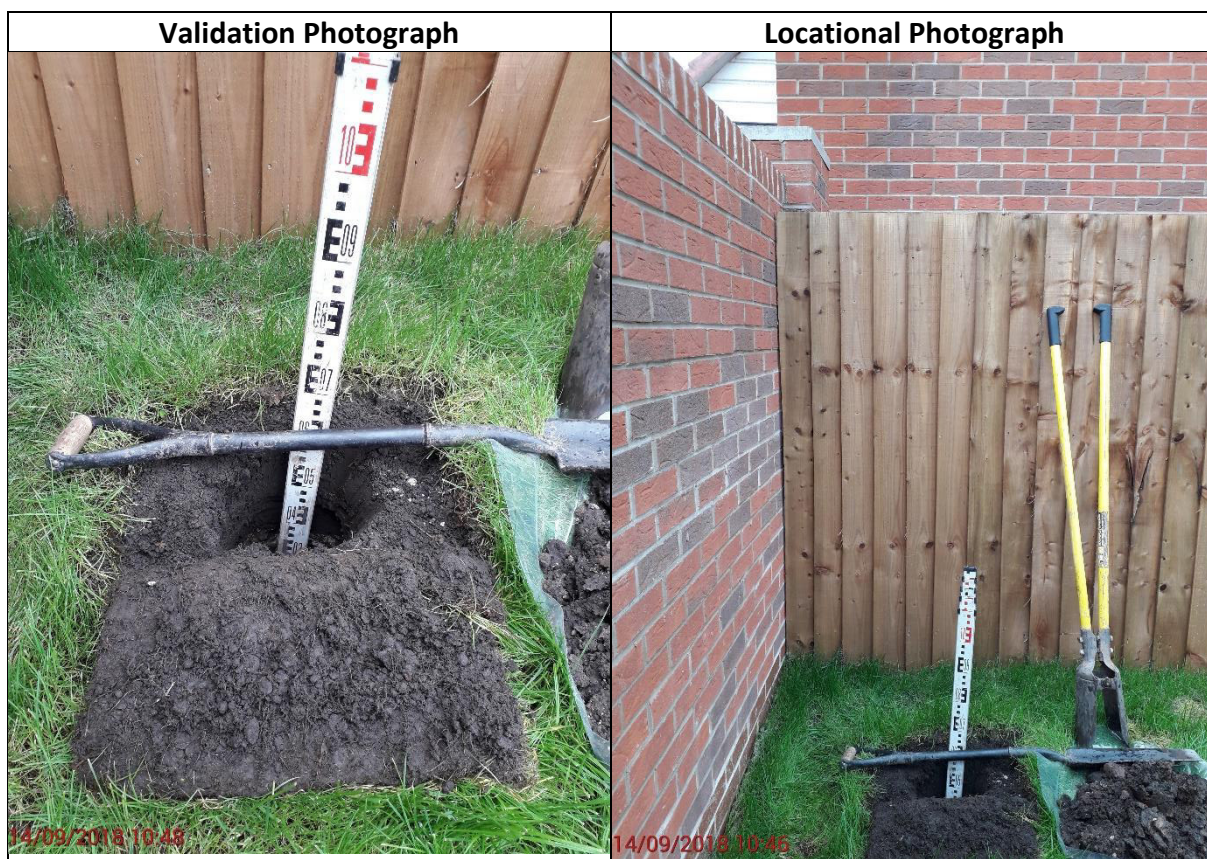


PLOT NUMBER: 40

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 14/09/2018
Consultant: C. Dowd

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	0 mm bgl
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:

GARDEN VALIDATION: PASS





SOIL CHEMICAL ANALYSIS





File,,,source1.pdf,,,all
File,,,source2.pdf,,,all



John Fenlon
Bellway Homes Limited (North West)
2 Alderman Road
Hunts Cross
Liverpool
Merseyside
L24 9LR

BY Email john.fenlon@bellway.co.uk

Dear John,

Garden Validation – Scotchbarn Lane, Knowsley – Plots 12-13

Background and Objectives

In accordance with the Remediation Strategy ref 103358p2r2, dated November 2017, the following is required across the whole site:

Depth Requirement for Gardens

- ▶ A total clean cover system comprising a minimum thickness of 600 mm;
- ▶ A minimum topsoil thickness of 150 mm; and,
- ▶ The remainder of the clean cover system shall be comprised of subsoil.

Validation Requirement

- ▶ Independent validation of works by Geo-Environmental Consultant;
- ▶ Visual inspection and chemical laboratory validation sampling; and
- ▶ Production of validation letter reports for the clean cover system.

Table 1: Chemical Validation Testing Requirement

Source	Source of Material			
	Greenfield	Remediated	Brownfield	Unknown
Gardens	1 per 250m ³	1 per 100 m ³	1 per 50 m ³	1 per 50 m ³
Soft Landscaping	1 per 250m ³	1 per 150 m ³	1 per 150 m ³	1 per 150 m ³
Other Fill Materials	1 per 250m ³	1 per 250m ³	1 per 250m ³	1 per 250m ³

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VALIDATION WORKS COMPLETED TO DATE

Table 2 shows a summary of validated plots to date.

Table 2: Summary of Validated Plots

Validated Plots [w/ 600mm Cover System]	Letter Reference
7-10	01v103358
1-2, 5	02v103358
6, 34-39, 118-119	03v103358
41-43 & 117	04v103358
11 & 40	05v103358
12-13	06v103358
Total = 24	

Table 3: Approximate total soil volumes of rear gardens

Material	Volume (m ³)
Topsoil	2,300
Subsoil	6,900

VALIDATION WORKS COMPLETED DURING SITE VISIT OF 1st October 2018

An engineer from REC attended site on 1st October 2018 to confirm the thickness of the topsoil and subsoil placed in the front and rear gardens of Plots 12-13 and collect soil samples for chemical analysis, further details as below. For the avoidance of doubt, REC can confirm that this report refers to 2 No. detached residential properties.

▶ Depth Validation

In total 2 excavations (one in each rear gardens as illustrated in Figure 1. below) were advanced by hand with the resulting strata encountered listed in individual certificates presented below. The excavations were completed to confirm that the required amount of cover system has been installed in the front and rear of the properties.

REC can confirm that our independent inspection provides sufficient visual evidence that the required 600mm clean cover system depth has been put in place within the **rear** residential garden areas of Plots 12-13.

▶ Physical Validation

Upon inspection of the topsoil and subsoil material of the plots that have been successfully validated, the REC Engineer did not encounter any potentially deleterious or unsuitable materials discernible by the naked eye; for example ceramic materials, metal objects, plastics, treated wood or textiles, etc.

It should be noted that the visual inspection undertaken was of stockpile surfaces and of the arisings brought to the surface as part of the sampling exercise at each plot; and not of all the material used





across the entirety of the site and therefore there may be deleterious materials present which were not encountered during this validation visit.

▶ **Chemical Validation**

All site won sub soil topsoil samples have been analysed for the constituents of concern noted in Table 3 (as enclosed to this letter) to the correct frequency as specified in Table 1 above and have been subsequently assessed against their suitability for a residential end use development.

TOPSOIL

Source Chemical Testing Certificates

An engineer from site visited site on two separate occasions on the 17th- 19th May 2016 and 15th March 2017 to undertake phase II ground investigations. These investigations found that the topsoil situated on site to be suitable for reuse in the garden areas. The certificates from the laboratory analysis are attached to this letter report.

Volume Chemical Testing Certificates

In total 2 No. samples of the topsoil were tested at a frequency of 1 per 50m³.

After completion of the laboratory analysis, REC can confirm that the topsoil and subsoil installed in the rear gardens of Plots 12 and 13 meet the specified requirements as a suitable growing medium and is fit for its intended use.

Yours Sincerely,

For and on behalf of REC Ltd

Calum Dowd
Consultant

Approved and Authorised

Phil Hill
Senior Consultant

Enclosed:

Sketch Location Plan of Validation Pits

Plot Inspection Records (including photographs and description)

Table 3: Screening Values for Materials within Residential Soft Landscaping Areas

Chemical Analysis Certificates





Figure 1: Sketch Plot Validation Pit Location



- - Validated Plots during Site Visit on 1st October 2018
- - Previously Validated Plots





PLOT INSPECTION RECORD



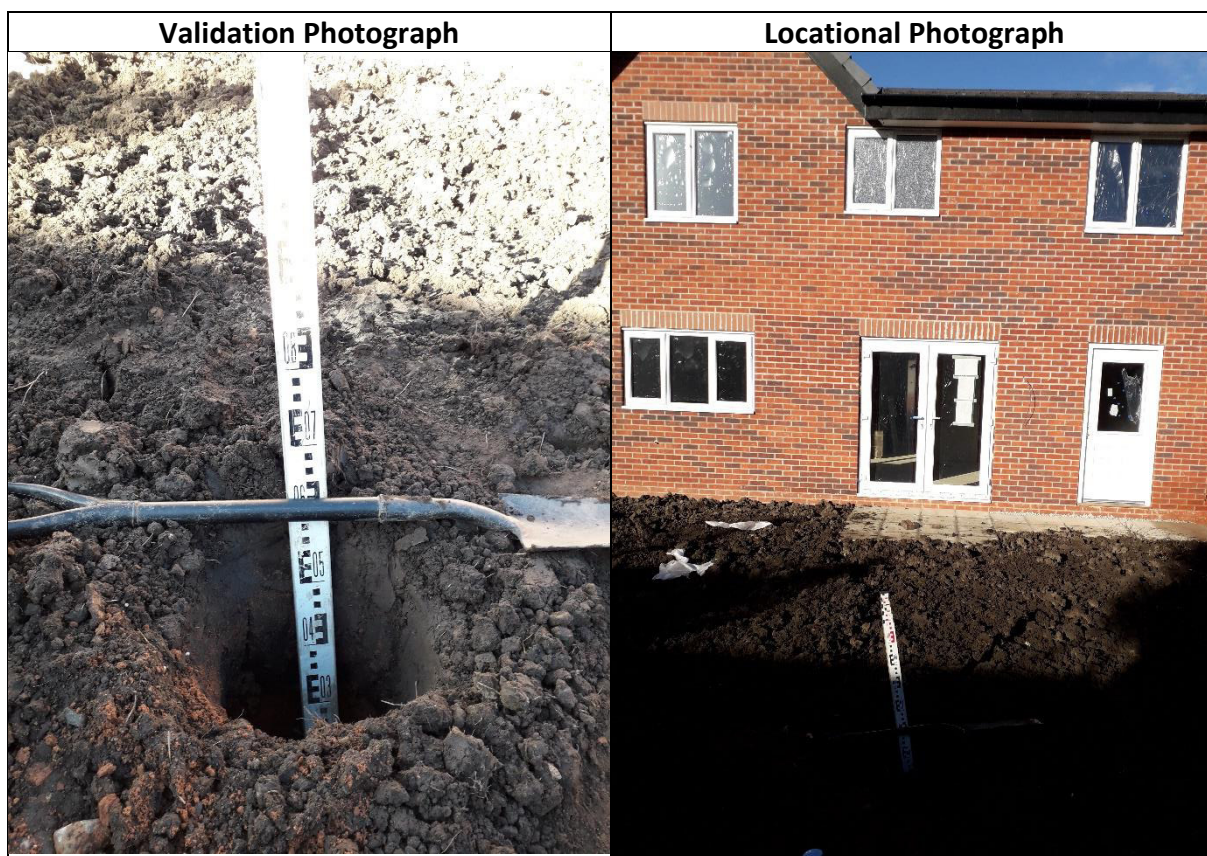


PLOT NUMBER: 12

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 1/10/2018
Consultant: C. Dowd

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	300 mm bgl
Subsoil	> 450mm bgl	Subsoil	300 mm bgl
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
Topsoil samples taken at 0.15 and 0.55m bgl respectively.

GARDEN VALIDATION: PASS



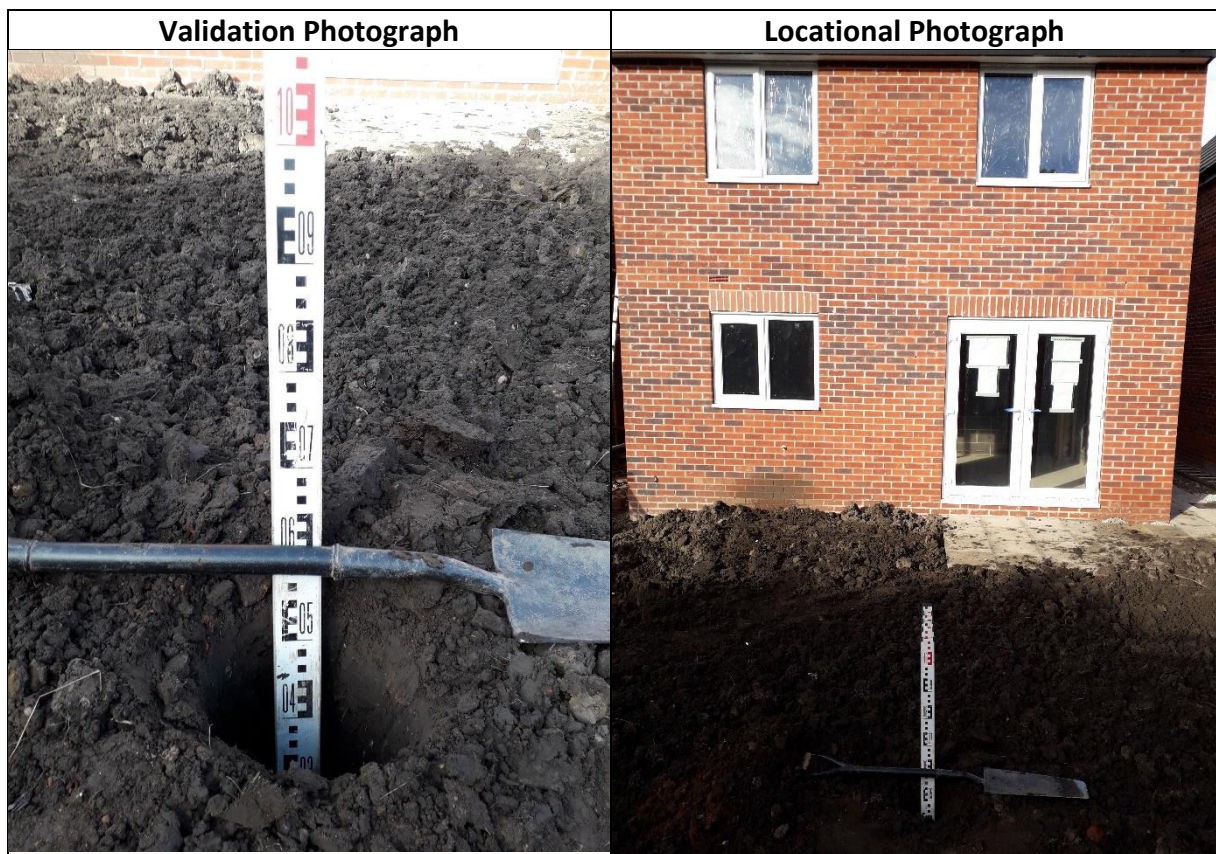


PLOT NUMBER: 13

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 01/10/2018
Consultant: C. Dowd

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	500 mm bgl
Subsoil	> 450mm bgl	Subsoil	100 mm bgl
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
N/A

GARDEN VALIDATION: PASS





SUITABILITY CRITERIA





Table 3.2: Validation Testing Summary

Determinand	Units	Screening Value for Use within Private Gardens	Maximum Concentration within Upper Topsoil	Maximum Concentration within Lower Topsoil	Screening Value Source
Inorganic Metals and Asbestos					
Arsenic	mg/kg	37	13	5	(i)
Cadmium	mg/kg	11	3	<1	(i)
Chromium (VI)	mg/kg	6	<1	<1	(i)
Lead	mg/kg	200	100	11	(iv)
Inorganic Mercury	mg/kg	40	<1	<1	(i)
Nickel	mg/kg	130	22	30	(i)
Selenium	mg/kg	250	<3	<3	(i)
Copper	mg/kg	2,400	140	18	(i)
Zinc	mg/kg	3,700	110	37	(i)
Cyanide	mg/kg	791	<1	<1	(v)
Asbestos	%	None Detected	N.D	N.D	N/A
Phenol	mg/kg	200	<0.1	<0.1	(ii)
Naphthalene	mg/kg	5.6	<0.1	<0.1	(ii)
Acenaphthylene	mg/kg	420	<0.1	<0.1	(ii)
Acenaphthene	mg/kg	510	<0.1	<0.1	(ii)
Fluorene	mg/kg	400	<0.1	<0.1	(ii)
Phenanthrene	mg/kg	220	0.3	<0.1	(ii)
Anthracene	mg/kg	2,400	<0.1	<0.1	(ii)
Fluoranthene	mg/kg	280	0.8	<0.1	(ii)
Pyrene	mg/kg	1200	0.7	<0.1	(ii)
Benzo(a)Anthracene	mg/kg	2.7	0.3	<0.1	(ii)
Chrysene	mg/kg	22	0.3	<0.1	(ii)
Benzo(b)Fluoranthene	mg/kg	3.3	0.3	<0.1	(ii)
Benzo(k)Fluoranthene	mg/kg	93	0.2	<0.1	(ii)
Benzo(a)Pyrene	mg/kg	2.7	0.3	<0.1	(ii)
Indeno(123-cd)Pyrene	mg/kg	36	0.1	<0.1	(ii)
Dibenzo(a,h)Anthracene	mg/kg	0.28	<0.1	<0.1	(ii)
Benzo(ghi)Perylene	mg/kg	340	0.2	<0.1	(ii)
TPH C ₅ -C ₆	mg/kg	78	<0.10	<0.10	(iii)
TPH C ₆ -C ₈	mg/kg	230	<0.10	<0.10	(iii)
TPH C ₈ -C ₁₀	mg/kg	65	<0.10	<0.10	(iii)
TPH C ₁₀ -C ₁₂	mg/kg	180	⁽¹³⁾ <1	⁽¹³⁾ <1	(iii)
TPH C ₁₂ -C ₁₆	mg/kg	330	⁽¹³⁾ <1	⁽¹³⁾ <1	(iii)
TPH C ₁₆ -C ₂₁	mg/kg	540	⁽¹³⁾ 7	⁽¹³⁾ 2	(iii)
TPH C ₂₁ -C ₃₅	mg/kg	1,500	⁽¹³⁾ 36	⁽¹³⁾ 3	(iii)
TPH C ₃₅ -C ₄₄	mg/kg	1,500	⁽¹³⁾ 15	⁽¹³⁾ <1	(iii)
Screening Value Source					
(i) LQM/CIEH Suitable For Use Level (S4UL) (2015);					
(ii) S4UL –Assessment Approach of 3% SOM;					
(iii) S4UL –3% SOM and assumed worst case aliphatic / aromatic compound;					
(iv) Defra Category 4 Screening Level (2014);					
(v) CLEA v1.06 Derived Value.					
⁽¹³⁾ Results have been blank corrected.					





SOIL CHEMICAL ANALYSIS



Scientific Analysis Laboratories Ltd

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Scientific Analysis Laboratories is a
limited company registered in England and
Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Report Number: 572763-1

Date of Report: 01-Jun-2016

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Sabine Sargeant

Customer Job Reference: 101754

Customer Purchase Order: 001151

Customer Site Reference: Scotchbarn Lane

Date Job Received at SAL: 18-May-2016

Date Analysis Started: 26-May-2016

Date Analysis Completed: 01-Jun-2016

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with SAL SOPs

All results have been reviewed in accordance with Section 25 of the SAL Quality Manual



Report checked
and authorised by :
Emma Spear
Project Manager

Issued by :
Emma Spear
Project Manager



SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Bulk Product Analysed as Bulk Product Asbestos ID					
SAL Reference				572763 004	
Customer Sample Reference				TP102	
Bottom Depth				0.4	
Date Sampled				17-MAY-2016	
Type				Fill	
Determinand	Method	Test Sample	LOD	Units	
Asbestos	T27	AR			Chrysotile Fibres Detected

SAL Reference: 572763										
Project Site: Scotchbarn Lane										
Customer Reference: 101754										
Soil Analysed as Soil										
MCERTS Preparation										
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007	
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104	
Bottom Depth					1	0.4	0.2	0.7	0.2	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	11	7.2	7.4	7.4	18
Retained on 10mm sieve		T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763										
Project Site: Scotchbarn Lane										
Customer Reference: 101754										
Soil					Analysed as Soil					
MCERTS Preparation										
SAL Reference					572763 008	572763 009	572763 011	572763 012	572763 013	
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107	
Bottom Depth					2	2	0.5	2.1	0.5	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	7.3	11	18	18	9.7
Retained on 10mm sieve		T2	M40	0.1	%	-	-	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil MCERTS Preparation Analysed as Soil										
SAL Reference					572763 015	572763 016	572763 017	572763 018	572763 019	
Customer Sample Reference					TP108	TP109	TP110	TP111	TP112	
Bottom Depth					0.1	0.5	0.4	0.3	0.1	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Topsoil	Sandy Soil	Clay	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units						
Moisture @105C	T162	AR	0.1	%	8.2	14	18	18	35	
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1	

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference				572763 020	572763 022	572763 023	572763 025	572763 028	
Customer Sample Reference				TP112	TP113	TP113	WS102	WS104	
Bottom Depth				0.9	0.5	1.4	0.2	0.2	
Date Sampled				17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016	18-MAY-2016	
Type				Sandy Soil	Clay	Clay	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	18	17	12	5.8	19
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil		Analysed as Soil							
MCERTS Preparation									
SAL Reference					572763 029	572763 031	572763 032	572763 033	572763 035
Customer Sample Reference					WS105	WS108	WS108	WS109	WS110
Bottom Depth					0.1	0.2	0.5	0.3	1.2
Date Sampled					18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	25	23	16	15	26
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference		572763 039							
Customer Sample Reference		WS113							
Bottom Depth		0.7							
Date Sampled		19-MAY-2016							
Type		Topsoil							
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	5.2				
Retained on 10mm sieve	T2	M40	0.1	%	<0.1				

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Ltd 002S									
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104
Bottom Depth					1	0.4	0.2	0.7	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	8	25	17	5	18
Cadmium	T6	M40	1	mg/kg	<1	<1	<1	<1	2
Chromium	T6	M40	1	mg/kg	30	18	26	20	20
Lead	T6	M40	1	mg/kg	11	110	32	5	66
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Copper	T6	M40	1	mg/kg	17	70	69	7	81
Nickel	T6	M40	1	mg/kg	26	28	34	17	19
Zinc	T6	M40	1	mg/kg	48	190	120	23	98
pH	T7	AR			5.8	7.1	8.2	7.5	5.9
SO4(Total)	T6	M40	0.01	%	0.02	0.30	0.07	0.01	0.07
SO4(2:1)	T6	AR	100	mg/l	<100	310	<100	<100	<100
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1	<1	<1
Beryllium	T6	M40	2	mg/kg	3	2	2	<2	<2
Boron (water-soluble)	T6	AR	1	mg/kg	<1	<1	<1	<1	<1
Phenols(Mono)	T546	AR	1	mg/kg	<1	<1	<1	<1	<1
Vanadium	T6	M40	1	mg/kg	36	37	41	24	32
Barium	T6	M40	1	mg/kg	100	150	160	26	98
Cyanide(Total)	T546	AR	1	mg/kg	<1	<1	<1	<1	1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Ltd 002S									
SAL Reference					572763 011	572763 012	572763 013	572763 015	572763 016
Customer Sample Reference					TP106	TP106	TP107	TP108	TP109
Bottom Depth					0.5	2.1	0.5	0.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	18	4	16	13	13
Cadmium	T6	M40	1	mg/kg	3	<1	2	<1	2
Chromium	T6	M40	1	mg/kg	23	17	23	28	22
Lead	T6	M40	1	mg/kg	120	7	190	150	100
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Copper	T6	M40	1	mg/kg	130	12	48	61	84
Nickel	T6	M40	1	mg/kg	20	16	18	21	18
Zinc	T6	M40	1	mg/kg	140	24	270	170	130
pH	T7	AR			6.9	6.7	6.9	7.4	7.4
SO4(Total)	T6	M40	0.01	%	0.07	<0.01	0.88	0.08	0.15
SO4(2:1)	T6	AR	100	mg/l	<100	<100	650	130	<100
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1	<1	<1
Beryllium	T6	M40	2	mg/kg	2	<2	<2	<2	<2
Boron (water-soluble)	T6	AR	1	mg/kg	<1	<1	<1	<1	<1
Phenols(Mono)	T546	AR	1	mg/kg	<1	<1	<1	<1	<1
Vanadium	T6	M40	1	mg/kg	36	20	36	30	31
Barium	T6	M40	1	mg/kg	97	35	280	150	150
Cyanide(Total)	T546	AR	1	mg/kg	1	<1	1	1	<1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 011	572763 012	572763 013	572763 015	572763 016
Customer Sample Reference					TP106	TP106	TP107	TP108	TP109
Bottom Depth					0.5	2.1	0.5	0.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	1.7	1.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	0.5	0.3
Fluoranthene	T207	M105	0.1	mg/kg	0.5	<0.1	2.2	3.3	2.0
Pyrene	T207	M105	0.1	mg/kg	0.5	<0.1	2.0	3.3	2.0
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.3	<0.1	1.0	2.3	1.1
Chrysene	T207	M105	0.1	mg/kg	0.3	<0.1	1.2	2.6	1.3
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.3	<0.1	1.4	3.3	1.4
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.1	<0.1	0.4	0.5	0.3
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	2.2	1.0
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.1	<0.1	0.6	1.2	0.5
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.3	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.1	<0.1	0.8	1.5	0.6
PAH(total)	T207	M105	0.1	mg/kg	2.6	<0.1	12	23	12

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 017	572763 018	572763 019	572763 020	572763 022
Customer Sample Reference					TP110	TP111	TP112	TP112	TP113
Bottom Depth					0.4	0.3	0.1	0.9	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Topsoil	Topsoil	Sandy Soil	Clay
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.6	0.2	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.5	0.9	0.2	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.5	1.0	0.3	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.6	1.2	0.3	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	0.2	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.8	0.2	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.2	0.5	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.3	0.6	0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1	5.1	9.4	2.5	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 023	572763 025	572763 028	572763 029	572763 031
Customer Sample Reference					TP113	WS102	WS104	WS105	WS108
Bottom Depth					1.4	0.2	0.2	0.1	0.2
Date Sampled					17-MAY-2016	18-MAY-2016	18-MAY-2016	18-MAY-2016	19-MAY-2016
Type					Clay	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.7	0.2	0.3	0.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.7	0.6	0.6	0.5
Pyrene	T207	M105	0.1	mg/kg	<0.1	1.6	0.6	0.6	0.5
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	1.0	0.3	0.3	0.2
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.9	0.3	0.3	0.2
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.2	0.5	0.5	0.3
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.8	0.3	0.3	0.2
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.2	0.2	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.6	0.2	0.2	0.2
PAH(total)	T207	M105	0.1	mg/kg	<0.1	9.5	3.3	3.4	2.3

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 032	572763 033	572763 035	572763 039	
Customer Sample Reference					WS108	WS109	WS110	WS113	
Bottom Depth					0.5	0.3	1.2	0.7	
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type					Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.4	<0.1	
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	
Fluoranthene	T207	M105	0.1	mg/kg	0.3	1.0	0.8	<0.1	
Pyrene	T207	M105	0.1	mg/kg	0.3	0.9	0.7	<0.1	
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Chrysene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.1	0.7	0.4	<0.1	
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.3	<0.1	<0.1	
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.3	<0.1	
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
PAH(total)	T207	M105	0.1	mg/kg	0.9	6.5	3.9	<0.1	

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
REC Banded TPH									
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104
Bottom Depth					1	0.4	0.2	0.7	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) 2	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) 6	(13) 2	(13) <1	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) <1	(13) 10	(13) 13	(13) <1	(13) 2
TPH (C21-C35)	T206	M105	1	mg/kg	(13) <1	(13) 36	(13) 150	(13) <1	(13) 7
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) 20	(13) 77	(13) 2	(13) <1

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
REC Banded TPH									
SAL Reference					572763 008	572763 009	572763 011	572763 012	572763 013
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107
Bottom Depth					2	2	0.5	2.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	0.84	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13,9) <10
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(9,13) <10
TPH (C16-C21)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) 1	(13) <1	(9,13) <10
TPH (C21-C35)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) 10	(13) <1	(13) 11
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) 10

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
REC Banded TPH									
SAL Reference					572763 015	572763 016	572763 017	572763 018	572763 019
Customer Sample Reference					TP108	TP109	TP110	TP111	TP112
Bottom Depth					0.1	0.5	0.4	0.3	0.1
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) 3	(13) 2	(13) <1	(13) <1	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) 35	(13) 18	(13) <1	(13) 3	(13) 3
TPH (C21-C35)	T206	M105	1	mg/kg	(13) 340	(13) 73	(13) <1	(13) 15	(13) 14
TPH (C35-C44)	T8	M105	1	mg/kg	(13) 120	(13) 23	(13) <1	(13) <1	(13) 1

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
pH and Sulphate									
SAL Reference					572763 028	572763 029	572763 031	572763 032	572763 033
Customer Sample Reference					WS104	WS105	WS108	WS108	WS109
Bottom Depth					0.2	0.1	0.2	0.5	0.3
Date Sampled					18-MAY-2016	18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763							
Project Site: Scotchbarn Lane							
Customer Reference: 101754							
Soil							

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Miscellaneous Analysed as Soil									
SAL Reference					572763 001	572763 002	572763 003	572763 005	572763 006
Customer Sample Reference					TP101	TP101	TP102	TP103	TP103
Bottom Depth					1	2.2	0.4	0.2	0.7
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	-	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	310	<100	<100

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 007	572763 009	572763 011	572763 012	572763 013
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107
Bottom Depth					0.2	2	0.5	2.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	-	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	650

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 014	572763 015	572763 016	572763 017	572763 018
Customer Sample Reference					TP107	TP108	TP109	TP110	TP111
Bottom Depth					1.2	0.1	0.5	0.4	0.3
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Topsoil	Sandy Soil	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			-	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	130	<100	<100	<100

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 019	572763 020	572763 022	572763 023	572763 025
Customer Sample Reference					TP112	TP112	TP113	TP113	WS102
Bottom Depth					0.1	0.9	0.5	1.4	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Miscellaneous Analysed as Soil									
SAL Reference					572763 028	572763 029	572763 031	572763 032	572763 033
Customer Sample Reference					WS104	WS105	WS108	WS108	WS109
Bottom Depth					0.2	0.1	0.2	0.5	0.3
Date Sampled					18-MAY-2016	18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763								
Project Site: Scotchbarn Lane								
Customer Reference: 101754								
Soil			Analysed as Soil					
Miscellaneous								
SAL Reference					572763 035	572763 039	572763 040	
Customer Sample Reference					WS110	WS113	WS113	
Bottom Depth					1.2	0.7	1.4	
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type					Topsoil	Topsoil	Topsoil	
Determinand		Method	Test Sample	LOD	Units			
Asbestos ID		T27	AR			N.D.	N.D.	-
SO4(2:1)		T6	AR	100	mg/l	170	<100	<100

Index to symbols used in 572763-1

Value	Description
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
N.D.	Not Detected
13	Results have been blank corrected.
9	LOD raised due to dilution of sample
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was sub-contracted to REC Asbestos.
"Fill" samples are outside the scope of our MCERTS accreditation. Results are UKAS only.

Method Index

Value	Description
T7	Probe
T54	GC/MS (Headspace)
T546	Colorimetry (CF)
T162	Grav (1 Dec) (105 C)
T27	PLM
T207	GC/MS (MCERTS)
T8	GC/FID
T6	ICP/OES
T206	GC/FID (MCERTS)
T2	Grav

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Asbestos	T27	AR			SU	004
Moisture @105C	T162	AR	0.1	%	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
Retained on 10mm sieve	T2	M40	0.1	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Arsenic	T6	M40	2	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cadmium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chromium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Lead	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Mercury	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Selenium	T6	M40	3	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Copper	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Nickel	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Zinc	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(Total)	T6	M40	0.01	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(2:1)	T6	AR	100	mg/l	N	001-003,005-007,009,011-020,022-023,025,028-029,031-033,035,039-040
Chromium VI	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Barium	T6	M40	1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Beryllium	T6	M40	2	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Boron (water-soluble)	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cyanide(Total)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenols(Mono)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Vanadium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Naphthalene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthylene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Fluorene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenanthrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Anthracene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chrysene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
PAH(total)	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C10-C12)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C12-C16)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C16-C21)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C21-C35)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C35-C44)	T8	M105	1	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			U	002,009,014,040
Asbestos ID	T27	AR			SU	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039



Concept Life Sciences

Certificate of Analysis

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Report Number: 640278-1

Date of Report: 22-Mar-2017

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Louise Stock

Customer Job Reference: 103358

Customer Purchase Order: 002602

Customer Site Reference: Scotchbarn Lane

Date Job Received at Concept: 16-Mar-2017

Date Analysis Started: 20-Mar-2017

Date Analysis Completed: 22-Mar-2017

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with Concept SOPs



Report checked
and authorised by :
Aleksandra Pacula
Project Manager

Issued by :
Aleksandra Pacula
Project Manager



Concept Reference: 640278	
Project Site: Scotchbarn Lane	
Customer Reference: 103358	
Soil	Analysed as Soil
MCERTS Preparation	

Concept Reference					640278 002	640278 010	640278 012	640278 015	640278 018
Customer Sample Reference					TP201	TP205	TP208	TP209	TP207
Bottom Depth					1.3	0.9	0.3	0.3	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil

Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	15	14	4.5	8.3	16
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 640278	
Project Site: Scotchbarn Lane	
Customer Reference: 103358	
Soil	Analysed as Soil
MCERTS Preparation	

Concept Reference					640278 024
Customer Sample Reference					TP210
Bottom Depth					0.9
Date Sampled					15-MAR-2017
Type					Sandy Soil
Determinand	Method	Test Sample	LOD	Units	
Moisture @105C	T162	AR	0.1	%	9.3
Retained on 10mm sieve	T2	M40	0.1	%	<0.1

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358	
Soil REC 002S	Analysed as Soil

Concept Reference					640278 012	640278 015	640278 024
Customer Sample Reference					TP208	TP209	TP210
Bottom Depth					0.3	0.3	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units			
Arsenic	T6	M40	2	mg/kg	9	15	7
Cadmium	T6	M40	1	mg/kg	<1	<1	<1
Chromium	T6	M40	1	mg/kg	21	24	30
Lead	T6	M40	1	mg/kg	16	35	51
Mercury	T6	M40	1	mg/kg	<1	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3	<3
Copper	T6	M40	1	mg/kg	25	47	52
Nickel	T6	M40	1	mg/kg	19	22	22
Zinc	T6	M40	1	mg/kg	41	93	77
pH	T7	AR			9.1	9.8	8.2
SO4(Total)	T6	A40	0.01	%	0.31	0.69	0.04
SO4(2:1)	T6	AR	0.1	g/l	0.2	0.1	<0.1
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1
Barium	T6	A40	1	mg/kg	75	150	75
Beryllium	T6	A40	2	mg/kg	<2	<2	<2
Boron (water-soluble)	T6	AR	1	mg/kg	<1	<1	<1
Cyanide(Total)	T921	AR	1	mg/kg	<1	<1	<1
Phenols(Mono)	T921	AR	1	mg/kg	<1	<1	<1
Vanadium	T6	M40	1	mg/kg	24	33	32

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358							
Soil		Analysed as Soil					
Partial UKWIR suite 1							
Concept Reference				640278 002	640278 010	640278 018	
Customer Sample Reference				TP201	TP205	TP207	
Bottom Depth				1.3	0.9	0.9	
Date Sampled				15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type				Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units			
pH	T7	AR			7.8	6.3	7.9
Electrical Conductivity	T7	A40	10	µS/cm	1500	1600	650
Redox Potential	T7	A40		mV	-51	-38	-100

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358							
Soil		Analysed as Soil					
Partial UKWIR suite 2							
Concept Reference					640278 013	640278 016	640278 020
Customer Sample Reference					TP208	TP209	TP206
Bottom Depth					0.9	0.9	0.65
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units			
Electrical Conductivity	T7	A40	10	µS/cm	1500	1400	1600
pH	T7	A40			9.9	10.1	8.3
Redox Potential	T7	A40		mV	-120	-120	-89
TPH (C11-C20)	T8	AR	1	mg/kg	(13) 1	(13) 5	(13) 4
TPH (C20-C40)	T8	AR	1	mg/kg	(13) 10	(13) 63	(13) 16
Total Petroleum Hydrocarbons (C5 - C10 aliphatic/aromatic)	T85	AR	0.010	mg/kg	<0.010	<0.010	(110) <0.020
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	(110) <0.020
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	(110) <0.020
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	(110) <0.020
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	(110) <0.020
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	(110) <0.020
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	(110) <0.020

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358								
Soil Partial UKWIR suite 3			Analysed as Soil					
Concept Reference			640278 006		640278 027		640278 028	
Customer Sample Reference			TP203		TP211		TP211	
Bottom Depth			0.9		0.9		1.4	
Date Sampled			15-MAR-2017		15-MAR-2017		15-MAR-2017	
Type			Sandy Soil		Sandy Soil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units				
Electrical Conductivity	T7	A40	10	µS/cm	1400	1800	1700	
pH	T7	A40			7.3	8.0	8.1	
Redox Potential	T7	A40		mV	-49	11	9	
TPH (C11-C20)	T8	AR	1	mg/kg	⁽¹³⁾ <1	⁽¹³⁾ <1	⁽¹³⁾ <1	
TPH (C20-C40)	T8	AR	1	ma/ka	⁽¹³⁾ 5	⁽¹³⁾ g	⁽¹³⁾ <1	

Concept Reference: 640278									
Project Site: Scotchbarn Lane									
Customer Reference: 103358									
Soil					Analysed as Soil				
Phenols (Speciated)									
Concept Reference					640278 006	640278 013	640278 016	640278 020	640278 027
Customer Sample Reference					TP203	TP208	TP209	TP206	TP211
Bottom Depth					0.9	0.9	0.9	0.65	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand		Method	Test Sample	LOD	Units				
Phenol		T149	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01
Cresols		T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01
Xylenols		T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01

Concept Reference: 640278					
Project Site: Scotchbarn Lane					
Customer Reference: 103358					
Soil			Analysed as Soil		
Phenols (Speciated)					
Concept Reference					640278 028
Customer Sample Reference					TP211
Bottom Depth					1.4
Date Sampled					15-MAR-2017
Type					Sandy Soil
Determinand	Method	Test Sample	LOD	Units	
Phenol	T149	AR	0.01	mg/kg	<0.01
Cresols	T16	AR	0.01	mg/kg	<0.01
Xylenols	T16	AR	0.01	mg/kg	<0.01

	Concept Reference: 640278
	Project Site: Scotchbarn Lane
	Customer Reference: 103358
Soil	Analysed as Soil
SVOC 625 + Tentatively Identified Compounds	

[illegible]

Determinand	Method	Test Sample	LOD	Units					
Phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(36,62) <0.5	-	(36,62) <0.5	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	-	(36,62) <0.5	(62,36) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil
Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(62,36) <0.5	-	(62,36) <0.5	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	-	(36,62) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	-	0.6	0.2
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	0.2	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.4	-	0.7	0.3
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	-	0.5	0.3
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.2	-	0.3	0.2
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	-	0.3	0.2
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.1	-	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.2	-	0.1	<0.1



Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	0.1	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(62,36) <0.5	-	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	(36,62) <0.5	(36,62) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(36,62) <0.5	-	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	(62,36) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	0.2	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	0.2	<0.1
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.3	0.1	<0.1
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.6	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil Analysed as Soil								
SVOC 625 + Tentatively Identified Compounds								
Concept Reference				640278 018	640278 020	640278 027	640278 028	
Customer Sample Reference				TP207	TP206	TP211	TP211	
Bottom Depth				0.9	0.65	0.9	1.4	
Date Sampled				15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units				
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil Miscellaneous								
Concept Reference		640278 012	640278 015	640278 024				
Customer Sample Reference		TP208	TP209	TP210				
Bottom Depth		0.3	0.3	0.9				
Date Sampled		15-MAR-2017	15-MAR-2017	15-MAR-2017				
Type		Sandy Soil	Sandy Soil	Sandy Soil				
Determinand	Method	Test Sample	LOD	Units				
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	

Index to symbols used in 640278-1

Value	Description
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
A40	Assisted dried < 40C
N.D.	Not Detected
110	LOD raised due to low internal standard recovery.
62	LOD was raised due to the method performance of the analytical procedure used
13	Results have been blank corrected.
36	LOD Raised due to low Matrix spike recovery
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was subcontracted to REC Asbestos.

Method Index

Value	Description
T8	GC/FID
T921	Colorimetry (CF) (MCERT)
T16	GC/MS
T27	PLM
T6	ICP/OES
T207	GC/MS (MCERTS)
T85	Calc
T149	GC/MS (SIR)
T7	Probe
T2	Grav
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
pH	T7	AR			M	002,010,012,015,018,024
Electrical Conductivity	T7	A40	10	µS/cm	N	002,006,010,013,016,018,020,027-028
Redox Potential	T7	A40		mV	N	002,006,010,013,016,018,020,027-028
Phenol	T207	M105	0.1	mg/kg	M	002,010,018
Phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-methyl phenol	T207	M105	0.1	mg/kg	M	002,010,018
2-methyl phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3/4-Methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
3/4-Methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachloroethane	T207	M105	0.1	mg/kg	U	002,010,018
Hexachloroethane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Nitrobenzene	T207	M105	0.1	mg/kg	M	002,010,018
Nitrobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Isophorone	T207	M105	0.1	mg/kg	U	002,010,018
Isophorone	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitrophenol	T207	M105	0.1	mg/kg	U	002,010,018
2-Nitrophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Naphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Naphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chloroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobutadiene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
Hexachlorobutadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Chloronaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
2-Chloronaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitroaniline	T207	M105	0.1	mg/kg	M	002,010,018
2-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dimethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Dimethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	U	002,010,018
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Acenaphthylene	T207	M105	0.1	mg/kg	U	002,010,018
Acenaphthylene	T207	M105	0.1	mg/kg	M	002,010,018
Acenaphthylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Acenaphthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzofuran	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	M	002,010,018
Dibenzofuran	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Diethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
Diethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
4-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pentachlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Phenanthrene	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T207	M105	0.1	mg/kg	U	002,010,018
Pentachlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Carbazole	T207	M105	0.1	mg/kg	U	002,010,018
Phenanthrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-butylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Carbazole	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T207	M105	0.1	mg/kg	U	002,010,018
Di-n-butylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Chrysene	T207	M105	0.1	mg/kg	M	002,010,018
Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Chrysene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	002,010,018
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
SVOC screen (extra peaks)	T16	M105	10	mg/kg	N	002,006,010,013,016,018,020,027-028
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Total Petroleum Hydrocarbons (C5 - C10 aliphatic/aromatic)	T85	AR	0.010	mg/kg	N	013,016,020
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
Phenol	T149	AR	0.01	mg/kg	U	006,013,016,020,027-028
Cresols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Xylenols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Asbestos ID	T27	AR			SU	012,015,024
Arsenic	T6	M40	2	mg/kg	M	012,015,024
Cadmium	T6	M40	1	mg/kg	M	012,015,024
Chromium	T6	M40	1	mg/kg	M	012,015,024
Lead	T6	M40	1	mg/kg	M	012,015,024

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Mercury	T6	M40	1	mg/kg	M	012,015,024
Selenium	T6	M40	3	mg/kg	M	012,015,024
Copper	T6	M40	1	mg/kg	M	012,015,024
Nickel	T6	M40	1	mg/kg	M	012,015,024
Zinc	T6	M40	1	mg/kg	M	012,015,024
SO ₄ (Total)	T6	A40	0.01	%	N	012,015,024
SO ₄ (2:1)	T6	AR	0.1	g/l	N	012,015,024
Chromium VI	T6	AR	1	mg/kg	N	012,015,024
Barium	T6	A40	1	mg/kg	U	012,015,024
Beryllium	T6	A40	2	mg/kg	U	012,015,024
Boron (water-soluble)	T6	AR	1	mg/kg	N	012,015,024
Cyanide(Total)	T921	AR	1	mg/kg	M	012,015,024
Phenols(Mono)	T921	AR	1	mg/kg	M	012,015,024
Vanadium	T6	M40	1	mg/kg	M	012,015,024
pH	T7	A40			U	006,013,016,020,027-028
TPH (C11-C20)	T8	AR	1	mg/kg	U	006,013,016,020,027-028
TPH (C20-C40)	T8	AR	1	mg/kg	N	006,013,016,020,027-028
Moisture @105C	T162	AR	0.1	%	N	002,010,012,015,018,024
Retained on 10mm sieve	T2	M40	0.1	%	N	002,010,012,015,018,024



Concept Life Sciences

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 770952-1

Date of Report: 05-Oct-2018

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Mr Martin Lucass

Customer Job Reference: 103358

Customer Purchase Order: 005555

Customer Site Reference: Scotchborn Lane

Date Job Received at Concept: 01-Oct-2018

Date Analysis Started: 01-Oct-2018

Date Analysis Completed: 05-Oct-2018

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

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Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with Section 25 of the Concept Life Sciences, Analytical Services Quality Manual



Report checked
and authorised by :
Chloe Kitto
Customer Service Advisor

Issued by :
Chloe Kitto
Customer Service Advisor



Concept Reference: 770952 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil MCERTS Preparation						
Concept Reference				770952 001	770952 002	
Customer Sample Reference				Plot 12	Plot 12	
Depth				0.15	0.55	
Date Sampled				01-OCT-2018	01-OCT-2018	
Matrix Class				Topsoil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units		
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1
Moisture @105C	T162	AR	0.1	%	22	8.7

Concept Reference: 770952 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil REC Ltd 002S						
Concept Reference				770952 001	770952 002	
Customer Sample Reference				Plot 12	Plot 12	
Depth				0.15	0.55	
Date Sampled				01-OCT-2018	01-OCT-2018	
Matrix Class				Topsoil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units		
Arsenic	T6	M40	2	mg/kg	13	5
Cadmium	T6	M40	1	mg/kg	3	<1
Chromium	T6	M40	1	mg/kg	28	33
Lead	T6	M40	1	mg/kg	100	11
Mercury	T6	M40	1	mg/kg	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3
Copper	T6	M40	1	mg/kg	140	18
Nickel	T6	M40	1	mg/kg	22	30
Zinc	T6	M40	1	mg/kg	110	37
pH	T7	A40			8.4	6.8
SO4(Total)	T6	A40	0.01	%	0.08	<0.01
SO4(2:1)	T6	AR	100	mg/l	<100	<100
Chromium VI	T6	A40	1	mg/kg	<1	<1
Barium	T6	A40	1	mg/kg	100	34
Beryllium	T6	A40	2	mg/kg	<2	<2
Boron (water-soluble)	T6	A40	1	mg/kg	<1	<1
Cyanide(Total)	T921	M105	1	mg/kg	<1	<1
Phenols(Mono)	T921	M105	1	mg/kg	<1	<1
Vanadium	T6	M40	1	mg/kg	29	30

Concept Reference: 770952 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil PAH US EPA 16 (B and K split) and Phenol						
Concept Reference			770952 001	770952 002		
Customer Sample Reference			Plot 12	Plot 12		
Depth			0.15	0.55		
Date Sampled			01-OCT-2018	01-OCT-2018		
Matrix Class			Topsoil	Sandy Soil		
Determinand	Method	Test Sample	LOD	Units		
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.3	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	0.8	<0.1
Pyrene	T207	M105	0.1	mg/kg	0.7	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.3	<0.1
Chrysene	T207	M105	0.1	mg/kg	0.3	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.3	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.2	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.3	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.2	<0.1
PAH(total)	T207	M105	0.1	mg/kg	3.5	<0.1
Phenol	T207	M105	0.1	mg/kg	<0.1	<0.1

Concept Reference: 770952 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil REC Banded TPH						
Concept Reference			770952 001	770952 002		
Customer Sample Reference			Plot 12	Plot 12		
Depth			0.15	0.55		
Date Sampled			01-OCT-2018	01-OCT-2018		
Matrix Class			Topsoil	Sandy Soil		
Determinand	Method	Test Sample	LOD	Units		
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10
TPH (C35-C44)	T8	M105	1	mg/kg	⁽¹³⁾ 15	⁽¹³⁾ <1
TPH (C10-C12)	T206	M105	1	mg/kg	⁽¹³⁾ <1	⁽¹³⁾ <1
TPH (C12-C16)	T206	M105	1	mg/kg	⁽¹³⁾ <1	⁽¹³⁾ <1
TPH (C16-C21)	T206	M105	1	mg/kg	⁽¹³⁾ 7	⁽¹³⁾ 2
TPH (C21-C35)	T206	M105	1	mg/kg	⁽¹³⁾ 36	⁽¹³⁾ 3

Concept Reference: 770952 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil REC TOC and SOM						
Concept Reference			770952 001		770952 002	
Customer Sample Reference			Plot 12		Plot 12	
Depth			0.15		0.55	
Date Sampled			01-OCT-2018		01-OCT-2018	
Matrix Class			Topsoil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units		
Soil Organic Matter	T287	A40	0.1	%	6.1	0.2
Total Organic Carbon	T21	A40	0.1	%	3.6	0.1

Concept Reference: 770952 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil Misc						
Concept Reference			770952 001		770952 002	
Customer Sample Reference			Plot 12		Plot 12	
Depth			0.15		0.55	
Date Sampled			01-OCT-2018		01-OCT-2018	
Matrix Class			Topsoil		Sandy Soil	
Determinand	Method	Test Sample	LOD	Units		
Asbestos ID	T27	A40			N.D.	N.D.

Index to symbols used in 770952-1

Value	Description
A40	Assisted dried < 40C
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
AR	As Received
N.D.	Not Detected
13	Results have been blank corrected.
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos testing was subcontracted to REC Asbestos.

Method Index

Value	Description
T921	Colorimetry (CF) (MCERT)
T8	GC/FID
T21	OX/IR
T206	GC/FID (MCERTS)
T162	Grav (1 Dec) (105 C)
T54	GC/MS (Headspace)
T27	PLM
T207	GC/MS (MCERTS)
T287	Calc TOC/0.58
T2	Grav
T6	ICP/OES

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001-002
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001-002
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001-002
TPH (C35-C44)	T8	M105	1	mg/kg	N	001-002
TPH (C10-C12)	T206	M105	1	mg/kg	M	001-002
TPH (C12-C16)	T206	M105	1	mg/kg	M	001-002
TPH (C16-C21)	T206	M105	1	mg/kg	M	001-002
TPH (C21-C35)	T206	M105	1	mg/kg	M	001-002
Retained on 10mm sieve	T2	M40	0.1	%	N	001-002
Moisture @105C	T162	AR	0.1	%	N	001-002
Soil Organic Matter	T287	A40	0.1	%	N	001-002
Total Organic Carbon	T21	A40	0.1	%	N	001-002
Naphthalene	T207	M105	0.1	mg/kg	M	001-002
Acenaphthylene	T207	M105	0.1	mg/kg	U	001-002
Acenaphthene	T207	M105	0.1	mg/kg	M	001-002
Fluorene	T207	M105	0.1	mg/kg	M	001-002
Phenanthrene	T207	M105	0.1	mg/kg	M	001-002
Anthracene	T207	M105	0.1	mg/kg	U	001-002
Fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Pyrene	T207	M105	0.1	mg/kg	M	001-002
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001-002
Chrysene	T207	M105	0.1	mg/kg	M	001-002
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001-002
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001-002
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001-002
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001-002
PAH(total)	T207	M105	0.1	mg/kg	U	001-002
Phenol	T207	M105	0.1	mg/kg	M	001-002
Asbestos ID	T27	A40			SU	001-002
Arsenic	T6	M40	2	mg/kg	M	001-002
Cadmium	T6	M40	1	mg/kg	M	001-002
Chromium	T6	M40	1	mg/kg	M	001-002
Lead	T6	M40	1	mg/kg	M	001-002
Mercury	T6	M40	1	mg/kg	M	001-002
Selenium	T6	M40	3	mg/kg	M	001-002
Copper	T6	M40	1	mg/kg	M	001-002
Nickel	T6	M40	1	mg/kg	M	001-002
Zinc	T6	M40	1	mg/kg	M	001-002
pH	T7	A40			M	001-002
SO4(Total)	T6	A40	0.01	%	N	001-002
SO4(2:1)	T6	AR	100	mg/l	N	001-002
Chromium VI	T6	A40	1	mg/kg	N	001-002
Barium	T6	A40	1	mg/kg	U	001-002
Beryllium	T6	A40	2	mg/kg	U	001-002
Boron (water-soluble)	T6	A40	1	mg/kg	N	001-002
Cyanide(Total)	T921	M105	1	mg/kg	M	001-002
Phenols(Mono)	T921	M105	1	mg/kg	M	001-002
Vanadium	T6	M40	1	mg/kg	M	001-002

John Fenlon
Bellway Homes Limited (North West)
2 Alderman Road
Hunts Cross
Liverpool
Merseyside
L24 9LR

BY Email john.fenlon@bellway.co.uk

Dear John,

Garden Validation – Scotchbarn Lane, Knowsley – Plots 14-16

Background and Objectives

In accordance with the Remediation Strategy ref 103358p2r2, dated November 2017, the following is required across the whole site:

Depth Requirement for Gardens

- ▶ A total clean cover system comprising a minimum thickness of 600 mm;
- ▶ A minimum topsoil thickness of 150 mm; and,
- ▶ The remainder of the clean cover system shall be comprised of subsoil.

Validation Requirement

- ▶ Independent validation of works by Geo-Environmental Consultant;
- ▶ Visual inspection and chemical laboratory validation sampling; and
- ▶ Production of validation letter reports for the clean cover system.

Table 1: Chemical Validation Testing Requirement

Source	Source of Material			
	Greenfield	Remediated	Brownfield	Unknown
Gardens	1 per 250m ³	1 per 100 m ³	1 per 50 m ³	1 per 50 m ³
Soft Landscaping	1 per 250m ³	1 per 150 m ³	1 per 150 m ³	1 per 150 m ³
Other Fill Materials	1 per 250m ³	1 per 250m ³	1 per 250m ³	1 per 250m ³

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VALIDATION WORKS COMPLETED TO DATE

Table 2 shows a summary of validated plots to date.

Table 2: Summary of Validated Plots

Validated Plots [w/ 600mm Cover System]	Letter Reference
7-10	01v103358
1-2, 5	02v103358
6, 34-39, 118-119	03v103358
41-43 & 117	04v103358
11 & 40	05v103358
12-13	06v103358
14-16	07v103358
Total = 27	

Table 3: Approximate total soil volumes of rear gardens

Material	Volume (m ³)
Topsoil	2,300
Subsoil	6,900

VALIDATION WORKS COMPLETED DURING SITE VISIT OF 7th November 2018

An engineer from REC attended site on 7th November 2018 to confirm the thickness of the topsoil and subsoil placed in the rear gardens of Plots 14-16 and collect soil samples for chemical analysis, further details as below. For the avoidance of doubt, REC can confirm that this report refers to 3 No. detached residential properties.

▶ Depth Validation

In total 3 excavations (one in each rear gardens as illustrated in Figure 1. below were advanced by hand with the resulting strata encountered listed in individual certificates presented below. The excavations were completed to confirm that the required amount of cover system has been installed in the rear of the properties.

REC can confirm that our independent inspection provides sufficient visual evidence that the required 600mm clean cover system depth has been put in place within the **rear** residential garden areas of Plots 14-16.

▶ Physical Validation

Upon inspection of the topsoil and subsoil material of the plots that have been successfully validated, the REC Engineer did not encounter any potentially deleterious or unsuitable materials discernible by the naked eye; for example ceramic materials, metal objects, plastics, treated wood or textiles, etc.





It should be noted that the visual inspection undertaken was of stockpile surfaces and of the arisings brought to the surface as part of the sampling exercise at each plot; and not of all the material used across the entirety of the site and therefore there may be deleterious materials present which were not encountered during this validation visit.

▶ Chemical Validation

All site won sub soil topsoil samples have been analysed for the constituents of concern noted in Table 3 (as enclosed to this letter) to the correct frequency as specified in Table 1 above and have been subsequently assessed against their suitability for a residential end use development.

TOPSOIL

Source Chemical Testing Certificates

An engineer from site visited site on two separate occasions on the 17th- 19th May 2016 and 15th March 2017 to undertake phase II ground investigations. These investigations found that the topsoil situated on site to be suitable for reuse in the garden areas. The certificates from the laboratory analysis are attached to this letter report.

Volume Chemical Testing Certificates

In total 2 No. samples of the topsoil (0.2mbgl and 0.5mbgl) were tested at a frequency of 1 per 50m³.

After completion of the laboratory analysis, REC can confirm that the topsoil and subsoil installed in the rear gardens of Plots 14, 15 and 16 meet the specified requirements as a suitable growing medium and is fit for its intended use.

Yours Sincerely,

For and on behalf of REC Ltd

Alex Reavley
Consultant

Approved and Authorised

Phil Hill
Senior Consultant

Enclosed:

Sketch Location Plan of Validation Pits

Plot Inspection Records (including photographs and description)

Table 3: Screening Values for Materials within Residential Soft Landscaping Areas

Chemical Analysis Certificates





Figure 1: Sketch Plot Validation Pit Location



- - Validated Plots during Site Visit on 7th November 2018
- - Previously Validated Plots





PLOT INSPECTION RECORD



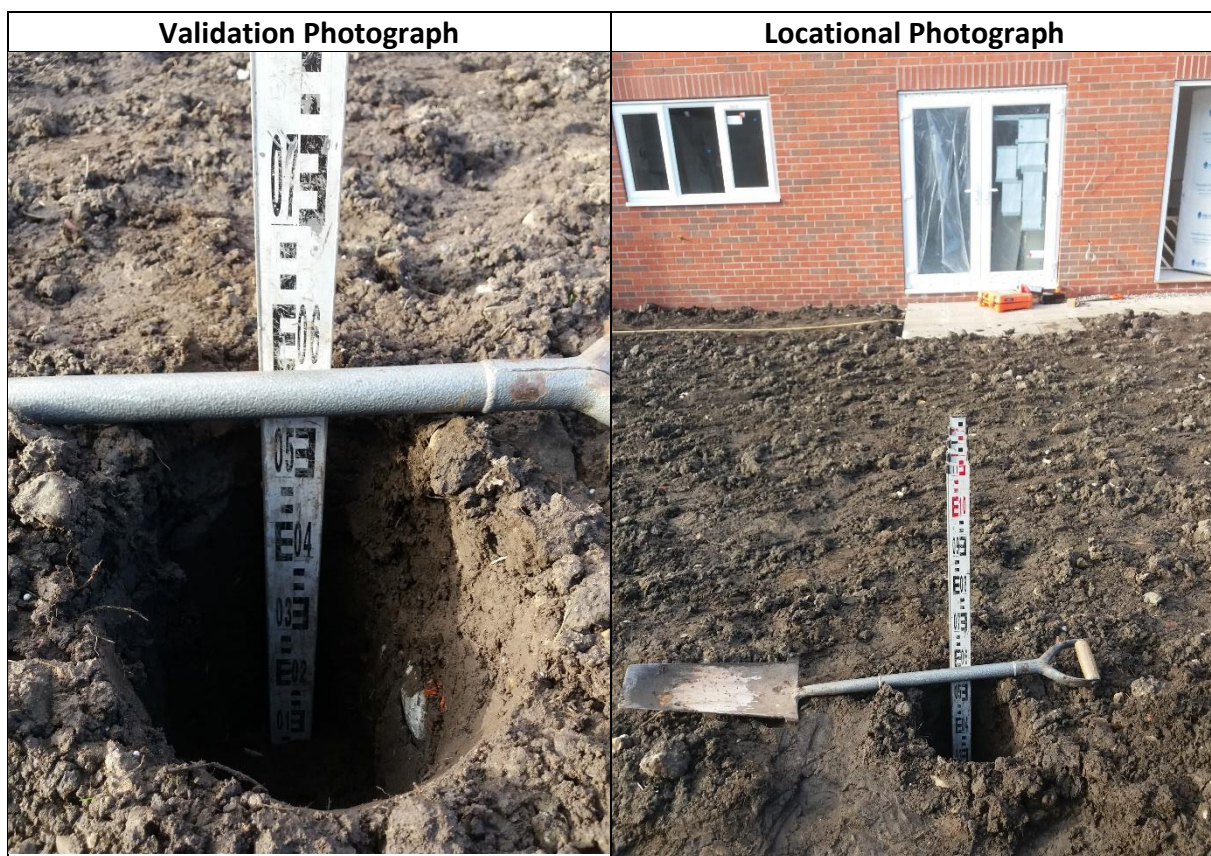


PLOT NUMBER: 14

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 07/11/2018
Consultant: A.Reavley

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
N/A

GARDEN VALIDATION: PASS



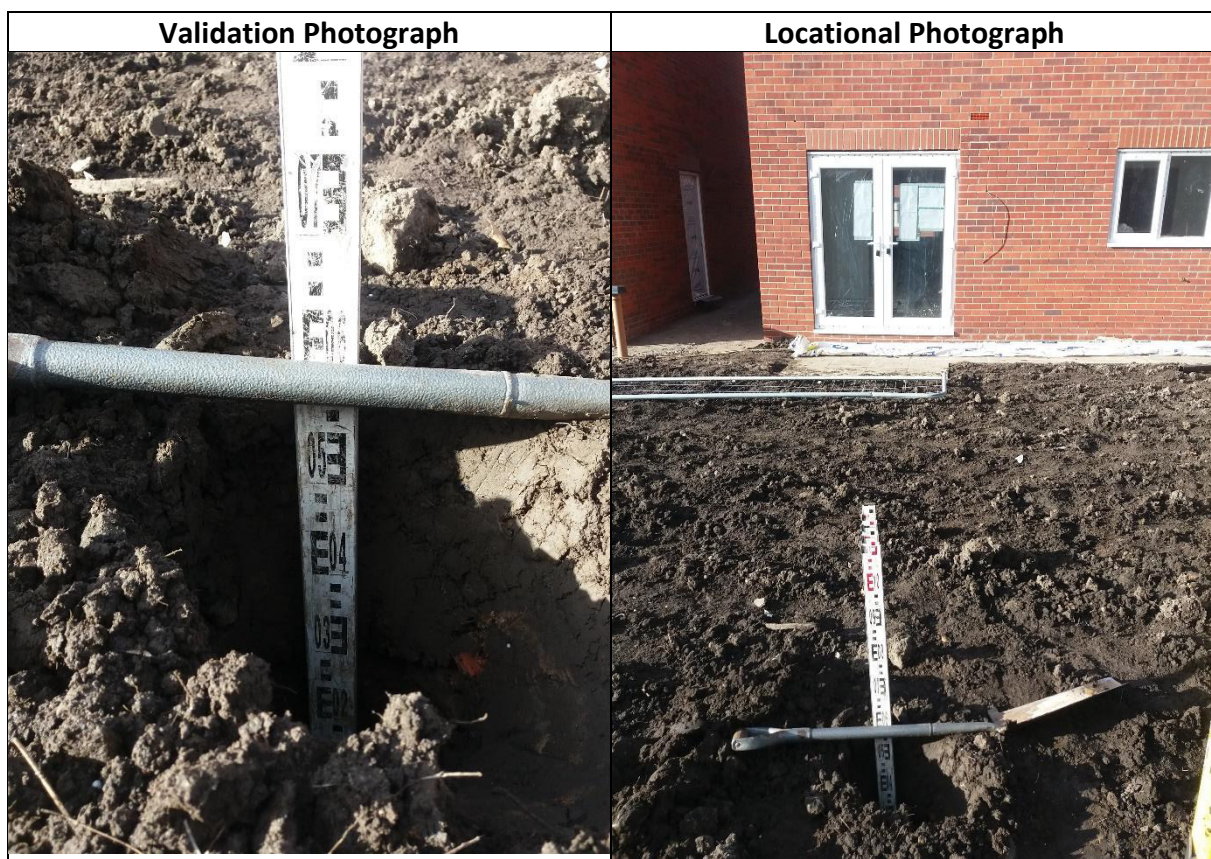


PLOT NUMBER: 15

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 07/11/2018
Consultant: A.Reavley

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
Topsoil samples taken at 0.20 and 0.50m bgl respectively.

GARDEN VALIDATION: PASS



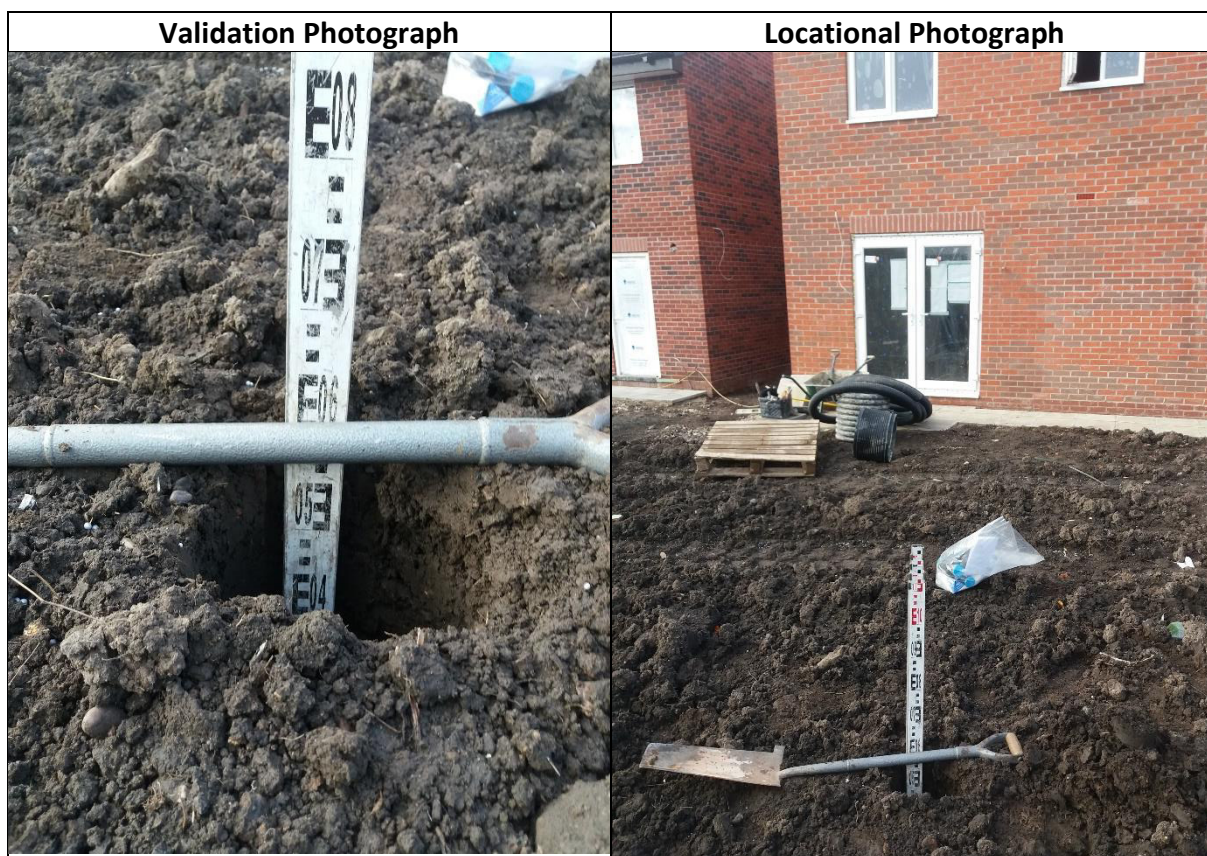


PLOT NUMBER: 16

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 07/11/2018
Consultant: A.Reavley

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
N/A

GARDEN VALIDATION: PASS





SUITABILITY CRITERIA





Table 3.2: Validation Testing Summary

Determinand	Units	Screening Value for Use within Private Gardens	Maximum Concentration within Upper Topsoil	Maximum Concentration within Lower Topsoil	Screening Value Source
Inorganics – Metals and Asbestos					
Arsenic	mg/kg	37	13	14	(i)
Cadmium	mg/kg	11	3	3	(i)
Chromium (VI)	mg/kg	6	<1	<1	(i)
Lead	mg/kg	200	110	110	(iv)
Inorganic Mercury	mg/kg	40	<1	<1	(i)
Nickel	mg/kg	130	20	20	(i)
Selenium	mg/kg	250	<3	<3	(i)
Copper	mg/kg	2,400	120	140	(i)
Zinc	mg/kg	3,700	100	110	(i)
Cyanide	mg/kg	791	<1	<1	(v)
Asbestos	%	None Detected	N.D	N.D	N/A
Organics - PAHs					
Phenol	mg/kg	200	<0.1	<0.1	(ii)
Naphthalene	mg/kg	5.6	<0.1	<0.1	(ii)
Acenaphthylene	mg/kg	420	<0.1	<0.1	(ii)
Acenaphthene	mg/kg	510	<0.1	<0.1	(ii)
Fluorene	mg/kg	400	<0.1	<0.1	(ii)
Phenanthrene	mg/kg	220	0.2	0.1	(ii)
Anthracene	mg/kg	2,400	<0.1	<0.1	(ii)
Fluoranthene	mg/kg	280	0.4	0.4	(ii)
Pyrene	mg/kg	1200	0.4	0.4	(ii)
Benzo(a)Anthracene	mg/kg	2.7	0.2	0.2	(ii)
Chrysene	mg/kg	22	0.2	0.2	(ii)
Benzo(b)Fluoranthene	mg/kg	3.3	<0.1	0.2	(ii)
Benzo(k)Fluoranthene	mg/kg	93	<0.1	0.2	(ii)
Benzo(a)Pyrene	mg/kg	2.7	0.1	0.2	(ii)
Indeno(123-cd)Pyrene	mg/kg	36	<0.1	0.1	(ii)
Dibenzo(a,h)Anthracene	mg/kg	0.28	<0.1	<0.1	(ii)
Benzo(ghi)Perylene	mg/kg	340	<0.1	0.2	(ii)
Organics – TPHs					
TPH C ₅ -C ₆	mg/kg	78	<0.10	<0.10	(iii)
TPH C ₆ -C ₈	mg/kg	230	<0.10	0.31	(iii)
TPH C ₈ -C ₁₀	mg/kg	65	<0.10	<0.10	(iii)
TPH C ₁₀ -C ₁₂	mg/kg	180	⁽¹³⁾ <1	⁽¹³⁾ <1	(iii)
TPH C ₁₂ -C ₁₆	mg/kg	330	⁽¹³⁾ 2	⁽¹³⁾ 1	(iii)
TPH C ₁₆ -C ₂₁	mg/kg	540	⁽¹³⁾ 7	⁽¹³⁾ 5	(iii)
TPH C ₂₁ -C ₃₅	mg/kg	1,500	⁽¹³⁾ 39	⁽¹³⁾ 25	(iii)
TPH C ₃₅ -C ₄₄	mg/kg	1,500	⁽¹³⁾ 12	⁽¹³⁾ 7	(iii)
Screening Value Source (i) LQM/CIEH Suitable For Use Level (S4UL) (2015); (ii) S4UL –Assessment Approach of 3% SOM; (iii) S4UL –3% SOM and assumed worst case aliphatic / aromatic compound; (iv) Defra Category 4 Screening Level (2014); (v) CLEA v1.06 Derived Value. (13) Results have been blank corrected.					





SOIL CHEMICAL ANALYSIS



Scientific Analysis Laboratories Ltd

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Scientific Analysis Laboratories is a
limited company registered in England and
Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Report Number: 572763-1

Date of Report: 01-Jun-2016

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Sabine Sargeant

Customer Job Reference: 101754

Customer Purchase Order: 001151

Customer Site Reference: Scotchbarn Lane

Date Job Received at SAL: 18-May-2016

Date Analysis Started: 26-May-2016

Date Analysis Completed: 01-Jun-2016

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with SAL SOPs

All results have been reviewed in accordance with Section 25 of the SAL Quality Manual



Report checked
and authorised by :
Emma Spear
Project Manager

Issued by :
Emma Spear
Project Manager



SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Bulk Product Analysed as Bulk Product Asbestos ID					
SAL Reference				572763 004	
Customer Sample Reference				TP102	
Bottom Depth				0.4	
Date Sampled				17-MAY-2016	
Type				Fill	
Determinand	Method	Test Sample	LOD	Units	
Asbestos	T27	AR			Chrysotile Fibres Detected

SAL Reference: 572763										
Project Site: Scotchbarn Lane										
Customer Reference: 101754										
Soil Analysed as Soil										
MCERTS Preparation										
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007	
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104	
Bottom Depth					1	0.4	0.2	0.7	0.2	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	11	7.2	7.4	7.4	18
Retained on 10mm sieve		T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763										
Project Site: Scotchbarn Lane										
Customer Reference: 101754										
Soil					Analysed as Soil					
MCERTS Preparation										
SAL Reference					572763 008	572763 009	572763 011	572763 012	572763 013	
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107	
Bottom Depth					2	2	0.5	2.1	0.5	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	7.3	11	18	18	9.7
Retained on 10mm sieve		T2	M40	0.1	%	-	-	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754										
Soil					Analysed as Soil					
MCERTS Preparation										
SAL Reference					572763 015	572763 016	572763 017	572763 018	572763 019	
Customer Sample Reference					TP108	TP109	TP110	TP111	TP112	
Bottom Depth					0.1	0.5	0.4	0.3	0.1	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Topsoil	Sandy Soil	Clay	Topsoil	Topsoil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	8.2	14	18	18	35
Retained on 10mm sieve		T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference				572763 020	572763 022	572763 023	572763 025	572763 028	
Customer Sample Reference				TP112	TP113	TP113	WS102	WS104	
Bottom Depth				0.9	0.5	1.4	0.2	0.2	
Date Sampled				17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016	18-MAY-2016	
Type				Sandy Soil	Clay	Clay	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	18	17	12	5.8	19
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil		Analysed as Soil							
MCERTS Preparation									
SAL Reference					572763 029	572763 031	572763 032	572763 033	572763 035
Customer Sample Reference					WS105	WS108	WS108	WS109	WS110
Bottom Depth					0.1	0.2	0.5	0.3	1.2
Date Sampled					18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	25	23	16	15	26
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference		572763 039							
Customer Sample Reference		WS113							
Bottom Depth		0.7							
Date Sampled		19-MAY-2016							
Type		Topsoil							
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	5.2				
Retained on 10mm sieve	T2	M40	0.1	%	<0.1				

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference				572763 011	572763 012	572763 013	572763 015	572763 016	
Customer Sample Reference				TP106	TP106	TP107	TP108	TP109	
Bottom Depth				0.5	2.1	0.5	0.1	0.5	
Date Sampled				17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type				Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	1.7	1.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	0.5	0.3
Fluoranthene	T207	M105	0.1	mg/kg	0.5	<0.1	2.2	3.3	2.0
Pyrene	T207	M105	0.1	mg/kg	0.5	<0.1	2.0	3.3	2.0
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.3	<0.1	1.0	2.3	1.1
Chrysene	T207	M105	0.1	mg/kg	0.3	<0.1	1.2	2.6	1.3
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.3	<0.1	1.4	3.3	1.4
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.1	<0.1	0.4	0.5	0.3
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	2.2	1.0
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.1	<0.1	0.6	1.2	0.5
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.3	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.1	<0.1	0.8	1.5	0.6
PAH(total)	T207	M105	0.1	mg/kg	2.6	<0.1	12	23	12

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference				572763 017	572763 018	572763 019	572763 020	572763 022	
Customer Sample Reference				TP110	TP111	TP112	TP112	TP113	
Bottom Depth				0.4	0.3	0.1	0.9	0.5	
Date Sampled				17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type				Clay	Topsoil	Topsoil	Sandy Soil	Clay	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.6	0.2	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.5	0.9	0.2	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.5	1.0	0.3	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.6	1.2	0.3	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	0.2	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.8	0.2	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.2	0.5	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.3	0.6	0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1	5.1	9.4	2.5	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference				572763 023	572763 025	572763 028	572763 029	572763 031	
Customer Sample Reference				TP113	WS102	WS104	WS105	WS108	
Bottom Depth				1.4	0.2	0.2	0.1	0.2	
Date Sampled				17-MAY-2016	18-MAY-2016	18-MAY-2016	18-MAY-2016	19-MAY-2016	
Type				Clay	Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.7	0.2	0.3	0.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.7	0.6	0.6	0.5
Pyrene	T207	M105	0.1	mg/kg	<0.1	1.6	0.6	0.6	0.5
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	1.0	0.3	0.3	0.2
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.9	0.3	0.3	0.2
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.2	0.5	0.5	0.3
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.8	0.3	0.3	0.2
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.2	0.2	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.6	0.2	0.2	0.2
PAH(total)	T207	M105	0.1	mg/kg	<0.1	9.5	3.3	3.4	2.3

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil		Analysed as Soil							
PAH US EPA 16 (B and K split)									
SAL Reference					572763 032	572763 033	572763 035	572763 039	
Customer Sample Reference					WS108	WS109	WS110	WS113	
Bottom Depth					0.5	0.3	1.2	0.7	
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type					Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.4	<0.1	
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	
Fluoranthene	T207	M105	0.1	mg/kg	0.3	1.0	0.8	<0.1	
Pyrene	T207	M105	0.1	mg/kg	0.3	0.9	0.7	<0.1	
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Chrysene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.1	0.7	0.4	<0.1	
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.3	<0.1	<0.1	
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.3	<0.1	
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
PAH(total)	T207	M105	0.1	ma/kg	0.9	6.5	3.9	<0.1	

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
REC Banded TPH									
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104
Bottom Depth					1	0.4	0.2	0.7	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) 2	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) 6	(13) 2	(13) <1	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) <1	(13) 10	(13) 13	(13) <1	(13) 2
TPH (C21-C35)	T206	M105	1	mg/kg	(13) <1	(13) 36	(13) 150	(13) <1	(13) 7
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) 20	(13) 77	(13) 2	(13) <1

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
REC Banded TPH									
SAL Reference					572763 008	572763 009	572763 011	572763 012	572763 013
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107
Bottom Depth					2	2	0.5	2.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	0.84	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13,9) <10
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(9,13) <10
TPH (C16-C21)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) 1	(13) <1	(9,13) <10
TPH (C21-C35)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) 10	(13) <1	(13) 11
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) 10

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
REC Banded TPH									
SAL Reference					572763 015	572763 016	572763 017	572763 018	572763 019
Customer Sample Reference					TP108	TP109	TP110	TP111	TP112
Bottom Depth					0.1	0.5	0.4	0.3	0.1
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) 3	(13) 2	(13) <1	(13) <1	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) 35	(13) 18	(13) <1	(13) 3	(13) 3
TPH (C21-C35)	T206	M105	1	mg/kg	(13) 340	(13) 73	(13) <1	(13) 15	(13) 14
TPH (C35-C44)	T8	M105	1	mg/kg	(13) 120	(13) 23	(13) <1	(13) <1	(13) 1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH									
SAL Reference					572763 020	572763 022	572763 023	572763 025	572763 028
Customer Sample Reference					TP112	TP113	TP113	WS102	WS104
Bottom Depth					0.9	0.5	1.4	0.2	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016	18-MAY-2016
Type					Sandy Soil	Clay	Clay	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) 6	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) 1	(13) <1	(13) <1	(13) 33	(13) 1
TPH (C21-C35)	T206	M105	1	mg/kg	(13) 9	(13) <1	(13) <1	(13) 180	(13) 11
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) 65	(13) <1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH									
SAL Reference					572763 029	572763 031	572763 032	572763 033	572763 035
Customer Sample Reference					WS105	WS108	WS108	WS109	WS110
Bottom Depth					0.1	0.2	0.5	0.3	1.2
Date Sampled					18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) <1	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) 3	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) 3	(13) <1	(13) <1	(13) 9	(13) 5
TPH (C21-C35)	T206	M105	1	mg/kg	(13) 12	(13) 6	(13) 7	(13) 17	(13) 14
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1	(13) <1	(13) <1	(13) 1	(13) 1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Banded TPH					
SAL Reference					572763 039
Customer Sample Reference					WS113
Bottom Depth					0.7
Date Sampled					19-MAY-2016
Type					Topsoil
Determinand	Method	Test Sample	LOD	Units	
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10
TPH (C10-C12)	T206	M105	1	mg/kg	(13) <1
TPH (C12-C16)	T206	M105	1	mg/kg	(13) <1
TPH (C16-C21)	T206	M105	1	mg/kg	(13) <1
TPH (C21-C35)	T206	M105	1	mg/kg	(13) <1
TPH (C35-C44)	T8	M105	1	mg/kg	(13) <1

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 014	572763 015	572763 016	572763 017	572763 018
Customer Sample Reference					TP107	TP108	TP109	TP110	TP111
Bottom Depth					1.2	0.1	0.5	0.4	0.3
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Topsoil	Sandy Soil	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			-	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	130	<100	<100	<100

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 019	572763 020	572763 022	572763 023	572763 025
Customer Sample Reference					TP112	TP112	TP113	TP113	WS102
Bottom Depth					0.1	0.9	0.5	1.4	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 028	572763 029	572763 031	572763 032	572763 033
Customer Sample Reference					WS104	WS105	WS108	WS108	WS109
Bottom Depth					0.2	0.1	0.2	0.5	0.3
Date Sampled					18-MAY-2016	18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763

Project Site: Scotchbarn Lane

Customer Reference: 101754

Soil

Miscellaneous

Analysed as Soil

SAL Reference					572763 035	572763 039	572763 040
Customer Sample Reference					WS110	WS113	WS113
Bottom Depth					1.2	0.7	1.4
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units			
Asbestos ID	T27	AR			N.D.	N.D.	-
SO4(2:1)	T6	AR	100	mg/l	170	<100	<100

Index to symbols used in 572763-1

Value	Description
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
N.D.	Not Detected
13	Results have been blank corrected.
9	LOD raised due to dilution of sample
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was sub-contracted to REC Asbestos.
"Fill" samples are outside the scope of our MCERTS accreditation. Results are UKAS only.

Method Index

Value	Description
T7	Probe
T54	GC/MS (Headspace)
T546	Colorimetry (CF)
T162	Grav (1 Dec) (105 C)
T27	PLM
T207	GC/MS (MCERTS)
T8	GC/FID
T6	ICP/OES
T206	GC/FID (MCERTS)
T2	Grav

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Asbestos	T27	AR			SU	004
Moisture @105C	T162	AR	0.1	%	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
Retained on 10mm sieve	T2	M40	0.1	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Arsenic	T6	M40	2	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cadmium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chromium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Lead	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Mercury	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Selenium	T6	M40	3	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Copper	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Nickel	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Zinc	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(Total)	T6	M40	0.01	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(2:1)	T6	AR	100	mg/l	N	001-003,005-007,009,011-020,022-023,025,028-029,031-033,035,039-040
Chromium VI	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Barium	T6	M40	1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Beryllium	T6	M40	2	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Boron (water-soluble)	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cyanide(Total)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenols(Mono)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Vanadium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Naphthalene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthylene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Fluorene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenanthrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Anthracene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chrysene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
PAH(total)	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C10-C12)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C12-C16)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C16-C21)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C21-C35)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C35-C44)	T8	M105	1	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			U	002,009,014,040
Asbestos ID	T27	AR			SU	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039



Concept Life Sciences

Certificate of Analysis

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Report Number: 640278-1

Date of Report: 22-Mar-2017

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Louise Stock

Customer Job Reference: 103358

Customer Purchase Order: 002602

Customer Site Reference: Scotchbarn Lane

Date Job Received at Concept: 16-Mar-2017

Date Analysis Started: 20-Mar-2017

Date Analysis Completed: 22-Mar-2017

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

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Tests covered by this certificate were conducted in accordance with Concept SOPs



Report checked
and authorised by :
Aleksandra Pacula
Project Manager

Issued by :
Aleksandra Pacula
Project Manager



Concept Reference: 640278									
Project Site: Scotchbarn Lane									
Customer Reference: 103358									
Soil					Analysed as Soil				
MCERTS Preparation									
Concept Reference					640278 002	640278 010	640278 012	640278 015	640278 018
Customer Sample Reference					TP201	TP205	TP208	TP209	TP207
Bottom Depth					1.3	0.9	0.3	0.3	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	15	14	4.5	8.3	16
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil MCERTS Preparation					
Concept Reference		640278 024			
Customer Sample Reference		TP210			
Bottom Depth		0.9			
Date Sampled		15-MAR-2017			
Type		Sandy Soil			
Determinand	Method	Test Sample	LOD	Units	
Moisture @105C	T162	AR	0.1	%	9.3
Retained on 10mm sieve	T2	M40	0.1	%	<0.1

Concept Reference: 640278							
Project Site: Scotchbarn Lane							
Customer Reference: 103358							
Soil		Analysed as Soil					
REC 002S							
Concept Reference					640278 012	640278 015	640278 024
Customer Sample Reference					TP208	TP209	TP210
Bottom Depth					0.3	0.3	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units			
Arsenic	T6	M40	2	mg/kg	9	15	7
Cadmium	T6	M40	1	mg/kg	<1	<1	<1
Chromium	T6	M40	1	mg/kg	21	24	30
Lead	T6	M40	1	mg/kg	16	35	51
Mercury	T6	M40	1	mg/kg	<1	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3	<3
Copper	T6	M40	1	mg/kg	25	47	52
Nickel	T6	M40	1	mg/kg	19	22	22
Zinc	T6	M40	1	mg/kg	41	93	77
pH	T7	AR			9.1	9.8	8.2
SO4(Total)	T6	A40	0.01	%	0.31	0.69	0.04
SO4(2:1)	T6	AR	0.1	g/l	0.2	0.1	<0.1
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1
Barium	T6	A40	1	mg/kg	75	150	75
Beryllium	T6	A40	2	mg/kg	<2	<2	<2
Boron (water-soluble)	T6	AR	1	mg/kg	<1	<1	<1
Cyanide(Total)	T921	AR	1	mg/kg	<1	<1	<1
Phenols(Mono)	T921	AR	1	mg/kg	<1	<1	<1
Vanadium	T6	M40	1	mg/kg	24	33	32

Concept Reference: 640278							
Project Site: Scotchbarn Lane							
Customer Reference: 103358							
Soil				Analysed as Soil			
Partial UKWIR suite 1							
Concept Reference				640278 002	640278 010	640278 018	
Customer Sample Reference				TP201	TP205	TP207	
Bottom Depth				1.3	0.9	0.9	
Date Sampled				15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type				Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units			
pH	T7	AR			7.8	6.3	7.9
Electrical Conductivity	T7	A40	10	µS/cm	1500	1600	650
Redox Potential	T7	A40		mV	-51	-38	-100

Concept Reference: 640278							
Project Site: Scotchbarn Lane							
Customer Reference: 103358							
Soil		Analysed as Soil					
Partial UKWIR suite 2							
Concept Reference					640278 013	640278 016	640278 020
Customer Sample Reference					TP208	TP209	TP206
Bottom Depth					0.9	0.9	0.65
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units			
Electrical Conductivity	T7	A40	10	µS/cm	1500	1400	1600
pH	T7	A40			9.9	10.1	8.3
Redox Potential	T7	A40		mV	-120	-120	-89
TPH (C11-C20)	T8	AR	1	mg/kg	(13) 1	(13) 5	(13) 4
TPH (C20-C40)	T8	AR	1	mg/kg	(13) 10	(13) 63	(13) 16
Total Petroleum Hydrocarbons (C5 - C10 aliphatic/aromatic)	T85	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	<0.010	<0.010	⁽¹¹⁰⁾ <0.020

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil			Analysed as Soil					
Partial UKWIR suite 3								
Concept Reference					640278 006	640278 027	640278 028	
Customer Sample Reference					TP203	TP211	TP211	
Bottom Depth					0.9	0.9	1.4	
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type					Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units				
Electrical Conductivity	T7	A40	10	µS/cm	1400	1800	1700	
pH	T7	A40			7.3	8.0	8.1	
Redox Potential	T7	A40		mV	-49	11	9	
TPH (C11-C20)	T8	AR	1	mg/kg	⁽¹³⁾ <1	⁽¹³⁾ <1	⁽¹³⁾ <1	
TPH (C20-C40)	T8	AR	1	ma/ka	⁽¹³⁾ 5	⁽¹³⁾ g	⁽¹³⁾ <1	

Concept Reference: 640278									
Project Site: Scotchbarn Lane									
Customer Reference: 103358									
Soil					Analysed as Soil				
Phenols (Speciated)									
Concept Reference					640278 006	640278 013	640278 016	640278 020	640278 027
Customer Sample Reference					TP203	TP208	TP209	TP206	TP211
Bottom Depth					0.9	0.9	0.9	0.65	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand		Method	Test Sample	LOD	Units				
Phenol		T149	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01
Cresols		T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01
Xylenols		T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01

Concept Reference: 640278					
Project Site: Scotchbarn Lane					
Customer Reference: 103358					
Soil			Analysed as Soil		
Phenols (Speciated)					
Concept Reference					640278 028
Customer Sample Reference					TP211
Bottom Depth					1.4
Date Sampled					15-MAR-2017
Type					Sandy Soil
Determinand	Method	Test Sample	LOD	Units	
Phenol	T149	AR	0.01	mg/kg	<0.01
Cresols	T16	AR	0.01	mg/kg	<0.01
Xylenols	T16	AR	0.01	mg/kg	<0.01

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil SVOC 625 + Tentatively Identified Compounds									
Concept Reference				640278 002	640278 006	640278 010	640278 013	640278 016	
Customer Sample Reference				TP201	TP203	TP205	TP208	TP209	
Bottom Depth				1.3	0.9	0.9	0.9	0.9	
Date Sampled				15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
Phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(36,62) <0.5	-	(36,62) <0.5	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	-	(36,62) <0.5	(62,36) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil
Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(62,36) <0.5	-	(62,36) <0.5	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	-	(36,62) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	-	0.6	0.2
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	0.2	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.4	-	0.7	0.3
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	-	0.5	0.3
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.2	-	0.3	0.2
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	-	0.3	0.2
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.1	-	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference		640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference		TP201	TP203	TP205	TP208	TP209
Bottom Depth		1.3	0.9	0.9	0.9	0.9
Date Sampled		15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type		Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units		
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.2
					-	0.1
						<0.1



Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	0.1	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(62,36) <0.5	-	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	(36,62) <0.5	(36,62) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(36,62) <0.5	-	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	(62,36) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	0.2	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	0.2	<0.1
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.3	0.1	<0.1
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.6	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil Analysed as Soil								
SVOC 625 + Tentatively Identified Compounds								
Concept Reference				640278 018	640278 020	640278 027	640278 028	
Customer Sample Reference				TP207	TP206	TP211	TP211	
Bottom Depth				0.9	0.65	0.9	1.4	
Date Sampled				15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units				
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil Miscellaneous								
Concept Reference		640278 012	640278 015	640278 024				
Customer Sample Reference		TP208	TP209	TP210				
Bottom Depth		0.3	0.3	0.9				
Date Sampled		15-MAR-2017	15-MAR-2017	15-MAR-2017				
Type		Sandy Soil	Sandy Soil	Sandy Soil				
Determinand	Method	Test Sample	LOD	Units				
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	

Index to symbols used in 640278-1

Value	Description
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
A40	Assisted dried < 40C
N.D.	Not Detected
110	LOD raised due to low internal standard recovery.
62	LOD was raised due to the method performance of the analytical procedure used
13	Results have been blank corrected.
36	LOD Raised due to low Matrix spike recovery
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was subcontracted to REC Asbestos.

Method Index

Value	Description
T8	GC/FID
T921	Colorimetry (CF) (MCERT)
T16	GC/MS
T27	PLM
T6	ICP/OES
T207	GC/MS (MCERTS)
T85	Calc
T149	GC/MS (SIR)
T7	Probe
T2	Grav
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
pH	T7	AR			M	002,010,012,015,018,024
Electrical Conductivity	T7	A40	10	µS/cm	N	002,006,010,013,016,018,020,027-028
Redox Potential	T7	A40		mV	N	002,006,010,013,016,018,020,027-028
Phenol	T207	M105	0.1	mg/kg	M	002,010,018
Phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-methyl phenol	T207	M105	0.1	mg/kg	M	002,010,018
2-methyl phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3/4-Methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
3/4-Methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachloroethane	T207	M105	0.1	mg/kg	U	002,010,018
Hexachloroethane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Nitrobenzene	T207	M105	0.1	mg/kg	M	002,010,018
Nitrobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Isophorone	T207	M105	0.1	mg/kg	U	002,010,018
Isophorone	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitrophenol	T207	M105	0.1	mg/kg	U	002,010,018
2-Nitrophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Naphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Naphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chloroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobutadiene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
Hexachlorobutadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Chloronaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
2-Chloronaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitroaniline	T207	M105	0.1	mg/kg	M	002,010,018
2-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dimethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Dimethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	U	002,010,018
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Acenaphthylene	T207	M105	0.1	mg/kg	U	002,010,018
Acenaphthylene	T207	M105	0.1	mg/kg	M	002,010,018
Acenaphthylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Acenaphthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzofuran	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	M	002,010,018
Dibenzofuran	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Diethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
Diethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
4-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pentachlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Phenanthrene	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T207	M105	0.1	mg/kg	U	002,010,018
Pentachlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Carbazole	T207	M105	0.1	mg/kg	U	002,010,018
Phenanthrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-butylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Carbazole	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T207	M105	0.1	mg/kg	U	002,010,018
Di-n-butylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Chrysene	T207	M105	0.1	mg/kg	M	002,010,018
Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Chrysene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	002,010,018
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
SVOC screen (extra peaks)	T16	M105	10	mg/kg	N	002,006,010,013,016,018,020,027-028
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Total Petroleum Hydrocarbons (C5 - C10 aliphatic/aromatic)	T85	AR	0.010	mg/kg	N	013,016,020
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
Phenol	T149	AR	0.01	mg/kg	U	006,013,016,020,027-028
Cresols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Xylenols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Asbestos ID	T27	AR			SU	012,015,024
Arsenic	T6	M40	2	mg/kg	M	012,015,024
Cadmium	T6	M40	1	mg/kg	M	012,015,024
Chromium	T6	M40	1	mg/kg	M	012,015,024
Lead	T6	M40	1	mg/kg	M	012,015,024

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Mercury	T6	M40	1	mg/kg	M	012,015,024
Selenium	T6	M40	3	mg/kg	M	012,015,024
Copper	T6	M40	1	mg/kg	M	012,015,024
Nickel	T6	M40	1	mg/kg	M	012,015,024
Zinc	T6	M40	1	mg/kg	M	012,015,024
SO ₄ (Total)	T6	A40	0.01	%	N	012,015,024
SO ₄ (2:1)	T6	AR	0.1	g/l	N	012,015,024
Chromium VI	T6	AR	1	mg/kg	N	012,015,024
Barium	T6	A40	1	mg/kg	U	012,015,024
Beryllium	T6	A40	2	mg/kg	U	012,015,024
Boron (water-soluble)	T6	AR	1	mg/kg	N	012,015,024
Cyanide(Total)	T921	AR	1	mg/kg	M	012,015,024
Phenols(Mono)	T921	AR	1	mg/kg	M	012,015,024
Vanadium	T6	M40	1	mg/kg	M	012,015,024
pH	T7	A40			U	006,013,016,020,027-028
TPH (C11-C20)	T8	AR	1	mg/kg	U	006,013,016,020,027-028
TPH (C20-C40)	T8	AR	1	mg/kg	N	006,013,016,020,027-028
Moisture @105C	T162	AR	0.1	%	N	002,010,012,015,018,024
Retained on 10mm sieve	T2	M40	0.1	%	N	002,010,012,015,018,024



Concept Life Sciences

Certificate of Analysis

Hadfield House
Hadfield Street
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Manchester
M16 9FE
Tel : 0161 874 2400
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Report Number: 780722-2

Date of Report: 14-Nov-2018

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Mr Phil Hill

Customer Job Reference: 103358

Customer Purchase Order: 005823

Customer Site Reference: Scotchbarn Lane

Date Job Received at Concept: 07-Nov-2018

Date Analysis Started: 08-Nov-2018

Date Analysis Completed: 14-Nov-2018

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

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Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with Section 25 of the Concept Life Sciences, Analytical Services Quality Manual



Report checked
and authorised by :
Aleksandra Pacula
Senior Customer Service
Advisor

Issued by :
Aleksandra Pacula
Senior Customer Service
Advisor



Concept Reference: 780722 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil MCERTS Preparation						
Concept Reference				780722 001	780722 002	
Customer Sample Reference				TS1	TS2	
Hole ID				Plot 15	Plot 15	
Top Depth				0.2	0.5	
Date Sampled				07-NOV-2018	07-NOV-2018	
Matrix Class				Clay	Clay	
Determinand	Method	Test Sample	LOD	Units		
Moisture @105C	T162	AR	0.1	%	23	21
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1

Concept Reference: 780722 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil REC Ltd 002S						
Concept Reference				780722 001	780722 002	
Customer Sample Reference				TS1	TS2	
Hole ID				Plot 15	Plot 15	
Top Depth				0.2	0.5	
Date Sampled				07-NOV-2018	07-NOV-2018	
Matrix Class				Clay	Clay	
Determinand	Method	Test Sample	LOD	Units		
Arsenic	T6	M40	2	mg/kg	13	14
Cadmium	T6	M40	1	mg/kg	3	3
Chromium	T6	M40	1	mg/kg	22	23
Lead	T6	M40	1	mg/kg	110	110
Mercury	T6	M40	1	mg/kg	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3
Copper	T6	M40	1	mg/kg	120	140
Nickel	T6	M40	1	mg/kg	20	20
Zinc	T6	M40	1	mg/kg	100	110
pH	T7	A40			7.6	7.3
SO4(Total)	T6	A40	0.01	%	0.07	0.07
SO4(2:1)	T6	AR	0.1	g/l	<0.1	<0.1
Chromium VI	T6	A40	1	mg/kg	<1	<1
Barium	T6	A40	1	mg/kg	110	120
Beryllium	T6	A40	2	mg/kg	<2	<2
Boron (water-soluble)	T6	A40	1	mg/kg	<1	<1
Cyanide(Total)	T921	M105	1	mg/kg	<1	<1
Phenols(Mono)	T921	M105	1	mg/kg	<1	<1
Vanadium	T6	M40	1	mg/kg	24	25

Concept Reference: 780722 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil PAH US EPA 16 (B and K split) and Phenol						
Concept Reference				780722 001	780722 002	
Customer Sample Reference				TS1	TS2	
Hole ID				Plot 15	Plot 15	
Top Depth				0.2	0.5	
Date Sampled				07-NOV-2018	07-NOV-2018	
Matrix Class				Clay	Clay	
Determinand	Method	Test Sample	LOD	Units		
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1
Acenaphthylene	T207	AR	0.1	mg/kg	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.2	0.1
Anthracene	T207	AR	0.1	mg/kg	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	0.4	0.4
Pyrene	T207	M105	0.1	mg/kg	0.4	0.4
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.2	0.2
Chrysene	T207	M105	0.1	mg/kg	0.2	0.2
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.1	0.2
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.2
PAH(total)	T207	AR	0.1	mg/kg	1.4	2.2
Phenol	T207	M105	0.1	mg/kg	<0.1	<0.1

Concept Reference: 780722 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil REC Banded TPH						
Concept Reference				780722 001	780722 002	
Customer Sample Reference				TS1	TS2	
Hole ID				Plot 15	Plot 15	
Top Depth				0.2	0.5	
Date Sampled				07-NOV-2018	07-NOV-2018	
Matrix Class				Clay	Clay	
Determinand	Method	Test Sample	LOD	Units		
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	0.31
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10
TPH (C35-C44)	T8	AR	1	mg/kg	12⁽¹³⁾	7⁽¹³⁾
TPH (C10-C12)	T206	M105	1	mg/kg	<1 ⁽¹³⁾	<1 ⁽¹³⁾
TPH (C12-C16)	T206	M105	1	mg/kg	2⁽¹³⁾	1⁽¹³⁾
TPH (C16-C21)	T206	M105	1	mg/kg	7⁽¹³⁾	5⁽¹³⁾
TPH (C21-C35)	T206	M105	1	mg/kg	39⁽¹³⁾	25⁽¹³⁾

Concept Reference: 780722 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil REC TOC and SOM					
Concept Reference		780722 001		780722 002	
Customer Sample Reference		TS1		TS2	
Hole ID		Plot 15		Plot 15	
Top Depth		0.2		0.5	
Date Sampled		07-NOV-2018		07-NOV-2018	
Matrix Class		Clay		Clay	
Determinand	Method	Test Sample	LOD	Units	
Soil Organic Matter	T287	A40	0.1	%	4.6 5.5
Total Organic Carbon	T21	A40	0.1	%	2.7 3.2

Concept Reference: 780722 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil Misc					
Concept Reference		780722 001		780722 002	
Customer Sample Reference		TS1		TS2	
Hole ID		Plot 15		Plot 15	
Top Depth		0.2		0.5	
Date Sampled		07-NOV-2018		07-NOV-2018	
Matrix Class		Clay		Clay	
Determinand	Method	Test Sample	LOD	Units	
Asbestos ID	T27	A40			N.D. N.D.

Index to symbols used in 780722-2

Value	Description
A40	Assisted dried < 40C
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
AR	As Received
N.D.	Not Detected
13	Results have been blank corrected.
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos testing was subcontracted to REC Asbestos.

Method Index

Value	Description
T2	Grav
T27	PLM
T162	Grav (1 Dec) (105 C)
T206	GC/FID (MCERTS)
T21	OX/IR
T7	Probe
T207	GC/MS (MCERTS)
T287	Calc TOC/0.58
T6	ICP/OES

T921	Colorimetry (CF) (MCERT)
T8	GC/FID
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Moisture @105C	T162	AR	0.1	%	N	001-002
Retained on 10mm sieve	T2	M40	0.1	%	N	001-002
Arsenic	T6	M40	2	mg/kg	M	001-002
Cadmium	T6	M40	1	mg/kg	M	001-002
Chromium	T6	M40	1	mg/kg	M	001-002
Lead	T6	M40	1	mg/kg	M	001-002
Mercury	T6	M40	1	mg/kg	M	001-002
Selenium	T6	M40	3	mg/kg	M	001-002
Copper	T6	M40	1	mg/kg	M	001-002
Nickel	T6	M40	1	mg/kg	M	001-002
Zinc	T6	M40	1	mg/kg	M	001-002
pH	T7	A40			M	001-002
SO4(Total)	T6	A40	0.01	%	N	001-002
SO4(2:1)	T6	AR	0.1	g/l	N	001-002
Chromium VI	T6	A40	1	mg/kg	N	001-002
Barium	T6	A40	1	mg/kg	U	001-002
Beryllium	T6	A40	2	mg/kg	U	001-002
Boron (water-soluble)	T6	A40	1	mg/kg	N	001-002
Cyanide(Total)	T921	M105	1	mg/kg	M	001-002
Phenols(Mono)	T921	M105	1	mg/kg	M	001-002
Vanadium	T6	M40	1	mg/kg	M	001-002
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001-002
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001-002
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001-002
TPH (C35-C44)	T8	AR	1	mg/kg	N	001-002
TPH (C10-C12)	T206	M105	1	mg/kg	M	001-002
TPH (C12-C16)	T206	M105	1	mg/kg	M	001-002
TPH (C16-C21)	T206	M105	1	mg/kg	M	001-002
TPH (C21-C35)	T206	M105	1	mg/kg	M	001-002
Asbestos ID	T27	A40			SU	001-002
Naphthalene	T207	M105	0.1	mg/kg	M	001-002
Acenaphthylene	T207	AR	0.1	mg/kg	U	001-002
Acenaphthene	T207	M105	0.1	mg/kg	M	001-002
Fluorene	T207	M105	0.1	mg/kg	M	001-002
Phenanthrene	T207	M105	0.1	mg/kg	M	001-002
Anthracene	T207	AR	0.1	mg/kg	U	001-002
Fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Pyrene	T207	M105	0.1	mg/kg	M	001-002
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001-002
Chrysene	T207	M105	0.1	mg/kg	M	001-002
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001-002
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001-002
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001-002
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001-002
PAH(total)	T207	AR	0.1	mg/kg	U	001-002
Phenol	T207	M105	0.1	mg/kg	M	001-002
Soil Organic Matter	T287	A40	0.1	%	N	001-002
Total Organic Carbon	T21	A40	0.1	%	N	001-002

John Fenlon
Bellway Homes Limited (North West)
2 Alderman Road
Hunts Cross
Liverpool
Merseyside
L24 9LR

BY Email john.fenlon@bellway.co.uk

Dear John,

Garden Validation – Scotchbarn Lane, Knowsley – Plots 17-19

Background and Objectives

In accordance with the Remediation Strategy ref 103358p2r2, dated November 2017, the following remedial measures are required in all areas of the site:

Depth Requirement for Gardens

- ▶ A total clean cover system comprising a minimum thickness of 600 mm;
- ▶ A minimum topsoil thickness of 150 mm; and,
- ▶ The remainder of the clean cover system shall be comprised of subsoil.

Validation Requirement

- ▶ Independent validation of works by Geo-Environmental Consultant;
- ▶ Visual inspection and chemical laboratory validation sampling; and
- ▶ Production of validation letter reports for the clean cover system.

Required sample numbers for chemical validation are summarised in Table 1.

Table 1: Chemical Validation Testing Requirement

Source	Source of Material			
	Greenfield	Remediated	Brownfield	Unknown
Gardens	1 per 250m ³	1 per 100 m ³	1 per 50 m ³	1 per 50 m ³
Soft Landscaping	1 per 250m ³	1 per 150 m ³	1 per 150 m ³	1 per 150 m ³
Other Fill Materials	1 per 250m ³	1 per 250m ³	1 per 250m ³	1 per 250m ³

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Validation Works Completed

Table 2 shows a summary of validated plots to date.

Table 2: Summary of Validated Plots

Validated Plots [w/ 600mm Cover System]	Letter Reference
7-10	01v103358
1-2, 5	02v103358
6, 34-39, 118-119	03v103358
41-43 & 117	04v103358
11 & 40	05v103358
12-13	06v103358
14-16	07v103358
17-19	08v103358

Table 3 summarises approximate volumes of soil validated to date within the rear gardens.

Table 3: Approximate total soil volumes of rear gardens

Material	Volume (m ³)
Topsoil	2,300
Subsoil	6,900

Validation Visit - 5th December 2019

REC attended site on 5th December 2018 to confirm the correct thickness of topsoil and subsoil has been used in the rear gardens of 3 properties in Plots 17-19 and to collect samples for laboratory analysis.

One excavation in each rear garden was advanced by hand as shown on Figure 1 below. The depths and descriptions of each strata encountered were recorded.

REC's independent inspection shows that the required 600mm of clean cover is present within the rear gardens of Plots 17-19.

A visual inspection of the topsoil and subsoil at each of the four excavations confirmed it to be free of potentially deleterious or unsuitable materials discernible by the naked eye such as ceramic materials, metal objects, plastics, treated wood or textiles.

Topsoil and subsoil samples were collected and analysed for the constituents of concern noted in Table 4 (enclosed to this letter) to the correct frequency as specified in Table 1 above and have been subsequently assessed against their suitability for a residential with gardens and plant uptake end use development.

Laboratory Testing of Site Won Topsoil

REC visited site on the 17th- 19th May 2016 and 15th March 2017 to undertake intrusive ground investigations. Sampling and testing of site won topsoil as part of this work determined it suitable for use within gardens. Laboratory test certificates are attached to this report.

Laboratory Testing of Placed Topsoil

Two samples of topsoil were tested at a frequency of 1 per 50m³ within Plot 18. A minor exceedance for lead of 230mg/kg compared with a screening value of 200mg/kg was encountered in the sample from Plot 18 at 0.3m bgl. Given the marginal nature of the result, that the screening values derived





are conservative, the other sample was below the limit and from the same source, and additional testing during previous visits has demonstrated lead concentrations below the screening value it is considered that the topsoil is suitable for use and no further work is required. Laboratory test certificates are attached to this report.

Yours Sincerely,
For and on behalf of REC Ltd

Phil Hill

Approved and Authorised

Martin Lucass

Enclosed:
Sketch Location Plan of Validation Pits
Plot Inspection Records (including photographs and description)
Table 4: Screening Values for Materials within Residential Soft Landscaping Areas
Chemical Analysis Certificates





Figure 1: Sketch Plot Validation Pit Location



- - Validated Plots during Site Visit on 5th December 2018
- - Previously Validated Plots





PLOT INSPECTION RECORDS



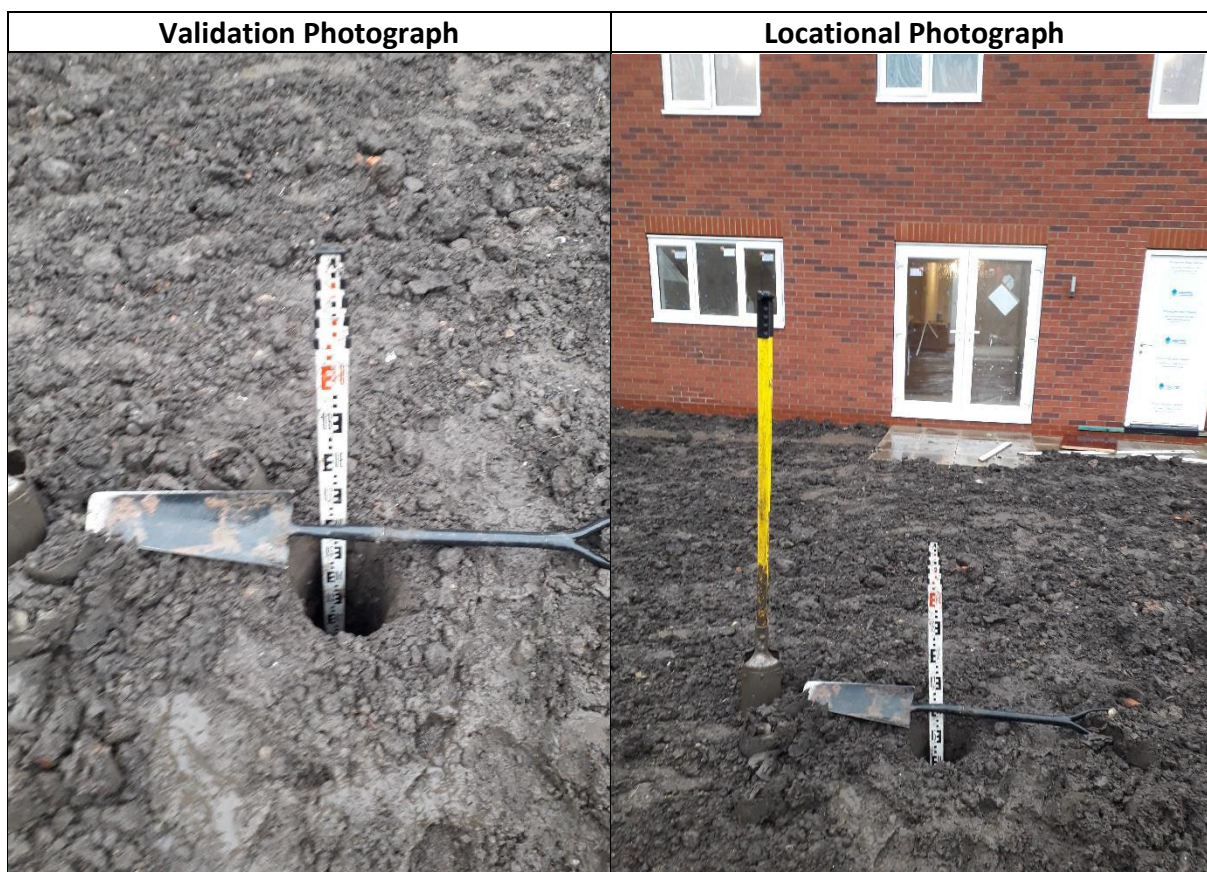


PLOT NUMBER: 17

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 05/12/2018
Consultant: C. Dowd

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
N/A

GARDEN VALIDATION: PASS



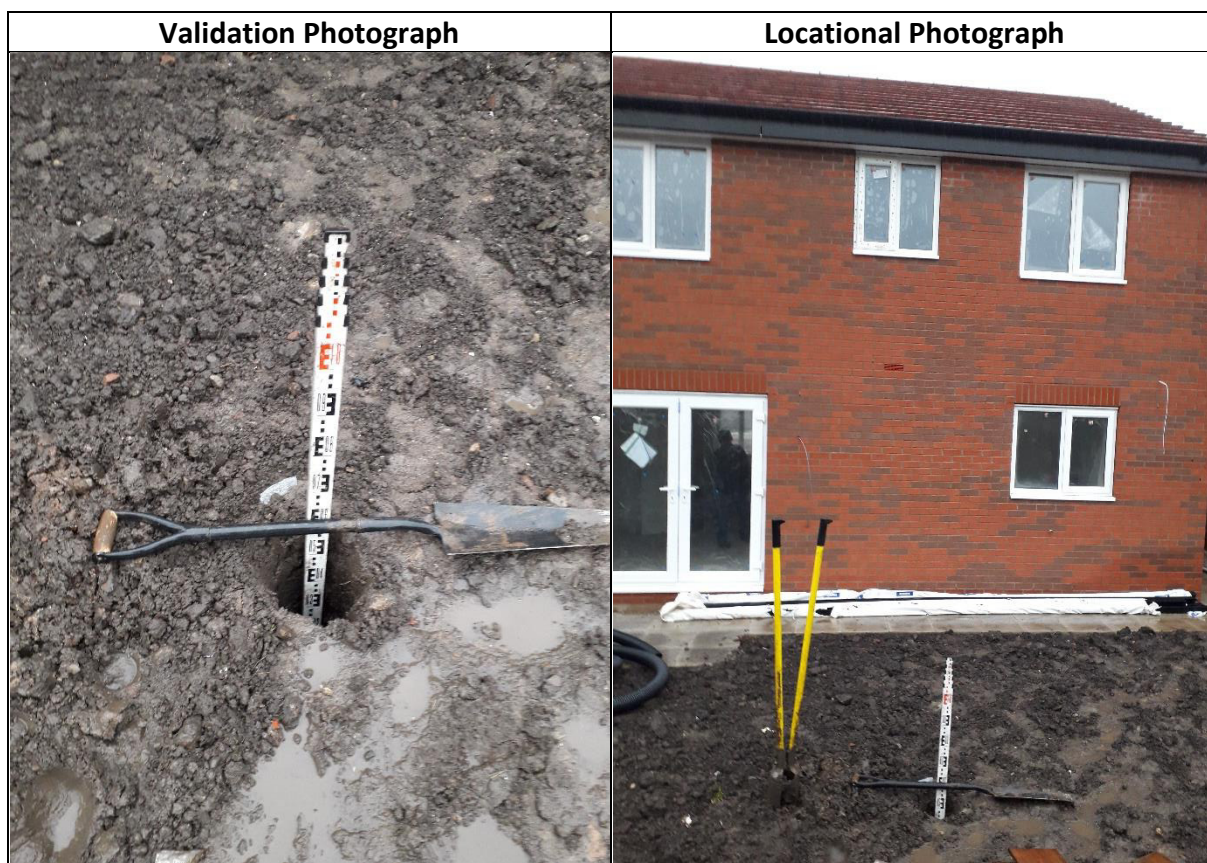


PLOT NUMBER: 18

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 05/12/2018
Consultant: C. Dowd

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:

Elevated Lead encountered in Topsoil sample at 0.2 – Not considered significant – See Report

GARDEN VALIDATION: PASS





SUITABILITY CRITERIA





Table 4: Validation Testing Summary

Determinand	Units	Screening Value for Use within Private Gardens	Maximum Concentration within Upper Topsoil	Maximum Concentration within Lower Topsoil	Screening Value Source
Inorganics – Metals and Asbestos					
Arsenic	mg/kg	37	13	16	(i)
Cadmium	mg/kg	11	3	3	(i)
Chromium (VI)	mg/kg	6	<1	<1	(i)
Lead	mg/kg	200	230	160	(iv)
Inorganic Mercury	mg/kg	40	<1	<1	(i)
Nickel	mg/kg	130	24	24	(i)
Selenium	mg/kg	250	<3	<3	(i)
Copper	mg/kg	2,400	140	120	(i)
Zinc	mg/kg	3,700	120	120	(i)
Cyanide	mg/kg	791	<1	<1	(v)
Asbestos	%	None Detected	N.D	N.D	N/A
Organics - PAHs					
Phenol	mg/kg	200	<0.1	<0.1	(ii)
Naphthalene	mg/kg	5.6	<0.1	<0.1	(ii)
Acenaphthylene	mg/kg	420	<0.1	<0.1	(ii)
Acenaphthene	mg/kg	510	<0.1	<0.1	(ii)
Fluorene	mg/kg	400	<0.1	<0.1	(ii)
Phenanthrene	mg/kg	220	0.6	0.4	(ii)
Anthracene	mg/kg	2,400	0.2	<0.1	(ii)
Fluoranthene	mg/kg	280	1.4	0.7	(ii)
Pyrene	mg/kg	1200	1.4	0.7	(ii)
Benzo(a)Anthracene	mg/kg	2.7	0.8	0.3	(ii)
Chrysene	mg/kg	22	0.7	0.3	(ii)
Benzo(b)Fluoranthene	mg/kg	3.3	0.5	0.2	(ii)
Benzo(k)Fluoranthene	mg/kg	93	0.4	0.2	(ii)
Benzo(a)Pyrene	mg/kg	2.7	0.5	0.2	(ii)
Indeno(123-cd)Pyrene	mg/kg	36	0.3	0.1	(ii)
Dibenzo(a,h)Anthracene	mg/kg	0.28	<0.1	<0.1	(ii)
Benzo(ghi)Perylene	mg/kg	340	0.3	0.2	(ii)
Organics – TPHs					
TPH C ₅ -C ₆	mg/kg	78	<0.10	<0.10	(iii)
TPH C ₆ -C ₈	mg/kg	230	<0.10	<0.10	(iii)
TPH C ₈ -C ₁₀	mg/kg	65	<0.10	<0.10	(iii)
TPH C ₁₀ -C ₁₂	mg/kg	180	⁽¹³⁾ <1	⁽¹³⁾ <1	(iii)
TPH C ₁₂ -C ₁₆	mg/kg	330	⁽¹³⁾ <1	⁽¹³⁾ <1	(iii)
TPH C ₁₆ -C ₂₁	mg/kg	540	⁽¹³⁾ 1	⁽¹³⁾ 6	(iii)
TPH C ₂₁ -C ₃₅	mg/kg	1,500	⁽¹³⁾ 1	⁽¹³⁾ 32	(iii)
TPH C ₃₅ -C ₄₄	mg/kg	1,500	⁽¹³⁾ 1	⁽¹³⁾ 6	(iii)
Screening Value Source (i) LQM/CIEH Suitable For Use Level (S4UL) (2015); (ii) S4UL –Assessment Approach of 3% SOM; (iii) S4UL –3% SOM and assumed worst case aliphatic / aromatic compound; (iv) Defra Category 4 Screening Level (2014); (v) CLEA v1.06 Derived Value. (13) Results have been blank corrected.					





SOIL CHEMICAL ANALYSIS



Scientific Analysis Laboratories Ltd

Certificate of Analysis

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Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Scientific Analysis Laboratories is a
limited company registered in England and
Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Report Number: 572763-1

Date of Report: 01-Jun-2016

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Sabine Sargeant

Customer Job Reference: 101754

Customer Purchase Order: 001151

Customer Site Reference: Scotchbarn Lane

Date Job Received at SAL: 18-May-2016

Date Analysis Started: 26-May-2016

Date Analysis Completed: 01-Jun-2016

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with SAL SOPs

All results have been reviewed in accordance with Section 25 of the SAL Quality Manual



Report checked
and authorised by :
Emma Spear
Project Manager

Issued by :
Emma Spear
Project Manager



SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Bulk Product Analysed as Bulk Product Asbestos ID					
SAL Reference				572763 004	
Customer Sample Reference				TP102	
Bottom Depth				0.4	
Date Sampled				17-MAY-2016	
Type				Fill	
Determinand	Method	Test Sample	LOD	Units	
Asbestos	T27	AR			Chrysotile Fibres Detected

SAL Reference: 572763										
Project Site: Scotchbarn Lane										
Customer Reference: 101754										
Soil Analysed as Soil										
MCERTS Preparation										
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007	
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104	
Bottom Depth					1	0.4	0.2	0.7	0.2	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	11	7.2	7.4	7.4	18
Retained on 10mm sieve		T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763										
Project Site: Scotchbarn Lane										
Customer Reference: 101754										
Soil					Analysed as Soil					
MCERTS Preparation										
SAL Reference					572763 008	572763 009	572763 011	572763 012	572763 013	
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107	
Bottom Depth					2	2	0.5	2.1	0.5	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	7.3	11	18	18	9.7
Retained on 10mm sieve		T2	M40	0.1	%	-	-	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil MCERTS Preparation Analysed as Soil										
SAL Reference					572763 015	572763 016	572763 017	572763 018	572763 019	
Customer Sample Reference					TP108	TP109	TP110	TP111	TP112	
Bottom Depth					0.1	0.5	0.4	0.3	0.1	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Topsoil	Sandy Soil	Clay	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units						
Moisture @105C	T162	AR	0.1	%	8.2	14	18	18	35	
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1	

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference				572763 020	572763 022	572763 023	572763 025	572763 028	
Customer Sample Reference				TP112	TP113	TP113	WS102	WS104	
Bottom Depth				0.9	0.5	1.4	0.2	0.2	
Date Sampled				17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016	18-MAY-2016	
Type				Sandy Soil	Clay	Clay	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	18	17	12	5.8	19
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil		Analysed as Soil							
MCERTS Preparation									
SAL Reference					572763 029	572763 031	572763 032	572763 033	572763 035
Customer Sample Reference					WS105	WS108	WS108	WS109	WS110
Bottom Depth					0.1	0.2	0.5	0.3	1.2
Date Sampled					18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	25	23	16	15	26
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference		572763 039							
Customer Sample Reference		WS113							
Bottom Depth		0.7							
Date Sampled		19-MAY-2016							
Type		Topsoil							
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	5.2				
Retained on 10mm sieve	T2	M40	0.1	%	<0.1				

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Ltd 002S									
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104
Bottom Depth					1	0.4	0.2	0.7	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	8	25	17	5	18
Cadmium	T6	M40	1	mg/kg	<1	<1	<1	<1	2
Chromium	T6	M40	1	mg/kg	30	18	26	20	20
Lead	T6	M40	1	mg/kg	11	110	32	5	66
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Copper	T6	M40	1	mg/kg	17	70	69	7	81
Nickel	T6	M40	1	mg/kg	26	28	34	17	19
Zinc	T6	M40	1	mg/kg	48	190	120	23	98
pH	T7	AR			5.8	7.1	8.2	7.5	5.9
SO4(Total)	T6	M40	0.01	%	0.02	0.30	0.07	0.01	0.07
SO4(2:1)	T6	AR	100	mg/l	<100	310	<100	<100	<100
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1	<1	<1
Beryllium	T6	M40	2	mg/kg	3	2	2	<2	<2
Boron (water-soluble)	T6	AR	1	mg/kg	<1	<1	<1	<1	<1
Phenols(Mono)	T546	AR	1	mg/kg	<1	<1	<1	<1	<1
Vanadium	T6	M40	1	mg/kg	36	37	41	24	32
Barium	T6	M40	1	mg/kg	100	150	160	26	98
Cyanide(Total)	T546	AR	1	mg/kg	<1	<1	<1	<1	1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil REC Ltd 002S									
SAL Reference					572763 011	572763 012	572763 013	572763 015	572763 016
Customer Sample Reference					TP106	TP106	TP107	TP108	TP109
Bottom Depth					0.5	2.1	0.5	0.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Arsenic	T6	M40	2	mg/kg	18	4	16	13	13
Cadmium	T6	M40	1	mg/kg	3	<1	2	<1	2
Chromium	T6	M40	1	mg/kg	23	17	23	28	22
Lead	T6	M40	1	mg/kg	120	7	190	150	100
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3	<3
Copper	T6	M40	1	mg/kg	130	12	48	61	84
Nickel	T6	M40	1	mg/kg	20	16	18	21	18
Zinc	T6	M40	1	mg/kg	140	24	270	170	130
pH	T7	AR			6.9	6.7	6.9	7.4	7.4
SO4(Total)	T6	M40	0.01	%	0.07	<0.01	0.88	0.08	0.15
SO4(2:1)	T6	AR	100	mg/l	<100	<100	650	130	<100
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1	<1	<1
Beryllium	T6	M40	2	mg/kg	2	<2	<2	<2	<2
Boron (water-soluble)	T6	AR	1	mg/kg	<1	<1	<1	<1	<1
Phenols(Mono)	T546	AR	1	mg/kg	<1	<1	<1	<1	<1
Vanadium	T6	M40	1	mg/kg	36	20	36	30	31
Barium	T6	M40	1	mg/kg	97	35	280	150	150
Cyanide(Total)	T546	AR	1	mg/kg	1	<1	1	1	<1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 011	572763 012	572763 013	572763 015	572763 016
Customer Sample Reference					TP106	TP106	TP107	TP108	TP109
Bottom Depth					0.5	2.1	0.5	0.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	1.7	1.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	0.5	0.3
Fluoranthene	T207	M105	0.1	mg/kg	0.5	<0.1	2.2	3.3	2.0
Pyrene	T207	M105	0.1	mg/kg	0.5	<0.1	2.0	3.3	2.0
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.3	<0.1	1.0	2.3	1.1
Chrysene	T207	M105	0.1	mg/kg	0.3	<0.1	1.2	2.6	1.3
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.3	<0.1	1.4	3.3	1.4
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.1	<0.1	0.4	0.5	0.3
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	2.2	1.0
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.1	<0.1	0.6	1.2	0.5
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.3	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.1	<0.1	0.8	1.5	0.6
PAH(total)	T207	M105	0.1	mg/kg	2.6	<0.1	12	23	12

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 017	572763 018	572763 019	572763 020	572763 022
Customer Sample Reference					TP110	TP111	TP112	TP112	TP113
Bottom Depth					0.4	0.3	0.1	0.9	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Topsoil	Topsoil	Sandy Soil	Clay
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.6	0.2	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.5	0.9	0.2	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.5	1.0	0.3	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.6	1.2	0.3	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	0.2	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.8	0.2	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.2	0.5	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.3	0.6	0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1	5.1	9.4	2.5	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference				572763 023	572763 025	572763 028	572763 029	572763 031	
Customer Sample Reference				TP113	WS102	WS104	WS105	WS108	
Bottom Depth				1.4	0.2	0.2	0.1	0.2	
Date Sampled				17-MAY-2016	18-MAY-2016	18-MAY-2016	18-MAY-2016	19-MAY-2016	
Type				Clay	Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.7	0.2	0.3	0.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.7	0.6	0.6	0.5
Pyrene	T207	M105	0.1	mg/kg	<0.1	1.6	0.6	0.6	0.5
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	1.0	0.3	0.3	0.2
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.9	0.3	0.3	0.2
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.2	0.5	0.5	0.3
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.8	0.3	0.3	0.2
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.2	0.2	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.6	0.2	0.2	0.2
PAH(total)	T207	M105	0.1	mg/kg	<0.1	9.5	3.3	3.4	2.3

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
PAH US EPA 16 (B and K split)									
SAL Reference					572763 032	572763 033	572763 035	572763 039	
Customer Sample Reference					WS108	WS109	WS110	WS113	
Bottom Depth					0.5	0.3	1.2	0.7	
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type					Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.4	<0.1	
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	
Fluoranthene	T207	M105	0.1	mg/kg	0.3	1.0	0.8	<0.1	
Pyrene	T207	M105	0.1	mg/kg	0.3	0.9	0.7	<0.1	
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Chrysene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.1	0.7	0.4	<0.1	
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.3	<0.1	<0.1	
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.3	<0.1	
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
PAH(total)	T207	M105	0.1	ma/kg	0.9	6.5	3.9	<0.1	

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
pH and Sulphate									
SAL Reference				572763 028	572763 029	572763 031	572763 032	572763 033	
Customer Sample Reference				WS104	WS105	WS108	WS108	WS109	
Bottom Depth				0.2	0.1	0.2	0.5	0.3	
Date Sampled				18-MAY-2016	18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type				Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763							
Project Site: Scotchbarn Lane							
Customer Reference: 101754							
Soil				Analysed as Soil			
pH and Sulphate							
SAL Reference				572763 035	572763 039	572763 040	
Customer Sample Reference				WS110	WS113	WS113	
Bottom Depth				1.2	0.7	1.4	
Date Sampled				19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type				Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units			
pH	T7	AR			-	-	7.6
SO4(2:1)	T6	AR	100	mg/l	170	<100	<100

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 001	572763 002	572763 003	572763 005	572763 006
Customer Sample Reference					TP101	TP101	TP102	TP103	TP103
Bottom Depth					1	2.2	0.4	0.2	0.7
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	-	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	310	<100	<100

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 007	572763 009	572763 011	572763 012	572763 013
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107
Bottom Depth					0.2	2	0.5	2.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	-	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	650

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 014	572763 015	572763 016	572763 017	572763 018
Customer Sample Reference					TP107	TP108	TP109	TP110	TP111
Bottom Depth					1.2	0.1	0.5	0.4	0.3
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Topsoil	Sandy Soil	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			-	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	130	<100	<100	<100

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 019	572763 020	572763 022	572763 023	572763 025
Customer Sample Reference					TP112	TP112	TP113	TP113	WS102
Bottom Depth					0.1	0.9	0.5	1.4	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 028	572763 029	572763 031	572763 032	572763 033
Customer Sample Reference					WS104	WS105	WS108	WS108	WS109
Bottom Depth					0.2	0.1	0.2	0.5	0.3
Date Sampled					18-MAY-2016	18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763

Project Site: Scotchbarn Lane

Customer Reference: 101754

Soil

Miscellaneous

Analysed as Soil

SAL Reference					572763 035	572763 039	572763 040
Customer Sample Reference					WS110	WS113	WS113
Bottom Depth					1.2	0.7	1.4
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units			
Asbestos ID	T27	AR			N.D.	N.D.	-
SO4(2:1)	T6	AR	100	mg/l	170	<100	<100

Index to symbols used in 572763-1

Value	Description
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
N.D.	Not Detected
13	Results have been blank corrected.
9	LOD raised due to dilution of sample
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was sub-contracted to REC Asbestos.
"Fill" samples are outside the scope of our MCERTS accreditation. Results are UKAS only.

Method Index

Value	Description
T7	Probe
T54	GC/MS (Headspace)
T546	Colorimetry (CF)
T162	Grav (1 Dec) (105 C)
T27	PLM
T207	GC/MS (MCERTS)
T8	GC/FID
T6	ICP/OES
T206	GC/FID (MCERTS)
T2	Grav

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Asbestos	T27	AR			SU	004
Moisture @105C	T162	AR	0.1	%	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
Retained on 10mm sieve	T2	M40	0.1	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Arsenic	T6	M40	2	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cadmium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chromium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Lead	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Mercury	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Selenium	T6	M40	3	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Copper	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Nickel	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Zinc	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(Total)	T6	M40	0.01	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(2:1)	T6	AR	100	mg/l	N	001-003,005-007,009,011-020,022-023,025,028-029,031-033,035,039-040
Chromium VI	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Barium	T6	M40	1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Beryllium	T6	M40	2	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Boron (water-soluble)	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cyanide(Total)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenols(Mono)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Vanadium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Naphthalene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthylene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Fluorene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenanthrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Anthracene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chrysene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
PAH(total)	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C10-C12)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C12-C16)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C16-C21)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C21-C35)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C35-C44)	T8	M105	1	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			U	002,009,014,040
Asbestos ID	T27	AR			SU	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039



Concept Life Sciences

Certificate of Analysis

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Report Number: 640278-1

Date of Report: 22-Mar-2017

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Louise Stock

Customer Job Reference: 103358

Customer Purchase Order: 002602

Customer Site Reference: Scotchbarn Lane

Date Job Received at Concept: 16-Mar-2017

Date Analysis Started: 20-Mar-2017

Date Analysis Completed: 22-Mar-2017

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

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Tests covered by this certificate were conducted in accordance with Concept SOPs



Report checked
and authorised by :
Aleksandra Pacula
Project Manager

Issued by :
Aleksandra Pacula
Project Manager

Concept Reference: 640278									
Project Site: Scotchbarn Lane									
Customer Reference: 103358									
Soil					Analysed as Soil				
Phenols (Speciated)									
Concept Reference					640278 006	640278 013	640278 016	640278 020	640278 027
Customer Sample Reference					TP203	TP208	TP209	TP206	TP211
Bottom Depth					0.9	0.9	0.9	0.65	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand		Method	Test Sample	LOD	Units				
Phenol		T149	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01
Cresols		T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01
Xylenols		T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01

Concept Reference: 640278					
Project Site: Scotchbarn Lane					
Customer Reference: 103358					
Soil			Analysed as Soil		
Phenols (Speciated)					
Concept Reference					640278 028
Customer Sample Reference					TP211
Bottom Depth					1.4
Date Sampled					15-MAR-2017
Type					Sandy Soil
Determinand	Method	Test Sample	LOD	Units	
Phenol	T149	AR	0.01	mg/kg	<0.01
Cresols	T16	AR	0.01	mg/kg	<0.01
Xylenols	T16	AR	0.01	mg/kg	<0.01

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil SVOC 625 + Tentatively Identified Compounds									
Concept Reference				640278 002	640278 006	640278 010	640278 013	640278 016	
Customer Sample Reference				TP201	TP203	TP205	TP208	TP209	
Bottom Depth				1.3	0.9	0.9	0.9	0.9	
Date Sampled				15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
Phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(36,62) <0.5	-	(36,62) <0.5	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	-	(36,62) <0.5	(62,36) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil
Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(62,36) <0.5	-	(62,36) <0.5	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	-	(36,62) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	-	0.6	0.2
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	0.2	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.4	-	0.7	0.3
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	-	0.5	0.3
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.2	-	0.3	0.2
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	-	0.3	0.2
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.1	-	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.2	-	0.1	<0.1



Concept Reference: 640278	
Project Site: Scotchbarn Lane	
Customer Reference: 103358	
Soil	Analysed as Soil
SVOC 625 + Tentatively Identified Compounds	

Soil	Analysed as Soil
SVOC 625 + Tentatively Identified Compounds	

Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	0.1	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(62,36) <0.5	-	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	(36,62) <0.5	(36,62) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(36,62) <0.5	-	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	(62,36) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	0.2	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	0.2	<0.1
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.3	0.1	<0.1
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.6	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil Analysed as Soil								
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
Miscellaneous								
Concept Reference					640278 012	640278 015	640278 024	
Customer Sample Reference					TP208	TP209	TP210	
Bottom Depth					0.3	0.3	0.9	
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type					Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units				
Asbestos ID	T27	AR			N D	N D	N D	

Index to symbols used in 640278-1

Value	Description
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
A40	Assisted dried < 40C
N.D.	Not Detected
110	LOD raised due to low internal standard recovery.
62	LOD was raised due to the method performance of the analytical procedure used
13	Results have been blank corrected.
36	LOD Raised due to low Matrix spike recovery
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was subcontracted to REC Asbestos.

Method Index

Value	Description
T8	GC/FID
T921	Colorimetry (CF) (MCERT)
T16	GC/MS
T27	PLM
T6	ICP/OES
T207	GC/MS (MCERTS)
T85	Calc
T149	GC/MS (SIR)
T7	Probe
T2	Grav
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
pH	T7	AR			M	002,010,012,015,018,024
Electrical Conductivity	T7	A40	10	µS/cm	N	002,006,010,013,016,018,020,027-028
Redox Potential	T7	A40		mV	N	002,006,010,013,016,018,020,027-028
Phenol	T207	M105	0.1	mg/kg	M	002,010,018
Phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-methyl phenol	T207	M105	0.1	mg/kg	M	002,010,018
2-methyl phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3/4-Methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
3/4-Methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachloroethane	T207	M105	0.1	mg/kg	U	002,010,018
Hexachloroethane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Nitrobenzene	T207	M105	0.1	mg/kg	M	002,010,018
Nitrobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Isophorone	T207	M105	0.1	mg/kg	U	002,010,018
Isophorone	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitrophenol	T207	M105	0.1	mg/kg	U	002,010,018
2-Nitrophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Naphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Naphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chloroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobutadiene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
Hexachlorobutadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Chloronaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
2-Chloronaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitroaniline	T207	M105	0.1	mg/kg	M	002,010,018
2-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dimethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Dimethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	U	002,010,018
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Acenaphthylene	T207	M105	0.1	mg/kg	U	002,010,018
Acenaphthylene	T207	M105	0.1	mg/kg	M	002,010,018
Acenaphthylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Acenaphthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzofuran	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	M	002,010,018
Dibenzofuran	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Diethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
Diethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
4-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pentachlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Phenanthrene	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T207	M105	0.1	mg/kg	U	002,010,018
Pentachlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Carbazole	T207	M105	0.1	mg/kg	U	002,010,018
Phenanthrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-butylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Carbazole	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T207	M105	0.1	mg/kg	U	002,010,018
Di-n-butylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Chrysene	T207	M105	0.1	mg/kg	M	002,010,018
Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Chrysene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	002,010,018
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
SVOC screen (extra peaks)	T16	M105	10	mg/kg	N	002,006,010,013,016,018,020,027-028
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Total Petroleum Hydrocarbons (C5 - C10 aliphatic/aromatic)	T85	AR	0.010	mg/kg	N	013,016,020
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
Phenol	T149	AR	0.01	mg/kg	U	006,013,016,020,027-028
Cresols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Xylenols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Asbestos ID	T27	AR			SU	012,015,024
Arsenic	T6	M40	2	mg/kg	M	012,015,024
Cadmium	T6	M40	1	mg/kg	M	012,015,024
Chromium	T6	M40	1	mg/kg	M	012,015,024
Lead	T6	M40	1	mg/kg	M	012,015,024

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Mercury	T6	M40	1	mg/kg	M	012,015,024
Selenium	T6	M40	3	mg/kg	M	012,015,024
Copper	T6	M40	1	mg/kg	M	012,015,024
Nickel	T6	M40	1	mg/kg	M	012,015,024
Zinc	T6	M40	1	mg/kg	M	012,015,024
SO ₄ (Total)	T6	A40	0.01	%	N	012,015,024
SO ₄ (2:1)	T6	AR	0.1	g/l	N	012,015,024
Chromium VI	T6	AR	1	mg/kg	N	012,015,024
Barium	T6	A40	1	mg/kg	U	012,015,024
Beryllium	T6	A40	2	mg/kg	U	012,015,024
Boron (water-soluble)	T6	AR	1	mg/kg	N	012,015,024
Cyanide(Total)	T921	AR	1	mg/kg	M	012,015,024
Phenols(Mono)	T921	AR	1	mg/kg	M	012,015,024
Vanadium	T6	M40	1	mg/kg	M	012,015,024
pH	T7	A40			U	006,013,016,020,027-028
TPH (C11-C20)	T8	AR	1	mg/kg	U	006,013,016,020,027-028
TPH (C20-C40)	T8	AR	1	mg/kg	N	006,013,016,020,027-028
Moisture @105C	T162	AR	0.1	%	N	002,010,012,015,018,024
Retained on 10mm sieve	T2	M40	0.1	%	N	002,010,012,015,018,024



Concept Life Sciences

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 787603-1

Date of Report: 13-Dec-2018

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Mr Phil Hill

Customer Job Reference: 103358

Customer Purchase Order: 006004

Customer Site Reference: Scotchborn Lane

Date Job Received at Concept: 05-Dec-2018

Date Analysis Started: 05-Dec-2018

Date Analysis Completed: 12-Dec-2018

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with Section 25 of the Concept Life Sciences, Analytical Services Quality Manual



Report checked
and authorised by :
Aleksandra Pacula
Senior Customer Service
Advisor

Issued by :
Aleksandra Pacula
Senior Customer Service
Advisor



Concept Reference: 787603 Project Site: Scotchborn Lane Customer Reference: 103358						
Soil Analysed as Soil MCERTS Preparation						
Concept Reference				787603 001	787603 002	
Customer Sample Reference				TS1	SS1	
Hole ID				Plot18	Plot18	
Bottom Depth				0.20	0.50	
Top Depth				0.00	0.00	
Date Sampled				05-DEC-2018	05-DEC-2018	
Matrix Class				Clay	Clay	
Determinand	Method	Test Sample	LOD	Units		
Moisture @105C	T162	AR	0.1	%	25	25
Retained on 10mm sieve	T2	M40	0.1	%	78.6	66.0

Concept Reference: 787603 Project Site: Scotchborn Lane Customer Reference: 103358						
Soil Analysed as Soil REC Ltd 002S						
Concept Reference				787603 001	787603 002	
Customer Sample Reference				TS1	SS1	
Hole ID				Plot18	Plot18	
Bottom Depth				0.20	0.50	
Top Depth				0.00	0.00	
Date Sampled				05-DEC-2018	05-DEC-2018	
Matrix Class				Clay	Clay	
Determinand	Method	Test Sample	LOD	Units		
Arsenic	T6	M40	2	mg/kg	14	16
Cadmium	T6	M40	1	mg/kg	3	2
Chromium	T6	M40	1	mg/kg	27	27
Lead	T6	M40	1	mg/kg	230	160
Mercury	T6	M40	1	mg/kg	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3
Copper	T6	M40	1	mg/kg	140	120
Nickel	T6	M40	1	mg/kg	24	24
Zinc	T6	M40	1	mg/kg	120	120
pH	T7	A40			7.7	7.7
SO4(Total)	T6	A40	0.01	%	0.05	0.07
SO4(2:1)	T6	AR	0.1	g/l	<0.1	<0.1
Chromium VI	T6	A40	1	mg/kg	<1	<1
Barium	T6	A40	1	mg/kg	110	140
Beryllium	T6	A40	2	mg/kg	<2	<2
Boron (water-soluble)	T6	A40	1	mg/kg	<1	<1
Cyanide(Total)	T921	M105	1	mg/kg	<1	<1
Phenols(Mono)	T921	M105	1	mg/kg	<1	<1
Vanadium	T6	M40	1	mg/kg	27	26

Concept Reference: 787603 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil PAH US EPA 16 (B and K split) and Phenol						
Concept Reference				787603 001	787603 002	
Customer Sample Reference				TS1	SS1	
Hole ID				Plot18	Plot18	
Bottom Depth				0.20	0.50	
Top Depth				0.00	0.00	
Date Sampled				05-DEC-2018	05-DEC-2018	
Matrix Class				Clay	Clay	
Determinand	Method	Test Sample	LOD	Units		
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.6	0.4
Anthracene	T207	M105	0.1	mg/kg	0.2	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	1.4	0.7
Pyrene	T207	M105	0.1	mg/kg	1.4	0.6
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.8	0.3
Chrysene	T207	M105	0.1	mg/kg	0.7	0.3
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.5	0.2
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.4	0.2
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.5	0.2
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.3	0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.3	0.2
PAH(total)	T207	M105	0.1	mg/kg	7.0	3.1
Phenol	T207	M105	0.1	mg/kg	<0.1	<0.1

Concept Reference: 787603 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil REC Banded TPH						
Concept Reference				787603 001	787603 002	
Customer Sample Reference				TS1	SS1	
Hole ID				Plot18	Plot18	
Bottom Depth				0.20	0.50	
Top Depth				0.00	0.00	
Date Sampled				05-DEC-2018	05-DEC-2018	
Matrix Class				Clay	Clay	
Determinand	Method	Test Sample	LOD	Units		
TPH (C5-C6)	T54	AR	0.10	mg/kg	<0.10	<0.10
TPH (C6-C8)	T54	AR	0.10	mg/kg	<0.10	<0.10
TPH (C8-C10)	T54	AR	0.10	mg/kg	<0.10	<0.10
TPH (C35-C44)	T8	M105	1	mg/kg	<1 ⁽¹³⁾	6⁽¹³⁾
TPH (C10-C12)	T206	M105	1	mg/kg	<1 ⁽¹³⁾	<1 ⁽¹³⁾
TPH (C12-C16)	T206	M105	1	mg/kg	<1 ⁽¹³⁾	<1 ⁽¹³⁾
TPH (C16-C21)	T206	M105	1	mg/kg	1⁽¹³⁾	6⁽¹³⁾
TPH (C21-C35)	T206	M105	1	mg/kg	1⁽¹³⁾	32⁽¹³⁾

Concept Reference: 787603 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil REC TOC and SOM						
Concept Reference		787603 001		787603 002		
Customer Sample Reference		TS1		SS1		
Hole ID		Plot18		Plot18		
Bottom Depth		0.20		0.50		
Top Depth		0.00		0.00		
Date Sampled		05-DEC-2018		05-DEC-2018		
Matrix Class		Clay		Clay		
Determinand	Method	Test Sample	LOD	Units		
Soil Organic Matter	T287	A40	0.1	%	5.5	4.6
Total Organic Carbon	T21	A40	0.1	%	3.2	2.6

Concept Reference: 787603 Project Site: Scotchborn Lane Customer Reference: 103358 Soil Analysed as Soil Misc						
Concept Reference		787603 001		787603 002		
Customer Sample Reference		TS1		SS1		
Hole ID		Plot18		Plot18		
Bottom Depth		0.20		0.50		
Top Depth		0.00		0.00		
Date Sampled		05-DEC-2018		05-DEC-2018		
Matrix Class		Clay		Clay		
Determinand	Method	Test Sample	LOD	Units		
Asbestos ID	T27	A40			N.D.	N.D.

Index to symbols used in 787603-1

Value	Description
A40	Assisted dried < 40C
AR	As Received
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
N.D.	Not Detected
13	Results have been blank corrected.
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was subcontracted to REC Asbestos.

Method Index

Value	Description
T162	Grav (1 Dec) (105 C)
T921	Colorimetry (CF) (MCERT)
T2	Grav
T6	ICP/OES
T206	GC/FID (MCERTS)
T8	GC/FID
T7	Probe

T207	GC/MS (MCERTS)
T54	GC/MS (Headspace)
T287	Calc TOC/0.58
T27	PLM
T21	OX/IR

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Asbestos ID	T27	A40			SU	001-002
Soil Organic Matter	T287	A40	0.1	%	N	001-002
Total Organic Carbon	T21	A40	0.1	%	N	001-002
Moisture @105C	T162	AR	0.1	%	N	001-002
Retained on 10mm sieve	T2	M40	0.1	%	N	001-002
Arsenic	T6	M40	2	mg/kg	M	001-002
Cadmium	T6	M40	1	mg/kg	M	001-002
Chromium	T6	M40	1	mg/kg	M	001-002
Lead	T6	M40	1	mg/kg	M	001-002
Mercury	T6	M40	1	mg/kg	M	001-002
Selenium	T6	M40	3	mg/kg	M	001-002
Copper	T6	M40	1	mg/kg	M	001-002
Nickel	T6	M40	1	mg/kg	M	001-002
Zinc	T6	M40	1	mg/kg	M	001-002
pH	T7	A40			M	001-002
SO4(Total)	T6	A40	0.01	%	N	001-002
SO4(2:1)	T6	AR	0.1	g/l	N	001-002
Chromium VI	T6	A40	1	mg/kg	N	001-002
Barium	T6	A40	1	mg/kg	U	001-002
Beryllium	T6	A40	2	mg/kg	U	001-002
Boron (water-soluble)	T6	A40	1	mg/kg	N	001-002
Cyanide(Total)	T921	M105	1	mg/kg	M	001-002
Phenols(Mono)	T921	M105	1	mg/kg	M	001-002
Vanadium	T6	M40	1	mg/kg	M	001-002
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001-002
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001-002
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001-002
TPH (C35-C44)	T8	M105	1	mg/kg	N	001-002
TPH (C10-C12)	T206	M105	1	mg/kg	M	001-002
TPH (C12-C16)	T206	M105	1	mg/kg	M	001-002
TPH (C16-C21)	T206	M105	1	mg/kg	M	001-002
TPH (C21-C35)	T206	M105	1	mg/kg	M	001-002
Naphthalene	T207	M105	0.1	mg/kg	M	001-002
Acenaphthylene	T207	M105	0.1	mg/kg	U	001-002
Acenaphthene	T207	M105	0.1	mg/kg	M	001-002
Fluorene	T207	M105	0.1	mg/kg	M	001-002
Phenanthrene	T207	M105	0.1	mg/kg	M	001-002
Anthracene	T207	M105	0.1	mg/kg	U	001-002
Fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Pyrene	T207	M105	0.1	mg/kg	M	001-002
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001-002
Chrysene	T207	M105	0.1	mg/kg	M	001-002
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001-002
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001-002
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001-002
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001-002
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001-002
PAH(total)	T207	M105	0.1	mg/kg	U	001-002
Phenol	T207	M105	0.1	mg/kg	M	001-002

John Fenlon
Bellway Homes Limited (North West)
2 Alderman Road
Hunts Cross
Liverpool
Merseyside
L24 9LR

By email only: john.fenlon@bellway.co.uk

Dear John,

Garden Validation – Scotchbarn Lane, Knowsley – Plots 120 - 123

Background and Objectives

In accordance with the Remediation Strategy ref 103358p2r2, dated November 2017, the following remedial measures are required in all areas of the site:

Depth Requirement for Gardens

- ▶ A total clean cover system comprising a minimum thickness of 600 mm;
- ▶ A minimum topsoil thickness of 150 mm; and,
- ▶ The remainder of the clean cover system shall be comprised of subsoil.

Validation Requirement

- ▶ Independent validation of works by Geo-Environmental Consultant;
- ▶ Visual inspection and chemical laboratory validation sampling; and
- ▶ Production of validation letter reports for the clean cover system.

Required sample numbers for chemical validation are summarised in Table 1.

Table 1: Chemical Validation Testing Requirement

Source	Source of Material			
	Greenfield	Remediated	Brownfield	Unknown
Gardens	1 per 250m ³	1 per 100 m ³	1 per 50 m ³	1 per 50 m ³
Soft Landscaping	1 per 250m ³	1 per 150 m ³	1 per 150 m ³	1 per 150 m ³
Other Fill Materials	1 per 250m ³	1 per 250m ³	1 per 250m ³	1 per 250m ³

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Validation Works Completed

Table 2 shows a summary of validated plots to date.

Table 2: Summary of Validated Plots

Validated Plots [w/ 600mm Cover System]	Letter Reference
7-10	01v103358
1-2, 5	02v103358
6, 34-39, 118-119	03v103358
41-43 & 117	04v103358
11 & 40	05v103358
12-13	06v103358
14-16	07v103358
17-19	08v103358
120-123	09v103358

Table 3 summarises approximate volumes of soil validated to date within the rear gardens.

Table 3: Approximate total soil volumes of rear gardens

Material	Volume (m ³)
Topsoil	2,300
Subsoil	6,900

Validation Visit - 5th February 2019

REC attended site on 5th February 2019 to confirm the correct thickness of topsoil and subsoil has been used in the rear gardens of 4 properties in Plots 120 - 123 and to collect samples for laboratory analysis.

One excavation in each rear garden was advanced by hand as shown on Figure 1 below. The depths and descriptions of each strata encountered were recorded.

REC's independent inspection shows that the required 600mm of clean cover is present within the rear gardens of Plots 120 - 123.

A visual inspection of the topsoil and subsoil at each of the four excavations confirmed it to be free of potentially deleterious or unsuitable materials discernible by the naked eye such as ceramic materials, metal objects, plastics, treated wood or textiles.

Topsoil and subsoil samples were collected and analysed for the constituents of concern noted in Table 4 (enclosed to this letter) to the correct frequency as specified in Table 1 above and have been subsequently assessed against their suitability for a residential with gardens and plant uptake end use development.

Laboratory Testing of Site Won Topsoil

REC visited site on the 17th- 19th May 2016 and 15th March 2017 to undertake intrusive ground investigations. Sampling and testing of site won topsoil as part of this work determined it suitable for use within gardens. Laboratory test certificates are attached to this report.





Laboratory Testing of Placed Topsoil

Four samples of topsoil were tested at a frequency of 1 per 50m³ within Plots 120 and 122. Laboratory analysis confirms its suitability for use within the gardens. Laboratory test certificates are attached to this report.

Summary

REC can confirm that the topsoil and subsoil installed in the rear gardens of Plots 120 - 123 meet the specified requirements as a suitable growing medium and is suitable for its intended use.

Yours Sincerely,

For and on behalf of REC Ltd

Phil Hill
Senior Consultant

Approved and Authorised

Martin Lucass
Associate Director

Enclosed:

Sketch Location Plan of Validation Pits

Plot Inspection Records (including photographs and description)

Table 4: Screening Values for Materials within Residential Soft Landscaping Areas

Chemical Analysis Certificates





Figure 1: Sketch Plot Validation Pit Location



- - Validated Plots during Site Visit on 5th February 2019
- - Previously Validated Plots





PLOT INSPECTION RECORDS





PLOT NUMBER: 120

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 05/02/2019
Consultant: P.Hill

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl

Validation Photograph	Locational Photograph
	

Additional Comments:
Samples taken at 0.1m and 0.4m bgl

GARDEN VALIDATION: PASS





PLOT NUMBER: 121

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 05/02/2019
Consultant: P.Hill

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl

Validation Photograph	Locational Photograph
	

Additional Comments:
N/A

GARDEN VALIDATION: PASS



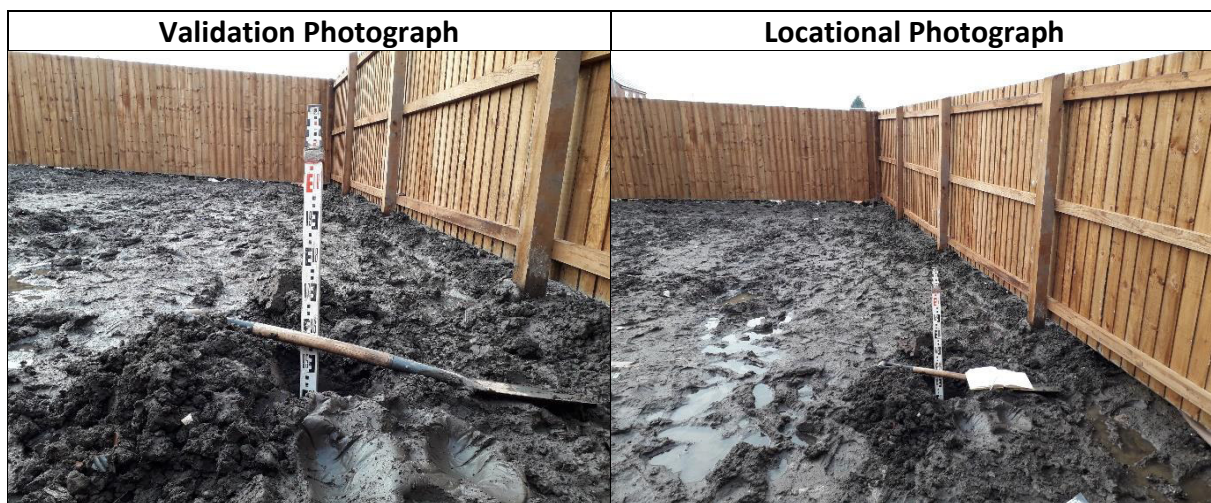


PLOT NUMBER: 122

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 05/02/2019
Consultant: P.Hill

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
Samples taken at 0.1m and 0.4m bgl

GARDEN VALIDATION: PASS



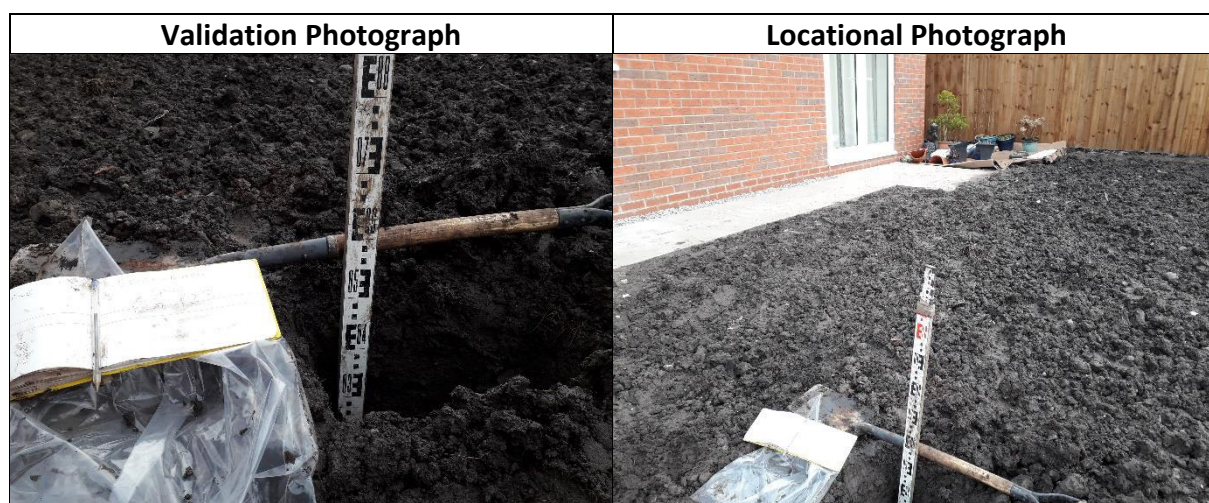


PLOT NUMBER: 123

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 05/02/2019
Consultant: P.Hill

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl



Additional Comments:
N/A

GARDEN VALIDATION: PASS





SUITABILITY CRITERIA





Table 4: Validation Testing Summary

Determinand	Units	Screening Value for Use within Private Gardens	Maximum Concentration within Upper Topsoil	Maximum Concentration within Lower Topsoil	Screening Value Source
Inorganics – Metals and Asbestos					
Arsenic	mg/kg	37	14	14	(i)
Cadmium	mg/kg	11	3	3	(i)
Chromium (VI)	mg/kg	6	<1	<1	(i)
Lead	mg/kg	200	120	120	(iv)
Inorganic Mercury	mg/kg	40	<1	<1	(i)
Nickel	mg/kg	130	22	22	(i)
Selenium	mg/kg	250	<3	<3	(i)
Copper	mg/kg	2,400	130	140	(i)
Zinc	mg/kg	3,700	120	120	(i)
Cyanide	mg/kg	791	<1	<1	(v)
Asbestos	%	None Detected	N.D	N.D	N/A
Organics - PAHs					
Phenol	mg/kg	200	<0.1	<0.1	(ii)
Naphthalene	mg/kg	5.6	<0.1	<0.1	(ii)
Acenaphthylene	mg/kg	420	<0.1	<0.1	(ii)
Acenaphthene	mg/kg	510	<0.1	<0.1	(ii)
Fluorene	mg/kg	400	<0.1	<0.4	(ii)
Phenanthrene	mg/kg	220	0.3	3.7	(ii)
Anthracene	mg/kg	2,400	<0.1	<0.1	(ii)
Fluoranthene	mg/kg	280	0.6	3.8	(ii)
Pyrene	mg/kg	1200	0.6	3.2	(ii)
Benzo(a)Anthracene	mg/kg	2.7	0.2	1.4	(ii)
Chrysene	mg/kg	22	0.3	1.5	(ii)
Benzo(b)Fluoranthene	mg/kg	3.3	0.2	0.9	(ii)
Benzo(k)Fluoranthene	mg/kg	93	0.2	1.1	(ii)
Benzo(a)Pyrene	mg/kg	2.7	0.2	1.1	(ii)
Indeno(123-cd)Pyrene	mg/kg	36	<0.1	0.6	(ii)
Dibenzo(a,h)Anthracene	mg/kg	0.28	<0.1	0.2	(ii)
Benzo(ghi)Perylene	mg/kg	340	<0.1	0.6	(ii)
Organics – TPHs					
TPH C ₅ -C ₆	mg/kg	78	<0.10	<0.10	(iii)
TPH C ₆ -C ₈	mg/kg	230	<0.10	0.31	(iii)
TPH C ₈ -C ₁₀	mg/kg	65	<0.10	<0.10	(iii)
TPH C ₁₀ -C ₁₂	mg/kg	180	⁽¹³⁾ 3	⁽¹³⁾ <1	(iii)
TPH C ₁₂ -C ₁₆	mg/kg	330	⁽¹³⁾ 1	⁽¹³⁾ 3	(iii)
TPH C ₁₆ -C ₂₁	mg/kg	540	⁽¹³⁾ 6	⁽¹³⁾ 4	(iii)
TPH C ₂₁ -C ₃₅	mg/kg	1,500	⁽¹³⁾ 28	⁽¹³⁾ 17	(iii)
TPH C ₃₅ -C ₄₄	mg/kg	1,500	⁽¹³⁾ 8	⁽¹³⁾ 7	(iii)
Screening Value Source (i) LQM/CIEH Suitable For Use Level (S4UL) (2015); (ii) S4UL –Assessment Approach of 3% SOM; (iii) S4UL –3% SOM and assumed worst case aliphatic / aromatic compound; (iv) Defra Category 4 Screening Level (2014); (v) CLEA v1.06 Derived Value. (13) Results have been blank corrected.					





SOIL CHEMICAL ANALYSIS



Scientific Analysis Laboratories Ltd

Certificate of Analysis

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Scientific Analysis Laboratories is a
limited company registered in England and
Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Report Number: 572763-1

Date of Report: 01-Jun-2016

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Sabine Sargeant

Customer Job Reference: 101754

Customer Purchase Order: 001151

Customer Site Reference: Scotchbarn Lane

Date Job Received at SAL: 18-May-2016

Date Analysis Started: 26-May-2016

Date Analysis Completed: 01-Jun-2016

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with SAL SOPs

All results have been reviewed in accordance with Section 25 of the SAL Quality Manual



Report checked
and authorised by :
Emma Spear
Project Manager

Issued by :
Emma Spear
Project Manager



SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Bulk Product Analysed as Bulk Product Asbestos ID					
SAL Reference				572763 004	
Customer Sample Reference				TP102	
Bottom Depth				0.4	
Date Sampled				17-MAY-2016	
Type				Fill	
Determinand	Method	Test Sample	LOD	Units	
Asbestos	T27	AR			Chrysotile Fibres Detected

SAL Reference: 572763										
Project Site: Scotchbarn Lane										
Customer Reference: 101754										
Soil Analysed as Soil										
MCERTS Preparation										
SAL Reference					572763 001	572763 003	572763 005	572763 006	572763 007	
Customer Sample Reference					TP101	TP102	TP103	TP103	TP104	
Bottom Depth					1	0.4	0.2	0.7	0.2	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Clay	Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	11	7.2	7.4	7.4	18
Retained on 10mm sieve		T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763										
Project Site: Scotchbarn Lane										
Customer Reference: 101754										
Soil		Analysed as Soil								
MCERTS Preparation										
SAL Reference					572763 008	572763 009	572763 011	572763 012	572763 013	
Customer Sample Reference					TP104	TP105	TP106	TP106	TP107	
Bottom Depth					2	2	0.5	2.1	0.5	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand		Method	Test Sample	LOD	Units					
Moisture @105C		T162	AR	0.1	%	7.3	11	18	18	9.7
Retained on 10mm sieve		T2	M40	0.1	%	-	-	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil MCERTS Preparation Analysed as Soil										
SAL Reference					572763 015	572763 016	572763 017	572763 018	572763 019	
Customer Sample Reference					TP108	TP109	TP110	TP111	TP112	
Bottom Depth					0.1	0.5	0.4	0.3	0.1	
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	
Type					Topsoil	Sandy Soil	Clay	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units						
Moisture @105C	T162	AR	0.1	%	8.2	14	18	18	35	
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1	

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference				572763 020	572763 022	572763 023	572763 025	572763 028	
Customer Sample Reference				TP112	TP113	TP113	WS102	WS104	
Bottom Depth				0.9	0.5	1.4	0.2	0.2	
Date Sampled				17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016	18-MAY-2016	
Type				Sandy Soil	Clay	Clay	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	18	17	12	5.8	19
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference				572763 029	572763 031	572763 032	572763 033	572763 035	
Customer Sample Reference				WS105	WS108	WS108	WS109	WS110	
Bottom Depth				0.1	0.2	0.5	0.3	1.2	
Date Sampled				18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type				Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	25	23	16	15	26
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil MCERTS Preparation									
SAL Reference		572763 039							
Customer Sample Reference		WS113							
Bottom Depth		0.7							
Date Sampled		19-MAY-2016							
Type		Topsoil							
Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	5.2				
Retained on 10mm sieve	T2	M40	0.1	%	<0.1				

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 011	572763 012	572763 013	572763 015	572763 016
Customer Sample Reference					TP106	TP106	TP107	TP108	TP109
Bottom Depth					0.5	2.1	0.5	0.1	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Sandy Soil	Sandy Soil	Sandy Soil	Topsoil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	1.7	1.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	0.5	0.3
Fluoranthene	T207	M105	0.1	mg/kg	0.5	<0.1	2.2	3.3	2.0
Pyrene	T207	M105	0.1	mg/kg	0.5	<0.1	2.0	3.3	2.0
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.3	<0.1	1.0	2.3	1.1
Chrysene	T207	M105	0.1	mg/kg	0.3	<0.1	1.2	2.6	1.3
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.3	<0.1	1.4	3.3	1.4
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.1	<0.1	0.4	0.5	0.3
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.2	<0.1	1.0	2.2	1.0
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.1	<0.1	0.6	1.2	0.5
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	0.3	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.1	<0.1	0.8	1.5	0.6
PAH(total)	T207	M105	0.1	mg/kg	2.6	<0.1	12	23	12

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 017	572763 018	572763 019	572763 020	572763 022
Customer Sample Reference					TP110	TP111	TP112	TP112	TP113
Bottom Depth					0.4	0.3	0.1	0.9	0.5
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Clay	Topsoil	Topsoil	Sandy Soil	Clay
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.6	0.2	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	0.9	1.7	0.5	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.5	0.9	0.2	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.5	1.0	0.3	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.6	1.2	0.3	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	0.2	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.8	0.2	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.2	0.5	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.3	0.6	0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1	5.1	9.4	2.5	<0.1

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 023	572763 025	572763 028	572763 029	572763 031
Customer Sample Reference					TP113	WS102	WS104	WS105	WS108
Bottom Depth					1.4	0.2	0.2	0.1	0.2
Date Sampled					17-MAY-2016	18-MAY-2016	18-MAY-2016	18-MAY-2016	19-MAY-2016
Type					Clay	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.7	0.2	0.3	0.2
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.7	0.6	0.6	0.5
Pyrene	T207	M105	0.1	mg/kg	<0.1	1.6	0.6	0.6	0.5
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	1.0	0.3	0.3	0.2
Chrysene	T207	M105	0.1	mg/kg	<0.1	0.9	0.3	0.3	0.2
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	1.2	0.5	0.5	0.3
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.8	0.3	0.3	0.2
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.5	0.2	0.2	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.6	0.2	0.2	0.2
PAH(total)	T207	M105	0.1	mg/kg	<0.1	9.5	3.3	3.4	2.3

SAL Reference: 572763 Project Site: Scotchbarn Lane Customer Reference: 101754 Soil Analysed as Soil PAH US EPA 16 (B and K split)									
SAL Reference					572763 032	572763 033	572763 035	572763 039	
Customer Sample Reference					WS108	WS109	WS110	WS113	
Bottom Depth					0.5	0.3	1.2	0.7	
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016	
Type					Topsoil	Topsoil	Topsoil	Topsoil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.4	<0.1	
Anthracene	T207	M105	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	
Fluoranthene	T207	M105	0.1	mg/kg	0.3	1.0	0.8	<0.1	
Pyrene	T207	M105	0.1	mg/kg	0.3	0.9	0.7	<0.1	
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Chrysene	T207	M105	0.1	mg/kg	0.1	0.6	0.4	<0.1	
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.1	0.7	0.4	<0.1	
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	0.3	<0.1	<0.1	
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.6	0.3	<0.1	
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	0.4	0.2	<0.1	
PAH(total)	T207	M105	0.1	mg/kg	0.9	6.5	3.9	<0.1	

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 014	572763 015	572763 016	572763 017	572763 018
Customer Sample Reference					TP107	TP108	TP109	TP110	TP111
Bottom Depth					1.2	0.1	0.5	0.4	0.3
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016
Type					Topsoil	Topsoil	Sandy Soil	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			-	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	130	<100	<100	<100

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 019	572763 020	572763 022	572763 023	572763 025
Customer Sample Reference					TP112	TP112	TP113	TP113	WS102
Bottom Depth					0.1	0.9	0.5	1.4	0.2
Date Sampled					17-MAY-2016	17-MAY-2016	17-MAY-2016	17-MAY-2016	18-MAY-2016
Type					Topsoil	Sandy Soil	Clay	Clay	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763									
Project Site: Scotchbarn Lane									
Customer Reference: 101754									
Soil					Analysed as Soil				
Miscellaneous									
SAL Reference					572763 028	572763 029	572763 031	572763 032	572763 033
Customer Sample Reference					WS104	WS105	WS108	WS108	WS109
Bottom Depth					0.2	0.1	0.2	0.5	0.3
Date Sampled					18-MAY-2016	18-MAY-2016	19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units					
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.
SO4(2:1)	T6	AR	100	mg/l	<100	<100	<100	<100	<100

SAL Reference: 572763

Project Site: Scotchbarn Lane

Customer Reference: 101754

Soil

Miscellaneous

Analysed as Soil

SAL Reference					572763 035	572763 039	572763 040
Customer Sample Reference					WS110	WS113	WS113
Bottom Depth					1.2	0.7	1.4
Date Sampled					19-MAY-2016	19-MAY-2016	19-MAY-2016
Type					Topsoil	Topsoil	Topsoil
Determinand	Method	Test Sample	LOD	Units			
Asbestos ID	T27	AR			N.D.	N.D.	-
SO4(2:1)	T6	AR	100	mg/l	170	<100	<100

Index to symbols used in 572763-1

Value	Description
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
N.D.	Not Detected
13	Results have been blank corrected.
9	LOD raised due to dilution of sample
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was sub-contracted to REC Asbestos.
"Fill" samples are outside the scope of our MCERTS accreditation. Results are UKAS only.

Method Index

Value	Description
T7	Probe
T54	GC/MS (Headspace)
T546	Colorimetry (CF)
T162	Grav (1 Dec) (105 C)
T27	PLM
T207	GC/MS (MCERTS)
T8	GC/FID
T6	ICP/OES
T206	GC/FID (MCERTS)
T2	Grav

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Asbestos	T27	AR			SU	004
Moisture @105C	T162	AR	0.1	%	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
Retained on 10mm sieve	T2	M40	0.1	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Arsenic	T6	M40	2	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cadmium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chromium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Lead	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Mercury	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Selenium	T6	M40	3	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Copper	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Nickel	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Zinc	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(Total)	T6	M40	0.01	%	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
SO4(2:1)	T6	AR	100	mg/l	N	001-003,005-007,009,011-020,022-023,025,028-029,031-033,035,039-040
Chromium VI	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Barium	T6	M40	1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Beryllium	T6	M40	2	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Boron (water-soluble)	T6	AR	1	mg/kg	N	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Cyanide(Total)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenols(Mono)	T546	AR	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Vanadium	T6	M40	1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Naphthalene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthylene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Acenaphthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Fluorene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Phenanthrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Anthracene	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Chrysene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
PAH(total)	T207	M105	0.1	mg/kg	U	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C10-C12)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C12-C16)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C16-C21)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C21-C35)	T206	M105	1	mg/kg	M	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
TPH (C35-C44)	T8	M105	1	mg/kg	N	001,003,005-009,011-013,015-020,022-023,025,028-029,031-033,035,039
pH	T7	AR			U	002,009,014,040
Asbestos ID	T27	AR			SU	001,003,005-007,011-013,015-020,022-023,025,028-029,031-033,035,039



Concept Life Sciences

Certificate of Analysis

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Report Number: 640278-1

Date of Report: 22-Mar-2017

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Miss Louise Stock

Customer Job Reference: 103358

Customer Purchase Order: 002602

Customer Site Reference: Scotchbarn Lane

Date Job Received at Concept: 16-Mar-2017

Date Analysis Started: 20-Mar-2017

Date Analysis Completed: 22-Mar-2017

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with Concept SOPs



Report checked
and authorised by :
Aleksandra Pacula
Project Manager

Issued by :
Aleksandra Pacula
Project Manager



Concept Reference: 640278	
Project Site: Scotchbarn Lane	
Customer Reference: 103358	
Soil	Analysed as Soil
MCERTS Preparation	

Concept Reference					640278 002	640278 010	640278 012	640278 015	640278 018
Customer Sample Reference					TP201	TP205	TP208	TP209	TP207
Bottom Depth					1.3	0.9	0.3	0.3	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil

Determinand	Method	Test Sample	LOD	Units					
Moisture @105C	T162	AR	0.1	%	15	14	4.5	8.3	16
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1	<0.1

Concept Reference: 640278	
Project Site: Scotchbarn Lane	
Customer Reference: 103358	
Soil	Analysed as Soil
MCERTS Preparation	

Concept Reference					640278 024
Customer Sample Reference					TP210
Bottom Depth					0.9
Date Sampled					15-MAR-2017
Type					Sandy Soil
Determinand	Method	Test Sample	LOD	Units	
Moisture @105C	T162	AR	0.1	%	9.3
Retained on 10mm sieve	T2	M40	0.1	%	<0.1

Concept Reference: 640278	
Project Site: Scotchbarn Lane	
Customer Reference: 103358	
Soil	Analysed as Soil
REC 002S	

Concept Reference					640278 012	640278 015	640278 024
Customer Sample Reference					TP208	TP209	TP210
Bottom Depth					0.3	0.3	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units			
Arsenic	T6	M40	2	mg/kg	9	15	7
Cadmium	T6	M40	1	mg/kg	<1	<1	<1
Chromium	T6	M40	1	mg/kg	21	24	30
Lead	T6	M40	1	mg/kg	16	35	51
Mercury	T6	M40	1	mg/kg	<1	<1	<1
Selenium	T6	M40	3	mg/kg	<3	<3	<3
Copper	T6	M40	1	mg/kg	25	47	52
Nickel	T6	M40	1	mg/kg	19	22	22
Zinc	T6	M40	1	mg/kg	41	93	77
pH	T7	AR			9.1	9.8	8.2
SO4(Total)	T6	A40	0.01	%	0.31	0.69	0.04
SO4(2:1)	T6	AR	0.1	g/l	0.2	0.1	<0.1
Chromium VI	T6	AR	1	mg/kg	<1	<1	<1
Barium	T6	A40	1	mg/kg	75	150	75
Beryllium	T6	A40	2	mg/kg	<2	<2	<2
Boron (water-soluble)	T6	AR	1	mg/kg	<1	<1	<1
Cyanide(Total)	T921	AR	1	mg/kg	<1	<1	<1
Phenols(Mono)	T921	AR	1	mg/kg	<1	<1	<1
Vanadium	T6	M40	1	mg/kg	24	33	32

Concept Reference: 640278									
Project Site: Scotchbarn Lane									
Customer Reference: 103358									
Soil					Analysed as Soil				
Phenols (Speciated)									
Concept Reference					640278 006	640278 013	640278 016	640278 020	640278 027
Customer Sample Reference					TP203	TP208	TP209	TP206	TP211
Bottom Depth					0.9	0.9	0.9	0.65	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Phenol	T149	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
Cresols	T16	AR	0.01	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01
Xylenols	T16	AR	0.01	ma/kg	<0.01	<0.01	<0.01	<0.01	<0.01

Concept Reference: 640278					
Project Site: Scotchbarn Lane					
Customer Reference: 103358					
Soil			Analysed as Soil		
Phenols (Speciated)					
Concept Reference					640278 028
Customer Sample Reference					TP211
Bottom Depth					1.4
Date Sampled					15-MAR-2017
Type					Sandy Soil
Determinand	Method	Test Sample	LOD	Units	
Phenol	T149	AR	0.01	mg/kg	<0.01
Cresols	T16	AR	0.01	mg/kg	<0.01
Xylenols	T16	AR	0.01	mg/kg	<0.01

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358	
Soil SVOC 625 + Tentatively Identified Compounds	Analysed as Soil

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(36,62) <0.5	-	(36,62) <0.5	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	-	(36,62) <0.5	(62,36) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil
Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	(36) <0.5	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	-	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(62,36) <0.5	-	(62,36) <0.5	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	-	(36,62) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	-	0.6	0.2
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	0.2	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.4	-	0.7	0.3
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	-	0.5	0.3
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.2	-	0.3	0.2
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	-	0.3	0.2
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.2	-	0.2	0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	<0.1	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.1	-	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	-	<0.1	<0.1

Concept Reference: 640278
Project Site: Scotchbarn Lane
Customer Reference: 103358

Soil Analysed as Soil
SVOC 625 + Tentatively Identified Compounds

Concept Reference					640278 002	640278 006	640278 010	640278 013	640278 016
Customer Sample Reference					TP201	TP203	TP205	TP208	TP209
Bottom Depth					1.3	0.9	0.9	0.9	0.9
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units					
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.2	-	0.1	<0.1



Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil					Analysed as Soil			
SVOC 625 + Tentatively Identified Compounds								
Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-methyl phenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-methyl phenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3/4-Methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
3/4-Methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachloroethane	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachloroethane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Nitrobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Nitrobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Isophorone	T207	M105	0.1	mg/kg	<0.1	-	-	-
Isophorone	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Nitrophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitrophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Naphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Naphthalene	T16	M105	0.1	mg/kg	-	0.1	<0.1	<0.1
4-Chloroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorobutadiene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chloroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	<0.1	-	-	-
Hexachlorobutadiene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2-Methylnaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Methylnaphthalene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	(62,36) <0.5	-	-	-
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	-	(62,36) <0.5	(36,62) <0.5	(36,62) <0.5
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
2-Chloronaphthalene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Chloronaphthalene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
2-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Dimethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

	Concept Reference: 640278
	Project Site: Scotchbarn Lane
	Customer Reference: 103358
Soil	Analysed as Soil
SVOC 625 + Tentatively Identified Compounds	

Soil	Analysed as Soil
SVOC 625 + Tentatively Identified Compounds	

Concept Reference					640278 018	640278 020	640278 027	640278 028
Customer Sample Reference					TP207	TP206	TP211	TP211
Bottom Depth					0.9	0.65	0.9	1.4
Date Sampled					15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017
Type					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Acenaphthylene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Acenaphthene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
3-Nitroaniline	T207	M105	0.1	mg/kg	(36) <0.5	-	-	-
3-Nitroaniline	T16	M105	0.1	mg/kg	-	(36) <0.5	(36) <0.5	(36) <0.5
Dibenzofuran	T207	M105	0.1	mg/kg	<0.1	-	-	-
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Dibenzofuran	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Diethyl phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
Diethyl phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Nitroaniline	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluorene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Azobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	<0.1	-	-	-
4-Nitroaniline	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Hexachlorobenzene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Azobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pentachlorophenol	T207	M105	0.1	mg/kg	(36,62) <0.5	-	-	-
Hexachlorobenzene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pentachlorophenol	T16	M105	0.1	mg/kg	-	(36,62) <0.5	(62,36) <0.5	(36,62) <0.5
Carbazole	T207	M105	0.1	mg/kg	<0.1	-	-	-
Phenanthrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Di-n-butylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Carbazole	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-butylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Butyl benzylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Fluoranthene	T16	M105	0.1	mg/kg	-	0.3	0.2	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Pyrene	T16	M105	0.1	mg/kg	-	0.4	0.2	<0.1
Butyl benzylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Di-n-octylphthalate	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	-	0.3	0.1	<0.1
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Chrysene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Di-n-octylphthalate	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	-	0.6	0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	-	-	-
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	-	-	-
SVOC screen (extra peaks)	T16	M105	10	mg/kg	<10	<10	<10	<10
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	-	0.2	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	-	<0.1	<0.1	<0.1

Concept Reference: 640278								
Project Site: Scotchbarn Lane								
Customer Reference: 103358								
Soil Analysed as Soil								
SVOC 625 + Tentatively Identified Compounds								
Concept Reference				640278 018	640278 020	640278 027	640278 028	
Customer Sample Reference				TP207	TP206	TP211	TP211	
Bottom Depth				0.9	0.65	0.9	1.4	
Date Sampled				15-MAR-2017	15-MAR-2017	15-MAR-2017	15-MAR-2017	
Type				Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units				
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	-	0.3	<0.1	<0.1

Concept Reference: 640278 Project Site: Scotchbarn Lane Customer Reference: 103358 Soil Analysed as Soil Miscellaneous								
Concept Reference		640278 012	640278 015	640278 024				
Customer Sample Reference		TP208	TP209	TP210				
Bottom Depth		0.3	0.3	0.9				
Date Sampled		15-MAR-2017	15-MAR-2017	15-MAR-2017				
Type		Sandy Soil	Sandy Soil	Sandy Soil				
Determinand	Method	Test Sample	LOD	Units				
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	

Index to symbols used in 640278-1

Value	Description
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
A40	Assisted dried < 40C
N.D.	Not Detected
110	LOD raised due to low internal standard recovery.
62	LOD was raised due to the method performance of the analytical procedure used
13	Results have been blank corrected.
36	LOD Raised due to low Matrix spike recovery
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos was subcontracted to REC Asbestos.

Method Index

Value	Description
T8	GC/FID
T921	Colorimetry (CF) (MCERT)
T16	GC/MS
T27	PLM
T6	ICP/OES
T207	GC/MS (MCERTS)
T85	Calc
T149	GC/MS (SIR)
T7	Probe
T2	Grav
T54	GC/MS (Headspace)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
pH	T7	AR			M	002,010,012,015,018,024
Electrical Conductivity	T7	A40	10	µS/cm	N	002,006,010,013,016,018,020,027-028
Redox Potential	T7	A40		mV	N	002,006,010,013,016,018,020,027-028
Phenol	T207	M105	0.1	mg/kg	M	002,010,018
Phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T207	M105	0.1	mg/kg	M	002,010,018
2-Chlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,3-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,3-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,4-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,4-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2-Dichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
1,2-Dichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroisopropyl) ether	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-chloroisopropyl) ether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-methyl phenol	T207	M105	0.1	mg/kg	M	002,010,018
2-methyl phenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3/4-Methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
3/4-Methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachloroethane	T207	M105	0.1	mg/kg	U	002,010,018
Hexachloroethane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Nitrobenzene	T207	M105	0.1	mg/kg	M	002,010,018
Nitrobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Isophorone	T207	M105	0.1	mg/kg	U	002,010,018
Isophorone	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitrophenol	T207	M105	0.1	mg/kg	U	002,010,018
2-Nitrophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dimethylphenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4-Dimethylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-chloroethoxy) methane	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Bis (2-chloroethoxy) methane	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
1,2,4-Trichlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Naphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Naphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chloroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobutadiene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T207	M105	0.1	mg/kg	M	002,010,018
Hexachlorobutadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chloro-3-methylphenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Methylnaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorocyclopentadiene	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorocyclopentadiene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
2,4,6-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4,5-Trichlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Chloronaphthalene	T207	M105	0.1	mg/kg	M	002,010,018
2-Chloronaphthalene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2-Nitroaniline	T207	M105	0.1	mg/kg	M	002,010,018
2-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dimethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Dimethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,6-Dinitrotoluene	T207	M105	0.1	mg/kg	U	002,010,018
2,6-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Acenaphthylene	T207	M105	0.1	mg/kg	U	002,010,018
Acenaphthylene	T207	M105	0.1	mg/kg	M	002,010,018
Acenaphthylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Acenaphthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
3-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzofuran	T207	M105	0.1	mg/kg	M	002,010,018
2,4-Dinitrotoluene	T207	M105	0.1	mg/kg	M	002,010,018
Dibenzofuran	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
2,4-Dinitrotoluene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Diethyl phthalate	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T207	M105	0.1	mg/kg	M	002,010,018
4-Chlorophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
Diethyl phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Nitroaniline	T207	M105	0.1	mg/kg	U	002,010,018
Fluorene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
4-Chlorophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T207	M105	0.1	mg/kg	M	002,010,018
4-Nitroaniline	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Azobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Hexachlorobenzene	T207	M105	0.1	mg/kg	M	002,010,018
4-Bromophenyl phenylether	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pentachlorophenol	T207	M105	0.1	mg/kg	U	002,010,018
Hexachlorobenzene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Phenanthrene	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T207	M105	0.1	mg/kg	U	002,010,018
Pentachlorophenol	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Carbazole	T207	M105	0.1	mg/kg	U	002,010,018
Phenanthrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-butylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Carbazole	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T207	M105	0.1	mg/kg	U	002,010,018
Di-n-butylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Chrysene	T207	M105	0.1	mg/kg	M	002,010,018
Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Bis (2-ethylhexyl)phthalate	T207	M105	0.1	mg/kg	M	002,010,018
Butyl benzylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T207	M105	0.1	mg/kg	M	002,010,018
Chrysene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Bis (2-ethylhexyl)phthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Di-n-octylphthalate	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(b/k)Fluoranthene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	002,010,018
Benzo(a)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	002,010,018
Indeno(123-cd)Pyrene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
SVOC screen (extra peaks)	T16	M105	10	mg/kg	N	002,006,010,013,016,018,020,027-028
Dibenzo(ah)Anthracene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Benzo(ghi)Perylene	T16	M105	0.1	mg/kg	U	006,013,016,020,027-028
Total Petroleum Hydrocarbons (C5 - C10 aliphatic/aromatic)	T85	AR	0.010	mg/kg	N	013,016,020
TPH (C5-C6 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C7 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C6-C8 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C7-C8 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aliphatic)	T54	AR	0.010	mg/kg	N	013,016,020
TPH (C8-C10 aromatic)	T54	AR	0.010	mg/kg	N	013,016,020
Phenol	T149	AR	0.01	mg/kg	U	006,013,016,020,027-028
Cresols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Xylenols	T16	AR	0.01	mg/kg	U	006,013,016,020,027-028
Asbestos ID	T27	AR			SU	012,015,024
Arsenic	T6	M40	2	mg/kg	M	012,015,024
Cadmium	T6	M40	1	mg/kg	M	012,015,024
Chromium	T6	M40	1	mg/kg	M	012,015,024
Lead	T6	M40	1	mg/kg	M	012,015,024

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Mercury	T6	M40	1	mg/kg	M	012,015,024
Selenium	T6	M40	3	mg/kg	M	012,015,024
Copper	T6	M40	1	mg/kg	M	012,015,024
Nickel	T6	M40	1	mg/kg	M	012,015,024
Zinc	T6	M40	1	mg/kg	M	012,015,024
SO ₄ (Total)	T6	A40	0.01	%	N	012,015,024
SO ₄ (2:1)	T6	AR	0.1	g/l	N	012,015,024
Chromium VI	T6	AR	1	mg/kg	N	012,015,024
Barium	T6	A40	1	mg/kg	U	012,015,024
Beryllium	T6	A40	2	mg/kg	U	012,015,024
Boron (water-soluble)	T6	AR	1	mg/kg	N	012,015,024
Cyanide(Total)	T921	AR	1	mg/kg	M	012,015,024
Phenols(Mono)	T921	AR	1	mg/kg	M	012,015,024
Vanadium	T6	M40	1	mg/kg	M	012,015,024
pH	T7	A40			U	006,013,016,020,027-028
TPH (C11-C20)	T8	AR	1	mg/kg	U	006,013,016,020,027-028
TPH (C20-C40)	T8	AR	1	mg/kg	N	006,013,016,020,027-028
Moisture @105C	T162	AR	0.1	%	N	002,010,012,015,018,024
Retained on 10mm sieve	T2	M40	0.1	%	N	002,010,012,015,018,024



Concept Life Sciences

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 800288-3

Date of Report: 15-Feb-2019

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Mr Phil Hill

Customer Job Reference: 103358

Customer Purchase Order: 006350

Date Job Received at Concept: 05-Feb-2019

Date Analysis Started: 06-Feb-2019

Date Analysis Completed: 11-Feb-2019

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with Section 25 of the Concept Life Sciences, Analytical Services Quality Manual



Report checked
and authorised by :
Aleksandra Pacula
Senior Customer Service
Advisor

Issued by :
Toni Morris
Customer Service Advisor



Concept Reference: 800288	
Customer Reference: 103358	
Soil	Analysed as Soil
MCERTS Preparation	

Concept Reference: 800288	
Customer Reference: 103358	
Soil	Analysed as Soil
REC Ltd 002S	

Index to symbols used in 800288-3

Value	Description
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
A40	Assisted dried < 40C
AR	As Received
N.D.	Not Detected
13	Results have been blank corrected.
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos testing was subcontracted to REC Asbestos.

Method Index

Value	Description
T6	ICP/OES
T921	Colorimetry (CF) (MCERT)
T162	Grav (1 Dec) (105 C)
T8	GC/FID
T54	GC/MS (Headspace)
T7	Probe
T206	GC/FID (MCERTS)
T2	Grav
T27	PLM
T207	GC/MS (MCERTS)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Asbestos ID	T27	A40			SU	001-004
Naphthalene	T207	M105	0.1	mg/kg	M	001-004
Acenaphthylene	T207	AR	0.1	mg/kg	U	001-003
Acenaphthylene	T207	M105	0.1	mg/kg	U	004
Acenaphthene	T207	M105	0.1	mg/kg	M	001-004
Fluorene	T207	M105	0.1	mg/kg	M	001-004
Phenanthrene	T207	M105	0.1	mg/kg	M	001-004
Anthracene	T207	AR	0.1	mg/kg	U	001-003
Anthracene	T207	M105	0.1	mg/kg	U	004
Fluoranthene	T207	M105	0.1	mg/kg	M	001-004
Pyrene	T207	M105	0.1	mg/kg	M	001-004
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001-004
Chrysene	T207	M105	0.1	mg/kg	M	001-004
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001-004
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001-004
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001-004
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001-004
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001-004
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001-004
PAH(total)	T207	AR	0.1	mg/kg	U	001-003
PAH(total)	T207	M105	0.1	mg/kg	U	004
Phenol	T207	M105	0.1	mg/kg	M	001-004
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001-004
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001-004
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001-004
TPH (C35-C44)	T8	AR	1	mg/kg	N	001-004
TPH (C10-C12)	T206	M105	1	mg/kg	M	001-004
TPH (C12-C16)	T206	M105	1	mg/kg	M	001-004
TPH (C16-C21)	T206	M105	1	mg/kg	M	001-004

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
TPH (C21-C35)	T206	M105	1	mg/kg	M	001-004
Retained on 10mm sieve	T2	M40	0.1	%	N	001-004
Moisture @105C	T162	AR	0.1	%	N	001-004
Arsenic	T6	M40	2	mg/kg	M	001-004
Cadmium	T6	M40	1	mg/kg	M	001-004
Chromium	T6	M40	1	mg/kg	M	001-004
Lead	T6	M40	1	mg/kg	M	001-004
Mercury	T6	M40	1	mg/kg	M	001-004
Selenium	T6	M40	3	mg/kg	M	001-004
Copper	T6	M40	1	mg/kg	M	001-004
Nickel	T6	M40	1	mg/kg	M	001-004
Zinc	T6	M40	1	mg/kg	M	001-004
pH	T7	A40			M	001-004
SO4(Total)	T6	A40	0.01	%	N	001-004
SO4(2:1)	T6	AR	0.1	g/l	N	001-004
Chromium VI	T6	A40	1	mg/kg	N	001-004
Barium	T6	A40	1	mg/kg	U	001-004
Beryllium	T6	A40	2	mg/kg	U	001-004
Boron (water-soluble)	T6	A40	1	mg/kg	N	001-004
Cyanide(Total)	T921	M105	1	mg/kg	M	001-004
Phenols(Mono)	T921	M105	1	mg/kg	M	001-004
Vanadium	T6	M40	1	mg/kg	M	001-004



John Fenlon
Bellway Homes Limited (North West)
2 Alderman Road
Hunts Cross
Liverpool
Merseyside
L24 9LR

By email only: john.fenlon@bellway.co.uk

Dear John,

Garden Validation – Scotchbarn Lane, Knowsley – Plots 124 - 128

Background and Objectives

In accordance with the Remediation Strategy ref 103358p2r2, dated November 2017, the following remedial measures are required in all areas of the site:

Depth Requirement for Gardens

- ▶ A total clean cover system comprising a minimum thickness of 600 mm;
- ▶ A minimum topsoil thickness of 150 mm; and
- ▶ The remainder of the clean cover system shall be comprised of subsoil.

Validation Requirement

- ▶ Independent validation of works by Geo-Environmental Consultant;
- ▶ Visual inspection and chemical laboratory validation sampling; and
- ▶ Production of validation letter reports for the clean cover system.

Required sample numbers for chemical validation are summarised in Table 1.

Table 1: Chemical Validation Testing Requirement

Source	Source of Material			
	Greenfield	Remediated	Brownfield	Unknown
Gardens	1 per 250m ³	1 per 100 m ³	1 per 50 m ³	1 per 50 m ³
Soft Landscaping	1 per 250m ³	1 per 150 m ³	1 per 150 m ³	1 per 150 m ³
Other Fill Materials	1 per 250m ³	1 per 250m ³	1 per 250m ³	1 per 250m ³

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REC Ltd, Osprey House, Pacific Quay, Broadway, Manchester M50 2UE

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Validation Works Completed

Table 2 shows a summary of validated plots to date.

Table 2: Summary of Validated Plots

Validated Plots [w/ 600mm Cover System]	Letter Reference
7-10	01v103358
1-2, 5	02v103358
6, 34-39, 118-119	03v103358
41-43 & 117	04v103358
11 & 40	05v103358
12-13	06v103358
14-16	07v103358
17-19	08v103358
120-123	09v103358
124-128	10v103358

Table 3 summarises approximate volumes of soil validated to date within the rear gardens.

Table 3: Approximate total soil volumes of rear gardens

Material	Volume (m ³)
Topsoil	2,300
Subsoil	6,900

Validation Visit - 4th April 2019

REC attended site on 4th April 2019 to confirm the correct thickness of topsoil and subsoil has been used in the rear gardens of properties in Plots 124 - 128 and to collect samples for laboratory analysis.

One excavation in each rear garden was advanced by hand as shown on Figure 1 below. The depths and descriptions of each strata encountered were recorded.

REC's independent inspection shows that the required 600mm of clean cover is present within the rear gardens of Plots 124 - 128.

A visual inspection of the topsoil and subsoil at each of the four excavations confirmed it to be free of potentially deleterious or unsuitable materials discernible by the naked eye such as ceramic materials, metal objects, plastics, treated wood or textiles.

Topsoil and subsoil samples were collected and analysed for the constituents of concern noted in Table 4 (enclosed to this letter) to the correct frequency as specified in Table 1 above and have been subsequently assessed against their suitability for a residential with gardens and plant uptake end use development.

Laboratory Testing of Site Won Topsoil

REC visited site on the 17th- 19th May 2016 and 15th March 2017 to undertake intrusive ground investigations. Sampling and testing of site won topsoil as part of this work determined it suitable for use within gardens.





Laboratory Testing of Placed Topsoil

Two samples of topsoil and two samples of subsoil were tested at a frequency of 1 per 50m³ within Plots 124 - 128. Laboratory analysis confirms its suitability for use within the gardens. Laboratory test certificates are attached to this report.

Summary

REC can confirm that the topsoil and subsoil installed in the rear gardens of Plots 124 - 128 meet the specified requirements as a suitable growing medium and is suitable for its intended use.

Yours Sincerely,

For and on behalf of REC Ltd

Matthew Dee
Consultant

Approved and Authorised

Martin Lucass
Associate Director

Enclosed:

Sketch Location Plan of Validation Pits

Plot Inspection Records (including photographs and description)

Table 4: Screening Values for Materials within Residential Soft Landscaping Areas

Chemical Analysis Certificates





Figure 1: Sketch Plot Validation Pit Location



- - Validated Plots during Site Visit on 4th April 2019
- - Previously Validated Plots





PLOT INSPECTION RECORDS





PLOT NUMBER: 124

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 04/04/2019
Consultant: M. Dee

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl

Validation Photograph	Locational Photograph
	

Additional Comments:
N/A

GARDEN VALIDATION: PASS





PLOT NUMBER: 125

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 04/04/2019
Consultant: M. Dee

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl

Validation Photograph	Locational Photograph
	

Additional Comments:
Samples taken at 0.2m and 0.45m bgl

GARDEN VALIDATION: PASS





PLOT NUMBER: 126

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 04/04/2019
Consultant: M. Dee

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl

Validation Photograph	Locational Photograph
	

Additional Comments:
N/A

GARDEN VALIDATION: PASS





PLOT NUMBER: 127

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 04/04/2019
Consultant: M. Dee

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl

Validation Photograph	Locational Photograph
	

Additional Comments:
N/A

GARDEN VALIDATION: PASS





PLOT NUMBER: 128

Developer: Bellway Homes

Pit Location: Rear Garden

Date: 04/04/2019

Consultant: M. Dee

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl

Validation Photograph	Locational Photograph
	

Additional Comments:
Samples taken 0.2m and 0.4m bgl

GARDEN VALIDATION: PASS





SUITABILITY CRITERIA





Table 4: Validation Testing Summary

Determinand	Units	Screening Value for Use within Private Gardens	Maximum Concentration within Upper Topsoil	Maximum Concentration within Lower Topsoil	Screening Value Source
Inorganics – Metals and Asbestos					
Arsenic	mg/kg	37	17	15	(i)
Cadmium	mg/kg	11	3	2	(i)
Chromium (VI)	mg/kg	6	<1	<1	(i)
Lead	mg/kg	200	160	120	(iv)
Inorganic Mercury	mg/kg	40	<1	<1	(i)
Nickel	mg/kg	130	26	28	(i)
Selenium	mg/kg	250	<3	<3	(i)
Copper	mg/kg	2,400	130	120	(i)
Zinc	mg/kg	3,700	140	140	(i)
Cyanide	mg/kg	791	<1	<1	(v)
Asbestos	%	None Detected	N.D	N.D	N/A
Organics - PAHs					
Phenol	mg/kg	200	<1	<1	(ii)
Naphthalene	mg/kg	5.6	0.1	<0.1	(ii)
Acenaphthylene	mg/kg	420	<0.1	<0.1	(ii)
Acenaphthene	mg/kg	510	0.3	<0.1	(ii)
Fluorene	mg/kg	400	0.2	<0.1	(ii)
Phenanthrene	mg/kg	220	1.2	<0.1	(ii)
Anthracene	mg/kg	2,400	0.3	<0.1	(ii)
Fluoranthene	mg/kg	280	1.6	0.2	(ii)
Pyrene	mg/kg	1200	1.4	0.2	(ii)
Benzo(a)Anthracene	mg/kg	2.7	0.7	<0.1	(ii)
Chrysene	mg/kg	22	0.7	<0.1	(ii)
Benzo(b)Fluoranthene	mg/kg	3.3	0.6	<0.1	(ii)
Benzo(k)Fluoranthene	mg/kg	93	0.5	<0.1	(ii)
Benzo(a)Pyrene	mg/kg	2.7	0.6	0.1	(ii)
Indeno(123-cd)Pyrene	mg/kg	36	0.3	<0.1	(ii)
Dibenzo(a,h)Anthracene	mg/kg	0.28	<0.1	<0.1	(ii)
Benzo(ghi)Perylene	mg/kg	340	0.4	<0.1	(ii)
Organics – TPHs					
TPH C ₅ -C ₆	mg/kg	78	<0.1	<0.1	(iii)
TPH C ₆ -C ₈	mg/kg	230	<0.1	<0.1	(iii)
TPH C ₈ -C ₁₀	mg/kg	65	<0.1	<0.1	(iii)
TPH C ₁₀ -C ₁₂	mg/kg	180	⁽¹³⁾ <1	⁽¹³⁾ <1	(iii)
TPH C ₁₂ -C ₁₆	mg/kg	330	⁽¹³⁾ 3	⁽¹³⁾ 1	(iii)
TPH C ₁₆ -C ₂₁	mg/kg	540	⁽¹³⁾ 13	⁽¹³⁾ 4	(iii)
TPH C ₂₁ -C ₃₅	mg/kg	1,500	⁽¹³⁾ 40	⁽¹³⁾ 24	(iii)
TPH C ₃₅ -C ₄₄	mg/kg	1,500	⁽¹³⁾ 10	⁽¹³⁾ 6	(iii)
Screening Value Source (i) LQM/CIEH Suitable For Use Level (S4UL) (2015); (ii) S4UL –Assessment Approach of 3% SOM; (iii) S4UL –3% SOM and assumed worst case aliphatic / aromatic compound; (iv) Defra Category 4 Screening Level (2014); (v) CLEA v1.06 Derived Value. (13) Results have been blank corrected.					





SOIL CHEMICAL ANALYSIS



Concept Life Sciences

Certificate of Analysis

Hadfield House
Hadfield Street
Cornbrook
Manchester
M16 9FE
Tel : 0161 874 2400
Fax : 0161 874 2468

Report Number: 814067-2

Date of Report: 12-Apr-2019

Customer: Resource Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Salford
M50 2UE

Customer Contact: Mr Martin Lucass

Customer Job Reference: 103358

Customer Purchase Order: PO006614

Customer Site Reference: SCOTCHBARN LANE

Date Job Received at Concept: 04-Apr-2019

Date Analysis Started: 05-Apr-2019

Date Analysis Completed: 12-Apr-2019

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

Customers are responsible for information provided where, if incorrect, it could affect the validity of the results.

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

This report should not be reproduced except in full without the written approval of the laboratory

Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with QMSection 15 of the Concept Life Sciences, Analytical Services Quality Manual



Report checked
and authorised by :
Toni Morris
Customer Service Advisor

Issued by :
Toni Morris
Customer Service Advisor

Concept Reference:	814067
Project Site:	SCOTCHBARN LANE
Customer Reference:	103358
Soil	Analysed as Soil
MCERTS Preparation	

Soil
MCERTS Preparation

Concept Reference					814067 001	814067 002	814067 003	814067 004
Customer Sample Reference					TS101	TS102	SS101	SS102
Depth					0.2	0.2	0.45	0.4
Sample Type					ES	ES	ES	ES
Date Sampled					04-APR-2019	04-APR-2019	04-APR-2019	04-APR-2019
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Moisture @105C	T162	AR	0.1	%	23	21	19	19
Retained on 10mm sieve	T2	M40	0.1	%	<0.1	<0.1	<0.1	<0.1

Concept Reference: 814067
Project Site: SCOTCHBARN LANE
Customer Reference: 103358

Soil Analysed as Soil

REC South Soil Suite

Soil
REC South Soil Suite

Concept Reference					814067 001	814067 002	814067 003	814067 004
Customer Sample Reference					TS101	TS102	SS101	SS102
Depth					0.2	0.2	0.45	0.4
Sample Type					ES	ES	ES	ES
Date Sampled					04-APR-2019	04-APR-2019	04-APR-2019	04-APR-2019
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil
Determinand	Method	Test Sample	LOD	Units				
Antimony	T6	A40	1	mg/kg	3	3	3	2
Arsenic	T6	M40	2	mg/kg	15	17	15	10
Barium	T6	A40	1	mg/kg	130	150	160	110
Beryllium	T6	A40	2	mg/kg	<2	<2	<2	<2
Boron (water-soluble)	T6	A40	1	mg/kg	<1	<1	<1	<1
Cadmium	T6	M40	1	mg/kg	3	3	2	<1
Chromium	T6	M40	1	mg/kg	31	28	31	30
Copper	T6	M40	1	mg/kg	130	130	120	43
Lead	T6	M40	1	mg/kg	130	160	120	36
Mercury	T6	M40	1	mg/kg	<1	<1	<1	<1
Nickel	T6	M40	1	mg/kg	24	26	27	28
Selenium	T6	M40	3	mg/kg	<3	<3	<3	<3
Vanadium	T6	M40	1	mg/kg	29	32	33	31
Zinc	T6	M40	1	mg/kg	140	140	140	63
Asbestos ID	T27	A40			N.D.	N.D.	N.D.	N.D.
Chromium VI	T6	A40	1	mg/kg	<1	<1	<1	<1
pH	T7	A40			7.8	7.8	7.7	8.0
Soil Organic Matter	T287	A40	0.1	%	5.0	5.9	4.7	1.9
(Water Soluble) SO4 expressed as SO4	T242	A40	0.05	g/l	0.06	0.13	0.37	0.13
SO4(Total)	T102	A40	0.01	%	0.08	0.10	0.14	0.06
Cyanide(Total)	T921	M105	1	mg/kg	<1	<1	<1	<1
Phenols(Mono)	T921	M105	1	mg/kg	<1	<1	<1	<1
Moisture @40C	T277	AR	0.1	%	21	19	13	18

Concept Reference: 814067									
Project Site: SCOTCHBARN LANE									
Customer Reference: 103358									
Soil		Analysed as Soil							
Total and Speciated USEPA16 PAH									
Concept Reference					814067 001	814067 002	814067 003	814067 004	
Customer Sample Reference					TS101	TS102	SS101	SS102	
Depth					0.2	0.2	0.45	0.4	
Sample Type					ES	ES	ES	ES	
Date Sampled					04-APR-2019	04-APR-2019	04-APR-2019	04-APR-2019	
Matrix Class					Sandy Soil	Sandy Soil	Sandy Soil	Sandy Soil	
Determinand	Method	Test Sample	LOD	Units					
Naphthalene	T207	M105	0.1	mg/kg	0.1	<1.0 ⁽⁹⁾	<0.1	<0.1	
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<1.0 ⁽⁹⁾	<0.1	<0.1	
Acenaphthene	T207	M105	0.1	mg/kg	0.3	<1.0 ⁽⁹⁾	<0.1	<0.1	
Fluorene	T207	M105	0.1	mg/kg	0.2	<1.0 ⁽⁹⁾	<0.1	<0.1	
Phenanthrene	T207	M105	0.1	mg/kg	1.2	<1.0 ⁽⁹⁾	<0.1	<0.1	
Anthracene	T207	M105	0.1	mg/kg	0.3	<1.0 ⁽⁹⁾	<0.1	<0.1	
Fluoranthene	T207	M105	0.1	mg/kg	1.6	<1.0 ⁽⁹⁾	0.2	<0.1	
Pyrene	T207	M105	0.1	mg/kg	1.4	<1.0 ⁽⁹⁾	0.2	<0.1	
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	0.7	<1.0 ⁽⁹⁾	<0.1	<0.1	
Chrysene	T207	M105	0.1	mg/kg	0.7	<1.0 ⁽⁹⁾	<0.1	<0.1	
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	0.6	<1.0 ⁽⁹⁾	<0.1	<0.1	
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	0.5	<1.0 ⁽⁹⁾	<0.1	<0.1	
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	0.6	<1.0 ⁽⁹⁾	0.1	<0.1	
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	0.3	<1.0 ⁽⁹⁾	<0.1	<0.1	
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<1.0 ⁽⁹⁾	<0.1	<0.1	
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	0.4	<1.0 ⁽⁹⁾	<0.1	<0.1	
PAH(total)	T207	M105	0.1	mg/kg	9.0	<1.0 ⁽⁹⁾	0.6	<0.1	

Value	Description
AR	As Received
M40	Analysis conducted on sample assisted dried at no more than 40C. Results are reported on a dry weight basis.
A40	Assisted dried < 40C
M105	Analysis conducted on an "as received" aliquot. Results are reported on a dry weight basis where moisture content was determined by assisted drying of sample at 105C
N.D.	Not Detected

13	Results have been blank corrected.
9	LOD raised due to dilution of sample
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Asbestos testing was subcontracted to REC Asbestos.

Method Index

Value	Description
T242	2:1 Extraction/ICP/OES (TRL 447 T1)
T85	Calc
T206	GC/FID (MCERTS)
T277	Grav (1 Dec) (40 C)
T102	ICP/OES (HCl extract)
T27	PLM
T162	Grav (1 Dec) (105 C)
T207	GC/MS (MCERTS)
T6	ICP/OES
T287	Calc TOC/0.58
T7	Probe
T54	GC/MS (Headspace)
T8	GC/FID
T2	Grav
T921	Colorimetry (CF) (MCERT)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Moisture @105C	T162	AR	0.1	%	N	001-004
Retained on 10mm sieve	T2	M40	0.1	%	N	001-004
Antimony	T6	A40	1	mg/kg	U	001-004
Arsenic	T6	M40	2	mg/kg	M	001-004
Barium	T6	A40	1	mg/kg	U	001-004
Beryllium	T6	A40	2	mg/kg	U	001-004
Boron (water-soluble)	T6	A40	1	mg/kg	N	001-004
Cadmium	T6	M40	1	mg/kg	M	001-004
Chromium	T6	M40	1	mg/kg	M	001-004
Copper	T6	M40	1	mg/kg	M	001-004
Lead	T6	M40	1	mg/kg	M	001-004
Mercury	T6	M40	1	mg/kg	M	001-004
Nickel	T6	M40	1	mg/kg	M	001-004
Selenium	T6	M40	3	mg/kg	M	001-004
Vanadium	T6	M40	1	mg/kg	M	001-004
Zinc	T6	M40	1	mg/kg	M	001-004
Asbestos ID	T27	A40			SU	001-004
Chromium VI	T6	A40	1	mg/kg	N	001-004
pH	T7	A40			M	001-004
Soil Organic Matter	T287	A40	0.1	%	N	001-004
(Water Soluble) SO4 expressed as SO4	T242	A40	0.05	g/l	M	001-004
SO4(Total)	T102	A40	0.01	%	M	001-004
Cyanide(Total)	T921	M105	1	mg/kg	M	001-004
Phenols(Mono)	T921	M105	1	mg/kg	M	001-004
Moisture @40C	T277	AR	0.1	%	N	001-004
TPH (C5-C6)	T54	AR	0.10	mg/kg	N	001-004
TPH (C6-C8)	T54	AR	0.10	mg/kg	N	001-004
TPH (C8-C10)	T54	AR	0.10	mg/kg	N	001-004
TPH (C10-C12)	T206	M105	1	mg/kg	M	001-004
TPH (C12-C16)	T206	M105	1	mg/kg	M	001-004
TPH (C16-C21)	T206	M105	1	mg/kg	M	001-004
TPH (C21-C35)	T206	M105	1	mg/kg	M	001-004
TPH (C35-C40)	T8	M105	1	mg/kg	N	001-004
TPH C5-C40 (sum)	T85	M105	10	mg/kg	N	001-004
Naphthalene	T207	M105	0.1	mg/kg	M	001-004

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Acenaphthylene	T207	M105	0.1	mg/kg	U	001-004
Acenaphthene	T207	M105	0.1	mg/kg	M	001-004
Fluorene	T207	M105	0.1	mg/kg	M	001-004
Phenanthrene	T207	M105	0.1	mg/kg	M	001-004
Anthracene	T207	M105	0.1	mg/kg	U	001-004
Fluoranthene	T207	M105	0.1	mg/kg	M	001-004
Pyrene	T207	M105	0.1	mg/kg	M	001-004
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	M	001-004
Chrysene	T207	M105	0.1	mg/kg	M	001-004
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	M	001-004
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	M	001-004
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	M	001-004
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	M	001-004
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	M	001-004
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	M	001-004
PAH(total)	T207	M105	0.1	mg/kg	U	001-004



John Fenlon
Bellway Homes Limited (North West)
2 Alderman Road
Hunts Cross
Liverpool
Merseyside
L24 9LR

By email only: john.fenlon@bellway.co.uk

Dear John,

Garden Validation – Scotchbarn Lane, Knowsley – Plots 27, 31-33

Background and Objectives

In accordance with the Remediation Strategy ref 103358p2r2, dated November 2017, the following remedial measures are required in all areas of the site:

Depth Requirement for Gardens

- ▶ A total clean cover system comprising a minimum thickness of 600 mm;
- ▶ A minimum topsoil thickness of 150 mm; and,
- ▶ The remainder of the clean cover system shall be comprised of subsoil.

Validation Requirement

- ▶ Independent validation of works by Geo-Environmental Consultant;
- ▶ Visual inspection and chemical laboratory validation sampling; and
- ▶ Production of validation letter reports for the clean cover system.

Required sample numbers for chemical validation are summarised in Table 1.

Table 1: Chemical Validation Testing Requirement

Source	Source of Material			
	Greenfield	Remediated	Brownfield	Unknown
Gardens	1 per 250m ³	1 per 100 m ³	1 per 50 m ³	1 per 50 m ³
Soft Landscaping	1 per 250m ³	1 per 150 m ³	1 per 150 m ³	1 per 150 m ³
Other Fill Materials	1 per 250m ³	1 per 250m ³	1 per 250m ³	1 per 250m ³

A CONCEPT LIFE SCIENCES COMPANY



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Validation Works Completed

Table 2 shows a summary of validated plots to date.

Table 2: Summary of Validated Plots

Validated Plots [w/ 600mm Cover System]	Letter Reference
7-10	01v103358
1-2, 5	02v103358
6, 34-39, 118-119	03v103358
41-43 & 117	04v103358
11 & 40	05v103358
12-13	06v103358
14-16	07v103358
17-19	08v103358
120-123	09v103358
124-128	10v103358
20 – 26	11V103358
27, 31-33	12V103358

Table 3 summarises approximate volumes of soil validated to date within the rear gardens.

Table 3: Approximate total soil volumes of rear gardens

Material	Volume (m ³)
Topsoil	2,300
Subsoil	6,900

Validation Visit - 10th June 2019

REC attended site on 10th June 2019 to confirm the correct thickness of topsoil and subsoil has been used in the rear gardens of properties in Plots 27, 31-33 and to collect samples for laboratory analysis.

One excavation in each rear garden was advanced by hand as shown on Figure 1 below. The depths and descriptions of each strata encountered were recorded.

REC's independent inspection shows that the required 600mm of clean cover is present within the rear gardens of Plots 27, 31 - 33.

A visual inspection of the topsoil and subsoil at each of the four excavations confirmed it to be free of potentially deleterious or unsuitable materials discernible by the naked eye such as ceramic materials, metal objects, plastics, treated wood or textiles.

Topsoil and subsoil samples were collected and analysed for the constituents of concern noted in Table 4 (enclosed to this letter) to the correct frequency as specified in Table 1 above and have been subsequently assessed against their suitability for a residential with gardens and plant uptake end use development.

Laboratory Testing of Site Won Topsoil

REC visited site on the 17th- 19th May 2016 and 15th March 2017 to undertake intrusive ground investigations. Sampling and testing of site won topsoil as part of this work determined it suitable for use within gardens. Laboratory test certificates are attached to this report.





Laboratory Testing of Placed Topsoil

Three samples of topsoil and three samples of subsoil were tested at a frequency of 1 per 50m³ within Plots 27, 31 - 33. Laboratory analysis confirms its suitability for use within the gardens. Laboratory test certificates are attached to this report.

Summary

REC can confirm that the topsoil and subsoil installed in the rear gardens of Plots 27, 31 - 33 meet the specified requirements as a suitable growing medium and is suitable for its intended use.

Yours Sincerely,

For and on behalf of REC Ltd

Matthew Dee
Consultant

Approved and Authorised

Martin Lucass
Associate Director

Enclosed:

Sketch Location Plan of Validation Pits

Plot Inspection Records (including photographs and description)

Table 4: Screening Values for Materials within Residential Soft Landscaping Areas

Chemical Analysis Certificates





Figure 1: Sketch Plot Validation Pit Location



- - Validated Plots during Site Visit on 10th June 2019
- - Previously Validated Plots





PLOT INSPECTION RECORDS





PLOT NUMBER: 27

Developer: Bellway Homes
Pit Location: Rear Garden

Date: 10/06/2019
Consultant: M. Dee

Capping Requirements	Total Depth	Capping Observed	Total Depth
Topsoil	> 150 mm bgl	Topsoil	600 mm bgl
Subsoil	> 450mm bgl	Subsoil	N/A
Break Layer	N/A	Break Layer	N /A
TOTAL DEPTH	> 600mm bgl	TOTAL DEPTH	600 mm bgl

Validation Photograph	Locational Photograph
	

Additional Comments:
N/A

GARDEN VALIDATION: PASS

