



Final Report

Report Number: 14-15041 Issue-1

Initial Date of Issue: 01-Dec-14

Client: A C Environment Solutions Ltd

Client Address: Unit 5A Enterprise Court
Farfield Park
Manvers
Rotherham
South Yorkshire
S63 5DB

Contact(s): Nick Pickard

Project: AC12 Land Adjoining Jagger Lane. Emley Moor AC00100

Quotation No.: Q14-02390

Date Received: 24-Nov-14

Order No.:

Date Instructed: 24-Nov-14

No. of Samples: 27

Results Due: 28-Nov-14

**Turnaround:
(Weekdays)** 5

Date Approved: 01-Dec-14

Approved By:

Details: Keith Jones, Technical Manager

Results Summary - Soil

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:				14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:				73392	73393	73395	73396	73397	73399	73400	73401	73402
Order No.:	Client Sample Ref.:												
	Client Sample ID.:				TP1	TP1	TP2	TP2	TP2	TP3	TP3	TP3	TP4
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.05	0.25	0.00	0.15	0.70	0.00	0.05	0.60	0.05
	Bottom Depth(m):				0.10	0.35	0.05	0.25		0.05	0.15	0.70	0.10
	Date Sampled:				20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14
Determinand	Accred.	SOP	Units	LOD									
Aqua Regia													
Sulphate (Total)	U	2430	%	0.01		0.13		0.19	0.13		0.18	0.22	
Asbestos													
ACM Type	U	2192			-		-			-			-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected		No Asbestos Detected			No Asbestos Detected			No Asbestos Detected
Cyanide													
Cyanide (Total)	U	2300	mg/kg	0.5		< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Cyanide (Free)	U	2300	mg/kg	0.5		< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Thiocyanate	U	2300	mg/kg	5		< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	
Hexavalent Chromium													
Chromium (Hexavalent)	N	2490	mg/kg	0.5		< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Moisture													
Moisture	N	2030	%	0.02		15		13	40		19	33	
PAH FID													
Naphthalene	U	2700	mg/kg	0.1		< 0.10		0.27	0.16		0.64	0.77	
Acenaphthylene	U	2700	mg/kg	0.1		< 0.10		0.74	0.29		0.34	0.67	
Acenaphthene	U	2700	mg/kg	0.1		< 0.10		0.91	0.16		0.78	0.40	
Fluorene	U	2700	mg/kg	0.1		< 0.10		0.76	0.24		0.85	0.26	
Phenanthrene	U	2700	mg/kg	0.1		< 0.10		10	3.3		7.5	3.7	
Anthracene	U	2700	mg/kg	0.1		< 0.10		3.3	0.61		2.1	1.0	
Fluoranthene	U	2700	mg/kg	0.1		< 0.10		31	5.8		15	6.1	
Pyrene	U	2700	mg/kg	0.1		< 0.10		32	6.3		15	6.7	
Benzo[a]anthracene	U	2700	mg/kg	0.1		< 0.10		17	3.2		6.8	3.6	
Chrysene	U	2700	mg/kg	0.1		< 0.10		18	3.6		7.4	4.9	
Benzo[b]fluoranthene	U	2700	mg/kg	0.1		< 0.10		21	3.7		8.8	4.8	
Benzo[k]fluoranthene	U	2700	mg/kg	0.1		< 0.10		9.3	1.3		4.0	1.6	
Benzo[a]pyrene	U	2700	mg/kg	0.1		< 0.10		17	2.6		7.1	3.0	
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.1		< 0.10		12	1.6		3.7	1.9	
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.1		< 0.10		2.1	< 0.10		0.18	0.13	
Benzo[g,h,i]perylene	U	2700	mg/kg	0.1		< 0.10		9.7	2.2		4.2	1.9	
Total Of 16 PAH's	U	2700	mg/kg	2		< 2.0		190	35		84	41	
Phenols by HPLC													

Results Summary - Soil

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:		14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:		73392	73393	73395	73396	73397	73399	73400	73401	73402
Order No.:	Client Sample Ref.:										
	Client Sample ID.:		TP1	TP1	TP2	TP2	TP2	TP3	TP3	TP3	TP4
	Sample Type:		SOIL								
	Top Depth (m):		0.05	0.25	0.00	0.15	0.70	0.00	0.05	0.60	0.05
	Bottom Depth(m):		0.10	0.35	0.05	0.25		0.05	0.15	0.70	0.10
	Date Sampled:		20-Nov-14								
Determinand	Accred.	SOP	Units	LOD							
Total Phenols	U	2920	mg/kg	0.3		< 0.30	< 0.30	< 0.30		< 0.30	0.43
Stones											
Stones	N	2030	%	0.02		< 0.020	< 0.020	< 0.020		< 0.020	< 0.020
Sulphide											
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.5		1.3	35	13		26	28
Total Metals											
Arsenic	U	2450	mg/kg	1		29	49	27		240	77
Cadmium	U	2450	mg/kg	0.1		0.66	1.3	0.59		0.52	2.0
Chromium	U	2450	mg/kg	1		36	100	38		51	42
Copper	U	2450	mg/kg	0.5		60	130	110		210	340
Mercury	U	2450	mg/kg	0.1		0.19	0.51	0.20		0.28	0.50
Nickel	U	2450	mg/kg	0.5		27	40	33		88	83
Lead	U	2450	mg/kg	0.5		270	260	93		590	390
Selenium	U	2450	mg/kg	0.2		< 0.20	< 0.20	< 0.20		0.39	0.72
Zinc	U	2450	mg/kg	0.5		140	200	290		180	550
Total Organic Carbon											
Organic Matter	U	2625	%	0.4		11	17	28		40	40
Total Petroleum Hydrocarbons											
TPH >C6-C10	N	2670	mg/kg	1							
TPH >C10-C21	N	2670	mg/kg	1							
TPH >C21-C40	N	2670	mg/kg	1							
Total TPH >C6-C40	U	2670	mg/kg	10							
Total Petroleum Hydrocarbons A/A Split											
Aliphatic TPH >C5-C6	N	2675	mg/kg	0.1				< 0.10			< 0.10
Aliphatic TPH >C6-C8	N	2675	mg/kg	0.1				< 0.10			< 0.10
Aliphatic TPH >C8-C10	U	2675	mg/kg	0.1				< 0.10			< 0.10
Aliphatic TPH >C10-C12	U	2675	mg/kg	1				< 1.0			< 1.0
Aliphatic TPH >C12-C16	U	2675	mg/kg	1				< 1.0			10
Aliphatic TPH >C16-C21	U	2675	mg/kg	1				< 1.0			53
Aliphatic TPH >C21-C35	U	2675	mg/kg	1				< 1.0			21
Aliphatic TPH >C35-C44	U	2675	mg/kg	1				< 1.0			< 1.0
Total Aliphatic Hydrocarbons	U	2675	mg/kg	5				< 5.0			85

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:		14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:		73392	73393	73395	73396	73397	73399	73400	73401	73402
Order No.:	Client Sample Ref.:										
	Client Sample ID.:		TP1	TP1	TP2	TP2	TP2	TP3	TP3	TP3	TP4
	Sample Type:		SOIL								
	Top Depth (m):		0.05	0.25	0.00	0.15	0.70	0.00	0.05	0.60	0.05
	Bottom Depth(m):		0.10	0.35	0.05	0.25		0.05	0.15	0.70	0.10
	Date Sampled:		20-Nov-14								
Determinand	Accred.	SOP	Units	LOD							
Aromatic TPH >C5-C7	N	2675	mg/kg	0.1				< 0.10		< 0.10	
Aromatic TPH >C7-C8	N	2675	mg/kg	0.1				< 0.10		< 0.10	
Aromatic TPH >C8-C10	U	2675	mg/kg	0.1				< 0.10		< 0.10	
Aromatic TPH >C10-C12	N	2675	mg/kg	1				< 1.0		< 1.0	
Aromatic TPH >C12-C16	U	2675	mg/kg	1				< 1.0		4.6	
Aromatic TPH >C16-C21	U	2675	mg/kg	1				7.0		31	
Aromatic TPH >C21-C35	N	2675	mg/kg	1				10		42	
Aromatic TPH >C35-C44	N	2675	mg/kg	1				< 1.0		1.1	
Total Aromatic Hydrocarbons	U	2675	mg/kg	5				17		79	
Total Petroleum Hydrocarbons	U	2675	mg/kg	10				17		160	
VOC Low-Level											
Dichlorodifluoromethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Chloromethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Vinyl Chloride	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Bromomethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Chloroethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Trichlorofluoromethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,1-Dichloroethene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Trans 1,2-Dichloroethene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,1-Dichloroethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
cis 1,2-Dichloroethene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Bromochloromethane	N	2760	µg/kg	0.5				< 0.50		< 0.50	
Trichloromethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,1,1-Trichloroethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Tetrachloromethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,1-Dichloropropene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Benzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2-Dichloroethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Trichloroethene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2-Dichloropropane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Dibromomethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Bromodichloromethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
cis-1,3-Dichloropropene	N	2760	µg/kg	0.2				< 0.20		< 0.20	

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:		14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	
Quotation No.: Q14-02390	Chemtest Sample ID.:		73392	73393	73395	73396	73397	73399	73400	73401	73402
Order No.:	Client Sample Ref.:										
	Client Sample ID.:		TP1	TP1	TP2	TP2	TP2	TP3	TP3	TP3	TP4
	Sample Type:		SOIL								
	Top Depth (m):		0.05	0.25	0.00	0.15	0.70	0.00	0.05	0.60	0.05
	Bottom Depth(m):		0.10	0.35	0.05	0.25		0.05	0.15	0.70	0.10
	Date Sampled:		20-Nov-14								
Determinand	Accred.	SOP	Units	LOD							
Toluene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Trans-1,3-Dichloropropene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,1,2-Trichloroethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Tetrachloroethene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,3-Dichloropropane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Dibromochloromethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2-Dibromoethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Chlorobenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,1,1,2-Tetrachloroethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Ethylbenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
M & P-Xylene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
O-Xylene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Styrene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Tribromomethane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Isopropylbenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Bromobenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2,3-Trichloropropane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
2-Chlorotoluene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,3,5-Trimethylbenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
4-Chlorotoluene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Tert-Butylbenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2,4-Trimethylbenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Sec-Butylbenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,3-Dichlorobenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
4-Isopropyltoluene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,4-Dichlorobenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
N-Butylbenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2-Dichlorobenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2-Dibromo-3-Chloropropane	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2,4-Trichlorobenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Hexachlorobutadiene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
1,2,3-Trichlorobenzene	N	2760	µg/kg	0.2				< 0.20		< 0.20	
Methyl Tert-Butyl Ether	N	2760	µg/kg	0.2				< 0.20		< 0.20	

Results Summary - Soil

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:				14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:				73392	73393	73395	73396	73397	73399	73400	73401	73402
Order No.:	Client Sample Ref.:												
	Client Sample ID.:				TP1	TP1	TP2	TP2	TP2	TP3	TP3	TP3	TP4
	Sample Type:				SOIL								
	Top Depth (m):				0.05	0.25	0.00	0.15	0.70	0.00	0.05	0.60	0.05
	Bottom Depth(m):				0.10	0.35	0.05	0.25		0.05	0.15	0.70	0.10
	Date Sampled:				20-Nov-14								
Determinand	Accred.	SOP	Units	LOD									
Water Soluble Metals													
Boron (Hot Water Soluble)	U	2120	mg/kg	0.4		0.94		0.92	1.3		0.73	0.86	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.01		0.057		0.049	0.061		0.038	0.15	
pH													
pH	U	2010				8.0		8.3	8.1		7.6	7.6	

Results Summary - Soil

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:		14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	
Quotation No.: Q14-02390	Chemtest Sample ID.:		73403	73404	73405	73406	73407	73408	73409	73411	73412	73413	
Order No.:	Client Sample Ref.:												
	Client Sample ID.:		TP4	TP4	TP5	TP5	TP5	TP5	TP6	TP6	TP6	TP6	
	Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):		0.15	0.79	0.00	0.30	0.45	0.90	0.00	0.25	0.75	1.55	
	Bottom Depth(m):		0.27		0.05		0.55	1.05	0.05	0.35	0.80	1.60	
	Date Sampled:		20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	20-Nov-14	
Determinand	Accred.	SOP	Units	LOD									
Aqua Regia													
Sulphate (Total)	U	2430	%	0.01	0.28	0.15		0.034	0.093		0.17		
Asbestos													
ACM Type	U	2192					-				-		
Asbestos Identification	U	2192	%	0.001			No Asbestos Detected				No Asbestos Detected		
Cyanide													
Cyanide (Total)	U	2300	mg/kg	0.5	< 0.50	< 0.50		< 0.50	< 0.50		< 0.50		
Cyanide (Free)	U	2300	mg/kg	0.5	< 0.50	< 0.50		< 0.50	< 0.50		< 0.50		
Thiocyanate	U	2300	mg/kg	5	< 5.0	< 5.0		< 5.0	< 5.0		< 5.0		
Hexavalent Chromium													
Chromium (Hexavalent)	N	2490	mg/kg	0.5	< 0.50	< 0.50		< 0.50	< 0.50		< 0.50		
Moisture													
Moisture	N	2030	%	0.02	23	10		9.0	18	14	10	21	20
PAH FID													
Naphthalene	U	2700	mg/kg	0.1	0.69	0.70		0.88	0.14		< 0.10		
Acenaphthylene	U	2700	mg/kg	0.1	1.5	0.33		0.24	< 0.10		< 0.10		
Acenaphthene	U	2700	mg/kg	0.1	2.3	0.81		1.1	< 0.10		< 0.10		
Fluorene	U	2700	mg/kg	0.1	2.4	0.96		1.2	0.11		< 0.10		
Phenanthrene	U	2700	mg/kg	0.1	25	5.9		8.3	0.40		< 0.10		
Anthracene	U	2700	mg/kg	0.1	5.4	2.1		3.0	0.59		< 0.10		
Fluoranthene	U	2700	mg/kg	0.1	46	12		17	0.59		< 0.10		
Pyrene	U	2700	mg/kg	0.1	43	12		18	0.64		< 0.10		
Benzo[a]anthracene	U	2700	mg/kg	0.1	21	5.6		8.4	0.64		< 0.10		
Chrysene	U	2700	mg/kg	0.1	24	7.1		9.7	0.76		< 0.10		
Benzo[b]fluoranthene	U	2700	mg/kg	0.1	24	7.5		9.2	0.13		< 0.10		
Benzo[k]fluoranthene	U	2700	mg/kg	0.1	11	3.2		4.0	0.41		< 0.10		
Benzo[a]pyrene	U	2700	mg/kg	0.1	19	6.0		7.5	0.39		< 0.10		
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.1	10	3.9		5.3	0.11		< 0.10		
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.1	1.4	1.5		2.2	< 0.10		< 0.10		
Benzo[g,h,i]perylene	U	2700	mg/kg	0.1	10	4.5		5.2	0.41		< 0.10		
Total Of 16 PAH's	U	2700	mg/kg	2	250	74		100	5.3		< 2.0		
Phenols by HPLC													

Results Summary - Soil

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:		14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:		73403	73404	73405	73406	73407	73408	73409	73411	73412	73413
Order No.:	Client Sample Ref.:											
	Client Sample ID.:		TP4	TP4	TP5	TP5	TP5	TP5	TP6	TP6	TP6	TP6
	Sample Type:		SOIL									
	Top Depth (m):		0.15	0.79	0.00	0.30	0.45	0.90	0.00	0.25	0.75	1.55
	Bottom Depth(m):		0.27		0.05		0.55	1.05	0.05	0.35	0.80	1.60
	Date Sampled:		20-Nov-14									
Determinand	Accred.	SOP	Units	LOD								
Total Phenols	U	2920	mg/kg	0.3	< 0.30	< 0.30		< 0.30	< 0.30		< 0.30	
Stones												
Stones	N	2030	%	0.02	< 0.020	< 0.020		< 0.020	< 0.020		< 0.020	
Sulphide												
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.5	130	23		49	11		9.1	
Total Metals												
Arsenic	U	2450	mg/kg	1	46	39		11	18		14	
Cadmium	U	2450	mg/kg	0.1	0.62	0.28		0.56	0.13		0.55	
Chromium	U	2450	mg/kg	1	48	38		53	22		31	
Copper	U	2450	mg/kg	0.5	300	68		32	25		62	
Mercury	U	2450	mg/kg	0.1	0.35	0.16		< 0.10	0.11		0.11	
Nickel	U	2450	mg/kg	0.5	41	66		18	24		19	
Lead	U	2450	mg/kg	0.5	190	86		100	43		100	
Selenium	U	2450	mg/kg	0.2	< 0.20	< 0.20		< 0.20	< 0.20		< 0.20	
Zinc	U	2450	mg/kg	0.5	160	160		60	60		140	
Total Organic Carbon												
Organic Matter	U	2625	%	0.4	28	31		9.7	6.0	< 0.40	7.1	2.6
Total Petroleum Hydrocarbons												
TPH >C6-C10	N	2670	mg/kg	1								< 1.0
TPH >C10-C21	N	2670	mg/kg	1								330
TPH >C21-C40	N	2670	mg/kg	1								30
Total TPH >C6-C40	U	2670	mg/kg	10							7600	360
Total Petroleum Hydrocarbons A/A Split												
Aliphatic TPH >C5-C6	N	2675	mg/kg	0.1					< 0.10		< 0.10	
Aliphatic TPH >C6-C8	N	2675	mg/kg	0.1					< 0.10		< 0.10	
Aliphatic TPH >C8-C10	U	2675	mg/kg	0.1					< 0.10		< 0.10	
Aliphatic TPH >C10-C12	U	2675	mg/kg	1					< 1.0		1.7	
Aliphatic TPH >C12-C16	U	2675	mg/kg	1					< 1.0		33	
Aliphatic TPH >C16-C21	U	2675	mg/kg	1					< 1.0		34	
Aliphatic TPH >C21-C35	U	2675	mg/kg	1					< 1.0		4.1	
Aliphatic TPH >C35-C44	U	2675	mg/kg	1					< 1.0		< 1.0	
Total Aliphatic Hydrocarbons	U	2675	mg/kg	5					< 5.0		72	

Results Summary - Soil

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:		14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:		73403	73404	73405	73406	73407	73408	73409	73411	73412	73413
Order No.:	Client Sample Ref.:											
	Client Sample ID.:		TP4	TP4	TP5	TP5	TP5	TP5	TP6	TP6	TP6	TP6
	Sample Type:		SOIL									
	Top Depth (m):		0.15	0.79	0.00	0.30	0.45	0.90	0.00	0.25	0.75	1.55
	Bottom Depth(m):		0.27		0.05		0.55	1.05	0.05	0.35	0.80	1.60
	Date Sampled:		20-Nov-14									
Determinand	Accred.	SOP	Units	LOD								
Aromatic TPH >C5-C7	N	2675	mg/kg	0.1				< 0.10			< 0.10	
Aromatic TPH >C7-C8	N	2675	mg/kg	0.1				< 0.10			< 0.10	
Aromatic TPH >C8-C10	U	2675	mg/kg	0.1				< 0.10			< 0.10	
Aromatic TPH >C10-C12	N	2675	mg/kg	1				< 1.0			< 1.0	
Aromatic TPH >C12-C16	U	2675	mg/kg	1				< 1.0			7.1	
Aromatic TPH >C16-C21	U	2675	mg/kg	1				< 1.0			7.5	
Aromatic TPH >C21-C35	N	2675	mg/kg	1				< 1.0			1.3	
Aromatic TPH >C35-C44	N	2675	mg/kg	1				< 1.0			< 1.0	
Total Aromatic Hydrocarbons	U	2675	mg/kg	5				< 5.0			16	
Total Petroleum Hydrocarbons	U	2675	mg/kg	10				< 10			88	
VOC Low-Level												
Dichlorodifluoromethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Chloromethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Vinyl Chloride	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Bromomethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Chloroethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Trichlorofluoromethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,1-Dichloroethene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Trans 1,2-Dichloroethene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,1-Dichloroethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
cis 1,2-Dichloroethene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Bromochloromethane	N	2760	µg/kg	0.5				< 0.50			< 0.50	
Trichloromethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,1,1-Trichloroethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Tetrachloromethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,1-Dichloropropene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Benzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2-Dichloroethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Trichloroethene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2-Dichloropropane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Dibromomethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Bromodichloromethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
cis-1,3-Dichloropropene	N	2760	µg/kg	0.2				< 0.20			< 0.20	

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:		14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	
Quotation No.: Q14-02390	Chemtest Sample ID.:		73403	73404	73405	73406	73407	73408	73409	73411	73412	73413
Order No.:	Client Sample Ref.:											
	Client Sample ID.:		TP4	TP4	TP5	TP5	TP5	TP5	TP6	TP6	TP6	TP6
	Sample Type:		SOIL									
	Top Depth (m):		0.15	0.79	0.00	0.30	0.45	0.90	0.00	0.25	0.75	1.55
	Bottom Depth(m):		0.27		0.05		0.55	1.05	0.05	0.35	0.80	1.60
	Date Sampled:		20-Nov-14									
Determinand	Accred.	SOP	Units	LOD								
Toluene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Trans-1,3-Dichloropropene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,1,2-Trichloroethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Tetrachloroethene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,3-Dichloropropane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Dibromochloromethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2-Dibromoethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Chlorobenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,1,1,2-Tetrachloroethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Ethylbenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
M & P-Xylene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
O-Xylene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Styrene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Tribromomethane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Isopropylbenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Bromobenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2,3-Trichloropropane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
2-Chlorotoluene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,3,5-Trimethylbenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
4-Chlorotoluene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Tert-Butylbenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2,4-Trimethylbenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Sec-Butylbenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,3-Dichlorobenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
4-Isopropyltoluene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,4-Dichlorobenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
N-Butylbenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2-Dichlorobenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2-Dibromo-3-Chloropropane	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2,4-Trichlorobenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Hexachlorobutadiene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
1,2,3-Trichlorobenzene	N	2760	µg/kg	0.2				< 0.20			< 0.20	
Methyl Tert-Butyl Ether	N	2760	µg/kg	0.2				< 0.20			< 0.20	

Results Summary - Soil

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:				14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	14-15041	
Quotation No.: Q14-02390	Chemtest Sample ID.:				73403	73404	73405	73406	73407	73408	73409	73411	73412	73413
Order No.:	Client Sample Ref.:													
	Client Sample ID.:				TP4	TP4	TP5	TP5	TP5	TP5	TP6	TP6	TP6	TP6
	Sample Type:				SOIL									
	Top Depth (m):				0.15	0.79	0.00	0.30	0.45	0.90	0.00	0.25	0.75	1.55
	Bottom Depth(m):				0.27		0.05		0.55	1.05	0.05	0.35	0.80	1.60
	Date Sampled:				20-Nov-14									
Determinand	Accred.	SOP	Units	LOD										
Water Soluble Metals														
Boron (Hot Water Soluble)	U	2120	mg/kg	0.4	0.78	0.57		0.52	0.51			0.71		
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.01	0.036	0.024		0.042	0.019			0.10		
pH														
pH	U	2010			7.8	7.8		8.2	6.6			7.0		

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:				14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:				73414	73415	73416
Order No.:	Client Sample Ref.:						
	Client Sample ID.:				M1	M2	M3
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):						
	Bottom Depth(m):						
	Date Sampled:				20-Nov-14	20-Nov-14	20-Nov-14
Determinand	Accred.	SOP	Units	LOD			
Aqua Regia							
Sulphate (Total)	U	2430	%	0.01	0.10	0.097	0.11
Asbestos							
ACM Type	U	2192			-		-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected		No Asbestos Detected
Cyanide							
Cyanide (Total)	U	2300	mg/kg	0.5	< 0.50	< 0.50	< 0.50
Cyanide (Free)	U	2300	mg/kg	0.5	< 0.50	< 0.50	< 0.50
Thiocyanate	U	2300	mg/kg	5	< 5.0	< 5.0	< 5.0
Hexavalent Chromium							
Chromium (Hexavalent)	N	2490	mg/kg	0.5	< 0.50	< 0.50	< 0.50
Moisture							
Moisture	N	2030	%	0.02	17	17	14
PAH FID							
Naphthalene	U	2700	mg/kg	0.1	0.16	< 0.10	0.23
Acenaphthylene	U	2700	mg/kg	0.1	0.20	0.10	0.28
Acenaphthene	U	2700	mg/kg	0.1	0.31	< 0.10	0.40
Fluorene	U	2700	mg/kg	0.1	0.42	0.13	0.44
Phenanthrene	U	2700	mg/kg	0.1	2.1	0.65	4.0
Anthracene	U	2700	mg/kg	0.1	0.47	0.13	0.76
Fluoranthene	U	2700	mg/kg	0.1	3.1	0.76	6.6
Pyrene	U	2700	mg/kg	0.1	3.0	0.81	6.7
Benzo[a]anthracene	U	2700	mg/kg	0.1	1.3	0.32	2.9
Chrysene	U	2700	mg/kg	0.1	2.1	1.1	4.9
Benzo[b]fluoranthene	U	2700	mg/kg	0.1	2.1	0.48	4.9
Benzo[k]fluoranthene	U	2700	mg/kg	0.1	1.4	0.98	2.2
Benzo[a]pyrene	U	2700	mg/kg	0.1	1.4	0.35	3.6
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.1	< 0.10	< 0.10	3.0
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.1	< 0.10	< 0.10	1.2
Benzo[g,h,i]perylene	U	2700	mg/kg	0.1	< 0.10	< 0.10	3.2
Total Of 16 PAH's	U	2700	mg/kg	2	18	5.8	45
Phenols by HPLC							

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:				14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:				73414	73415	73416
Order No.:	Client Sample Ref.:						
	Client Sample ID.:				M1	M2	M3
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):						
	Bottom Depth(m):						
	Date Sampled:				20-Nov-14	20-Nov-14	20-Nov-14
Determinand	Accred.	SOP	Units	LOD			
Total Phenols	U	2920	mg/kg	0.3	< 0.30	< 0.30	< 0.30
Stones							
Stones	N	2030	%	0.02	< 0.020	< 0.020	< 0.020
Sulphide							
Sulphide (Easily Liberatable)	U	2325	mg/kg	0.5	2.7	6.2	11
Total Metals							
Arsenic	U	2450	mg/kg	1	36	30	21
Cadmium	U	2450	mg/kg	0.1	0.43	0.25	0.74
Chromium	U	2450	mg/kg	1	28	20	38
Copper	U	2450	mg/kg	0.5	77	52	140
Mercury	U	2450	mg/kg	0.1	0.65	0.19	0.38
Nickel	U	2450	mg/kg	0.5	26	23	25
Lead	U	2450	mg/kg	0.5	180	100	110
Selenium	U	2450	mg/kg	0.2	< 0.20	< 0.20	< 0.20
Zinc	U	2450	mg/kg	0.5	170	100	190
Total Organic Carbon							
Organic Matter	U	2625	%	0.4	12	10	10
Total Petroleum Hydrocarbons							
TPH >C6-C10	N	2670	mg/kg	1			
TPH >C10-C21	N	2670	mg/kg	1			
TPH >C21-C40	N	2670	mg/kg	1			
Total TPH >C6-C40	U	2670	mg/kg	10			
Total Petroleum Hydrocarbons A/A Split							
Aliphatic TPH >C5-C6	N	2675	mg/kg	0.1			
Aliphatic TPH >C6-C8	N	2675	mg/kg	0.1			
Aliphatic TPH >C8-C10	U	2675	mg/kg	0.1			
Aliphatic TPH >C10-C12	U	2675	mg/kg	1			
Aliphatic TPH >C12-C16	U	2675	mg/kg	1			
Aliphatic TPH >C16-C21	U	2675	mg/kg	1			
Aliphatic TPH >C21-C35	U	2675	mg/kg	1			
Aliphatic TPH >C35-C44	U	2675	mg/kg	1			
Total Aliphatic Hydrocarbons	U	2675	mg/kg	5			

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.: 14-15041				14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.: 73414				73415	73416	
Order No.:	Client Sample Ref.:						
	Client Sample ID.: M1				M2	M3	
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):						
	Bottom Depth(m):						
	Date Sampled:				20-Nov-14	20-Nov-14	20-Nov-14
Determinand	Accred.	SOP	Units	LOD			
Aromatic TPH >C5-C7	N	2675	mg/kg	0.1			
Aromatic TPH >C7-C8	N	2675	mg/kg	0.1			
Aromatic TPH >C8-C10	U	2675	mg/kg	0.1			
Aromatic TPH >C10-C12	N	2675	mg/kg	1			
Aromatic TPH >C12-C16	U	2675	mg/kg	1			
Aromatic TPH >C16-C21	U	2675	mg/kg	1			
Aromatic TPH >C21-C35	N	2675	mg/kg	1			
Aromatic TPH >C35-C44	N	2675	mg/kg	1			
Total Aromatic Hydrocarbons	U	2675	mg/kg	5			
Total Petroleum Hydrocarbons	U	2675	mg/kg	10			
VOC Low-Level							
Dichlorodifluoromethane	N	2760	µg/kg	0.2			
Chloromethane	N	2760	µg/kg	0.2			
Vinyl Chloride	N	2760	µg/kg	0.2			
Bromomethane	N	2760	µg/kg	0.2			
Chloroethane	N	2760	µg/kg	0.2			
Trichlorofluoromethane	N	2760	µg/kg	0.2			
1,1-Dichloroethene	N	2760	µg/kg	0.2			
Trans 1,2-Dichloroethene	N	2760	µg/kg	0.2			
1,1-Dichloroethane	N	2760	µg/kg	0.2			
cis 1,2-Dichloroethene	N	2760	µg/kg	0.2			
Bromochloromethane	N	2760	µg/kg	0.5			
Trichloromethane	N	2760	µg/kg	0.2			
1,1,1-Trichloroethane	N	2760	µg/kg	0.2			
Tetrachloromethane	N	2760	µg/kg	0.2			
1,1-Dichloropropene	N	2760	µg/kg	0.2			
Benzene	N	2760	µg/kg	0.2			
1,2-Dichloroethane	N	2760	µg/kg	0.2			
Trichloroethene	N	2760	µg/kg	0.2			
1,2-Dichloropropane	N	2760	µg/kg	0.2			
Dibromomethane	N	2760	µg/kg	0.2			
Bromodichloromethane	N	2760	µg/kg	0.2			
cis-1,3-Dichloropropene	N	2760	µg/kg	0.2			

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.: 14-15041				14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.: 73414				73415	73416	
Order No.:	Client Sample Ref.:						
	Client Sample ID.: M1				M2	M3	
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):						
	Bottom Depth(m):						
	Date Sampled:				20-Nov-14	20-Nov-14	20-Nov-14
Determinand	Accred.	SOP	Units	LOD			
Toluene	N	2760	µg/kg	0.2			
Trans-1,3-Dichloropropene	N	2760	µg/kg	0.2			
1,1,2-Trichloroethane	N	2760	µg/kg	0.2			
Tetrachloroethene	N	2760	µg/kg	0.2			
1,3-Dichloropropane	N	2760	µg/kg	0.2			
Dibromochloromethane	N	2760	µg/kg	0.2			
1,2-Dibromoethane	N	2760	µg/kg	0.2			
Chlorobenzene	N	2760	µg/kg	0.2			
1,1,1,2-Tetrachloroethane	N	2760	µg/kg	0.2			
Ethylbenzene	N	2760	µg/kg	0.2			
M & P-Xylene	N	2760	µg/kg	0.2			
O-Xylene	N	2760	µg/kg	0.2			
Styrene	N	2760	µg/kg	0.2			
Tribromomethane	N	2760	µg/kg	0.2			
Isopropylbenzene	N	2760	µg/kg	0.2			
Bromobenzene	N	2760	µg/kg	0.2			
1,2,3-Trichloropropane	N	2760	µg/kg	0.2			
2-Chlorotoluene	N	2760	µg/kg	0.2			
1,3,5-Trimethylbenzene	N	2760	µg/kg	0.2			
4-Chlorotoluene	N	2760	µg/kg	0.2			
Tert-Butylbenzene	N	2760	µg/kg	0.2			
1,2,4-Trimethylbenzene	N	2760	µg/kg	0.2			
Sec-Butylbenzene	N	2760	µg/kg	0.2			
1,3-Dichlorobenzene	N	2760	µg/kg	0.2			
4-Isopropyltoluene	N	2760	µg/kg	0.2			
1,4-Dichlorobenzene	N	2760	µg/kg	0.2			
N-Butylbenzene	N	2760	µg/kg	0.2			
1,2-Dichlorobenzene	N	2760	µg/kg	0.2			
1,2-Dibromo-3-Chloropropane	N	2760	µg/kg	0.2			
1,2,4-Trichlorobenzene	N	2760	µg/kg	0.2			
Hexachlorobutadiene	N	2760	µg/kg	0.2			
1,2,3-Trichlorobenzene	N	2760	µg/kg	0.2			
Methyl Tert-Butyl Ether	N	2760	µg/kg	0.2			

Project: AC12 Land Adjoining Jagger Lane, Emley Moor AC00100

Client: A C Environment Solutions Ltd	Chemtest Job No.:				14-15041	14-15041	14-15041
Quotation No.: Q14-02390	Chemtest Sample ID.:				73414	73415	73416
Order No.:	Client Sample Ref.:						
	Client Sample ID.:				M1	M2	M3
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):						
	Bottom Depth(m):						
	Date Sampled:				20-Nov-14	20-Nov-14	20-Nov-14
Determinand	Accred.	SOP	Units	LOD			
Water Soluble Metals							
Boron (Hot Water Soluble)	U	2120	mg/kg	0.4	0.87	0.68	1.1
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.01	0.016	0.017	0.016
pH							
pH	U	2010			6.8	7.7	8.1