33C Vauxhall Ind. Estate, Greg Street Reddish, Stockport SK5 7BR TEL 0161 475 0870 FAX 0161 475 0871



TEST CERTIFICATE PARTICLE SIZE DISTRIBUTION

BS 1377: PART 2: Clause 9.2: 1990

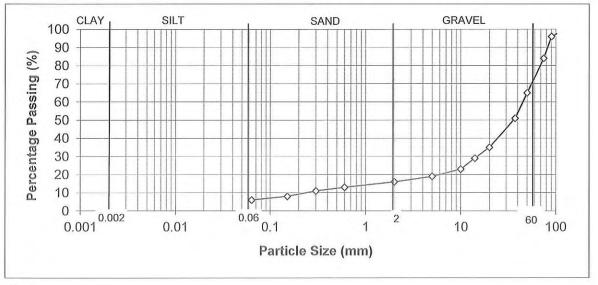
Determination of Moisture Content in accordance with BS 1377: PART 2: Clause 3: 1990 (Oven Dry)

CLIENT	Urban Regen Ltd
SITE	Upper Heyford
JOB NUMBER	MRN 2305/80

SAMPLE LABEL	B31-Sample-3	DATE SAMPLED	22-Oct-14
LAB SAMPLE No	59918	DATE RECEIVED	22-Oct-14
DATE TESTED	23-Oct-14	SAMPLED BY	Murray Rix

MATERIAL	6F2
ADVISED SOURCE	Site Won

Sieve Size	% Passing	Specification	Sieve Size	% Passing	Specification
(mm)	(%)	(%)	(mm)	(%)	(%)
125	100	100	10	23	15-60
90	96	80-100	5	19	10-45
75	84	65-100	2	16	
50	65		0.6	13	0-25
37.5	51	45-100	0.3	11	
20	35		0.15	8	
14	29		0.063	6	0-12



REMARKS

As received moisture content = 7.8%

Sample complies with the advised grading specification for a 6F2 material (SHW 2009)

SIGNED

NAME

A Richardson (Deputy Laboratory Manager)

DATE

04-Nov-14

Page Nof 13

33C Vauxhall Ind. Estate, Greg Street Reddish, Stockport SK5 7BR TEL 0161 475 0870 FAX 0161 475 0871



TEST CERTIFICATE PARTICLE SIZE DISTRIBUTION

BS 1377: PART 2: Clause 9.2: 1990

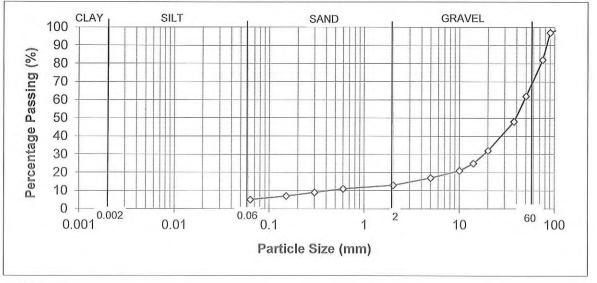
Determination of Moisture Content in accordance with BS 1377: PART 2: Clause 3: 1990 (Oven Dry)

CLIENT	Urban Regen Ltd
SITE	Upper Heyford
JOB NUMBER	MRN 2305/80

SAMPLE LABEL	B32-Sample-1	DATE SAMPLED	22-Oct-14
LAB SAMPLE No	59919	DATE RECEIVED	22-Oct-14
DATE TESTED	23-Oct-14	SAMPLED BY	Murray Rix

MATERIAL	6F2
ADVISED SOURCE	Site Won

Sieve Size	% Passing	Specification	Sieve Size	% Passing	Specification	
(mm)	(%)	(%)	(mm)	(%)	(%)	
125	100	100				
90	97	80-100	5	17	10-45	
75	82	65-100	2	13		
50	62		0.6	11	0-25	
37.5	48	45-100	0.3	9		
20	32		0.15	7		
14	25		0.063	5	0-12	



REMARKS

As received moisture content = 7.5%

Sample complies with the advised grading specification for a 6F2 material (SHW 2009)

SIGNED

NAME

A Richardson (Deputy Laboratory Manager) DATE

04-Nov-14

Page(3of 13



Smith Grant LLP Station House

Station Road

Ruabon Wrexham LL14 6DL

Jones Environmental Laboratory

Unit 3 Deeside Point Zone 3 **Deeside Industrial Park** Deeside CH5 2UA

Tel: +44 (0) 1244 833780 Fax: +44 (0) 1244 833781



Attention :	Dan Wayland
Date :	12th February, 2016
Your reference :	R1742b
Our reference :	Test Report 16/4531 Batch 1
Location :	Heyford(Porchester)
Date samples received :	5th February, 2016
Status :	Final report
Issue :	1

Five samples were received for analysis on 5th February, 2016 of which five were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Phil Sommerton BSc Project Manager

Client Name: Reference: Location: Contact: JE Job No.: Smith Grant LLP R1742b Heyford(Porchester) Dan Wayland 16/4531

Report : Solid

JE Job No.:	16/4531					 		 	-		
J E Sample No.	1-2	3-4	5-6	7-8	9-10						
Sample ID	D1B-TS1-A	D1B-TS1-B	D1B-TS1-C	D1B-TS2-A	D1B-TS2-B						
Donth											
Depth										e attached n ations and a	
COC No / misc											
Containers	Λì	٧J	٧J	٧J	٧J						
Sample Date	04/02/2016	04/02/2016	04/02/2016	04/02/2016	04/02/2016						
Sample Type	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1				LOD/LOR	Units	Method
Date of Receipt	05/02/2016	05/02/2016	05/02/2016	05/02/2016	05/02/2016				LOD/LOIX	Onits	No.
Arsenic #M	29.9	27.0	38.6	32.9	47.6				<0.5	mg/kg	TM30/PM15
Barium ^{#M}	120	116	128	68	159				<1	mg/kg	TM30/PM15
Beryllium	1.4	1.4	1.8	1.1	2.7				<0.5	mg/kg	TM30/PM15
Cadmium ^{#M} Chromium ^{#M}	<0.1 55.9	<0.1 49.8	<0.1 67.7	<0.1 42.6	<0.1 98.8				<0.1 <0.5	mg/kg mg/kg	TM30/PM15 TM30/PM15
Cobalt ^{#M}	9.9	9.0	14.8	8.4	14.8				<0.5	mg/kg	TM30/PM15
Copper ^{#M}	17	16	19	13	16				<1	mg/kg	TM30/PM15
Lead ^{#M}	44	56	70	44	77				<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1	0.1	<0.1	<0.1				<0.1	mg/kg	TM30/PM15
Molybdenum #M	2.2	1.7	2.1	1.5	1.9				<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	25.0	23.1	33.6	19.4	45.1				<0.7	mg/kg	TM30/PM15
Selenium ^{#M} Vanadium	2 88	2 76	1 93	1 70	2 172				<1 <1	mg/kg mg/kg	TM30/PM15 TM30/PM15
Water Soluble Boron #M	2.1	2.1	2.6	1.9	4.6				<0.1	mg/kg	TM74/PM32
Zinc ^{#M}	95	92	126	81	165				<5	mg/kg	TM30/PM15
PAH MS											
Naphthalene #M	<0.04	<0.04	<0.04	<0.04	<0.04				<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	0.05	0.09	0.07				<0.03	mg/kg	TM4/PM8
Acenaphthene ^{#M} Fluorene ^{#M}	<0.05 <0.04	<0.05 <0.04	<0.05 <0.04	<0.05 <0.04	<0.05 <0.04				<0.05 <0.04	mg/kg mg/kg	TM4/PM8 TM4/PM8
Phenanthrene ^{#M}	0.14	0.20	0.24	0.38	0.42				<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	0.06	0.08	0.18	0.13				<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.38	0.54	0.76	1.56	1.08				<0.03	mg/kg	TM4/PM8
Pyrene [#]	0.31	0.46	0.65	1.43	0.93				<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.19	0.28	0.39	0.85	0.54				<0.06	mg/kg	TM4/PM8
Chrysene ^{#M} Benzo(bk)fluoranthene ^{#M}	0.19 0.33	0.31 0.55	0.42	0.88	0.56				<0.02 <0.07	mg/kg mg/kg	TM4/PM8 TM4/PM8
Benzo(a)pyrene [#]	0.33	0.33	0.46	0.96	0.70				<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.14	0.23	0.35	0.70	0.55				<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	0.06	0.12	0.11				<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	0.13	0.22	0.33	0.65	0.51				<0.04	mg/kg	TM4/PM8
PAH 16 Total	2.0	3.2	4.6	9.5	6.8				<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.24	0.40	0.58	1.22	0.88				<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene PAH Surrogate % Recovery	0.09 108	0.15 113	0.23	0.47	0.34				<0.02 <0	mg/kg %	TM4/PM8 TM4/PM8
PAR Surlogate % Recovery	106	113	110	112					<0	70	TIVI4/FIVIO
							1				1

Client Name: Reference: Location: Contact: JE Job No.:

R1742b Heyford(Porchester) Dan Wayland 16/4531

Smith Grant LLP

Report : Solid

JE Job No.:	16/4531					 	 			
J E Sample No.	1-2	3-4	5-6	7-8	9-10					
Sample ID	D1B-TS1-A	D1B-TS1-B	D1B-TS1-C	D1B-TS2-A	D1B-TS2-B					
Depth								Please se	e attached n	otes for all
COC No / misc									ations and a	
Containers	٧J	٧J	VJ	VJ	٧J					
Sample Date		04/02/2016								
Sample Type	Soil	Soil	Soil	Soil	Soil					
Batch Number	1	1	1	1	1			LOD/LOR	Units	Method No.
Date of Receipt	05/02/2016	05/02/2016	05/02/2016	05/02/2016	05/02/2016					NO.
TPH CWG										
Aliphatics										
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M} >C8-C10	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1			<0.1 <0.1	mg/kg mg/kg	TM36/PM12 TM36/PM12
>C10-C12 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM5/PM12 TM5/PM16
>C12-C16 ^{#M}	<4	<4	<4	<4	<4			<4	mg/kg	TM5/PM16
>C16-C21 #M	<7	<7	<7	<7	<7			<7	mg/kg	TM5/PM16
>C21-C35 #M	<7	35	<7	9	<7			<7	mg/kg	TM5/PM16
Total aliphatics C5-35	<19	35	<19	<19	<19			<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics										
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>EC8-EC10 #M	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2			<0.2	mg/kg	TM5/PM16
>EC12-EC16 >EC16-EC21	<4	<4	<4	<4 31	<4			<4	mg/kg	TM5/PM16 TM5/PM16
>EC21-EC35	<7 7	14 504	<7 48	104	<7 <7			<7 <7	mg/kg mg/kg	TM5/PM16
Total aromatics C5-35	, <19	518	48	135	<19			<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	<38	553	48	135	<38			<38	mg/kg	TM5/TM36/PM12/PM16
									0.0	
MTBE [#]	<5	<5	<5	<5	<5			<5	ug/kg	TM31/PM12
Benzene #	<5	<5	<5	<5	<5			<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5	<5	<5	<5			<5	ug/kg	TM31/PM12
Ethylbenzene [#]	<5	<5	<5	<5	<5			<5	ug/kg	TM31/PM12
m/p-Xylene #	<5	<5	<5	<5	<5			<5	ug/kg	TM31/PM12
o-Xylene [#]	<5	<5	<5	<5	<5			<5	ug/kg	TM31/PM12
DCBa (Tatal va Araslar 1254)	<10	-10	<10	<10	<10			-10	ua/ka	TM16/PM8
PCBs (Total vs Aroclor 1254)	<10	<10	<10	<10	<10			<10	ug/kg	110116/19108
Natural Moisture Content	<0.1	27.8	<0.1	18.4	22.3			<0.1	%	PM4/PM0
Hexavalent Chromium [#]	<0.3	<0.3	<0.3	<0.3	<0.3			<0.3	mg/kg	TM38/PM20
. Issurations Onionidin	.0.0	-0.0	-0.0	-0.0	.0.0			-0.0		
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	mg/kg	TM89/PM45
Organic Matter	3.5	3.8	4.0	3.0	5.1			<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	224	230	206	220	216			<100	uS/cm	TM76/PM58
pH ^{#M}	8.12	7.86	8.11	8.16	8.25			<0.01	pH units	TM73/PM11
Sample Type	Clay Medium Brown	Clay Medium Brown	Clay	Clay Medium Brown	Clay Medium Brown				None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown stones, vegetation	Medium Brown	Medium Brown stones, vegetation	Medium Brown stones, vegetation				None None	PM13/PM0
Other Items	อเบทเซอ์, อิสที่มี	auries, vegetation	stones, vegetation	aunes, vegetation	aunes, vegetation				none	PM13/PM0

Client Name:	Smith Grant LLP
Reference:	R1742b
Location:	Heyford(Porchester)
Contact:	Dan Wayland

Natification	of Deviating	Samples
Nouncation		Samples

Matrix : Solid

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
16/4531	1	D1B-TS1-A		1-2	GRO	Solid Samples were received at a temperature above 9°C.
16/4531	1	D1B-TS1-B		3-4	GRO	Solid Samples were received at a temperature above 9°C.
16/4531	1	D1B-TS1-C		5-6	GRO	Solid Samples were received at a temperature above 9°C.
16/4531	1	D1B-TS2-A		7-8	GRO	Solid Samples were received at a temperature above 9°C.
16/4531	1	D1B-TS2-B		9-10	GRO	Solid Samples were received at a temperature above 9°C.

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/4531

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at $35^{\circ}C \pm 5^{\circ}C$ unless otherwise stated. Moisture content for CEN Leachate tests are dried at $105^{\circ}C \pm 5^{\circ}C$.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCI (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
В	Indicates analyte found in associated method blank.
DR	Dilution required.
М	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
СО	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
ТВ	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 16/4531

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM12/PM16	CWG GC-FID			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes

JE Job No: 16/4531

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM76	Modified US EPA method 120.1. Determination of Specific Conductance by Metrohm automated probe analyser.	PM58	Dried and ground solid samples are extracted with water in a 5:1 water to solid ratio, the samples are shaken on an orbital shaker.			AD	Yes

JE Job No: 16/4531

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.			AR	Yes



Smith Grant LLP Station House

Station Road

Ruabon Wrexham LL14 6DL

Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point Zone 3 Deeside Industrial Park Deeside CH5 2UA

Tel: +44 (0) 1244 833780 Fax: +44 (0) 1244 833781





Attention :	Dan Wayland
Date :	22nd January, 2015
Your reference :	R1742B
Our reference :	Test Report 15/2346 Batch 1
Location :	Upper Heyford (Dorchester)
Date samples received :	14th January, 2015
Status :	Final report
Issue :	1

Five samples were received for analysis on 14th January, 2015 of which five were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Phil Sommerton BSc Project Manager

Rjuiellward

Bob Millward BSc FRSC Principal Chemist

Client Name:				
Reference:				
Location:				
Contact:				
JE Job No.:				

Smith Grant LLP R1742B Upper Heyford (Dorchester) Dan Wayland 15/2346

Report : Solid

JE JOD NO.:	15/2340									
J E Sample No.	1-2	3-4	5-6	7-8	9-10					
Sample ID	DIB-W-AGG 7	DIB-W-AGG 8	DIB-W-AGG 9	DIB-SW-AGG 15	DIB-SW-AGG 16					
Donth										
Depth									e attached n ations and a	
COC No / misc								abbrott		oronymo
Containers	νJ	VJ	νJ	νJ	V J					
Sample Date	12/01/2015	12/01/2015	12/01/2015	12/01/2015	12/01/2015					
Sample Type	Soil	Soil	Soil	Soil	Soil					
Batch Number	1	1	1	1	1					
								LOD/LOR	Units	Method No.
Date of Receipt										TM00/DM45
Antimony	<1 36.2	<1	<1	<1 9.2	<1 9.1			<1	mg/kg	TM30/PM15 TM30/PM15
Arsenic ^{#M} Barium ^{#M}	36.2 86	12.2 51	12.0 34	9.2	38			<0.5 <1	mg/kg mg/kg	TM30/PM15
Beryllium	0.8	0.6	0.6	0.6	<0.5			<0.5	mg/kg	TM30/PM15
Cadmium *M	0.3	0.0	<0.1	0.8	<0.1			<0.1	mg/kg	TM30/PM15
Chromium #M	39.6	27.4	26.5	30.0	24.5			 <0.1	mg/kg	TM30/PM15
Cobalt ^{#M}	6.4	4.9	4.3	4.2	3.4			<0.5	mg/kg	TM30/PM15
Copper #M	12	9	7	12	7			<1	mg/kg	TM30/PM15
Lead ^{#M}	23	15	15	150	14			<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM30/PM15
Molybdenum #M	2.8	1.3	1.6	2.5	1.2			<0.1	mg/kg	TM30/PM15
Nickel #M	14.5	11.0	11.4	12.4	8.4			<0.7	mg/kg	TM30/PM15
Selenium ^{#M}	<1	<1	<1	<1	<1			<1	mg/kg	TM30/PM15
Vanadium	40	36	29	24	31			<1	mg/kg	TM30/PM15
Water Soluble Boron #M	3.2	2.3	1.9	1.6	1.2			<0.1	mg/kg	TM74/PM32
Zinc #M	75	41	39	216	32			<5	mg/kg	TM30/PM15
PAH MS										
Naphthalene #M	<0.04	<0.80 _E	<0.04	0.07	<0.04			<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.07	<0.60 _E	<0.03	0.03	<0.03			<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.06	<1.00 _E	<0.05	0.09	<0.05			<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}	<0.04	<0.80 _E	<0.04	0.05	<0.04			<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M}	0.46	2.59 _E	0.14	0.86	0.25			<0.03	mg/kg	TM4/PM8
Anthracene [#] Fluoranthene ^{#M}	0.19 1.74	1.50 _E	0.05	0.34	0.09			<0.04 <0.03	mg/kg	TM4/PM8 TM4/PM8
Pyrene #	1.74	11.49 _E 10.79 _E	0.43	1.23	0.59			<0.03	mg/kg mg/kg	TM4/PM8
	0.86		0.41	0.65	0.33			<0.03		TM4/PM8
Benzo(a)anthracene * Chrysene *	0.80	5.24 _E 4.59 _E	0.21	0.54	0.29			<0.00	mg/kg mg/kg	TM4/PM8
Benzo(bk)fluoranthene **	1.60	7.61 _E	0.39	0.76	0.48			 <0.02	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.01	5.34 _E	0.26	0.46	0.32			<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}	0.62	3.00 _E	0.16	0.27	0.18			<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.13	<0.80 _E	<0.04	0.05	0.04			<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.64	3.21 _E	0.15	0.27	0.19			<0.04	mg/kg	TM4/PM8
PAH 16 Total	9.9	55.4 _E	2.4	6.7	3.4			<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.15	5.48 _E	0.28	0.55	0.35			<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.45	2.13 _E	0.11	0.21	0.13			<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	101	100 _E	96	99	99			<0	%	TM4/PM8
										1

Client Name:
Reference:
Location:
Contact:
JE Job No.:

R1742B Upper Heyford (Dorchester) Dan Wayland 15/2346

Smith Grant LLP

Report : Solid

JE JOD NO.:	15/2340					 			 L		
J E Sample No.	1-2	3-4	5-6	7-8	9-10						
Sample ID	DIB-W-AGG 7	DIB-W-AGG 8	DIB-W-AGG 9	DIB-SW-AGG 15	DIB-SW-AGG 16						
Depth											
COC No / misc										e attached n ations and a	
Containers	VJ	٧J	VJ	٧J	VJ						
Sample Date	12/01/2015	12/01/2015	12/01/2015	12/01/2015	12/01/2015						
Sample Type	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1					11.25	Method
Date of Receipt	14/01/2015	14/01/2015	14/01/2015	14/01/2015	14/01/2015				LOD/LOR	Units	No.
TPH CWG											
Aliphatics											
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C10-C12 #M	<0.6 _A	<0.2	<0.6 _A	<0.2	<0.8 _D				<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<12 _A	<4	<12 _A	<4	<16 _D				<4	mg/kg	TM5/PM16
>C16-C21 #M >C21-C35 #M	<21 _A	<7	<21 _A	<7	<28 _D				<7	mg/kg	TM5/PM16 TM5/PM16
>C21-C35 """ Total aliphatics C5-35	<21 _A	36 36	<21 _A	54 54	<28 _D				<7 <19	mg/kg	TM5/TM36/PM12/PM16
Aromatics	<57 _A	30	<57 _A	54	<76 _D				<19	mg/kg	
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.6 _A	<0.2	<0.6 _A	<0.2	<0.8 _D				<0.2	mg/kg	TM5/PM16
>EC12-EC16	<12 _A	<4	<12 _A	<4	<16 _D				<4	mg/kg	TM5/PM16
>EC16-EC21	<21 _A	67	<21 _A	<7	<28 _D				<7	mg/kg	TM5/PM16
>EC21-EC35	45 _A	416	100 _A	58	101 _D				<7	mg/kg	TM5/PM16
Total aromatics C5-35	<57 _A	483	100 _A	58	101 _D				<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	<114 _A	519	<114 _A	112	<152 _D				 <38	mg/kg	TM5/TM36/PM12/PM16
MTBE [#]	<5	<5	<5	<5	<5				<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5	<5	<5	<5				<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5	<5	<5	<5				<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	<5				<5	ug/kg	TM31/PM12
m/p-Xylene #	<5	<5	<5	<5	<5				<5	ug/kg	TM31/PM12
o-Xylene #	<5	<5	<5	<5	<5				<5	ug/kg	TM31/PM12
PCBs (Total vs Aroclor 1254)	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Natural Moisture Content	14.5	11.2	7.4	8.7	11.7				<0.1	%	PM4/PM0
Hexavalent Chromium #	0.3	<0.3	<0.3	<0.3	<0.3				<0.3	mg/kg	TM38/PM20
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5	mg/kg	TM89/PM45
Organic Matter	0.8	1.6	0.9	1.4	0.5				<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	1200	644	1500	2004	640				-100		TM76/DM50
pH ^{#M}	1306 10.49	644 10.08	1569 9.39	2881 8.87	612 8.97				<100 <0.01	uS/cm pH units	TM76/PM58 TM73/PM11
pH Sample Type	Sand	Sand	9.39 Sandy Loam	8.87 Sandy Loam					<u><u></u></u>	None	PM13/PM11
	Light Brown	Light Brown		Medium Brown						None	PM13/PM0
										NODe	

Client Name:	Smith Grant LLP
Reference:	R1742B
Location:	Upper Heyford (Dorchester)
Contact:	Dan Wayland

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
					No deviating sample report results for job 15/2346	

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/2346

SOILS

Please note we are only MCERTS accredited for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. If we are instructed to keep samples, a storage charge of £1 (1.5 Euros) per sample per month will be applied until we are asked to dispose of them.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

WATERS

Please note we are not a Drinking Water Inspectorate (DWI) Approved Laboratory . It is important that detection limits are carefully considered when requesting water analysis.

UKAS accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

ABBREVIATIONS and ACRONYMS USED

#	UKAS accredited.
В	Indicates analyte found in associated method blank.
DR	Dilution required.
М	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
СО	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
OC	Outside Calibration Range
A	x3 Dilution
D	x4 Dilution
E	x20 Dilution

JE Job No: 15/2346

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM12/PM16	CWG GC-FID			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes

JE Job No: 15/2346

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM76	Modified US EPA method 120.1. Determination of Specific Conductance by Metrohm automated probe analyser.	PM58	Dried and ground solid samples are extracted with water in a 5:1 water to solid ratio, the samples are shaken on an orbital shaker.			AD	Yes

JE Job No: 15/2346

Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.			AR	Yes
	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection	Description No. (if appropriate) Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Dute	Description No. (if appropriate) Description	Description No. (if appropriate) Description UKAS	Description No. (if appropriate) Description UKAS (soils only)	Appropriate) Interview Description Ones (abis only) (AR) or Dried (AD)

Method Code Appendix



Smith Grant LLP Station House

Station Road

Ruabon Wrexham LL14 6DL

Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point Zone 3 Deeside Industrial Park Deeside CH5 2UA

Tel: +44 (0) 1244 833780 Fax: +44 (0) 1244 833781



Attention :	Dan Wayland
Date :	6th November, 2014
Your reference :	R1742B
Our reference :	Test Report 14/12802 Batch 1
Location :	Upper Heyford (Dorchester)
Date samples received :	23rd October, 2014
Status :	Final report
Issue :	1

Twenty three samples were received for analysis on 23rd October, 2014 of which twenty three were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

h lun

Bruce Leslie Project Co-ordinator

Rjuiellward

Bob Millward BSc FRSC Principal Chemist

Client Name:
Reference:
Location:
Contact:
JE Job No.:

Smith Grant LLP R1742B Upper Heyford (Dorchester) Dan Wayland 14/12802

Report : Solid

											4		
J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20			
Sample ID	SUB-4	DIB-AGG- CENTREL	DIB-SS59	DIB-SS60	DIB-SS63	DIB-SS64	DIB-SS67	DIB-SS68	DIB-SS70	DIB-SS71			
Depth											Please se	e attached n	otes for all
COC No / misc											abbrevi	ations and a	cronyms
Containers	٧J	٧J	٧J	٧J	٧J	٧J	٧J	VJ	٧J	٧J			
Sample Date	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1			1		1		1	1				
		1	1		1		1			1	LOD/LOR	Units	Method No.
Date of Receipt				23/10/2014		23/10/2014	23/10/2014	23/10/2014	23/10/2014				TM00/DM45
Antimony Arsenic ^{#M}	2 18.7	4	1 24.3	3 26.1	<1 11.5	2 28.1	<1 18.2	1 15.1	<1 12.4	2 27.2	<1 <0.5	mg/kg mg/kg	TM30/PM15 TM30/PM15
Barium ^{#M}	96	87	84	103	18	60	45	78	25	94	<1	mg/kg	TM30/PM15
Beryllium	1.1	0.8	1.5	1.5	0.5	1.4	0.9	1.1	0.5	1.7	<0.5	mg/kg	TM30/PM15
Cadmium ^{#M}	0.2	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Chromium ^{#M}	34.6	40.6	42.2	48.4	16.8	56.5	31.2	36.2	18.3	49.8	<0.5	mg/kg	TM30/PM15
Cobalt ^{#M}	8.7	5.2	9.8	12.4	4.1	7.6	8.2	9.1	4.9	12.1	<0.5	mg/kg	TM30/PM15
Copper #M	14	<1	5	<1	<1	<1	<1	1	<1	<1	<1	mg/kg	TM30/PM15
Lead ^{#M} Mercury ^{#M}	27 <0.1	55 <0.1	10 <0.1	20 <0.1	<5 <0.1	37 <0.1	8 <0.1	10 <0.1	<5 <0.1	12 <0.1	<5 <0.1	mg/kg mg/kg	TM30/PM15 TM30/PM15
Molybdenum #M	1.9	2.0	1.9	2.2	0.6	1.3	1.6	1.4	1.0	2.0	<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	19.1	15.1	23.5	27.1	8.1	24.7	19.4	22.3	10.8	27.7	<0.7	mg/kg	TM30/PM15
Selenium ^{#M}	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM30/PM15
Vanadium	56	44	99	99	51	111	52	62	35	119	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	1.3	2.7	1.7	2.9	2.0	0.8	0.9	1.4	1.2	1.3	<0.1	mg/kg	TM74/PM32
Zinc #M	86	86	47	76	18	97	49	621	20	55	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #M	<0.04	<0.40 _A	<0.04	<0.04	<0.04	0.05	<0.04	0.05	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.03	<0.30 _A	<0.03	<0.03	<0.03	0.19	<0.03	0.12	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.50 _A	<0.05	<0.05	<0.05	0.09	<0.05	0.70	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.40 _A	<0.04	<0.04	<0.04	0.07	<0.04	0.55	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.65	3.11 _A	0.30	<0.03	<0.03	2.02	<0.03	9.42	<0.03	0.06	<0.03	mg/kg	TM4/PM8
Anthracene #	0.22	0.81 _A	0.10	<0.04	<0.04	0.71	<0.04	2.72	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	1.70	5.74 _A	0.83	0.05	0.03	4.03	<0.03	9.21	<0.03	0.33	<0.03	mg/kg	TM4/PM8
Pyrene [#] Benzo(a)anthracene [#]	1.48 0.90	4.84 _A 2.11 _A	0.71 0.32	0.03 <0.06	0.03 <0.06	3.36 1.79	<0.03 <0.06	7.10 2.79	<0.03 <0.06	0.33	<0.03 <0.06	mg/kg mg/kg	TM4/PM8 TM4/PM8
Chrysene #M	0.95	2.27 _A	0.52	0.02	0.02	1.65	<0.02	3.04	<0.02	0.21	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	1.79	3.15 _A	0.43	<0.07	<0.07	2.68	<0.07	4.68	<0.07	0.33	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [#]	1.20	1.38 _A	0.24	<0.04	<0.04	1.78	<0.04	3.12	<0.04	0.19	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.73	0.93 _A	0.14	<0.04	<0.04	0.86	<0.04	2.01	<0.04	0.11	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.08	<0.40 _A	<0.04	<0.04	<0.04	0.11	<0.04	0.16	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	0.60	0.83 _A	0.12	<0.04	<0.04	0.80	<0.04	1.38	<0.04	0.11	<0.04	mg/kg	TM4/PM8
PAH 16 Total	10.3 1.29	25.2 _A	3.7	<0.6	<0.6	20.2 1.93	<0.6 <0.05	47.1	<0.6	1.9 0.24	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene Benzo(k)fluoranthene	0.50	2.27 _A 0.88 _A	0.31	<0.05 <0.02	<0.05 <0.02	0.75	<0.05	3.37 1.31	<0.05 <0.02	0.24	<0.05 <0.02	mg/kg mg/kg	TM4/PM8 TM4/PM8
PAH Surrogate % Recovery	104	95 _A	101	102	105	95	103	95	103	103	<0.02	%	TM4/PM8

Client Name:
Reference:
Location:
Contact:
JE Job No.:

R1742B Upper Heyford (Dorchester) Dan Wayland 14/12802

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J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	Ì		
o E dample No.	1-2	3-4	5-0	7-0	3-10	11-12	13-14	13-10	17-10	13-20			
Sample ID	SUB-4	DIB-AGG- CENTREL	DIB-SS59	DIB-SS60	DIB-SS63	DIB-SS64	DIB-SS67	DIB-SS68	DIB-SS70	DIB-SS71			
Depth											Please se	e attached n	otes for all
COC No / misc												ations and a	
Containers	VJ	٧J	٧J	٧J	٧J	٧J	VJ	٧J	٧J	٧J			
			22/10/2014										
Sample Date					22/10/2014				22/10/2014				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method
Date of Receipt	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	200,2011	onno	No.
TPH CWG													
Aliphatics													
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #M	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>C12-C16 #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM16
>C16-C21 #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM16
>C21-C35 #M	<7	46	<7	<7	<7	68	<7	<7	<7	<7	<7	mg/kg	TM5/PM16 TM5/TM36/PM12/PM16
Total aliphatics C5-35 Aromatics	<19	46	<19	<19	<19	68	<19	<19	<19	<19	<19	mg/kg	TM5/TM36/PM12/PM16
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	<4	<4	<4	<4	7	<4	<4	<4	<4	<4	mg/kg	TM5/PM16
>EC16-EC21	22	21	50	<7	<7	109	<7	15	<7	<7	<7	mg/kg	TM5/PM16
>EC21-EC35	145	165	167	<7	<7	418	<7	12	<7	<7	<7	mg/kg	TM5/PM16
Total aromatics C5-35	167	186	217	<19	<19	534	<19	27	<19	<19	<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	167	232	217	<38	<38	602	<38	<38	<38	<38	<38	mg/kg	TM5/TM36/PM12/PM16
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
o-Xylene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
PCBs (Total vs Aroclor 1254)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Natural Moisture Content	15.6	12.4	20.0	15.5	9.3	14.7	13.4	17.8	11.1	17.2	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	0.6	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Organic Matter	1.8	1.6	0.8	1.2	0.2	1.6	0.3	0.8	0.3	1.1	<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	278	512	236	256	160	603	143	145	108	139	<100	uS/cm	TM76/PM58
pH ^{#M}	8.07	11.69	8.38	8.23	8.61	8.77	8.73	8.63	8.91	8.71	<0.01	pH units	TM73/PM11
Sample Type	Clay	Loamy Sand	Clay	Clay	Clay	Clayey Sand	Sand	Clay	Clay	Clay		None	PM13/PM0
Sample Colour	Light Brown	Medium Brown	Medium Brown	-	Light Brown	Medium Brown	Medium Brown		Light Brown	Light Brown		None	PM13/PM0
Other Items	stones	roots, stones	stones	stones	stones, sand	stones	NA	stones	stones, sand	stones		None	PM13/PM0

Client Name:
Reference:
Location:
Contact:
JE Job No.:

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											ı		
J E Sample No.	21	22	23	24	25	26	27	28	29	30			
Sample ID	DIB-SS38A	DIB-SS38B	DIB-SS38C	DIB-SS38D	DIB-SS41A	DIB-SS41B	DIB-SS41C	DIB-SS41D	DIB-SS42A	DIB-SS42B			
Depth											Please se	e attached n	otes for all
COC No / misc												ations and a	
Containers	J	J	J	J	J	J	J	J	J	J			
Sample Date					22/10/2014		22/10/2014			22/10/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method No.
Date of Receipt	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014			
Antimony	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM15
Arsenic ^{#M}	16.6	16.1	21.9	13.9	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM15
Barium ^{#M}	-	-	-	-	-	-	-	-	-	-	<1 <0.5	mg/kg	TM30/PM15 TM30/PM15
Beryllium Cadmium ^{#M}	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg mg/kg	TM30/PM15
Chromium #M	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM15
Cobalt ^{#M}	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM15
Copper #M	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM15
Lead ^{#M}	-	-	-	-	-	-	-	-	16	7	<5	mg/kg	TM30/PM15
Mercury #M	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM15
Molybdenum ^{#M}	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	-	-	-	-	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM15
Selenium #M	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM15
Vanadium	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM15
Water Soluble Boron #M Zinc #M	-	-	-	-	-	-	-	-	-	-	<0.1 <5	mg/kg mg/kg	TM74/PM32 TM30/PM15
Zinc	-	-	-	-	-	-	-	-	-	-	<5	ilig/kg	110130/F10113
PAH MS													
Naphthalene ^{#M}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	0.05	0.12	<0.03	0.04	<0.03	<0.03	<0.03	-	-	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	-	-	<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.05	0.19	0.14	0.03	0.43	<0.03	<0.03	<0.03	-	-	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	0.09	0.12	<0.04	0.19	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.17	0.86	1.68	0.08	1.49	<0.03	0.03	<0.03	-	-	<0.03	mg/kg	TM4/PM8
Pyrene [#]	0.17	0.93	1.57	0.07	1.45	<0.03	0.03	<0.03	-	-	<0.03	mg/kg	TM4/PM8 TM4/PM8
Benzo(a)anthracene [#] Chrysene ^{#M}	0.10	0.58	1.32 1.44	<0.06 0.06	0.78	<0.06 <0.02	<0.06 <0.02	<0.06 <0.02	-	-	<0.06 <0.02	mg/kg mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	0.20	1.52	2.82	<0.07	1.75	<0.02	<0.02	<0.02	-	-	<0.02	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.13	1.08	1.96	0.06	1.23	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}	0.09	0.66	1.19	<0.04	0.75	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	0.09	0.12	<0.04	0.09	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	0.09	0.57	1.07	<0.04	0.66	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
PAH 16 Total	1.1	7.2	13.6	<0.6	9.8	<0.6	<0.6	<0.6	-	-	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.14	1.09	2.03	<0.05	1.26	<0.05	<0.05	<0.05	-	-	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.06	0.43	0.79	<0.02	0.49	<0.02	<0.02	<0.02	-	-	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	95	100	97	105	94	101	93	94	-	-	<0	%	TM4/PM8

Client Name:
Reference:
Location:
Contact:
JE Job No.:

R1742B Upper Heyford (Dorchester) Dan Wayland 14/12802

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Report : Solid

	14/12002		•										
J E Sample No.	21	22	23	24	25	26	27	28	29	30			
Sample ID	DIB-SS38A	DIB-SS38B	DIB-SS38C	DIB-SS38D	DIB-SS41A	DIB-SS41B	DIB-SS41C	DIB-SS41D	DIB-SS42A	DIB-SS42B			
Depth											Discourse		
COC No / misc												e attached n ations and a	
Containers		J	J	J	J	J	J	J	J	J			
	J												
Sample Date	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014	22/10/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method
Date of Receipt	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014	23/10/2014			No.
TPH CWG													
Aliphatics													
>C5-C6 #M	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C6-C8 #M	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C8-C10	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	-	-	-	-	-	-	-	-	-	-	<0.2	mg/kg	TM5/PM16
>C12-C16 #M	-	-	-	-	-	-	-	-	-	-	<4	mg/kg	TM5/PM16
>C16-C21 #M	-	-	-	-	-	-	-	-	-	-	<7	mg/kg	TM5/PM16
>C21-C35 #M	-	-	-	-	-	-	-	-	-	-	<7	mg/kg	TM5/PM16
Total aliphatics C5-35	-	-	-	-	-	-	-	-	-	-	<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics >C5-EC7	-	-	-	-	-	-	-	-	-	-	<0.1	malka	TM36/PM12
>EC7-EC8	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg mg/kg	TM36/PM12 TM36/PM12
>EC8-EC10 ^{#M}	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC10-EC12	-	-	-	-	-	-	-	_	-	-	<0.2	mg/kg	TM5/PM16
>EC12-EC16	-	-	-	-	-	-	-	-	-	-	<4	mg/kg	TM5/PM16
>EC16-EC21	-	-	-	-	-	-	-	-	-	-	<7	mg/kg	TM5/PM16
>EC21-EC35	-	-	-	-	-	-	-	-	-	-	<7	mg/kg	TM5/PM16
Total aromatics C5-35	-	-	-	-	-	-	-	-	-	-	<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	-	-	-	-	-	-	-	-	-	-	<38	mg/kg	TM5/TM36/PM12/PM16
MTBE#	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
Benzene [#]	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
Toluene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
Ethylbenzene #	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
m/p-Xylene [#]	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
o-Xylene [#]	-	-	-	-	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
PCBs (Total vs Aroclor 1254)	-	-	-	-	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Natural Moisture Content	13.7	15.7	19.8	13.0	11.9	8.4	8.5	10.3	-	-	<0.1	%	PM4/PM0
Hexavalent Chromium [#]	-	-	-	-	-	-	-	-	-	-	<0.3	mg/kg	TM38/PM20
	_	_	_	_	-	-		-	_	-	<0.5	ilig/kg	11030/11020
Free Cyanide	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
Complex Cyanide	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
												5.5	
Organic Matter	-	-	-	-	-	-	-	-	-	-	<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	-	-	-	-	-	-	-	-	-	-	<100	uS/cm	TM76/PM58
pH ^{#M}	-	-	-	-	-	-	-	-	-	-	<0.01	pH units	TM73/PM11
Sample Type	Clay	Clay	Clay	Clay	Loamy Sand	Sand	Clayey Loam	Clayey Loam	Clayey Loam	Clay		None	PM13/PM0
Sample Colour	Light Brown	Light Brown	Light Brown	Light Brown	Light Brown	Light Brown	Light Brown	Light Brown	Medium Brown	Light Brown		None	PM13/PM0
Other Items	stones, roots	stones, sand	roots	stones	stones	stones	stones	stones	stones, roots	stones		None	PM13/PM0

Client Name:
Reference:
Location:
Contact:
JE Job No.:

Smith Grant LLP R1742B Upper Heyford (Dorchester) Dan Wayland 14/12802

Report : Solid

								1		
J E Sample No.	31	32								
Sample ID	DIB-SS42C	DIB-SS42D								
Depth								Please se	e attached n	otes for all
COC No / misc									ations and a	
Containers	J	J								
Sample Date	22/10/2014	22/10/2014								
Sample Type	Soil	Soil								
Batch Number	1	1								
								LOD/LOR	Units	Method No.
Date of Receipt	23/10/2014	23/10/2014				_				
Antimony	-	-						<1	mg/kg	TM30/PM15
Arsenic #M	-	-						<0.5	mg/kg	TM30/PM15
Barium #M	-	-						<1	mg/kg	TM30/PM15
Beryllium	-	-						<0.5	mg/kg	TM30/PM15
Cadmium ^{#M}	-	-						<0.1	mg/kg	TM30/PM15
Chromium ^{#M}	-	-						<0.5	mg/kg	TM30/PM15
Cobalt #M	-	-						<0.5	mg/kg	TM30/PM15
Copper #M	-	-						<1	mg/kg	TM30/PM15
Lead #M	10	14						<5	mg/kg	TM30/PM15
Mercury #M	-	-						<0.1	mg/kg	TM30/PM15
Molybdenum #M	-	-						<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	-	-						<0.7	mg/kg	TM30/PM15
Selenium #M	-	-						<1	mg/kg	TM30/PM15
Vanadium	-	-						<1	mg/kg	TM30/PM15
Water Soluble Boron #M	-	-						<0.1	mg/kg	TM74/PM32
Zinc ^{#M}	-	-						<5	mg/kg	TM30/PM15
2110										
PAH MS										
Naphthalene #M		_						<0.04	mg/kg	TM4/PM8
Acenaphthylene	-	_						<0.04	mg/kg	TM4/PM8
Acenaphthene #M	-	-						<0.05	mg/kg	TM4/PM8
Fluorene #M	-	-						<0.04	mg/kg	TM4/PM8
Phenanthrene #M	-	-						<0.03	mg/kg	TM4/PM8
Anthracene #	-	-						<0.04	mg/kg	TM4/PM8
Fluoranthene #M	-	-						<0.03	mg/kg	TM4/PM8
Pyrene #	-	-						<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	-	-						<0.06	mg/kg	TM4/PM8
Chrysene #M	-	-						<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene ^{#M}	-	-						<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	-	-						<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	-	-						<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	-	-						<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	-	-						<0.04	mg/kg	TM4/PM8
PAH 16 Total	-	-						<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	-	-						<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	-	-						<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	-	-						<0	%	TM4/PM8
L		I		I						

Client Name:
Reference:
Location:
Contact:
JE Job No.:

R1742B Upper Heyford (Dorchester) Dan Wayland 14/12802

Smith Grant LLP

Report : Solid

		0.7							
J E Sample No.	31	32							
Sample ID	DIB-SS42C	DIB-SS42D							
Depth								e attached n	
COC No / misc							abbrevi	ations and a	cronyms
Containers	J	J							
Sample Date	22/10/2014	22/10/2014							
Sample Type	Soil	Soil							
Batch Number	1	1					LOD/LOR	Units	Method
Date of Receipt	23/10/2014	23/10/2014							No.
TPH CWG									
Aliphatics									
>C5-C6 #M	-	-					<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	-	-					<0.1	mg/kg	TM36/PM12
>C8-C10	-	-					<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	-	-	 				<0.2	mg/kg	TM5/PM16
>C12-C16 #M	-	-					<4	mg/kg	TM5/PM16
>C16-C21 ^{#M} >C21-C35 ^{#M}	-	-					<7	mg/kg	TM5/PM16
	-	-					<7 <19	mg/kg	TM5/PM16 TM5/TM36/PM12/PM16
Total aliphatics C5-35 Aromatics	-	-					<19	mg/kg	
>C5-EC7	-	-					<0.1	mg/kg	TM36/PM12
>EC7-EC8	-	-					<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	-	-					<0.1	mg/kg	TM36/PM12
>EC10-EC12	-	-					<0.2	mg/kg	TM5/PM16
>EC12-EC16	-	-					<4	mg/kg	TM5/PM16
>EC16-EC21	-	-					<7	mg/kg	TM5/PM16
>EC21-EC35	-	-					<7	mg/kg	TM5/PM16
Total aromatics C5-35	-	-					<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	-	-					<38	mg/kg	TM5/TM36/PM12/PM16
MTBE#	-	-					<5	ug/kg	TM31/PM12
Benzene [#]	-	-					<5	ug/kg	TM31/PM12
Toluene [#]	-	-					<5	ug/kg	TM31/PM12
Ethylbenzene #	-	-					<5	ug/kg	TM31/PM12
m/p-Xylene #	-	-					<5	ug/kg	TM31/PM12
o-Xylene [#]	-	-					<5	ug/kg	TM31/PM12
DODe (Tetel us Asseles (254)							.10		TM16/PM8
PCBs (Total vs Aroclor 1254)	-	-					<10	ug/kg	TIVIT6/PIVI8
Natural Moisture Content	-	-					<0.1	%	PM4/PM0
	-	-					\U.1	/0	
Hexavalent Chromium #	-	-					<0.3	mg/kg	TM38/PM20
Free Cyanide	-	-					<0.5	mg/kg	TM89/PM45
Complex Cyanide	-	-					<0.5	mg/kg	TM89/PM45
Organic Matter	-	-					<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	-	-					<100	uS/cm	TM76/PM58
pH ^{#M}	-	-					<0.01	pH units	TM73/PM11
Sample Type	Clayey Loam	Loam						None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown						None	PM13/PM0
Other Items	stones	stones						None	PM13/PM0

Client Name:
Reference:
Location:
Contact:
JE Job No.:

Smith Grant LLP R1742B Upper Heyford (Dorchester) Dan Wayland 14/12802

Report : Liquid

 $\label{eq:Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle \\ H=H_2SO_4, Z=ZnAc, N=NaOH, HN=HNO_3$

JE Job No.:	14/12802		 	 	$H=H_2SO_4, Z$	∠=∠nAC, N=	NaOH, HN=	HINU ₃			
J E Sample No.	33-35										
Sample ID	DRAIN-1										
Depth									Please se	e attached n	otes for all
COC No / misc										ations and a	
Containers	V G										
Sample Date	22/10/2014										
Sample Type	Ground Water										
Batch Number	1										
Date of Receipt									LOD/LOR	Units	Method No.
Dissolved Arsenic [#]	<0.9								<0.9	ug/l	TM30/PM14
Dissolved Boron	105								<2	ug/l	TM30/PM14
Dissolved Cadmium [#]	<0.03								<0.03	ug/l	TM30/PM14
Total Dissolved Chromium [#]	6.5								<0.2	ug/l	TM30/PM14
Dissolved Copper [#]	<3								<3	ug/l	TM30/PM14
Dissolved Lead [#]	3.0								<0.4	ug/l	TM30/PM14
Dissolved Nickel [#]	0.9								<0.2	ug/l	TM30/PM14
Dissolved Selenium #	<1.2								<1.2	ug/l	TM30/PM14
Dissolved Zinc [#]	1.7								<1.5	ug/l	TM30/PM14
Mercury Dissolved by CVAF #	<0.01								<0.01	ug/l	TM61/PM38
EPH (C8-C40) #	<10								<10	ug/l	TM5/PM30
Hexavalent Chromium	6								<2	ug/l	TM38/PM0
Total Dissolved Chromium III	<2								<2	ug/l	NONE/NONE
											-
											<u> </u>
	L	l									

Client Name:	Smith Gra	nt LLP				SVOC Re	port :	Liquid			
Reference:	R1742B										
Location:	Upper Hey	ford (Dor	chester)								
Contact:	Dan Wayla										
JE Job No.:	14/12802	ana									
JE JOD NO.:	14/12802								_		
J E Sample No.	33-35										
Sample ID	DRAIN-1										
ounpio 12											
Danth											
Depth COC No / misc										e attached r ations and a	
	14.0								abbrevie		oronymo
Containers	V G										
Sample Date	22/10/2014										
Sample Type	Ground Water										T
Batch Number	1								LOD/LOR	Units	Method No.
Date of Receipt	23/10/2014										NU.
SVOC MS											
Phenois											
2-Chlorophenol#	<1								<1	ug/l	TM16/PM30
2-Methylphenol #	<0.5								<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5								<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol #	<0.5								<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1								<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol #	<0.5								<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1								<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol #	<0.5								<0.5	ug/l	TM16/PM30
4-Methylphenol	<1								<1	ug/l	TM16/PM30
4-Nitrophenol	<10								<10	ug/l	TM16/PM30
Pentachlorophenol	<1								<1	ug/l	TM16/PM30
Phenol	<1								<1	ug/l	TM16/PM30
PAHs											1
2-Chloronaphthalene #	<1								<1	ug/l	TM16/PM30
2-Methylnaphthalene#	<1								<1	ug/l	TM16/PM30
Naphthalene #	<1								<1	ug/l	TM16/PM30
Acenaphthylene #	<0.5								<0.5	ug/l	TM16/PM30
Acenaphthene #	<1								<1	ug/l	TM16/PM30
Fluorene [#]	<0.5								<0.5	ug/l	TM16/PM30
Phenanthrene [#]	<0.5								<0.5	ug/l	TM16/PM30
Anthracene #	<0.5								<0.5	ug/l	TM16/PM30
Anthracene [*]	<0.5								<0.5	ug/i ug/i	TM16/PM30
Pluoranthene Pyrene [#]	<0.5								<0.5	ug/i ug/i	TM16/PM30
	<0.5								<0.5	ug/i ug/i	TM16/PM30
Benzo(a)anthracene #	-	1					 				TM16/PM30
Chrysene [#]	<0.5								<0.5	ug/l	1
Benzo(bk)fluoranthene #	<1								<1	ug/l	TM16/PM30
Benzo(a)pyrene	<1								<1	ug/l	TM16/PM30
Indeno(123cd)pyrene	<1								<1	ug/l	TM16/PM30
Dibenzo(ah)anthracene #	<0.5								<0.5	ug/l	TM16/PM30
Benzo(ghi)perylene #	<0.5								<0.5	ug/l	TM16/PM30
Phthalates	-								_	-	
Bis(2-ethylhexyl) phthalate	<5								<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1								<1	ug/l	TM16/PM30
Di-n-butyl phthalate #	<1.5								<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1								<1	ug/l	TM16/PM30
Diethyl phthalate #	<1								<1	ug/l	TM16/PM30
Dimethyl phthalate	<1								<1	ug/l	TM16/PM30
											-
											-
											-
											1
											1
											1
											-
											-
	1			1							1

	Smith Gra R1742B Upper Hey Dan Wayl	/ford (Dorc	hester)		SVOC Re	port :	Liquid			
	14/12802	anu								
								1		
J E Sample No.	33-35									
Sample ID	DRAIN-1									
Depth								 Please se	e attached n	otes for all
COC No / misc									ations and a	
Containers	V G									
Sample Date	22/10/2014									
Sample Type	Ground Water							 		
Batch Number Date of Receipt	1 23/10/2014							LOD/LOR	Units	Method No.
SVOC MS	23/10/2014									
Other SVOCs										
1,2-Dichlorobenzene [#]	<1							<1	ug/l	TM16/PM3
1,2,4-Trichlorobenzene#	<1							<1	ug/l	TM16/PM3
1,3-Dichlorobenzene #	<1							<1	ug/l	TM16/PM3
1,4-Dichlorobenzene#	<1							<1	ug/l	TM16/PM3
2-Nitroaniline	<1							<1	ug/l	TM16/PM3
2,4-Dinitrotoluene [#] 2,6-Dinitrotoluene	<0.5 <1							<0.5 <1	ug/l ug/l	TM16/PM3 TM16/PM3
2,6-Dinitrotoluene 3-Nitroaniline	<1 <1							<1	ug/i ug/i	TM16/PM3 TM16/PM3
4-Bromophenylphenylether #	<1							<1	ug/l	TM16/PM3
4-Chloroaniline	<1							<1	ug/l	TM16/PM3
4-Chlorophenylphenylether #	<1							<1	ug/l	TM16/PM3
4-Nitroaniline	<0.5							<0.5	ug/l	TM16/PM3
Azobenzene [#]	<0.5							<0.5	ug/l	TM16/PM3
Bis(2-chloroethoxy)methane	<0.5							<0.5	ug/l	TM16/PM3
Bis(2-chloroethyl)ether [#]	<1 <0.5							<1 <0.5	ug/l ug/l	TM16/PM3 TM16/PM3
Jarbazole Dibenzofuran [#]	<0.5							<0.5	ug/l	TM16/PM3
Hexachlorobenzene #	<1							<1	ug/l	TM16/PM3
Hexachlorobutadiene#	<1							<1	ug/l	TM16/PM3
Hexachlorocyclopentadiene	<1							<1	ug/l	TM16/PM3
Hexachloroethane #	<1							<1	ug/l	TM16/PM3
sophorone #	<0.5							<0.5	ug/l	TM16/PM3 TM16/PM3
N-nitrosodi-n-propylamine [#]	<0.5 <1							<0.5 <1	ug/l ug/l	TM16/PM3 TM16/PM3
NILODENZENE	~1								ug/i	11110/1 1110
										1
										}
										1
										}
							1			ŀ

Client Name:	Smith Grant LLP
Reference:	R1742B
Location:	Upper Heyford (Dorchester)
Contact:	Dan Wayland

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
					No deviating sample report results for job 14/12802	
					ad in this second. If we complete any listed it is because were used deviation	

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 14/12802

SOILS

Please note we are only MCERTS accredited for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. If we are instructed to keep samples, a storage charge of £1 (1.5 Euros) per sample per month will be applied until we are asked to dispose of them.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

WATERS

Please note we are not a Drinking Water Inspectorate (DWI) Approved Laboratory . It is important that detection limits are carefully considered when requesting water analysis.

UKAS accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

ABBREVIATIONS and ACRONYMS USED

#	UKAS accredited.
В	Indicates analyte found in associated method blank.
DR	Dilution required.
М	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
СО	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
OC	Outside Calibration Range
A	x10 Dilution

JE Job No: 14/12802

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM12/PM16	CWG GC-FID			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				

JE Job No: 14/12802

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.				
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes			
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

JE Job No: 14/12802

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
ТМ36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
ТМЗ8	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.				
ТМЗ8	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM61	Modified US EPA methods 245.7 and 200.7. Determination of Mercury by Cold Vapour Atomic Fluorescence.	PM38	Samples are brominated to reduce all mercury compounds to Mercury (II) which is analysed using method TM061.	Yes			
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM76	Modified US EPA method 120.1. Determination of Specific Conductance by Metrohm automated probe analyser.	PM58	Dried and ground solid samples are extracted with water in a 5:1 water to solid ratio, the samples are shaken on an orbital shaker.			AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.			AR	Yes
NONE	No Method Code	NONE	No Method Code				



Smith Grant LLP Station House

Station Road

Ruabon Wrexham LL14 6DL

Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point Zone 3 Deeside Industrial Park Deeside CH5 2UA

Tel: +44 (0) 1244 833780 Fax: +44 (0) 1244 833781



Attention :	Dan Wayland
Date :	20th October, 2014
Your reference :	R1742B
Our reference :	Test Report 14/12168 Batch 1
Location :	Upper Heyford (Dorchester)
Date samples received :	8th October, 2014
Status :	Final report
Issue :	1

Seventeen samples were received for analysis on 8th October, 2014 of which seventeen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Phil Sommerton BSc Project Manager

Rjuiellward

Bob Millward BSc FRSC Principal Chemist

Client Name:
Reference:
Location:
Contact:
JE Job No.:

Smith Grant LLP R1742B Upper Heyford (Dorchester) Dan Wayland 14/12168

Report : Solid

											4		
J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20			
Sample ID	D1B-SS45	D1B-SS49	D1B-SS55	D1B-SS56	D1B-SS58	D1B-SS62	D1B-SS66	D1B-SS69	D1B-SUB-1	D1B-SUB-2	Please see attached note abbreviations and acro		
Depth	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4					otes for all
COC No / misc													cronyms
Containers	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J			
Sample Date	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1			1		1			1				
		1	1		1		1	1		1	LOD/LOR	Units	Method No.
Date of Receipt		08/10/2014	08/10/2014		08/10/2014		08/10/2014		08/10/2014	08/10/2014			TM20/DM15
Antimony Arsenic ^{#M}	<1 12.1	<1 9.3	<1 16.5	2 19.7	<1 19.4	<1 19.0	<1 14.6	<1 16.1	2 19.6	1 23.9	<1 <0.5	mg/kg mg/kg	TM30/PM15 TM30/PM15
Barium #M	55	15	54	78	105	74	75	109	102	99	<1	mg/kg	TM30/PM15
Beryllium	0.7	<0.5	0.8	1.0	1.2	0.9	0.9	0.9	1.2	1.4	<0.5	mg/kg	TM30/PM15
Cadmium ^{#M}	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.2	<0.1	<0.1	mg/kg	TM30/PM15
Chromium ^{#M}	30.2	14.5	37.4	44.6	49.7	37.9	35.5	37.0	46.9	68.4	<0.5	mg/kg	TM30/PM15
Cobalt ^{#M}	5.2	2.8	6.4	8.6	9.2	7.9	6.5	7.5	8.0	11.7	<0.5	mg/kg	TM30/PM15
Copper #M	24	4	10	17	7	4	6	15	12	4	<1	mg/kg	TM30/PM15
Lead ^{#M} Mercury ^{#M}	15	6	18	37	42	27 <0.1	35 <0.1	63	24 <0.1	27 <0.1	<5	mg/kg	TM30/PM15 TM30/PM15
Molybdenum ^{#M}	<0.1 2.1	<0.1 1.2	<0.1 1.8	<0.1 2.3	<0.1 2.4	1.6	1.3	<0.1 1.5	2.5	3.3	<0.1 <0.1	mg/kg mg/kg	TM30/PM15
Nickel #M	14.4	7.0	14.8	19.2	23.6	20.0	16.2	19.1	18.5	31.1	<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM30/PM15
Vanadium	41	31	50	58	78	66	58	58	58	93	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	1.1	0.5	1.3	1.7	1.3	1.0	1.3	0.9	2.2	1.5	<0.1	mg/kg	TM74/PM32
Zinc #M	44	15	58	114	70	54	59	267	88	70	<5	mg/kg	TM30/PM15
PAH MS	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.04		Th (/ Dh (o
Naphthalene ^{#M} Acenaphthylene	<0.04 <0.03	<0.04 <0.03	<0.04 <0.03	<0.04 <0.03	<0.04 0.06	<0.04 0.19	<0.04	<0.04 0.05	<0.04 0.09	<0.80 _E <0.60 _E	<0.04 <0.03	mg/kg mg/kg	TM4/PM8 TM4/PM8
Acenaphthene #M	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	0.00	<0.05	0.08	<1.00 _E	<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04	<0.04	<0.04	<0.04	0.10	0.07	<0.04	<0.04	<0.80 _E	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.04	<0.03	0.15	0.05	0.42	1.91	1.73	0.67	0.99	<0.60 _E	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	0.07	<0.04	0.14	0.70	0.50	0.17	0.29	<0.80 _E	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.13	0.06	0.33	0.20	1.13	4.21	4.19	1.91	1.63	<0.60 _E	<0.03	mg/kg	TM4/PM8
Pyrene #	0.12	0.08	0.33	0.19	0.95	3.34	3.26	1.50	1.25	<0.60 _E	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.08	0.06	0.21	0.13	0.55	1.81	1.69	0.84	0.71	<1.20 _E	<0.06	mg/kg	TM4/PM8
Chrysene ^{#M} Benzo(bk)fluoranthene ^{#M}	0.08	0.04	0.21	0.13 0.19	0.55	1.70 2.94	1.63 2.73	0.92	0.71 1.24	<0.40 _E <1.40 _E	<0.02 <0.07	mg/kg mg/kg	TM4/PM8 TM4/PM8
Benzo(a)pyrene [#]	0.07	0.03	0.33	0.10	0.58	1.94	1.73	1.04	0.78	<0.80 _E	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}	0.20	<0.04	0.14	0.07	0.50	1.11	0.97	0.61	0.44	<0.80 _E	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.14	<0.04	<0.04	<0.04	0.06	0.16	0.13	0.07	0.07	<0.80 _E	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	0.19	<0.04	0.14	0.07	0.45	0.95	0.87	0.52	0.42	<0.80 _E	<0.04	mg/kg	TM4/PM8
PAH 16 Total	1.2	<0.6	2.1	1.1	6.5	21.2	19.7	9.9	8.7	<12.0 _E	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.09	0.06	0.25	0.14	0.77	2.12	1.97	1.18	0.89	<1.00 _E	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.03	0.03	0.10	0.05	0.30	0.82	0.76	0.46	0.35	<0.40 _E	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	103	113	111	110	110	113	113	115	113	114 _E	<0	%	TM4/PM8

Client Name:
Reference:
Location:
Contact:
JE Job No.:

R1742B Upper Heyford (Dorchester) Dan Wayland 14/12168

Smith Grant LLP

Report : Solid

J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	Ì		
		-					-		-				
Sample ID	D1B-SS45	D1B-SS49	D1B-SS55	D1B-SS56	D1B-SS58	D1B-SS62	D1B-SS66	D1B-SS69	D1B-SUB-1	D1B-SUB-2			
Depth	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4	0.0-0.4			Please se	e attached n	otes for all
COC No / misc												cronyms	
Containers	VJ	VJ	٧J	٧J	VJ	VJ	VJ	٧J	٧J	٧J			
Sample Date	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method No.
Date of Receipt	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014			INO.
TPH CWG													
Aliphatics													
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M >C8-C10	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	mg/kg mg/kg	TM36/PM12 TM36/PM12
>C8-C10 >C10-C12 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg mg/kg	TM36/PM12 TM5/PM16
>C12-C16 ^{#M}	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>C16-C21 #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM16
>C21-C35 #M	<7	<7	<7	<7	157	<7	<7	104	<7	<7	<7	mg/kg	TM5/PM16
Total aliphatics C5-35	<19	<19	<19	<19	157	<19	<19	104	<19	<19	<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics													
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM16
>EC16-EC21	<7	<7	<7	<7	<7	<7	18	15	10	<7	<7	mg/kg	TM5/PM16 TM5/PM16
>EC21-EC35 Total aromatics C5-35	11 <19	<7 <19	19 19	47 47	274 274	41 41	86 104	158 173	54 64	14 <19	<7 <19	mg/kg mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	<38	<38	<38	47	431	41	104	277	64	<38	<38	mg/kg	TM5/TM36/PM12/PM16
MTBE#	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
o-Xylene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
PCBs (Total vs Aroclor 1254)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<500 _F	<10	ug/kg	TM16/PM8
Natural Moisture Content	11.0	8.3	14.0	15.8	15.5	11.0	14.7	15.0	12.7	15.2	<0.1	%	PM4/PM0
Hexavalent Chromium *	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
	.5.0	.5.0		.510	.510	.510	.510			.510			
Organic Matter	0.8	0.3	1.2	1.9	1.5	1.4	1.8	1.3	1.5	1.4	<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	794	151	831	511	193	157	172	288	382	168	<100	uS/cm	TM76/PM58
pH ^{#M}	8.60	8.60	8.76	8.40	8.51	8.51	8.43	8.65	8.09	8.53	<0.01	pH units	TM73/PM11
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay		None	PM13/PM0
Sample Colour	Medium Brown	Light Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones and brick fragment	stones and sand	stones	stones and sand	stones and rrots	stones and sand	stones and roots	stones	stones	stones		None	PM13/PM0

Client Name:
Reference:
Location:
Contact:
JE Job No.:

R1742B Upper Heyford (Dorchester) Dan Wayland 14/12168

Smith Grant LLP

Report : Solid

										-		
J E Sample No.	21-22	23-24	25-26	27-28	29-30	31-32	33-34					
Sample ID	D1B-SUB-3	D1B-SE-S4	D1B-SE-S5	D1B-SE-S6	D1B-SW-S12	D1B-SW-S13	D1B-SW-S14			Please see attached notes		
Depth												otos for all
COC No / misc											cronyms	
Containers	٧J	VJ	٧J	٧J	٧J	٧J	VJ					
Sample Date	07/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014					
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil					1
Batch Number	1	1	1	1	1	1	1			LOD/LOR	Units	Method
Date of Receipt	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014			LOD/LOIX	Offita	No.
Antimony	1	1	1	<1	<1	<1	1			<1	mg/kg	TM30/PM15
Arsenic #M	25.6	18.3	19.3	12.6	14.8	13.8	11.9			<0.5	mg/kg	TM30/PM15
Barium #M	108	146	149	67	74	58	211			<1	mg/kg	TM30/PM15
Beryllium	1.6	1.0	1.1	0.7	0.7	0.7	0.8			<0.5	mg/kg	TM30/PM15
Cadmium ^{#M}	<0.1	0.1	0.2	0.1	<0.1	<0.1	0.9			<0.1	mg/kg	TM30/PM15
Chromium ^{#M}	71.3	49.7	51.2	32.4	38.2	30.4	36.8			<0.5	mg/kg	TM30/PM15
Cobalt ^{#M} Copper ^{#M}	13.5 4	6.4 5	7.8	4.8 7	5.4 2	5.2 5	5.3			<0.5	mg/kg	TM30/PM15
Copper "" Lead ^{#M}	4 27	5 38	8 36	11	2	5 19	12 55			<1 <5	mg/kg mg/kg	TM30/PM15 TM30/PM15
Mercury #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM30/PM15
Molybdenum ^{#M}	3.0	2.2	2.6	1.8	1.9	1.6	2.6			<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	34.1	18.7	24.3	12.8	16.1	15.2	14.3			<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1	<1	<1	<1	<1	<1			<1	mg/kg	TM30/PM15
Vanadium	108	56	56	35	41	40	31			<1	mg/kg	TM30/PM15
Water Soluble Boron #M	2.1	1.5	2.9	3.1	1.2	1.7	1.6			<0.1	mg/kg	TM74/PM32
Zinc #M	69	113	105	55	57	75	230			<5	mg/kg	TM30/PM15
PAH MS												
Naphthalene #M	<0.04	<0.40 _D	1.16 _A	<0.80 _E	0.84 _D	<0.40 _D	<0.40 _D			<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.30 _D	0.34 _A	<0.60 _E	<0.30 _D	0.42 _D	<0.30 _D			<0.03	mg/kg	TM4/PM8
Acenaphthene #M Fluorene #M	<0.05 <0.04	<0.50 _D	1.83 _A	<1.00 _E	1.76 _D	<0.50 _D	<0.50 _D			<0.05 <0.04	mg/kg	TM4/PM8 TM4/PM8
Phenanthrene #M	0.27	<0.40 _D 2.06 _D	1.16 _A 13.35 _A	<0.80 _E 5.41 _E	1.00 _D 11.00 _D	<0.40 _D 1.39 _D	<0.40 _D 1.21 _D			<0.04	mg/kg mg/kg	TM4/PM8
Anthracene #	0.06	0.84p	4.40 _A	1.68 _E	3.71 _D	0.96 _D	<0.40p			<0.03	mg/kg	TM4/PM8
Fluoranthene #M	0.47	9.10 _D	13.96 _A	4.91 _E	14.91 _D	18.92p	1.29p			< 0.03	mg/kg	TM4/PM8
Pyrene [#]	0.41	7.75 _D	10.25 _A	3.30 _E	11.57 _D	15.28 _D	1.04 _D			<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.25	4.28 _D	6.75 _A	1.89 _E	5.76 _D	7.62 _D	0.80 _D			<0.06	mg/kg	TM4/PM8
Chrysene #M	0.26	4.12 _D	5.75 _A	2.03 _E	5.66 _D	7.16 _D	0.70 _D			<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	0.35	7.53 _D	9.46 _A	2.33 _E	8.34 _D	11.85 _D	0.77 _D			<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [#]	0.18	4.21 _D	6.57 _A	0.97 _E	4.96 _D	8.27 _D	0.50 _D			<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene#M	0.16	2.74 _D	3.73 _A	<0.80 _E	3.06 _D	5.36 _D	<0.40 _D			<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.40 _D	0.50 _A	<0.80 _E	<0.40 _D	0.55 _D	<0.40 _D			<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.13	2.56 _D	2.98 _A	<0.80 _E	2.94 _D	4.57 _D	<0.40 _D			<0.04	mg/kg	TM4/PM8
PAH 16 Total	2.5	45.2 _D	82.2 _A	22.5 _E	75.5 _D	82.4 _D	6.3 _D			<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.25	5.42 _D	6.81 _A	1.68 _E	6.00 _D	8.53 _D	0.55 _D			<0.05	mg/kg	TM4/PM8 TM4/PM8
Benzo(k)fluoranthene PAH Surrogate % Recovery	0.10 116	2.11 _D 112 _D	2.65 _A 102 _A	0.65 _E 102 _E	2.34 _D 113 _D	3.32 _D 118 _D	0.22 _D 114 _D			<0.02 <0	mg/kg %	TM4/PM8 TM4/PM8
Gunogato // Recovery		112D	102A	102E	U JD	1100	114D			~0	70	

Client Name:
Reference:
Location:
Contact:
JE Job No.:

R1742B Upper Heyford (Dorchester) Dan Wayland 14/12168

Smith Grant LLP

Report : Solid

5E 500 NO	14/12100							 			
J E Sample No.	21-22	23-24	25-26	27-28	29-30	31-32	33-34				
Sample ID	D1B-SUB-3	D1B-SE-S4	D1B-SE-S5	D1B-SE-S6	D1B-SW-S12	D1B-SW-S13	D1B-SW-S14				
Depth											
COC No / misc										e attached n ations and a	
	N/ 1				N/ 1						
Containers	٧J	VJ	٧J	νJ	νJ	VJ	VJ				
Sample Date	07/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil			n	
Batch Number	1	1	1	1	1	1	1		LOD/LOR	Units	Method
Date of Receipt	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014	08/10/2014		200/2011	onno	No.
TPH CWG											
Aliphatics											
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C8-C10 >C10-C12 ^{#M}	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	0.1 <0.2		<0.1 <0.2	mg/kg mg/kg	TM36/PM12 TM5/PM16
>C10-C12 >C12-C16 ^{#M}	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	mg/kg	TM5/PM16 TM5/PM16
>C16-C21 #M	<7	<7	<7	<7	<7	<7	<7		<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	<7	43	24	64	51	18	113		<7	mg/kg	TM5/PM16
Total aliphatics C5-35	<19	43	24	64	51	<19	113		<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics											
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	0.6	1.4	<0.2	<0.2	<0.2		<0.2	mg/kg	TM5/PM16
>EC12-EC16 >EC16-EC21	<4 <7	<4 50	9 77	18 118	8 86	<4 16	<4 11		<4 <7	mg/kg mg/kg	TM5/PM16 TM5/PM16
>EC10-EC21	<7	323	215	345	321	157	186		<7	mg/kg	TM5/PM16
Total aromatics C5-35	<19	373	302	482	415	173	197		<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	<38	416	326	546	466	173	310		<38	mg/kg	TM5/TM36/PM12/PM16
MTBE [#]	<5	<5	<5	<5	<5	<5	<5		<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5	<5	<5	<5	<5	<5		<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5	<5	<5	<5	<5	<5		<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5		<5	ug/kg	TM31/PM12
m/p-Xylene [#] o-Xylene [#]	<5	<5	<5	<5	<5	<5 <5	<5		<5	ug/kg	TM31/PM12 TM31/PM12
0-Aylene	<5	<5	<5	<5	<5	<5	<5		<5	ug/kg	11001/110112
PCBs (Total vs Aroclor 1254)	<10	<100 _D	<100 _D	<500 _F	<200 _E	<100 _D	<100 _D		<10	ug/kg	TM16/PM8
Natural Moisture Content	17.5	11.0	13.0	10.1	7.2	8.8	5.9		<0.1	%	PM4/PM0
Hexavalent Chromium [#]	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		<0.3	mg/kg	TM38/PM20
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	mg/kg	TM89/PM45
Organic Matter	1.4	1.2	2.6	0.7	0.7	1.2	0.8		<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	177	1091	1757	2294	1684	2169	3737		<100	uS/cm	TM76/PM58
pH ^{#M}	8.35	9.76	9.13	10.26	11.33	11.72	11.90		<0.01	pH units	TM73/PM11
Sample Type	Clay	Clayey Sand	Sand	Clayey Sand	Sand	Clayey Sand	Sand			None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Light Brown	Light Brown	Light Brown			None	PM13/PM0
Other Items	stones	stones and glass	stone and brickfragment	stones and roots	stones	stones and brick fragment	stones and cement			None	PM13/PM0

Client Name:Smith Grant LLPReference:R1742BLocation:Upper Heyford (Dorchester)Contact:Dan Wayland

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

Matrix : Solid

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 14/12168

SOILS

Please note we are only MCERTS accredited for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. If we are instructed to keep samples, a storage charge of £1 (1.5 Euros) per sample per month will be applied until we are asked to dispose of them.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

WATERS

Please note we are not a Drinking Water Inspectorate (DWI) Approved Laboratory . It is important that detection limits are carefully considered when requesting water analysis.

UKAS accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

ABBREVIATIONS and ACRONYMS USED

#	UKAS accredited.
В	Indicates analyte found in associated method blank.
DR	Dilution required.
М	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
СО	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
OC	Outside Calibration Range
A	x5 Dilution
D	x10 Dilution
E	x20 Dilution
F	x50 Dilution

Method Code Appendix

JE Job No: 14/12168

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.			AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.	Yes		AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.	Yes	Yes	AR	Yes
TM5	In-House method based on USEPA 8015B. Determination of Extractable Petroleum Hydrocarbons (EPH) in the carbon chain length range of C8-40 by GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS (carbon banding only) on soils. All accreditation is matrix specific.	PM16	Aliphatic/Aromatic fractionation			AR	Yes
TM5	In-House method based on USEPA 8015B. Determination of Extractable Petroleum Hydrocarbons (EPH) in the carbon chain length range of C8-40 by GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS (carbon banding only) on soils. All accreditation is matrix specific.	PM16	Aliphatic/Aromatic fractionation	Yes	Yes	AR	Yes
TM5/TM36	TPH CWG by GC-FID	PM12/PM16	CWG GC-FID			AR	Yes
PM13	Soil Typing for MCERTS	PM0	No preparation is required.			AR	
TM16	In-House method based on USEPA 8270. Determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS. Accredited to ISO 17025 for waters. All accreditation is matrix specific. Quantification by Internal Standard method.	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.			AR	Yes
TM21	TOC and TC by Combustion	PM24	Eltra preparation			AD	Yes

JE Job No: 14/12168

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
ТМ30	Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry) using Thermo iCAP 6000 series instrument. Accredited to ISO 17025 for soils and waters and MCERTS accredited for Soils. All accreditation is matrix specific.	PM15	In-house method based on USEPA 3010A. Acid digestion of dried and crushed solid samples using Aqua Regia reflux.			AD	Yes
ТМ30	Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry) using Thermo iCAP 6000 series instrument. Accredited to ISO 17025 for soils and waters and MCERTS accredited for Soils. All accreditation is matrix specific.	PM15	In-house method based on USEPA 3010A. Acid digestion of dried and crushed solid samples using Aqua Regia reflux.	Yes	Yes	AD	Yes
TM31	In-house method based on USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID. Accredited to ISO 17025 for soils and waters and MCERTS accredited for soils. Accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific			AR	Yes
TM31	In-house method based on USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID. Accredited to ISO 17025 for soils and waters and MCERTS accredited for soils. Accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific	Yes		AR	Yes
TM36	In-House method based on USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-12 by headspace GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS accredited (carbon banding only) on soils. All accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific			AR	Yes
TM36	In-House method based on USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-12 by headspace GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS accredited (carbon banding only) on soils. All accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific	Yes	Yes	AR	Yes
TM38	Ionic analysis using the Thermo Aquakem Photometric Automatic Analyser. Accredited to ISO17025 and MCERTS for most analytes. All accreditation is matrix specific.	PM20	Solid samples are extracted with two parts de-ionised water to one part solid material for analysis of the extract for various parameters.	Yes		AR	Yes
ТМ73	pH in by Metrohm	PM11	1:2.5 soil/water extraction	Yes	Yes	AR	No
TM74	Water Soluble Boron by ICP-OES	PM32	Preparation of soils for WSB	Yes	Yes	AD	Yes
TM76	Electrical Conductivity by Metrohm	PM58	Preparation of sample for Electrical Conductivity			AD	Yes

JE Job No: 14/12168

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	In-house method based on USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. ISO17025 accredited method for soils and waters and MCERTS on soils. Accreditation is matrix specific.	PM45	Cyanide & Thiocyanate prep for soils			AR	Yes

Method Code Appendix



Smith Grant LLP Station House

Station Road

Ruabon Wrexham LL14 6DL

Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point Zone 3 Deeside Industrial Park Deeside CH5 2UA

Tel: +44 (0) 1244 833780 Fax: +44 (0) 1244 833781



Attention :	Dan Wayland
Date :	7th October, 2014
Your reference :	R1742B (Dorchester)
Our reference :	Test Report 14/11667 Batch 1
Location :	Heyford Park
Date samples received :	25th September, 2014
Status :	Final report
Issue :	1

Twenty samples were received for analysis on 25th September, 2014 of which twenty were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Phil Sommerton BSc Project Manager

Ruielward

Bob Millward BSc FRSC Principal Chemist

Client Name:			
Reference:			
Location:			
Contact:			
JE Job No.:			

Smith Grant LLP R1742B (Dorchester) Heyford Park Dan Wayland 14/11667

Report : Solid

Date of Receips 25092014 2509														
Construct <th>J E Sample No.</th> <th>1-2</th> <th>3-4</th> <th>5-6</th> <th>7-8</th> <th>9-10</th> <th>11-12</th> <th>13-14</th> <th>15-16</th> <th>17-18</th> <th>19-20</th> <th></th> <th></th> <th></th>	J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20			
COC No /me V.J V.J <th< th=""><th>Sample ID</th><th>D1B-SS36</th><th>D1B-SS37</th><th>D1B-SS38</th><th>D1B-SS39</th><th>D1B-SS40</th><th>D1B-SS41</th><th>D1B-SS42</th><th>D1B-SS43</th><th>D1B-SS46</th><th>D1B-SS47</th><th></th><th></th><th></th></th<>	Sample ID	D1B-SS36	D1B-SS37	D1B-SS38	D1B-SS39	D1B-SS40	D1B-SS41	D1B-SS42	D1B-SS43	D1B-SS46	D1B-SS47			
Columnine Image Columnine Sample DVV <th>Depth</th> <th>0.00-0.40</th> <th>Please se</th> <th>e attached n</th> <th>otes for all</th>	Depth	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	Please se	e attached n	otes for all
Semipring <th>COC No / misc</th> <th></th> <th>abbrevi</th> <th>ations and a</th> <th>cronyms</th>	COC No / misc											abbrevi	ations and a	cronyms
SineSineSineSineSineSineSineSineSineSineSineSineBarch Mume111 <th>Containers</th> <th>٧J</th> <th></th> <th></th> <th></th>	Containers	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J			
SineSineSineSineSineSineSineSineSineSineSineSineBarch Mume111 <th>Sample Date</th> <th>24/09/2014</th> <th></th> <th></th> <th></th>	Sample Date	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014			
Batch Numb 1										Soil				
Date of Ree 2003001														
Date of Freezing 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 250/02/14 750/04 750/04 Arusenc ^m 14.0 16.3 40.7 14.7 17.7 19.2 23.0 12.8 14.4 4.4 -1 mg/m 750/04 Barum ^m 65 0.7 10.3 35 63.7 10.1 10.1 10.1 10.1 10.1 40.1												LOD/LOR	Units	Method No.
Absolt 14.0 16.3 40.7 14.7 17.7 19.2 23.9 12.8 14.9 4.0 1.0													-	
barlum**5247103356366443615442r.1mgkgTMOPMBerylum060.71.20.70.01.01.30.51.10.74.05mgkgTMOPMChromium**17.720.135.016.724.025.650.216.528.617.34.05mgkgTMOPMCobalt***5164.09.95.37.710126.6718.88.1mgkgTMOPMCobalt***2215411317186131240.09.86.01.6TMOPMLaad***2215411317186131240.040.1mgkgTMOPMMorcury***-0.00.71.20.60.71.60.80.01.61.60.01.60.84.01mgkgTMOPMNobels****12.113.321.911.015.72.82.510.82.041.64.07.01.01.60.01.61.64.04.01.61.71.71.12.94.07.01.001	-													
Benylum0.680.711.210.710.910.911.010.511.110.710.011.300 PMCadmum ⁴ 0.7120.13.001.504.014.014.014.014.014.011.00 PMCobat ⁴ 5.117.712.013.017.711.011.024.014.014.024.034.0														
CambunO.1O.1O.2O.2O.1O.1O.2O.1O.2O.1 <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>TM30/PM15</th></th<>														TM30/PM15
Chroniun**17.720.135.016.724.925.650.216.528.617.3c.0.5mgkgTM30PMCobalt**5.16.49.95.37.412.18.94.09.86.0-0.5mgkgTM30PMLad**22154113171861312.240.017.6.5mgkgTM30PMMacuy**-0.1-0.14.0113.017.018.06.1-0.1-0.1-0.1mgkgTM30PMMolyddnum**0.90.71.20.50.71.80.80.91.10.10.1mgkgTM30PMMolyddnum**0.91.321.91.01.5.72.380.5710.81.41.20.1mgkgTM30PMMacedwim**-1-1111.71.32.51.80.31.41.71.30.1mgkgTM30PMVaarduo-1-11.10.41.41.71.30.41.30.1mgkgTM30PMVaarduo-1-11.10.41.41.71.10.41.41.71.10.41.41.71.10.51.51.50.71.51.50.51.5MgkgTM30PMVaarduo-1-1-1-11.10.41.71.10.51.51.5MgkgTM30PMVaarduo	•													TM30/PM15
Cobat5.16.49.95.37.41.28.94.09.86.0c.0.5mgkgTM30PMCopper*225141771012677188.01.7mgkgTM30PMLead**22515411317710614.014.														TM30/PM15
CopperM8717171012671886.1mgkgTM30PMLead M221541131718611240.17.16.5mgkgTM30PMMercury M0.90.71.20.50.71.80.80.91.10.94.1mgkgTM30PMNickel M12.113.321.911.015.72.8.82.5.710.82.0.41.2.64.0.7mgkgTM30PMSelenium M111.1<		5.1	6.4	9.9	5.3	7.4	12.1	8.9	4.0	9.8	6.0	<0.5		TM30/PM15
Marcury** c0.1c0.1c0.1c0.1c0.1c0.1c0.1c0.1c0.1mgkgTM30PMMoly6our **0.90.71.20.50.71.60.80.91.10.9c0.1mgkgTM30PMNicket**12.113.321.911.015.723.825.710.820.41.2c1.1mgkgTM30PMVandium414984c1c1c1c1c1c1.11.71.12.61.3c1.1mgkgTM30PMVandum41498448657591345344c1.1mgkgTM30PMVandur1.51.21.70.81.41.71.71.12.61.3c0.1mgkgTM30PMZnc **1.51.21.70.81.41.71.71.12.61.3c0.1mgkgTM3PMPAH MS1.70.81.41.71.71.12.61.3c0.4mgkgTM4PMAcenaphthere* <t< th=""><th>Copper #M</th><th>8</th><th>7</th><th>17</th><th>7</th><th>10</th><th>12</th><th>6</th><th>7</th><th>18</th><th>8</th><th><1</th><th>mg/kg</th><th>TM30/PM15</th></t<>	Copper #M	8	7	17	7	10	12	6	7	18	8	<1	mg/kg	TM30/PM15
Molydenum*0.90.71.20.50.71.60.80.91.10.9d.01mgkgTM30PMNicke**12.113.321.911.015.723.825.710.820.412.6-0.7mgkgTM30PMSelenium**mgkgTM30PMVanadiummgkgTM30PMVanadium**1.51.21.70.81.41.71.71.12.61.3mgkgTM30PMVanadium**644.41122.947577.0511075.0mgkgTM30PMPAH MS<		22	15	41	13	17	18	613	12	40	17	<5	mg/kg	TM30/PM15
Nicket ¹⁴ 12.1 13.3 21.9 11.0 15.7 23.8 25.7 10.8 20.4 12.6 c.7 mgkg TM30PM Selenium ⁴⁴ <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <td< th=""><th></th><th></th><th></th><th>0.4</th><th></th><th></th><th><0.1</th><th></th><th></th><th><0.1</th><th></th><th><0.1</th><th>mg/kg</th><th>TM30/PM15</th></td<>				0.4			<0.1			<0.1		<0.1	mg/kg	TM30/PM15
Selenium***Cr1Cr1Cr1Cr1Cr1Cr1Cr1Cr1Cr1Cr1Maine MVanadum4414984465575591134453444Cr1mg/spTMA/PMWater Schlube Boron***1.51.21.70.81.41.71.71.71.21.30.40mg/spTMA/PMZhe **1.51.21.70.84.77.77.0511.30.40mg/spTMA/PMZhe **1.81.9 <th></th> <th>TM30/PM15</th>														TM30/PM15
Vanadium 41 49 84 48 65 75 91 34 53 44 <1														TM30/PM15
Water Soluble Boron 1.5 1.2 1.7 0.8 1.4 1.7 1.7 1.1 2.6 1.3 <0.1														
Zinc MA6444112294757705110750<5														
PAH MS vo. Vo.<														TM30/PM15
Naphthalene40.04<0.080	Zinc	04		112	20	-11	01	10	01	107	00	10	ing/kg	
Acenaphthylene 0.04 1.21 _A 0.14 <.0.03	PAH MS													
Acenaphthylene 0.04 1.21 _A 0.14 <.0.03	Naphthalene #M	<0.04	<0.80 _A	<0.04	<0.04	<0.04	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluorene ^{MA} <.0.04		0.04	1.21 _A	0.14	<0.03	<0.03	0.07	<0.03	0.04	<0.03	0.05	<0.03	mg/kg	TM4/PM8
Phenanthree ^{#M} 0.23 42.64 0.63 0.21 <0.03	Acenaphthene #M	<0.05	7.31 _A	<0.05	<0.05	<0.05	0.34	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Anthracene [#] 0.11 14.49 _A 0.27 0.08 <0.04		<0.04	5.20 _A	0.04	<0.04	<0.04	0.27	<0.04	0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #M1.01 77.02_A 2.210.400.063.020.120.630.820.60<0.03			42.64 _A										mg/kg	TM4/PM8
Pyrene # 0.92 59.42_A 1.93 0.32 0.04 2.42 0.10 0.51 0.70 0.51 <0.03 mg/kg $TM4/PM$ Benzo(a)anthracene # 0.75 29.44_A 1.35 0.21 <0.06 1.33 0.09 0.29 0.48 0.37 <0.06 mg/kg $TM4/PM$ Chrysene #M 0.69 25.32_A 1.33 0.19 0.03 1.11 0.07 0.30 0.51 0.36 <0.02 mg/kg $TM4/PM$ Benzo(bk)fluoranthene #M 1.14 38.79_A 2.64 0.28 <0.07 1.98 0.10 0.41 0.82 0.55 <0.07 mg/kg $TM4/PM$ Benzo(a)pyrene # 0.76 25.98_A 1.67 0.23 0.04 1.98 0.10 0.41 0.82 0.55 <0.07 mg/kg $TM4/PM$ Indeno(123cd)pyrene # 0.76 25.98_A 1.67 0.23 0.04 1.98 0.02 0.51 0.32 <0.04 mg/kg $TM4/PM$ Indeno(123cd)pyrene # 0.45 14.04_A 1.08 0.14 <0.04 0.79 0.04 0.15 0.32 0.25 <0.04 mg/kg $TM4/PM$ Dibenzo(a)hjanthracene # 0.84 1.94 0.23 <0.04 0.79 0.04 0.15 0.32 <0.04 mg/kg $TM4/PM$ Dibenzo(b)fjuoranthene 0.84 1.26_B 1.09 0.22 <0.64 0.79 0.05 0.16 0.37 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>TM4/PM8</th></td<>														TM4/PM8
Benzo(a)anthracene0.75 29.44_{A} 1.350.21 <0.06 1.330.090.290.480.37 <0.06 mg/kgTM4/PMChrysene0.69 25.32_{A} 1.330.190.031.110.070.300.510.36 <0.02 mg/kgTM4/PMBenzo(bk)fluoranthene1.14 38.79_{A} 2.640.28 <0.07 1.980.100.410.820.55 <0.07 mg/kgTM4/PMBenzo(a)pyrene0.76 25.98_{A} 1.670.230.041.350.080.270.560.37 <0.04 mg/kgTM4/PMIndeno(123cd)pyrene0.4514.04_{A}1.080.14 <0.04 0.790.040.150.320.25 <0.04 mg/kgTM4/PMDibenzo(ah)anthracene0.081.91_{A}0.23 <0.04 0.790.040.150.320.25 <0.04 mg/kgTM4/PMDibenzo(ab)anthracene0.821.91_{A}0.23 <0.04 0.790.040.150.320.25 <0.04 mg/kgTM4/PMBenzo(b)fluoranthene0.441.268_{A}1.090.12 <0.04 0.790.040.150.320.21 <0.04 mg/kgTM4/PMBenzo(b)fluoranthene0.8227.93_{A}1.462.2 <0.64 1.780.790.550.160.370.21 <0.04 mg/kgTM4/PMBenzo(b)fluoranthene0.8227.93_{A}1.46 <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>														
Chrysene ** 0.69 25.32_{A} 1.33 0.19 0.03 1.11 0.07 0.30 0.51 0.36 <0.02 mg/kg $TM4/PM$ Benzo(bk)fluoranthene ** 1.14 38.79_{A} 2.64 0.28 <0.07 1.98 0.10 0.41 0.82 0.55 <0.07 mg/kg $TM4/PM$ Benzo(a)pyrene ** 0.76 25.98_{A} 1.67 0.23 0.04 1.35 0.08 0.27 0.56 0.37 <0.04 mg/kg $TM4/PM$ Indeno(123cd)pyrene ** 0.45 14.04_{A} 1.08 0.14 <0.04 0.79 0.04 0.15 0.32 0.25 <0.04 mg/kg $TM4/PM$ Dibenzo(ah)anthracene ** 0.68 1.91_{A} 0.23 <0.04 <0.79 0.04 0.15 0.32 0.25 <0.04 mg/kg $TM4/PM$ Benzo(ghi)perylene ** 0.44 1.91_{A} 0.23 <0.04 <0.79 0.04 0.16 0.37 0.21 <0.04 mg/kg $TM4/PM$ PAH 16 Total 6.6 355.5_{A} 14.6 2.2 <0.65 1.43 0.77 3.4 5.0 3.6 <0.6 mg/kg $TM4/PM$ Benzo(b/fluoranthene 0.82 27.93_{A} 1.90 0.20 <0.05 1.43 0.77 0.30 0.59 0.40 <0.50 mg/kg $TM4/PM$ Benzo(b/fluoranthene 0.32 10.86_{A} 0.74 0.88 <0.20 0.55 0.33 <														
Benzo(bk)fluoranthene ** 1.14 38.79 _A 2.64 0.28 <0.07														-
Benzo(a)pyrene # 0.76 25.98 _A 1.67 0.23 0.04 1.35 0.08 0.27 0.56 0.37 <0.04	•													TM4/PM8
Indeno(123cd)pyrene ^{#M} 0.45 14.04 _A 1.08 0.14 <0.04														TM4/PM8
Dibenzo(ah)anthracene [#] 0.08 1.91 _A 0.23 <0.04		0.45		1.08	0.14	<0.04	0.79	0.04		0.32	0.25	<0.04		TM4/PM8
PAH 16 Total 6.6 355.5 _A 14.6 2.2 <0.6		0.08		0.23	<0.04	<0.04	0.13	<0.04	<0.04	0.07	0.05	<0.04	mg/kg	TM4/PM8
Benzo(b)fluoranthene 0.82 27.93 $_{A}$ 1.90 0.20 <0.50	Benzo(ghi)perylene [#]	0.44	12.68 _A	1.09	0.12	<0.04	0.79	0.05	0.16	0.37	0.21	<0.04	mg/kg	TM4/PM8
Benzo(k)fluoranthene 0.32 10.86 _A 0.74 0.08 <0.02 0.55 0.03 0.11 0.23 0.15 <0.02 mg/kg TM4/PM	PAH 16 Total	6.6	355.5 _A	14.6	2.2	<0.6	15.8	0.7	3.4	5.0	3.6	<0.6	mg/kg	TM4/PM8
	Benzo(b)fluoranthene		27.93 _A	1.90		<0.05	1.43	0.07	0.30	0.59	0.40	<0.05	mg/kg	TM4/PM8
PAH Surrogate % Recovery 104 102 101 105 106 97 109 102 106 <0														TM4/PM8
	PAH Surrogate % Recovery	104	105 _A	102	101	105	106	97	109	102	106	<0	%	TM4/PM8

Client Name:			
Reference:			
Location:			
Contact:			
JE Job No.:			

Smith Grant LLP R1742B (Dorchester) Heyford Park Dan Wayland 14/11667

Report : Solid

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J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20			
Sample ID	D1B-SS36	D1B-SS37	D1B-SS38	D1B-SS39	D1B-SS40	D1B-SS41	D1B-SS42	D1B-SS43	D1B-SS46	D1B-SS47			
Depth	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	Please se	e attached n	otes for all
COC No / misc												ations and a	
Containers	٧J	٧J											
Sample Date	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014			
Sample Type	Soil	Soil											
Batch Number	1			1	1				1				
		1	1			1	1	1		1	LOD/LOR	Units	Method No.
Date of Receipt	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014			
TPH CWG Aliphatics													
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #M	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM16
>C16-C21 #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	65	<7	<7	<7	<7	20	<7	<7	<7	<7	<7	mg/kg	TM5/PM16
Total aliphatics C5-35 Aromatics	65	<19	<19	<19	<19	20	<19	<19	<19	<19	<19	mg/kg	TND/TND/PM12/PM10
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	16	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM16
>EC16-EC21	17	218	24	70	<7	17	<7	<7	<7	<7	<7	mg/kg	TM5/PM16
>EC21-EC35	140	178	111	358	<7	101	<7	34	29	39	<7	mg/kg	TM5/PM16
Total aromatics C5-35 Total aliphatics and aromatics(C5-35)	157 222	412 412	135	428 428	<19 <38	118 138	<19 <38	34	29 <38	39 39	<19 <38	mg/kg	TM5/TM36/PM12/PM16 TM5/TM36/PM12/PM16
Total aliphatics and aromatics(Co-oo)	222	412	135	420	<30	130	<30	<38	<30	39	<30	mg/kg	This masteria
MTBE [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
o-Xylene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
PCBs (Total vs Aroclor 1254)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Natural Moisture Content	10.6	9.7	9.1	8.9	10.5	10.6	9.7	8.9	11.2	12.6	<0.1	%	PM4/PM0
Hexavalent Chromium	0.6	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Organic Matter	1.2	1.7	2.7	2.9	1.0	4.2	2.7	0.8	2.5	1.1	<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	310	118	126	127	116	218	622	504	174	225	<100	uS/cm	TM76/PM58
pH ^{#M}	8.32	8.56	8.25	8.51	8.43	8.26	8.73	10.91	8.28	8.13	<0.01	pH units	TM73/PM11
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Loam	Clayey Loam		Loam	Loam	Clayey Loam		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown		None	PM13/PM0								
Other Items	Stones	Stones	Stones	Stones, Clay	Stones, Sand	Stones	Stones	Stones	Stones, roots	Stones		None	PM13/PM0

Client Name:			
Reference:			
Location:			
Contact:			
JE Job No.:			

Smith Grant LLP R1742B (Dorchester) Heyford Park Dan Wayland 14/11667

Report : Solid

J E Sample No.	21-22	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38	39-40			
Sample ID	D1B-SS48	D1B-SS50	D1B-SS51	D1B-SS52	D1B-SS53	D1B-SS54	D1B-SS57	HC-SPILE 1A	HC-SPILE 1B	HC-SPILE 1C			
Depth	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40				Please se	e attached n	otes for all
COC No / misc												ations and a	
Containers	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J			
Sample Date	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
											LOD/LOR	Units	Method No.
Date of Receipt		25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014		25/09/2014	25/09/2014			TM00/DM45
Antimony Arsenic ^{#M}	<1 10.7	<1 11.6	<1 13.6	<1 12.5	<1 14.4	<1 15.0	<1 18.1	-	-	-	<1 <0.5	mg/kg	TM30/PM15 TM30/PM15
Barium ^{#M}	27	22	23	48	33	41	64	-	-	-	<0.5	mg/kg mg/kg	TM30/PM15
Beryllium	0.6	0.5	<0.5	0.5	0.6	0.9	1.0	-	-	-	<0.5	mg/kg	TM30/PM15
Cadmium ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	mg/kg	TM30/PM15
Chromium #M	11.7	12.5	11.5	13.0	15.1	24.4	25.3	-	-	-	<0.5	mg/kg	TM30/PM15
Cobalt ^{#M}	4.2	4.7	4.1	3.9	4.5	6.4	7.9	-	-	-	<0.5	mg/kg	TM30/PM15
Copper ^{#M}	7	5	5	6	7	7	10	-	-	-	<1	mg/kg	TM30/PM15
Lead #M	11	5	9	14	10	10	20	-	-	-	<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	mg/kg	TM30/PM15
Molybdenum ^{#M}	1.7	0.6	0.7	0.6	1.2	0.8	0.9	-	-	-	<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	11.0	11.6	9.1	9.4	11.0	14.8	16.4	-	-	-	<0.7	mg/kg	TM30/PM15 TM30/PM15
Selenium ^{#M} Vanadium	<1 29	<1 33	<1 35	<1 36	<1 40	<1 60	<1 64	-	-	-	<1 <1	mg/kg mg/kg	TM30/PM15
Water Soluble Boron #M	1.0	0.7	0.6	1.4	0.8	0.9	1.5	-	-	-	<0.1	mg/kg	TM74/PM32
Zinc ^{#M}	30	22	20	45	36	34	54	-	-	-	<5	mg/kg	TM30/PM15
2.1.0			-	-			-				-	5 5	
PAH MS													
Naphthalene #M	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	-	-	-	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	<0.05	mg/kg	TM4/PM8
Fluorene #M	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.60	<0.03	<0.03	0.27	0.08	<0.03	0.42	-	-	-	<0.03	mg/kg	TM4/PM8
Anthracene [#] Fluoranthene ^{#M}	0.19	<0.04	<0.04	0.09	0.04	<0.04	0.11	-	-	-	<0.04	mg/kg	TM4/PM8 TM4/PM8
Pyrene #	0.63	<0.03 <0.03	0.08	0.56	0.27	<0.03 <0.03	0.77	-	-	-	<0.03 <0.03	mg/kg mg/kg	TM4/PM8
Benzo(a)anthracene [#]	0.43	<0.05	0.07	0.35	0.24	<0.06	0.48	-	-	-	<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}	0.38	<0.02	0.05	0.34	0.18	<0.00	0.49	-	-	-	<0.00	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	0.50	<0.07	0.09	0.58	0.32	<0.07	0.77	-	-	-	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [#]	0.33	<0.04	0.05	0.38	0.24	<0.04	0.53	-	-	-	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.19	<0.04	<0.04	0.24	0.20	<0.04	0.32	-	-	-	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	-	-	-	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.19	<0.04	<0.04	0.23	0.19	<0.04	0.32	-	-	-	<0.04	mg/kg	TM4/PM8
PAH 16 Total	4.4	<0.6	<0.6	3.7	2.0	<0.6	5.3	-	-	-	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.36	<0.05	0.06	0.42	0.23	<0.05	0.55	-	-	-	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene PAH Surrogate % Recovery	0.14 105	<0.02 105	0.03	0.16 98	0.09	<0.02 106	0.22	-	-	-	<0.02 <0	mg/kg %	TM4/PM8 TM4/PM8
1741 Gunogale /0 Kecovery	103	103	103	30	107	100	100	-	-	-	~0	/0	I IVIH/ F' IVIO

Client Name:			
Reference:			
Location:			
Contact:			
JE Job No.:			

Smith Grant LLP R1742B (Dorchester) Heyford Park Dan Wayland 14/11667

Report : Solid

J E Sample No.	21-22	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38	39-40			
Sample ID	D1B-SS48	D1B-SS50	D1B-SS51	D1B-SS52	D1B-SS53	D1B-SS54	D1B-SS57	HC-SPILE 1A	HC-SPILE 1B	HC-SPILE 1C			
Depth	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40				Please se	e attached n	otes for all
COC No / misc											abbrevi	ations and a	cronyms
Containers	٧J												
Sample Date	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014	24/09/2014			
Sample Type	Soil												
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method No.
Date of Receipt	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014	25/09/2014			NO.
TPH CWG													
Aliphatics													
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M >C8-C10	<0.1 <0.1	<0.1 <0.1	mg/kg mg/kg	TM36/PM12 TM36/PM12									
>C10-C12 ^{#M}	33.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	11.5	19.5	15.0	<0.1	mg/kg	TM5/PM12
>C12-C16 ^{#M}	71	<4	<4	<4	<4	<4	<4	154	177	130	<4	mg/kg	TM5/PM16
>C16-C21 #M	<7	<7	<7	<7	<7	<7	<7	141	201	154	<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	<7	<7	<7	<7	<7	<7	11	386	490	390	<7	mg/kg	TM5/PM16
Total aliphatics C5-35	104	<19	<19	<19	<19	<19	<19	693	888	689	<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics													
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 >EC12-EC16	2.0 8	<0.2	<0.2	<0.2 <4	<0.2	<0.2	<0.2 22	<0.2 29	<0.2 28	<0.2 21	<0.2	mg/kg	TM5/PM16 TM5/PM16
>EC12-EC16	° <7	<4 <7	<4 <7	<7	<4 <7	<4 <7	100	102	101	88	<4 <7	mg/kg mg/kg	TM5/PM16
>EC21-EC35	<7	<7	<7	64	<7	<7	172	304	309	253	<7	mg/kg	TM5/PM16
Total aromatics C5-35	<19	<19	<19	64	<19	<19	294	435	438	362	<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	104	<38	<38	64	<38	<38	294	1128	1326	1051	<38	mg/kg	TM5/TM36/PM12/PM16
MTBE [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Toluene [#] Ethylbenzene [#]	<5 <5	<5	<5 <5	<5 <5	<5	ug/kg	TM31/PM12 TM31/PM12						
n/p-Xylene #	<5	<5	<5	<5 <5	<5 <5	<5 <5	<5	<5 <5	<0 <5	<5 <5	<5 <5	ug/kg ug/kg	TM31/PM12 TM31/PM12
o-Xylene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
	-	-	-	-	-	-	-	-	-	-	-		
PCBs (Total vs Aroclor 1254)	<10	<10	<10	<10	<10	<10	<10	-	-	-	<10	ug/kg	TM16/PM8
Natural Moisture Content	16.3	9.9	9.9	10.7	10.9	12.2	8.8	13.0	9.1	13.0	<0.1	%	PM4/PM0
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	-	<0.3	mg/kg	TM38/PM20
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	mg/kg	TM89/PM45
Organic Matter	0.5	0.2	0.4	1.4	0.5	0.6	1.4	1.5	0.7	1.6	<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	210	126	101	305	294	124	145	-	-	-	<100	uS/cm	TM76/PM58
рН ^{#M}	8.96	8.65	8.64	11.03	8.63	8.42	8.34	-	-	-	<0.01	pH units	TM73/PM11
Sample Type	Clayey Loam	Loam	Clayey Loam	Sand	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Loam		None	PM13/PM0
Sample Colour	Medium Brown	Light Brown	Medium Brown	Light Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	Stones	Stones, Roots		None	PM13/PM0								

Client Name:	Smith Grant LLP
Reference:	R1742B (Dorchester)
Location:	Heyford Park
Contact:	Dan Wayland

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
14/11667	1					Samples were received at a temperature above 9°C.

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

Matrix : Solid

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 14/11667

SOILS

Please note we are only MCERTS accredited for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. If we are instructed to keep samples, a storage charge of £1 (1.5 Euros) per sample per month will be applied until we are asked to dispose of them.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

WATERS

Please note we are not a Drinking Water Inspectorate (DWI) Approved Laboratory . It is important that detection limits are carefully considered when requesting water analysis.

UKAS accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

ABBREVIATIONS and ACRONYMS USED

#	UKAS accredited.
В	Indicates analyte found in associated method blank.
DR	Dilution required.
М	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
СО	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
OC	Outside Calibration Range
A	x20 Dilution

Method Code Appendix

JE Job No: 14/11667

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.			AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.	Yes		AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.	Yes	Yes	AR	Yes
TM5	In-House method based on USEPA 8015B. Determination of Extractable Petroleum Hydrocarbons (EPH) in the carbon chain length range of C8-40 by GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS (carbon banding only) on soils. All accreditation is matrix specific.	PM16	Aliphatic/Aromatic fractionation			AR	Yes
TM5	In-House method based on USEPA 8015B. Determination of Extractable Petroleum Hydrocarbons (EPH) in the carbon chain length range of C8-40 by GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS (carbon banding only) on soils. All accreditation is matrix specific.	PM16	Aliphatic/Aromatic fractionation	Yes	Yes	AR	Yes
TM5/TM36	TPH CWG by GC-FID	PM12/PM16	CWG GC-FID			AR	Yes
PM13	Soil Typing for MCERTS	PM0	No preparation is required.			AR	
TM16	In-House method based on USEPA 8270. Determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS. Accredited to ISO 17025 for waters. All accreditation is matrix specific. Quantification by Internal Standard method.	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.			AR	Yes
TM21	TOC and TC by Combustion	PM24	Eltra preparation			AD	Yes

JE Job No: 14/11667

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
ТМ30	Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry) using Thermo iCAP 6000 series instrument. Accredited to ISO 17025 for soils and waters and MCERTS accredited for Soils. All accreditation is matrix specific.	PM15	In-house method based on USEPA 3010A. Acid digestion of dried and crushed solid samples using Aqua Regia reflux.			AD	Yes
ТМ30	Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry) using Thermo iCAP 6000 series instrument. Accredited to ISO 17025 for soils and waters and MCERTS accredited for Soils. All accreditation is matrix specific.	PM15	In-house method based on USEPA 3010A. Acid digestion of dried and crushed solid samples using Aqua Regia reflux.	Yes	Yes	AD	Yes
TM31	In-house method based on USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID. Accredited to ISO 17025 for soils and waters and MCERTS accredited for soils. Accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific			AR	Yes
TM31	In-house method based on USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID. Accredited to ISO 17025 for soils and waters and MCERTS accredited for soils. Accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific	Yes		AR	Yes
ТМ36	In-House method based on USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-12 by headspace GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS accredited (carbon banding only) on soils. All accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific			AR	Yes
TM36	In-House method based on USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-12 by headspace GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS accredited (carbon banding only) on soils. All accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific	Yes	Yes	AR	Yes
ТМ38	Ionic analysis using the Thermo Aquakem Photometric Automatic Analyser. Accredited to ISO17025 and MCERTS for most analytes. All accreditation is matrix specific.	PM20	Solid samples are extracted with two parts de-ionised water to one part solid material for analysis of the extract for various parameters.			AR	Yes
ТМ73	pH in by Metrohm	PM11	1:2.5 soil/water extraction	Yes	Yes	AR	No
TM74	Water Soluble Boron by ICP-OES	PM32	Preparation of soils for WSB	Yes	Yes	AD	Yes
TM76	Electrical Conductivity by Metrohm	PM58	Preparation of sample for Electrical Conductivity			AD	Yes

JE Job No: 14/11667

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	In-house method based on USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. ISO17025 accredited method for soils and waters and MCERTS on soils. Accreditation is matrix specific.	PM45	Cyanide & Thiocyanate prep for soils			AR	Yes

Method Code Appendix



Smith Grant LLP Station House

Station Road

Ruabon Wrexham LL14 6DL

Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point Zone 3 Deeside Industrial Park Deeside CH5 2UA

Tel: +44 (0) 1244 833780 Fax: +44 (0) 1244 833781



Attention :	Dan Wayland
Date :	25th September, 2014
Your reference :	R1742B
Our reference :	Test Report 14/10359 Batch 1
Location :	Upper Heyford (Dorchester)
Date samples received :	11th September, 2014
Status :	Final report
Issue :	1

Fourteen samples were received for analysis on 11th September, 2014 of which fourteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

h lun

Bruce Leslie Project Co-ordinator

Rjuiellward

Bob Millward BSc FRSC Principal Chemist

Client Name:
Reference:
Location:
Contact:
JE Job No.:

Smith Grant LLP R1742B Upper Heyford (Dorchester) Dan Wayland 14/10359

Report : Solid

. – –							10.11		4-		1		
J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17	18			
Sample ID	D1B-SW- AGG1	D1B-SW- AGG2	D1B-SW- AGG3	D1B-SW- AGG4	D1B-SS4B	D1B-SS4C	D1B-SS4D	D1B-SS4E	D1B-SS6B	D1B-SS6C			
Depth					0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	Please se	e attached n	otes for all
COC No / misc												ations and a	
Containers	٧J	VJ	٧J	٧J	VJ	٧J	٧J	٧J	J	J			
Sample Date		10/09/2014	10/09/2014	10/09/2014			10/09/2014	10/09/2014		10/09/2014			
					10/09/2014	10/09/2014			10/09/2014				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method
Date of Receipt	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014			No.
Antimony	<1	1	1	1	-	-	-	-	-	-	<1	mg/kg	TM30/PM15
Arsenic #M	13.4	23.1	45.0	14.0	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM15
Barium ^{#M}	79	96	68	178	-	-	-	-	-	-	<1	mg/kg	TM30/PM15
Beryllium	0.7	1.0	0.8	0.9	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM15
Cadmium ^{#M}	<0.1	0.1	<0.1	0.3	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM15
Chromium ^{#M}	19.2	26.8	19.6	20.9	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM15
Cobalt ^{#M} Copper ^{#M}	4.7 7	6.6 11	6.2 6	6.2 15	-	-	-	-	-	-	<0.5 <1	mg/kg mg/kg	TM30/PM15 TM30/PM15
Lead #M	, 11	21	13	29	-	-	-	-	5	10	<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1	<0.1	0.2	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM15
Molybdenum ^{#M}	0.8	1.2	1.4	1.3	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	13.1	18.5	16.5	14.3	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM15
Selenium ^{#M}	<1	<1	<1	<1	-	-	-	-	-	-	<1	mg/kg	TM30/PM15
Vanadium	37	48	38	37	-	-	-	-	-	-	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	3.0	4.6	3.4	3.6	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM32
Zinc #M	47	73	51	116	-	-	-	-	-	-	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #M	<0.40 _D	<0.40 _D	1.21 _D	<0.20 _A	<0.04	<0.04	<0.04	0.16	-	-	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.30 _D	<0.30 _D	<0.30 _D	<0.15 _A	<0.03	<0.03	<0.03	0.20	-	-	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.91 _D	0.62 _D	1.76 _D	<0.25 _A	<0.05	<0.05	<0.05	0.20	-	-	<0.05	mg/kg	TM4/PM8
Fluorene ^{#M} Phenanthrene ^{#M}	0.67 _D	0.42 _D	1.23 _D	<0.20 _A	<0.04	<0.04	<0.04 <0.03	0.19	-	-	<0.04	mg/kg	TM4/PM8 TM4/PM8
Anthracene #	6.61 _D 1.90 _D	4.52 _D 1.31 _D	13.06 _D 3.54 _D	0.60 _A <0.20 _A	0.59	<0.03 <0.04	<0.03	1.76 0.87	-	-	<0.03 <0.04	mg/kg mg/kg	TM4/PM8
Fluoranthene #M	7.66p	5.25p	14.01 _D	0.89 _A	0.84	<0.04	0.10	6.28	-	-	<0.04	mg/kg	TM4/PM8
Pyrene *	6.19 _D	4.31 _D	10.84 _D	0.03 _A	0.65	<0.03	0.10	5.85	-	-	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	3.48 _D	2.61 _D	5.84 _D	0.54 _A	0.23	<0.06	0.10	3.36	-	-	<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}	3.15 _D	2.28 _D	5.31 _D	0.47 _A	0.34	<0.02	0.09	3.40	-	-	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	4.43 _D	3.31 _D	7.13 _D	0.62 _A	0.49	<0.07	0.21	5.73	-	-	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	2.86 _D	2.26 _D	4.68 _D	0.40 _A	0.28	<0.04	0.15	3.87	-	-	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	1.69 _D	1.40 _D	2.77 _D	0.25 _A	0.21	<0.04	0.10	2.66	-	-	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.40 _D	<0.40 _D	0.49 _D	<0.20 _A	0.05	<0.04	<0.04	0.63	-	-	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	1.54 _D	1.13 _D	2.30 _D	0.22 _A	0.20	<0.04	0.11	2.59	-	-	<0.04	mg/kg	TM4/PM8
PAH 16 Total	41.1 _D	29.4 _D	74.2 _D	4.8 _A	4.0	<0.6	1.0	37.8	-	-	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	3.19 _D	2.38 _D	5.13 _D	0.45 _A	0.35	<0.05	0.15	4.13	-	-	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	1.24 _D	0.93 _D	2.00 _D	0.17 _A	0.14	<0.02	0.06	1.60	-	-	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	97 _D	114 _D	101 _D	92 A	101	107	109	106	-	-	<0	%	TM4/PM8
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J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17	18			
Sample ID	D1B-SW- AGG1	D1B-SW- AGG2	D1B-SW- AGG3	D1B-SW- AGG4	D1B-SS4B	D1B-SS4C	D1B-SS4D	D1B-SS4E	D1B-SS6B	D1B-SS6C			
Depth					0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	Please se	e attached n	otes for all
COC No / misc												ations and a	
Containers	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	J	J			
Sample Date		10/09/2014	10/09/2014		10/09/2014	10/09/2014	10/09/2014	10/09/2014					
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method No.
Date of Receipt	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014	11/09/2014			NU.
TPH CWG													
Aliphatics	0.4										0.4		TH00/D1440
>C5-C6 ^{#M} >C6-C8 ^{#M}	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	-	-	-	-	-	-	<0.1 <0.1	mg/kg	TM36/PM12 TM36/PM12
>C8-C8 >C8-C10	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM50/PM16
>C12-C16 #M	<4	<4	<4	<4	-	-	-	-	-	-	<4	mg/kg	TM5/PM16
>C16-C21 #M	<7	<7	<7	<7	-	-	-	-	-	-	<7	mg/kg	TM5/PM16
>C21-C35 #M	<7	<7	26	153	-	-	-	-	-	-	<7	mg/kg	TM5/PM16
Total aliphatics C5-35	<19	<19	26	153	-	-	-	-	-	-	<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics													
>C5-EC7	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2	<0.2 7	-	-	-	-	-	-	<0.2	mg/kg	TM5/PM16
>EC12-EC16 >EC16-EC21	6 82	<4 20	<4 41	98	-	-	-	-	-	-	<4 <7	mg/kg mg/kg	TM5/PM16 TM5/PM16
>EC21-EC35	231	120	170	393	-	-	-	-	-	-	<7	mg/kg	TM5/PM16
Total aromatics C5-35	319	140	211	498	-	-	-	-	-	-	<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	319	140	237	651	-	-	-	-	-	-	<38	mg/kg	TM5/TM36/PM12/PM16
MTBE [#]	<5	<5	<5	<5	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5	<5	<5	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5	<5	<5	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
m/p-Xylene#	<5	<5	<5	<5	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
o-Xylene [#]	<5	<5	<5	<5	-	-	-	-	-	-	<5	ug/kg	TM31/PM12
PCBs (Total vs Aroclor 1254)	<10	<10	<10	<10	-	-	-	-	-	-	<10	ug/kg	TM16/PM8
Natural Moisture Content	3.8	1.7	1.2	7.0	23.2	8.4	12.7	5.4	-	-	<0.1	%	PM4/PM0
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	-	-	-	-	-	-	<0.3	mg/kg	TM38/PM76
Free Cyanide	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
Organic Matter	1.7	1.2	0.5	1.3	1.5	<0.2	0.2	NDP	-	-	<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	1123	1938	1567	2363	-	-	-	-	-	-	<100	uS/cm	TM76/PM58
pH ^{#M}	10.73	9.40	9.56	10.58	-	-	-	-	-	-	<0.01	pH units	TM73/PM11
Sample Type	Other	Other	Other	Other	Clay	Clay	Clay		Clayey Sand	Clay		None	PM13/PM0 PM13/PM0
Sample Colour Other Items	stones and brick fragment	Light Brown	stones and brick fragment	Light Brown	stones, roots	-	Light Brown stones	Light Brown stones, fibre board	-	Light Brown stones, sand		None None	PM13/PM0 PM13/PM0
	survey and show negment		stores and stick insprints		3101103, 10015	stones	Siones	Siones, nore puello	stones	atomes, sand		none	PIVI 3/PIVI0

Client Name:
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JE Job No.:

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3E 300 NO.:	14/10333										-		
J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17	18			
Sample ID	D1B-SW- AGG1	D1B-SW- AGG2	D1B-SW- AGG3	D1B-SW- AGG4	D1B-SS4B	D1B-SS4C	D1B-SS4D	D1B-SS4E	D1B-SS6B	D1B-SS6C			
Depth					0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40	Please se	e attached n	otes for all
COC No / misc											abbrevi	ations and a	ronyms
Containers	VJ	VJ	VJ	VJ	VJ	VJ	VJ	VJ	J	J			
Sample Date	10/09/2014	10/09/2014	10/09/2014	10/09/2014	10/09/2014	10/09/2014	10/09/2014	10/09/2014	10/09/2014	10/09/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number		1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method No.
Date of Receipt	11/09/2014 -	11/09/2014 -	- 11/09/2014	- 11/09/2014	- 11/09/2014	11/09/2014	- 11/09/2014			- 11/09/2014		-	PM4/PM0
Mass of Dry Sample	-	-	-	-	-	-	-	59.6	-	-	<0.1	g	PIVI4/PIVIU

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JE JOD NO.:	14/10359				 	 	 	L		
J E Sample No.	19	20	21	22						
Sample ID	D1B-SS6D	D1B-SS6E	D1B-SS6F	D1B-SS6G						
Depth	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40						
COC No / misc	0.00 0.10	0.00 0.10	0.00 0.10	0.00 0.10					e attached n ations and a	
Containers	J		J	J						
		J								
Sample Date										
Sample Type	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1				LOD/LOR	Units	Method No.
Date of Receipt	11/09/2014	11/09/2014	11/09/2014	11/09/2014						
Antimony	-	-	-	-				<1	mg/kg	TM30/PM15
Arsenic ^{#M} Barium ^{#M}	-	-	-	-				<0.5	mg/kg	TM30/PM15 TM30/PM15
Barium Beryllium	-	-	-	-				<1 <0.5	mg/kg mg/kg	TM30/PM15 TM30/PM15
Cadmium ^{#M}	-	-	-	-				<0.1	mg/kg	TM30/PM15
Chromium #M	-	-	-	-				<0.5	mg/kg	TM30/PM15
Cobalt ^{#M}	-	-	-	-				<0.5	mg/kg	TM30/PM15
Copper #M	-	-	-	-				<1	mg/kg	TM30/PM15
Lead #M	20	6	7	14				<5	mg/kg	TM30/PM15
Mercury #M	-	-	-	-				<0.1	mg/kg	TM30/PM15
Molybdenum #M	-	-	-	-				<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	-	-	-	-				<0.7	mg/kg	TM30/PM15
Selenium ^{#M} Vanadium	-	-	-	-				<1 <1	mg/kg	TM30/PM15 TM30/PM15
Water Soluble Boron #M	-	-	-	-				<0.1	mg/kg mg/kg	TM74/PM32
Zinc #M	-	-	-	-				<5	mg/kg	TM30/PM15
								-	5 5	
PAH MS										
Naphthalene #M	-	-	-	-				<0.04	mg/kg	TM4/PM8
Acenaphthylene	-	-	-	-				<0.03	mg/kg	TM4/PM8
Acenaphthene #M	-	-	-	-				<0.05	mg/kg	TM4/PM8
Fluorene #M	-	-	-	-				<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M} Anthracene [#]	-	-	-	-				<0.03 <0.04	mg/kg mg/kg	TM4/PM8 TM4/PM8
Fluoranthene #M	-	-	-	-				<0.04	mg/kg	TM4/PM8
Pyrene #	-	-	-	-				<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	-	-	-	-				<0.06	mg/kg	TM4/PM8
Chrysene #M	-	-	-	-				<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	-	-	-	-				<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	-	-	-	-				<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	-	-	-	-				<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	-	-	-	-				<0.04	mg/kg	TM4/PM8 TM4/PM8
Benzo(ghi)perylene [#] PAH 16 Total	-	-	-	-				<0.04 <0.6	mg/kg mg/kg	TM4/PM8
Benzo(b)fluoranthene	-	-	-	-				<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	-	-	-	-				<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	-	-	-	-				<0	%	TM4/PM8
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JE JOD NO.:	14/10359									
J E Sample No.	19	20	21	22						
Sample ID	D1B-SS6D	D1B-SS6E	D1B-SS6F	D1B-SS6G						
Depth	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40					e attached n	
COC No / misc								apprevia	ations and a	ronyms
Containers	J	J	J	J						
Sample Date	10/09/2014	10/09/2014	10/09/2014	10/09/2014						
Sample Type	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1						
								LOD/LOR	Units	Method No.
Date of Receipt	11/09/2014	11/09/2014	11/09/2014	11/09/2014						
TPH CWG										
Aliphatics										
>C5-C6 #M	-	-	-	-				<0.1	mg/kg	TM36/PM12
>C6-C8 #M	-	-	-	-				<0.1	mg/kg	TM36/PM12 TM36/PM12
>C8-C10 >C10-C12 ^{#M}	-	-	-	-				<0.1 <0.2	mg/kg mg/kg	TM36/PM12 TM5/PM16
>C10-C12 >C12-C16 ^{#M}	-	-	-	-				<0.2	mg/kg	TM5/PM16 TM5/PM16
>C12-C16	-	-	-	-				<7	mg/kg	TM5/PM16
>C21-C35 #M	-	-	-	-				<7	mg/kg	TM5/PM16
Total aliphatics C5-35	-	-	-	-				<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics									0.0	
>C5-EC7	-	-	-	-				<0.1	mg/kg	TM36/PM12
>EC7-EC8	-	-	-	-				<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	-	-	-	-				<0.1	mg/kg	TM36/PM12
>EC10-EC12	-	-	-	-				<0.2	mg/kg	TM5/PM16
>EC12-EC16	-	-	-	-				<4	mg/kg	TM5/PM16
>EC16-EC21	-	-	-	-				<7	mg/kg	TM5/PM16
>EC21-EC35	-	-	-	-				<7	mg/kg	TM5/PM16
Total aromatics C5-35	-	-	-	-				<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	-	-	-	-				<38	mg/kg	TM5/TM36/PM12/PM16
								-		TM04/DM40
MTBE [#]	-	-	-	-				<5	ug/kg	TM31/PM12 TM31/PM12
Benzene [#] Toluene [#]	-	-	-	-				<5 <5	ug/kg ug/kg	TM31/PM12
Ethylbenzene #	-	-	-	-				<5	ug/kg	TM31/PM12
m/p-Xylene #	-	-	-	-				<5	ug/kg	TM31/PM12
o-Xylene [#]	-	-	-	-				<5	ug/kg	TM31/PM12
,								_	- 5- 5	
PCBs (Total vs Aroclor 1254)	-	-	-	-				<10	ug/kg	TM16/PM8
Natural Moisture Content	-	-	-	-				<0.1	%	PM4/PM0
Hexavalent Chromium	-	-	-	-				<0.3	mg/kg	TM38/PM76
Free Cyanide	-	-	-	-				<0.5	mg/kg	TM89/PM45
Complex Cyanide	-	-	-	-				<0.5	mg/kg	TM89/PM45
Organic Matter	-	-	-	-				<0.2	%	TM21/PM24
									<u> </u>	Th (70 Th (7
Electrical Conductivity @25C (5:1 ext)	-	-	-	-				<100	uS/cm	TM76/PM58
pH ^{#M}	- Clay	- Sandu Loom	- Sand	- Clay				<0.01	pH units	TM73/PM11
Sample Type	Clay	Sandy Loam	Sand	Clay Light Brown					None	PM13/PM0 PM13/PM0
Sample Colour	-			-					None	
Other Items	stones	stones	stones, clay	stones					None	PM13/PM0

Client Name:	
Reference:	
Location:	
Contact:	
JE Job No.:	

Smith Grant LLP R1742B Upper Heyford (Dorchester) Dan Wayland 14/10359

Report : Solid

JE Job No.:	14/10359				 	 	 	_		
J E Sample No.	19	20	21	22						
Sample ID	D1B-SS6D	D1B-SS6E	D1B-SS6F	D1B-SS6G						
Denth	0.00-0.40	0.00-0.40	0.00-0.40	0.00-0.40						
COC No / misc	0.00 0.40	0.00 0.40	0.00 0.40	0.00 0.40				Please se abbrevia	e attached ne ations and ac	otes for all pronyms
Containers	J	J	J	J						
Sample Date										
Sample Type	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1						Method
Date of Receipt	11/09/2014	11/09/2014	11/09/2014	11/09/2014				LOD/LOR	Units	No.
Mass of Dry Sample	-	-	-	-				<0.1	g	PM4/PM0
										I

Client Name:	Smith Grant LLP
Reference:	R1742B
Location:	Upper Heyford (Dorchester)
Contact:	Dan Wayland

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

If asbestos fibres are reported at trace levels there will not be enough fibres to quantify and will be less than 0.001%.

Signed on behalf of Jones Environmental Laboratory:

CONC

Gemma Newsome Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Description	Asbestos Containing Material	Asbestos Results	Asbestos Level	Comments
14/10359	1	D1B-SS4E	0.00-0.40	16	16/09/14	Soil-Silt/Clay/Brick/Stone	Free Fibres	Chrysotile	Trace	

Smith Grant LLP
R1742B
Upper Heyford (Dorchester)
Dan Wayland

NDP Reason Report

Matrix : Solid

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	NDP Reason
14/10359	1	D1B-SS4E	0.00-0.40	15-16	Asbestos detected in sample

Client Name:	Smith Grant LLP
Reference:	R1742B
Location:	Upper Heyford (Dorchester)
Contact:	Dan Wayland

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
					No deviating sample report results for job 14/10359	
					ad in this second. If we complete an listed it is because were used deviation	

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 14/10359

SOILS

Please note we are only MCERTS accredited for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. If we are instructed to keep samples, a storage charge of £1 (1.5 Euros) per sample per month will be applied until we are asked to dispose of them.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

WATERS

Please note we are not a Drinking Water Inspectorate (DWI) Approved Laboratory . It is important that detection limits are carefully considered when requesting water analysis.

UKAS accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

ABBREVIATIONS and ACRONYMS USED

#	UKAS accredited.
В	Indicates analyte found in associated method blank.
DR	Dilution required.
М	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
СО	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
OC	Outside Calibration Range
A	x5 Dilution
D	x10 Dilution

Method Code Appendix

JE Job No: 14/10359

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.			AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.	Yes		AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.	Yes	Yes	AR	Yes
TM5	In-House method based on USEPA 8015B. Determination of Extractable Petroleum Hydrocarbons (EPH) in the carbon chain length range of C8-40 by GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS (carbon banding only) on soils. All accreditation is matrix specific.	PM16	Aliphatic/Aromatic fractionation			AR	Yes
TM5	In-House method based on USEPA 8015B. Determination of Extractable Petroleum Hydrocarbons (EPH) in the carbon chain length range of C8-40 by GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS (carbon banding only) on soils. All accreditation is matrix specific.	PM16	Aliphatic/Aromatic fractionation	Yes	Yes	AR	Yes
TM5/TM36	TPH CWG by GC-FID	PM12/PM16	CWG GC-FID			AR	Yes
PM13	Soil Typing for MCERTS	PM0	No preparation is required.			AR	
TM16	In-House method based on USEPA 8270. Determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS. Accredited to ISO 17025 for waters. All accreditation is matrix specific. Quantification by Internal Standard method.	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.			AR	Yes

Method Code Appendix

JE Job No: 14/10359

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	TOC and TC by Combustion	PM24	Eltra preparation			AD	Yes
ТМЗО	Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry) using Thermo iCAP 6000 series instrument. Accredited to ISO 17025 for soils and waters and MCERTS accredited for Soils. All accreditation is matrix specific.	PM15	In-house method based on USEPA 3010A. Acid digestion of dried and crushed solid samples using Aqua Regia reflux.			AD	Yes
ТМЗО	Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry) using Thermo iCAP 6000 series instrument. Accredited to ISO 17025 for soils and waters and MCERTS accredited for Soils. All accreditation is matrix specific.	PM15	In-house method based on USEPA 3010A. Acid digestion of dried and crushed solid samples using Aqua Regia reflux.	Yes	Yes	AD	Yes
TM31	In-house method based on USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID. Accredited to ISO 17025 for soils and waters and MCERTS accredited for soils. Accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific			AR	Yes
TM31	In-house method based on USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID. Accredited to ISO 17025 for soils and waters and MCERTS accredited for soils. Accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific	Yes		AR	Yes
TM36	In-House method based on USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-12 by headspace GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS accredited (carbon banding only) on soils. All accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific			AR	Yes
TM36	In-House method based on USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-12 by headspace GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS accredited (carbon banding only) on soils. All accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific	Yes	Yes	AR	Yes
TM38	Ionic analysis using the Thermo Aquakem Photometric Automatic Analyser. Accredited to ISO17025 and MCERTS for most analytes. All accreditation is matrix specific.	PM76	As received samples are extracted using Sodium Hydroxide			AR	Yes
TM65	Asbestos Bulk Identification	PM42	Screening of soils for fibres			AR	
TM65	Asbestos Bulk Identification	PM42	Screening of soils for fibres	Yes		AR	

Method Code Appendix

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
ТМ73	pH in by Metrohm	PM11	1:2.5 soil/water extraction	Yes	Yes	AR	No
TM74	Water Soluble Boron by ICP-OES	PM32	Preparation of soils for WSB	Yes	Yes	AD	Yes
TM76	Electrical Conductivity by Metrohm	PM58	Preparation of sample for Electrical Conductivity			AD	Yes
TM89	In-house method based on USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. ISO17025 accredited method for soils and waters and MCERTS on soils. Accreditation is matrix specific.	PM45	Cyanide & Thiocyanate prep for soils			AR	Yes



Smith Grant LLP Station House

Station Road

Ruabon Wrexham LL14 6DL

Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point Zone 3 Deeside Industrial Park Deeside CH5 2UA

Tel: +44 (0) 1244 833780 Fax: +44 (0) 1244 833781



Attention :	Dan Wayland
Date :	10th September, 2014
Your reference :	R1742B (Dorchester)
Our reference :	Test Report 14/9695 Batch 1
Location :	Upper Hayford
Date samples received :	27th August, 2014
Status :	Final report
Issue :	1

Eleven samples were received for analysis on 27th August, 2014. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

h lun

Bruce Leslie Project Co-ordinator

Ruiellward

Bob Millward BSc FRSC Principal Chemist

Client Name:					
Reference:					
Location:					
Contact:					
JE Job No.:					

Smith Grant LLP R1742B (Dorchester) Upper Hayford Dan Wayland 14/9695

Report : Solid

	mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	Method No.
Sample IDDis-WAGGDis-WAGGDis-WAGGDis-WAGGAGG1AGG2AGGA1AGGA2AGGA2AGGA3AGGB1AGGB1AGGB2DepthCOC No /misVJ <th>We Units M Mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3</th> <th>Method No.</th>	We Units M Mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	Method No.
COC No / misenn<	We Units M Mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	Method No.
CCC No / miningMarcialMarcia	We Units M Mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	Method No.
Sample by Sample typeSolve of Solve of Sample typeSolve of Solve of 	mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	No.
Sample be AgenceSoluce	mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	No.
Sample for Batch MumerNo </th <th>mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3</br></th> <th>No.</th>	mg/kg TM3 mg/kg TM3 mg/kg TM3 	No.
Batch Number111 <th< th=""><th>mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3</th><th>No.</th></th<>	mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	No.
Date of ReceipNome 27/08/2014Nome 	mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	No.
Antimony 3 2 2 <1	mg/kg TM3 mg/kg TM3 mg/kg TM3 mg/kg TM3	
Arsenic *** 16.7 11.3 18.7 13.4 13.1 <t< th=""><th>mg/kg TM3 mg/kg TM3 mg/kg TM3</th><th></th></t<>	mg/kg TM3 mg/kg TM3 mg/kg TM3	
Baium **197701448461	mg/kg TM3	M30/PM15
Beryllium 0.8 0.7 0.9 0.7 0.5 -	mg/kg TM3	M30/PM15
Cadmim#M 0.4 0.3 0.4 0.5 0.2 - - - - - 0.1 Chromium#M 29.8 24.1 23.3 18.5 16.6 - - - - 0.5 <0.5 Cobalt#M 5.4 5.0 6.4 4.2 3.9 - - 0.5 <0.5 <0.5 Copper#M 13 12 18 7 5 - - 0.5 <0.5 <0.5 Lead#M 75 11 26 14 13 - - 0.5 <0.5 <0.5 Mercury#M <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5<	0 0	M30/PM15
Chronium**M 29.8 24.1 23.3 18.5 16.6 - </th <td>mg/kg TM3</td> <td>M30/PM15</td>	mg/kg TM3	M30/PM15
Cobalt M 5.4 5.0 6.4 4.2 3.9 - - - - - <.05	0.0	M30/PM15
Copper**M 13 12 18 7 5 - - - - - <	0 0	M30/PM15
Lead #M 75 11 26 14 13 - - - - <		M30/PM15
Molybdenum#M 1.8 1.6 3.5 0.9 0.8 - - - - <-0.1	mg/kg TM3	M30/PM15
Nickel ^{#M} 14.1 11.9 17.8 10.8 9.9 <0.7	mg/kg TM3	M30/PM15
	mg/kg TM3	M30/PM15
Selenium ^{#M} <1 <1 <1 <1 <1	mg/kg TM3	M30/PM15
	0 0	M30/PM15
Vanadium 36 29 38 31 33 <	0 0	M30/PM15
Water Soluble Boron *** 2.2 2.0 3.4 1.9 1.9 <0.1	0.0	M74/PM32
Zinc ^{#M} 142 51 119 74 47 <- <- <-	mg/kg TM3	M30/PM15
PAH MS		
Naphthalene *** <0.04 <0.04 <0.04 <0.04 <0.04	mg/kg TN	TM4/PM8
Acenaphthylene <0.03 <0.03 <0.03 0.03 <0.03 <0.03		TM4/PM8
Acenaphthene *** < <0.05 <0.05 <0.05 <0.05 < 0.05 < <0.05	mg/kg TM	TM4/PM8
Fluorene *** <0.04 <0.04 <0.04 <0.04 <0.04 <0.04 <0.04	mg/kg TN	TM4/PM8
Phenanthrene M 0.05 0.08 0.12 0.47 0.75 <- <- <- <- <- <- <- <- <-	mg/kg TN	TM4/PM8
Anthracene * <0.04 <0.04 0.05 0.15 0.15 - 	mg/kg TN	TM4/PM8
Fluoranthene # 0.06 0.09 0.27 0.91 1.35 <- <0.03		TM4/PM8
Pyrene [#] 0.06 0.07 0.25 0.79 1.14 <0.03		TM4/PM8
Benzo(a)anthracene [#] 0.07 <0.06 0.12 0.45 0.64 <0.06 Choresne ^{#M} 0.04 0.05 0.18 0.54 0.66 <0.02		TM4/PM8 TM4/PM8
Chrysene #M 0.04 0.05 0.18 0.54 0.66 - - - - <		TM4/PM8
Benzo(a)pyrene * <0.04 <0.04 0.18 0.58 0.60 <0.04		TM4/PM8
Indeno(123cd)pyrene ^{#M} <0.04 <0.04 0.11 0.36 0.39 <0.04		TM4/PM8
Dibenzo(ah)anthracene # <0.04 <0.04 <0.09 0.08 <0.04		TM4/PM8
Benzo(ghi)perylene # <0.04 <0.04 0.08 0.28 0.28 <0.04	0 0	TM4/PM8
PAH 16 Total <0.6 <0.6 1.6 5.6 7.0 <0.6	mg/kg TN	TM4/PM8
Benzo(b)fluoranthene <0.05 <0.05 0.20 0.66 0.68 <- <0.05	mg/kg TN	TM4/PM8
Benzo(k)fluoranthene <0.02 <0.02 0.08 0.25 0.27 <- <0.02		TM4/PM8
PAH Surrogate % Recovery 97 100 102 97 103 - - - - <0	% TN	TM4/PM8

Client Name:					
Reference:					
Location:					
Contact:					
JE Job No.:					

Smith Grant LLP R1742B (Dorchester) Upper Hayford Dan Wayland 14/9695

Report : Solid

											1		
J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20			
Sample ID	D1B-W-AGG1	D1B-W-AGG2	D1B-W-AGG3	D1B-NW- AGG1	D1B-NW- AGG2	UST16-20- AGGA1	UST16-20- AGGA2	UST16-20- AGGA3	UST16-20- AGGB1	UST16-20- AGGB2			
Depth											Please se	e attached n	otes for all
COC No / misc											abbrevi	ations and a	cronyms
Containers	V J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J	٧J			
Sample Date	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			Method
Date of Receipt	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	LOD/LOR	Units	No.
TPH CWG													
Aliphatics													
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #M	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>C12-C16 #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM16
>C16-C21 #M	<7	<7	<7	<7	<7	23	<7	<7	19	13	<7	mg/kg	TM5/PM16
>C21-C35 #M	<7	21	29	35	<7	10	<7	<7	177	128	<7	mg/kg	TM5/PM16
Total aliphatics C5-35	<19	21	29	35	<19	33	<19	<19	196	141	<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics													
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M} >EC10-EC12	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	<0.1 <0.2	mg/kg	TM36/PM12 TM5/PM16
>EC10-EC12 >EC12-EC16	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg mg/kg	TM5/PM16
>EC16-EC21	<7	<7	12	<7	<7	<7	<7	<7	32	<7	<7	mg/kg	TM5/PM16
>EC10 EC21	<7	<7	58	123	69	<7	<7	<7	160	58	<7	mg/kg	TM5/PM16
Total aromatics C5-35	<19	<19	70	123	69	<19	<19	<19	192	58	<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	<38	<38	99	158	69	<38	<38	<38	388	199	<38	mg/kg	TM5/TM36/PM12/PM16
MTBE#	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
m/p-Xylene#	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
o-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
PCBs (Total vs Aroclor 1254)	<10	<10	<10	<10	<10	-	-	-	-	-	<10	ug/kg	TM16/PM8
Natural Moisture Content	15.1	14.3	15.7	9.3	13.3	13.0	14.8	12.1	16.0	14.7	<0.1	%	PM4/PM0
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	-	-	-	<0.3	mg/kg	TM38/PM76
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
Complex Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	<0.5	mg/kg	TM89/PM45
Organic Matter	0.7	0.6	1.2	0.3	0.2	-	-	-	-	-	<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)	1992	2251	2458	2605	1434	-	-	-	_	-	<100	uS/cm	TM76/PM58
pH ^{#M}	1992	8.98	9.15	11.82	1434	-	-	-	-	-	<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand	Sand	Sand	Sand	-	-	-	-	-		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Light Brown	-	-	-	-	-		None	PM13/PM0
Other Items	stones and brick fragment	stones and brick fragment	stones and wood	stones	stones	-	-	-	-	-		None	PM13/PM0

Client Name:					
Reference:					
Location:					
Contact:					
JE Job No.:					

Smith Grant LLP R1742B (Dorchester) Upper Hayford Dan Wayland 14/9695

Report : Solid

J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20			
	D1B-W-AGG1	D1B-W-AGG2	D1B-W-AGG3	D1B-NW- AGG1	D1B-NW- AGG2	UST16-20- AGGA1	UST16-20- AGGA2	UST16-20- AGGA3	UST16-20- AGGB1	UST16-20- AGGB2			
Depth											Disease	e attached n	
COC No / misc												ations and ac	
Containers	٧J	٧J	٧J	٧J	VJ	VJ	٧J	VJ	٧J	٧J			
Sample Date	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014	26/08/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			Method
Date of Receipt	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	27/08/2014	LOD/LOR	Units	No.
Mass of Dry Sample	61.7	52.0	53.9	47.1	54.9	-	-	-	-	-	<0.1	g	PM4/PM0

Jones Environmental Laboratory Smith Grant LLP Client Name:

Reference: Location: Contact: JE Job No.: R1742B (Dorchester) Upper Hayford Dan Wayland 14/9695

Report : Solid

Dato of Receipt 27.08/2014 Image Image </th <th>3E 305 No</th> <th>14/3033</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	3E 305 No	14/3033							
Addition	J E Sample No.	21-22							
COC No / mic U Contains Contains U Contains Contains <thcontains< th=""> Contains <thcont< th=""><th>Sample ID</th><th>UST16-20- AGGB3</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></thcont<></thcontains<>	Sample ID	UST16-20- AGGB3							
COC No /me V V Image: Some of the sector of	Depth						Please se	e attached n	notes for all
Sample Day Zold Zold Sample Type Soil Soil <th>COC No / misc</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	COC No / misc								
Sample Type Sole	Containers	٧J							
Sample Type Sole	Sample Date	26/08/2014							
Batch Number 1 Image									
Date of Record 2708/2014 Image Image <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									
Lotted of Maccer pri Lotted of							LOD/LOR	Units	Method No.
Arsence ⁴⁴ </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									
Barkur M I Lad M I I I I I <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>TM30/PM15</th>									TM30/PM15
Bendium · · · · ·<									TM30/PM15 TM30/PM15
Cadnium ⁴⁴ </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>TM30/PM15</th>									TM30/PM15
Chomium ^M <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>TM30/PM15</th></t<>									TM30/PM15
Cobsh ⁴⁴ <td< th=""><th></th><th>-</th><th></th><th></th><th></th><th></th><th></th><th></th><th>TM30/PM15</th></td<>		-							TM30/PM15
CopperMa mg/m Mage Laad Ma <		-					<0.5		TM30/PM15
Mercury Methodumum Co.1 mg/kg TM30 Nickel ^M <		-					<1	mg/kg	TM30/PM15
Molybdenum** ··· Variar ···· ···· ···· ···· ···· ···· ···· ···· ···· ···· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· ··· </th <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th> <th><5</th> <th>mg/kg</th> <th>TM30/PM15</th>		-					<5	mg/kg	TM30/PM15
Nickel ^M		-					<0.1	mg/kg	TM30/PM15
Selenium MA <t< th=""><th></th><th>-</th><th></th><th></th><th></th><th></th><th></th><th></th><th>TM30/PM15</th></t<>		-							TM30/PM15
Vanadium									TM30/PM15
Water Soluble Boron ** Image Image <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>TM30/PM15</th>									TM30/PM15
Zine Manage Image Image <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>TM30/PM15 TM74/PM32</th>									TM30/PM15 TM74/PM32
PAH MSImage: Market									TM30/PM15
Naphthalene **	ZIIIC	-						ilig/kg	11030/110113
Acenaphthylene <th>PAH MS</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	PAH MS								
Acenaphthylene <th>Naphthalene #M</th> <th>-</th> <th></th> <th></th> <th></th> <th></th> <th><0.04</th> <th>mg/kg</th> <th>TM4/PM8</th>	Naphthalene #M	-					<0.04	mg/kg	TM4/PM8
Fluoree #M <t< th=""><th></th><th>-</th><th></th><th></th><th></th><th></th><th><0.03</th><th>mg/kg</th><th>TM4/PM8</th></t<>		-					<0.03	mg/kg	TM4/PM8
Phenanthrene **MImage: second se	Acenaphthene #M	-					<0.05	mg/kg	TM4/PM8
Anthracene #mg/kgTM4Fluoranthene #MMg/kgTM4Pyrene #Mg/kgTM4Benzo(a)anthracene #Mg/kgTM4Chrysene #MMg/kgTM4Benzo(b)fluoranthene #MMg/kgTM4Benzo(a)anthracene #Mg/kgTM4Benzo(b)fluoranthene #MMg/kgTM4Benzo(a)anthracene #Mg/kgTM4Benzo(b)fluoranthene #MMg/kgTM4Benzo(a)anthracene #Mg/kgTM4Benzo(a)pyrene #Mg/kgTM4Benzo(ghi)perylene #Mg/kgTM4Benzo(ghi)perylene #Mg/kgTM4PAH 16 TotalMg/kgTM4Benzo(b)fluorantheneMg/kgTM4Benzo(b)fluorantheneMg/kgTM4Benzo(b)fluoranthene </th <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th> <th><0.04</th> <th>mg/kg</th> <th>TM4/PM8</th>		-					<0.04	mg/kg	TM4/PM8
Fluoranthene #MImage: Mode of the sector		-						mg/kg	TM4/PM8
Pyrene #mg/kgTM4Benzo(a)anthracene #Image: Constraint of the second		-							TM4/PM8
Benzo(a)anthracene # mg/kg MM/kg Chrysene #M mg/kg MM/kg Benzo(b)fluoranthene #M mg/kg MM/kg Benzo(b)fluoranthene #M mg/kg MM/kg Benzo(b)fluoranthene #M mg/kg MM/kg Benzo(a)pyrene #M mg/kg MM/kg Indeno(123cd)pyrene #M mg/kg MM/kg Dibenzo(ah)anthracene # Mg/kg MM/kg Benzo(ghi)perylene # Mg/kg MM/kg Benzo(ghi)perylene # Mg/kg MM/kg PAH 16 Total Mg/kg MM/kg Mg/kg MM/kg									TM4/PM8
Chrysene #M - - mg/kg TM4 Benzo(bk)fluoranthene #M - - Mg/kg TM4 Benzo(a)pyrene # - - Mg/kg TM4 Indeno(123cd)pyrene #M - - Mg/kg TM4 Dibenzo(ah)anthracene # - - Mg/kg TM4 Benzo(ghi)perylene #M - - Mg/kg TM4 Dibenzo(ah)anthracene # - - Mg/kg TM4 Benzo(ghi)perylene # - - Mg/kg TM4 Benzo(ghi)perylene # - - Mg/kg TM4 Benzo(ghi)perylene # - - - Mg/kg TM4 Benzo(ghi)perylene # - - - - Mg/kg TM4 PAH 16 Total - - - - - - Mg/kg TM4 Benzo(b)fluoranthene - - - - - - - - Mg/kg TM4 PAH 16 Total - - - - - -		-							TM4/PM8 TM4/PM8
Benzo(b)(fluoranthene ^{#M} mg/kg TM4 Benzo(a)pyrene ^{#M} mg/kg TM4 Indeno(123cd)pyrene ^{#M} mg/kg TM4 Dibenzo(ah)anthracene ^{#M}		-							TM4/PM8
Benzo(a)pyrene # mg/kg TM4 Indeno(123cd)pyrene #M <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>TM4/PM8</th>									TM4/PM8
Indeno(123cd)pyrene ^{#M} - - Mg/kg TM4 Dibenzo(ah)anthracene [#] - - Mg/kg TM4 Benzo(ghi)perylene [#] - - Mg/kg TM4 PAH 16 Total - - - Mg/kg TM4 Benzo(b)fluoranthene - - - Mg/kg TM4		-							TM4/PM8
Dibenzo(ah)anthracene* - model model <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>TM4/PM8</th>		-							TM4/PM8
PAH 16 Total - TM4 Benzo(b)fluoranthene - TM4		-					<0.04		TM4/PM8
Benzo(b)fluoranthene - <0.05 mg/kg TM4	Benzo(ghi)perylene [#]	-					<0.04	mg/kg	TM4/PM8
	PAH 16 Total	-					<0.6	mg/kg	TM4/PM8
		-						mg/kg	TM4/PM8
	Benzo(k)fluoranthene						<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery - <	PAH Surrogate % Recovery	-					<0	%	TM4/PM8
									-

Jones Environmental Laboratory Client Name: Smith Grant LLP Report : Solid Reference: R1742B (Dorchester) Solids: V=60g VOC ji Location: Upper Hayford Solids: V=60g VOC ji

Dan Wayland

14/9695

Contact: JE Job No.:

JE JOD NO.:	14/9695	 	 	 	 	 _		
J E Sample No.	21-22							
Sample ID	UST16-20- AGGB3							
Denth								
Depth							e attached n ations and a	
COC No / misc								
Containers	٧J					1		
Sample Date	26/08/2014					1		
Sample Type	Soil							
Batch Number	1						11.25	Method
Date of Receipt	27/08/2014					LOD/LOR	Units	No.
TPH CWG								
Aliphatics								
>C5-C6 #M	<0.1					<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1					<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1					<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2					<0.2	mg/kg	TM5/PM16
>C12-C16 #M >C16-C21 #M	<4 <7					<4 <7	mg/kg	TM5/PM16 TM5/PM16
>C16-C21 **** >C21-C35 #M	</td <td></td> <td></td> <td></td> <td></td> <td><7</td> <td>mg/kg mg/kg</td> <td>TM5/PM16 TM5/PM16</td>					<7	mg/kg mg/kg	TM5/PM16 TM5/PM16
Total aliphatics C5-35	101					<19	mg/kg	TM5/TM36/PM12/PM16
Aromatics	101					10	ing/kg	
>C5-EC7	<0.1					<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1					<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1					<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2					<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4					<4	mg/kg	TM5/PM16
>EC16-EC21	19					<7	mg/kg	TM5/PM16
>EC21-EC35	127					<7	mg/kg	TM5/PM16
Total aromatics C5-35	146					<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	247					<38	mg/kg	TM5/TM36/PM12/PM16
MTBE #	<5					<5	ug/kg	TM31/PM12
Benzene [#]	<5					<5	ug/kg	TM31/PM12
Toluene [#]	<5					<5	ug/kg	TM31/PM12
Ethylbenzene #	<5					<5	ug/kg	TM31/PM12
m/p-Xylene [#]	<5					<5	ug/kg	TM31/PM12
o-Xylene [#]	<5					<5	ug/kg	TM31/PM12
						10		TM16/PM8
PCBs (Total vs Aroclor 1254)	-					<10	ug/kg	TM16/PM8
Natural Moisture Content	11.8					<0.1	%	PM4/PM0
Hexavalent Chromium	-					<0.3	mg/kg	TM38/PM76
Free Cyanide	-					<0.5	mg/kg	TM89/PM45
Complex Cyanide	-					<0.5	mg/kg	TM89/PM45
Organic Matter	-					<0.2	%	TM21/PM24
Electrical Conductivity @25C (5:1 ext)						-100		TM76/PM58
pH ^{#M}	-					<100 <0.01	uS/cm pH units	TM76/PM58 TM73/PM11
pH ^{am} Sample Type	-					<u><u></u></u>	None	PM13/PM11
Sample Colour	-						None	PM13/PM0
Other Items	-						None	PM13/PM0

Jones Environmental Laboratory													
Client Name: Reference: Location:	Smith Gra R1742B (I Upper Ha	Dorchester	.)				Report : Solids: V=	Solid 60g VOC ja	r, J=250g gl	ass jar, T=p	lastic tub		
Contact: JE Job No.:	Dan Wayl 14/9695							0 ,					
J E Sample No.	21-22												
Sample ID	UST16-20- AGGB3												
Depth											Plaasa sa	e attached n	otos for all
COC No / misc											abbrevi	ations and ac	cronyms
Containers	٧J												
Sample Date	26/08/2014												
Sample Type	Soil											1	
Batch Number											LOD/LOR	Units	Method No.
Date of Receipt													
Mass of Dry Sample	-										<0.1	g	PM4/PM0

Client Name:	Smith Grant LLP
Reference:	R1742B (Dorchester)
Location:	Upper Hayford
Contact:	Dan Wayland

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason							
	No deviating sample report results for job 14/9695												

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 14/9695

SOILS

Please note we are only MCERTS accredited for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. If we are instructed to keep samples, a storage charge of £1 (1.5 Euros) per sample per month will be applied until we are asked to dispose of them.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

WATERS

Please note we are not a Drinking Water Inspectorate (DWI) Approved Laboratory . It is important that detection limits are carefully considered when requesting water analysis.

UKAS accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

ABBREVIATIONS and ACRONYMS USED

#	UKAS accredited.
В	Indicates analyte found in associated method blank.
DR	Dilution required.
М	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
СО	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
OC	Outside Calibration Range

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.			AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.	Yes		AR	Yes
TM4	16 PAH by GC-MS, modified USEPA 8270	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.	Yes	Yes	AR	Yes
TM5	In-House method based on USEPA 8015B. Determination of Extractable Petroleum Hydrocarbons (EPH) in the carbon chain length range of C8-40 by GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS (carbon banding only) on soils. All accreditation is matrix specific.	PM16	Aliphatic/Aromatic fractionation			AR	Yes
TM5	In-House method based on USEPA 8015B. Determination of Extractable Petroleum Hydrocarbons (EPH) in the carbon chain length range of C8-40 by GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS (carbon banding only) on soils. All accreditation is matrix specific.	PM16	Aliphatic/Aromatic fractionation	Yes	Yes	AR	Yes
TM5/TM36	TPH CWG by GC-FID	PM12/PM16	CWG GC-FID			AR	Yes
PM13	Soil Typing for MCERTS	PM0	No preparation is required.			AR	
TM16	In-House method based on USEPA 8270. Determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS. Accredited to ISO 17025 for waters. All accreditation is matrix specific. Quantification by Internal Standard method.	PM8	In-house method based on USEPA 3510. ISO 17025 accredited extraction method for organic extraction from solid samples using an end over end agitator.			AR	Yes

Method Code Appendix

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	TOC and TC by Combustion	PM24	Eltra preparation			AD	Yes
TM30	Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry) using Thermo iCAP 6000 series instrument. Accredited to ISO 17025 for soils and waters and MCERTS accredited for Soils. All accreditation is matrix specific.	PM15	In-house method based on USEPA 3010A. Acid digestion of dried and crushed solid samples using Aqua Regia reflux.			AD	Yes
TM30	Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry) using Thermo iCAP 6000 series instrument. Accredited to ISO 17025 for soils and waters and MCERTS accredited for Soils. All accreditation is matrix specific.	PM15	In-house method based on USEPA 3010A. Acid digestion of dried and crushed solid samples using Aqua Regia reflux.	Yes	Yes	AD	Yes
TM31	In-house method based on USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID. Accredited to ISO 17025 for soils and waters and MCERTS accredited for soils. Accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific			AR	Yes
TM31	In-house method based on USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID. Accredited to ISO 17025 for soils and waters and MCERTS accredited for soils. Accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific	Yes		AR	Yes
TM36	In-House method based on USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-12 by headspace GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS accredited (carbon banding only) on soils. All accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific			AR	Yes
TM36	In-House method based on USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-12 by headspace GC-FID. Accredited to ISO 17025 on soil and water samples and MCERTS accredited (carbon banding only) on soils. All accreditation is matrix specific.	PM12	In-house method based on USEPA 5021. Preparation of solid and liquid samples for headspace analysis. Samples are spiked with surrogates to facilitate quantification. ISO 17025 accredited extraction method. All accreditation is matrix specific	Yes	Yes	AR	Yes
TM38	Ionic analysis using the Thermo Aquakem Photometric Automatic Analyser. Accredited to ISO17025 and MCERTS for most analytes. All accreditation is matrix specific.	PM76	As received samples are extracted using Sodium Hydroxide			AR	Yes
TM65	Asbestos Bulk Identification	PM42	Screening of soils for fibres			AR	
TM65	Asbestos Bulk Identification	PM42	Screening of soils for fibres	Yes		AR	

Method Code Appendix

Test Method No.	Description	Prep Method No. (if appropriate)	Description	UKAS	MCERTS (soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
ТМ73	pH in by Metrohm	PM11	1:2.5 soil/water extraction	Yes	Yes	AR	No
TM74	Water Soluble Boron by ICP-OES	PM32	Preparation of soils for WSB	Yes	Yes	AD	Yes
ТМ76	Electrical Conductivity by Metrohm	PM58	Preparation of sample for Electrical Conductivity			AD	Yes
ТМ89	In-house method based on USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. ISO17025 accredited method for soils and waters and MCERTS on soils. Accreditation is matrix specific.	PM45	Cyanide & Thiocyanate prep for soils			AR	Yes



Smith Grant LLP Station House

Station Road

Ruabon Wrexham LL14 6DL

Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point Zone 3 Deeside Industrial Park Deeside CH5 2UA

Tel: +44 (0) 1244 833780 Fax: +44 (0) 1244 833781



Attention :	Dan Wayland
Date :	2nd September, 2014
Your reference :	R1742B
Our reference :	Test Report 14/9392 Batch 1
Location :	Heyford(Dorchester)
Date samples received :	19th August, 2014
Status :	Final report
Issue :	2

Forty samples were received for analysis on 19th August, 2014. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Phil Sommerton BSc Project Manager

Rjuiellward

Bob Millward BSc FRSC Principal Chemist

Client Name:						
Reference:						
Location:						
Contact:						
JE Job No.:						

Smith Grant LLP R1742B Heyford(Dorchester) Dan Wayland 14/9392

Report : Solid

JE JOD NO	14/9392										i.		
J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20			
Sample ID	D1B-NE-AGG1	D1B-NE-AGG2	D1B-NE-AGG3	D1B-SE-AGG1	D1B-SE-AGG2	D1B-SS1	D1B-SS2	D1B-SS3	D1B-SS4	D1B-SS5			
Depth						0-0.4	0-0.4	0-0.4	0-0.4	0-0.4			otos for all
COC No / misc											abbreviations and acro		
Containers	VJ	٧J	٧J	VJ	VJ	VJ	٧J	VJ	٧J	٧J			
Sample Date			19/08/2014		19/08/2014	18/08/2014	18/08/2014	18/08/2014	18/08/2014	18/08/2014			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method
Date of Receipt	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014			No.
Antimony	-	<1	<1	<1	<1	<1	2	1	1	<1	<1	mg/kg	TM30/PM15
Antimony	1	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic ^{#M}	-	16.8 -	27.2	16.1 -	9.6	19.8	27.5	48.6	17.0	- 16.1	<0.5	mg/kg	TM30/PM15 TM30/PM62
Arsenic Barium ^{#M}	17.7	- 64	- 79	45	83	- 47	- 31	- 34	-	66	<0.5	mg/kg	TM30/PM62
Barium Barium	- 144	-	-	45	-	-	-	- 34	42	- 00	<1 <1	mg/kg mg/kg	TM30/PM15
Beryllium	-	0.7	- 0.5	<0.5	<0.5	0.6	1.6	- 1.3	0.9	0.8	<0.5	mg/kg	TM30/PM02
Beryllium	1.1	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Cadmium ^{#M}	-	0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Cadmium	<0.1	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium ^{#M}	-	18.1	18.2	14.3	17.7	16.4	61.4	59.5	19.7	27.7	<0.5	mg/kg	TM30/PM15
Chromium	26.3	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Cobalt ^{#M}	-	4.7	4.7	4.3	3.8	4.9	8.6	5.5	5.4	4.6	<0.5	mg/kg	TM30/PM15
Cobalt	7.5	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper #M	-	6	7	6	7	9	3	4	<1	<1	<1	mg/kg	TM30/PM15
Copper	13	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead #M	-	6	14	8	13	11	10	11	12	8	<5	mg/kg	TM30/PM15
Lead	48	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury #M	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Mercury	0.5	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum #M	-	1.0 -	1.0	0.8	0.9	1.6 -	1.4	0.6	0.7	0.7	<0.1	mg/kg	TM30/PM15 TM30/PM62
Molybdenum Nickel ^{#M}	1.5 -	- 14.9	- 12.8	- 11.2	- 11.7	- 11.2	- 29.1	- 20.6	- 14.7	- 15.5	<0.1 <0.7	mg/kg mg/kg	TM30/PM62
Nickel	18.7	-	-	-	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium #M	-	1	1	<1	1	1	1	1	<1	<1	<1	mg/kg	TM30/PM15
Selenium	<1	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Vanadium	-	31	38	30	27	53	142	133	47	62	<1	mg/kg	TM30/PM15
Vanadium	54	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Water Soluble Boron #M	-	1.9	3.4	0.9	1.7	1.0	1.7	1.1	1.1	0.8	<0.1	mg/kg	TM74/PM32
Water Soluble Boron	3.7	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc ^{#M}	-	41	58	40	43	40	83	56	54	46	<5	mg/kg	TM30/PM15
Zinc	205	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
				1	1	1	I	1	1		1		

Client Name: Reference: Location: Contact: JE Job No.: Smith Grant LLP R1742B Heyford(Dorchester) Dan Wayland 14/9392

Report : Solid

	14/3032												
J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20			
Sample ID	D1B-NE-AGG1	D1B-NE-AGG2	D1B-NE-AGG3	D1B-SE-AGG1	D1B-SE-AGG2	D1B-SS1	D1B-SS2	D1B-SS3	D1B-SS4	D1B-SS5			
Depth						0-0.4	0-0.4	0-0.4	0-0.4	0-0.4	Please se	e attached n	otes for all
COC No / misc												ations and a	
Containers	VJ	٧J	٧J	VJ	VJ	٧J	VJ	VJ	VJ	VJ			
Sample Date		19/08/2014	19/08/2014		19/08/2014	18/08/2014		18/08/2014	18/08/2014	18/08/2014			
-													
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method
Date of Receipt	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014	19/08/2014			No.
PAH MS													
Naphthalene #M	<0.04	0.32	0.82	0.13	<0.04	<0.04	0.05	<0.04	<0.40 _A	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.09	0.06	0.19	0.13	0.03	<0.03	0.12	0.06	0.82 _A	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.09	0.46	1.02	0.31	0.05	<0.05	0.13	<0.05	0.71 _A	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}	0.04	0.31	0.79	0.19	<0.04	<0.04	0.14	<0.04	0.60 _A	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.94	3.04	7.77	2.51	0.48	0.06	1.15	0.35	10.19 _A	0.07	<0.03	mg/kg	TM4/PM8
Anthracene #	0.29	0.87	2.26	0.67	0.13	<0.04	0.51	0.14	3.71 _A	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	2.58	2.99	8.44	4.28	0.85	0.11	3.17	0.93	19.90 _A	0.20	<0.03	mg/kg	TM4/PM8
Pyrene #	2.18 1.01	2.31	7.01	3.31 2.26	0.68	0.09	3.15 1.56	0.82	17.90 _A	0.18	<0.03 <0.06	mg/kg	TM4/PM8 TM4/PM8
Benzo(a)anthracene [#] Chrysene ^{#M}	1.19	1.12 0.92	3.63 3.28	2.26	0.32	0.08	1.62	0.30	9.79 _A 10.24 _A	0.14	<0.08	mg/kg mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	1.69	1.40	5.18	3.48	0.33	0.00	2.77	0.44	17.64 _A	0.14	<0.02	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.95	0.91	3.41	1.63	0.22	0.06	1.53	0.44	10.97 _A	0.11	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.65	0.56	1.77	1.17	0.14	0.04	1.03	0.28	6.49 _A	0.09	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.11	0.07	0.37	0.26	0.04	<0.04	0.12	0.08	1.05	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	0.58	0.46	1.64	1.13	0.14	0.04	1.04	0.29	6.01 _A	0.09	< 0.04	mg/kg	TM4/PM8
PAH 16 Total	12.4	15.8	47.6	23.6	3.9	0.6	18.1	5.1	116.0 _A	1.3	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.22	1.01	3.73	2.51	0.31	0.07	1.99	0.54	12.70 _A	0.17	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.47	0.39	1.45	0.97	0.12	0.03	0.78	0.21	4.94 _A	0.07	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	99	101	102	94	103	100	100	100	103 _A	106	<0	%	TM4/PM8
TPH CWG													
Aliphatics													
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>C12-C16 #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	<7	<7	<7	<7	<7	<7	29 43	<7	<7	<7	<7	mg/kg	TM5/PM16
>C21-C35 #M Total aliphatics C5-35	<7 <19	46 46	14 <19	36 36	<7 <19	<7 <19	43 72	41 41	<7 <19	<7 <19	<7 <19	mg/kg mg/kg	TM5/PM16 TM5/TM36/PM12/PM16
Aromatics	<13	40	<13	30	<13	13	12	-+1	13	<13	<13	mg/Kg	
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	6	10	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM16
>EC16-EC21	16	49	67	13	<7	<7	21	<7	51	<7	<7	mg/kg	TM5/PM16
>EC21-EC35	76	152	163	108	<7	<7	76	62	228	<7	<7	mg/kg	TM5/PM16
Total aromatics C5-35	92	207	240	121	<19	<19	97	62	279	<19	<19	mg/kg	TM5/TM36/PM12/PM16
Total aliphatics and aromatics(C5-35)	92	253	240	157	<38	<38	169	103	279	<38	<38	mg/kg	TM5/TM36/PM12/PM16
	_	_	_	_	_	_	_	_	_	_	_	-	TH0. T
MTBE [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12