19.

21.06.18 – Handpicking of visible ACM cement sheeting and excavation of surrounding soils for removal to quarantine area.

20.

21.06.18 – Handpicked ACM cement sheeting double-bagged, zip tied and then removed offsite for disposal.

21.

21.06.18 – View east across excavation area.

22.

21.06.18 - Stockpile of recovered soils retained for replacement moved to west of excavation.

23.

22.06.18 - Continued excavation of hydrocarbon contaminated soils down to weathered bedrock.

24.

22.06.18 – Black floating product observed on pooled water within excavation.

25.

22.06.18 – Additional stockpile of recovered soils retained for replacement after contamination removal.

26.

25.06.18 - View south across excavation area.

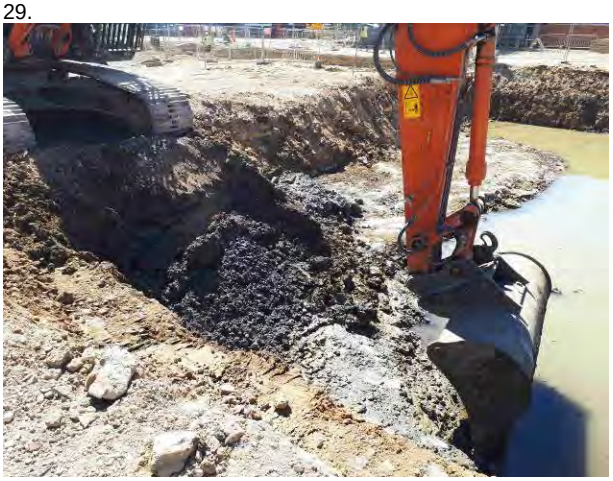
27.

25.06.18 - View southeast across excavation area.

28.

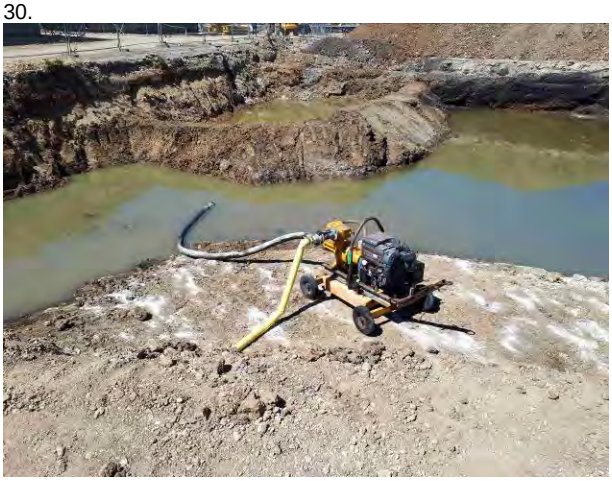
25.06.18 - Continued excavation of hydrocarbon contaminated soils down to weathered bedrock.

29.



26.06.18 - Continued excavation of hydrocarbon contaminated soils down to weathered bedrock.

30.



26.06.18 – Water pumped from excavation into adjacent USTs to east.

31.

26.06.18 - Water pumped from excavation into adjacent USTs to east.

32.

26.06.18 - Continued excavation of hydrocarbon contaminated soils down to weathered bedrock.

33.

27.06.18 – Pooled water pumped from excavation area exposing weathered bedrock.

34.

27.06.18 – Water pumped from excavation contained within adjacent USTs to east.

35.

27.06.18 – Weathered bedrock at base of excavation disturbed for sample collection.

36.

27.06.18 – Close up of disturbed weathered bedrock sampled for laboratory analysis.

37.

27.06.18 – Replacement of retained soils into excavation.

38.

28.06.18 – Retained soils stockpiled within excavation.

39.

28.06.18 – Continuation of excavation down to natural bedrock along western extent; no significant contamination indicators observed - soils sampled and retained.

40.

28.06.18 – View of southern end of western sidewall; no significant contamination indicators observed.

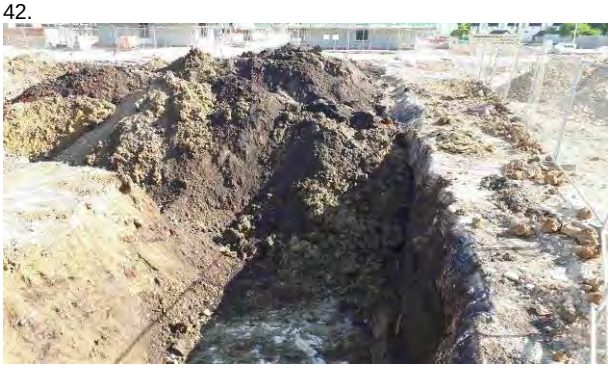
41.

28.06.18 - View of western end of southern sidewall; no significant contamination indicators observed.

42.

28.06.18 - View of northern end of western sidewall; no significant contamination indicators observed.

42.



28.06.18 – View along southern extent of excavation.

43.

29.06.18– Continuation of excavation down to natural bedrock along western end of northern extent; no significant contamination indicators observed - soils sampled and retained.

44.

29.06.18 – Retained soils in southwest of excavation.

45.

29.06.18 - Retained soils in northwest of excavation.

46.

29.06.18 - Continuation of excavation down to natural bedrock along central part of northern extent; contamination encountered and removed.

47.

02.07.18 - View southwest across excavation.

48.

02.07.18 - Continued excavation of hydrocarbon contaminated soils down to weathered bedrock in northeast corner.

49.

02.07.18 - View along eastern extent of excavation comprising weathered bedrock with some residual staining.

50.

02.07.18 – Replacement and recompaction of retained soils within excavation.

51.

02.07.18 – View along northern extent of excavation; residual staining present on eastern part of sidewall.

52.

02.07.18 – Stockpile of hydrocarbon contaminated soils in quarantine area.

53.

02.07.18 - Stockpile of hydrocarbon / asbestos contaminated soils in quarantine area; material excavated from area of the hotspot surrounding the deposits of ACM cement sheeting.

APPENDIX B

Laboratory Analysis Reports

Exova Jones Environmental

Registered Address : Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian, EH28 8PL

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

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

Smith Grant LLP
Station House
Station Road
Ruabon
Wrexham
LL14 6DL

Attention :	Scott Miller
Date :	14th June, 2018
Your reference :	R1742B
Our reference :	Test Report 18/8828 Batch 1
Location :	Heyford Dorchester
Date samples received :	7th June, 2018
Status :	Final report
Issue :	1

Two samples were received for analysis on 7th June, 2018 of which two 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:

[redacted]

Phil Sommerton BSc
Project Manager

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford Dorchester
Contact: Scott Miller
JE Job No.: 18/8828

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	1-2	3-4											
Sample ID	TP1-S1-PRODUCT	TP2-S1											
Depth		0.80-1.60											
COC No / misc													
Containers	V J	V J											
Sample Date	07/06/2018	07/06/2018											
Sample Type	Product	Clayey Sand											
Batch Number	1	1											
Date of Receipt	07/06/2018	07/06/2018											

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
PAH MS													
Naphthalene	<0.40 AA	-									<0.04	mg/kg	TM4/PM6
Acenaphthylene	3.87 AA	-									<0.03	mg/kg	TM4/PM6
Acenaphthene	4.88 AA	-									<0.05	mg/kg	TM4/PM6
Fluorene	13.86 AA	-									<0.04	mg/kg	TM4/PM6
Phenanthrene	30.99 AA	-									<0.03	mg/kg	TM4/PM6
Anthracene	7.59 AA	-									<0.04	mg/kg	TM4/PM6
Fluoranthene	16.17 AA	-									<0.03	mg/kg	TM4/PM6
Pyrene	42.92 AA	-									<0.03	mg/kg	TM4/PM6
Benzo(a)anthracene	10.51 AA	-									<0.06	mg/kg	TM4/PM6
Chrysene	8.07 AA	-									<0.02	mg/kg	TM4/PM6
Benzo(bk)fluoranthene	9.04 AA	-									<0.07	mg/kg	TM4/PM6
Benzo(a)pyrene	7.32 AA	-									<0.04	mg/kg	TM4/PM6
Indeno(123cd)pyrene	3.78 AA	-									<0.04	mg/kg	TM4/PM6
Dibenzo(ah)anthracene	1.12 AA	-									<0.04	mg/kg	TM4/PM6
Benzo(ghi)perylene	15.45 AA	-									<0.04	mg/kg	TM4/PM6
PAH 16 Total	175.6 AA	-									<0.6	mg/kg	TM4/PM6
Benzo(b)fluoranthene	6.51 AA	-									<0.05	mg/kg	TM4/PM6
Benzo(k)fluoranthene	2.53 AA	-									<0.02	mg/kg	TM4/PM6
TPH CWG													
Aliphatics													
>C5-C6 #M	-	0.2 SV									<0.1	mg/kg	TM36/PM12
>C6-C8 #M	-	3.4 SV									<0.1	mg/kg	TM36/PM12
>C8-C10	-	17.7 SV									<0.1	mg/kg	TM36/PM12
>C10-C12 #M	-	953.5									<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #M	-	923									<4	mg/kg	TM5/PM8/PM16
>C16-C21 #M	-	637									<7	mg/kg	TM5/PM8/PM16
>C21-C35 #M	-	17557									<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	-	20092									<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Aromatics													
>C5-EC7 #	-	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	-	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC8-EC10 #M	-	0.4 SV									<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	-	262.9									<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	-	376									<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	-	619									<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	-	6020									<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 #	-	7278									<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	-	27370									<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE #	-	<5 SV									<5	ug/kg	TM31/PM12
Benzene #	-	<5 SV									<5	ug/kg	TM31/PM12
Toluene #	-	<5 SV									<5	ug/kg	TM31/PM12

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford Dorchester
Contact: Scott Miller
JE Job No.: 18/8828

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	1-2	3-4									LOD/LOR	Units	Method No.
Sample ID	TP1-S1-PRODUCT	TP2-S1											
Depth		0.80-1.60											
COC No / misc													
Containers	V J	V J											
Sample Date	07/06/2018	07/06/2018											
Sample Type	Product	Clayey Sand											
Batch Number	1	1											
Date of Receipt	07/06/2018	07/06/2018											
Ethylbenzene #	-	117 SV									<5	ug/kg	TM31/PM12
m/p-Xylene #	-	239 SV									<5	ug/kg	TM31/PM12
o-Xylene #	-	<5 SV									<5	ug/kg	TM31/PM12
SEM	443369	-									<110	mg/kg	TM7/PM6
Saturates (Aliphatics)	27.02	-									<0.01	%	TM13/PM6
Aromatics	29.29	-									<0.01	%	TM13/PM6
Resins (Heterocyclics)	23.30	-									<0.01	%	TM13/PM6
Asphaltenes	20.39	-									<0.01	%	TM13/PM6
Natural Moisture Content	10.9	22.1									<0.1	%	PM4/PM0
Triterpanes 191m/z	Present	-										None	TM16/PM6
Triaromatic Steranes 231m/z	Present	-										None	TM16/PM6
Coal Tar	<0.1	-									<0.1	%	TM16/PM6
Sample Type	-	Clayey Sand										None	PM13/PM0
Sample Colour	-	Dark Brown										None	PM13/PM0
Other Items	-	stones										None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford Dorchester
Contact: Scott Miller
JE Job No.: 18/8828

Report : Product

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

J E Sample No.	1-2												
Sample ID	TP1-S1-PRODUCT												
Depth													
COC No / misc													
Containers	V J												
Sample Date	07/06/2018												
Sample Type	Product												
Batch Number	1												
Date of Receipt	07/06/2018												
Whole Oil Trace	See Attached											None	TM1/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford Dorchester
Contact: Scott Miller
JE Job No.: 18/8828

SVOC Report : **Product**

J E Sample No.	1-2												
Sample ID	TP1-S1-PRODUCT												
Depth											Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	V J												
Sample Date	07/06/2018												
Sample Type	Product												
Batch Number	1												
Date of Receipt	07/06/2018												
SVOC MS											LOD/LOR	Units	Method No.
Phenols													
2-Chlorophenol	<0.01										<0.01	%	TM16/PM0
2-Methylphenol	<0.01										<0.01	%	TM16/PM0
2-Nitrophenol	<0.01										<0.01	%	TM16/PM0
2,4-Dichlorophenol	<0.01										<0.01	%	TM16/PM0
2,4-Dimethylphenol	<0.01										<0.01	%	TM16/PM0
2,4,5-Trichlorophenol	<0.01										<0.01	%	TM16/PM0
2,4,6-Trichlorophenol	<0.01										<0.01	%	TM16/PM0
4-Chloro-3-methylphenol	<0.01										<0.01	%	TM16/PM0
4-Methylphenol	<0.01										<0.01	%	TM16/PM0
4-Nitrophenol	<0.01										<0.01	%	TM16/PM0
Pentachlorophenol	<0.01										<0.01	%	TM16/PM0
Phenol	<0.01										<0.01	%	TM16/PM0
PAHs													
2-Chloronaphthalene	<0.01										<0.01	%	TM16/PM0
2-Methylnaphthalene	<0.01										<0.01	%	TM16/PM0
Naphthalene	<0.01										<0.01	%	TM16/PM0
Acenaphthylene	<0.01										<0.01	%	TM16/PM0
Acenaphthene	<0.01										<0.01	%	TM16/PM0
Fluorene	<0.01										<0.01	%	TM16/PM0
Phenanthrene	0.01										<0.01	%	TM16/PM0
Anthracene	<0.01										<0.01	%	TM16/PM0
Fluoranthene	0.02										<0.01	%	TM16/PM0
Pyrene	0.02										<0.01	%	TM16/PM0
Benzo(a)anthracene	<0.01										<0.01	%	TM16/PM0
Chrysene	<0.01										<0.01	%	TM16/PM0
Benzo(bk)fluoranthene	0.01										<0.01	%	TM16/PM0
Benzo(a)pyrene	0.01										<0.01	%	TM16/PM0
Indeno(123cd)pyrene	0.07										<0.01	%	TM16/PM0
Dibenzo(ah)anthracene	0.07										<0.01	%	TM16/PM0
Benzo(ghi)perylene	0.01										<0.01	%	TM16/PM0
Phthalates													
Bis(2-ethylhexyl) phthalate	<0.01										<0.01	%	TM16/PM0
Butylbenzyl phthalate	<0.01										<0.01	%	TM16/PM0
Di-n-butyl phthalate	0.02										<0.01	%	TM16/PM0
Di-n-Octyl phthalate	<0.01										<0.01	%	TM16/PM0
Diethyl phthalate	<0.01										<0.01	%	TM16/PM0
Dimethyl phthalate	<0.01										<0.01	%	TM16/PM0

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford Dorchester
Contact: Scott Miller
JE Job No.: 18/8828

SVOC Report : **Product**

J E Sample No.	1-2												
Sample ID	TP1-S1-PRODUCT												
Depth											Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	V J												
Sample Date	07/06/2018												
Sample Type	Product												
Batch Number	1										LOD/LOR	Units	Method No.
Date of Receipt	07/06/2018												
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<0.01										<0.01	%	TM16/PM0
1,2,4-Trichlorobenzene	<0.01										<0.01	%	TM16/PM0
1,3-Dichlorobenzene	<0.01										<0.01	%	TM16/PM0
1,4-Dichlorobenzene	<0.01										<0.01	%	TM16/PM0
2-Nitroaniline	<0.01										<0.01	%	TM16/PM0
2,4-Dinitrotoluene	<0.01										<0.01	%	TM16/PM0
2,6-Dinitrotoluene	<0.01										<0.01	%	TM16/PM0
3-Nitroaniline	<0.01										<0.01	%	TM16/PM0
4-Bromophenylphenylether	<0.01										<0.01	%	TM16/PM0
4-Chloroaniline	<0.01										<0.01	%	TM16/PM0
4-Chlorophenylphenylether	<0.01										<0.01	%	TM16/PM0
4-Nitroaniline	<0.01										<0.01	%	TM16/PM0
Azobenzene	<0.01										<0.01	%	TM16/PM0
Bis(2-chloroethoxy)methane	<0.01										<0.01	%	TM16/PM0
Bis(2-chloroethyl)ether	<0.01										<0.01	%	TM16/PM0
Carbazole	<0.01										<0.01	%	TM16/PM0
Dibenzofuran	<0.01										<0.01	%	TM16/PM0
Hexachlorobenzene	<0.01										<0.01	%	TM16/PM0
Hexachlorobutadiene	<0.01										<0.01	%	TM16/PM0
Hexachlorocyclopentadiene	<0.01										<0.01	%	TM16/PM0
Hexachloroethane	<0.01										<0.01	%	TM16/PM0
Isophorone	<0.01										<0.01	%	TM16/PM0
N-nitrosodi-n-propylamine	<0.01										<0.01	%	TM16/PM0
Nitrobenzene	<0.01										<0.01	%	TM16/PM0

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford Dorchester
Contact: Scott Miller
JE Job No.: 18/8828

VOC Report : **Product**

J E Sample No.	1-2												
Sample ID	TP1-S1-PRODUCT												
Depth													
COC No / misc													
Containers	V J												
Sample Date	07/06/2018												
Sample Type	Product												
Batch Number	1												
Date of Receipt	07/06/2018												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
VOC MS													
Dichlorodifluoromethane	<0.01										<0.01	%	TM124/PM0
Methyl Tertiary Butyl Ether	<0.05										<0.05	%	TM124/PM0
Chloromethane	<0.01										<0.01	%	TM124/PM0
Vinyl Chloride	<0.01										<0.01	%	TM124/PM0
Bromomethane	<0.01										<0.01	%	TM124/PM0
Chloroethane	<0.01										<0.01	%	TM124/PM0
Trichlorofluoromethane	<0.01										<0.01	%	TM124/PM0
1,1-Dichloroethene (1,1 DCE)	<0.01										<0.01	%	TM124/PM0
Dichloromethane (DCM)	<0.01										<0.01	%	TM124/PM0
trans-1-2-Dichloroethene	<0.01										<0.01	%	TM124/PM0
1,1-Dichloroethane	<0.01										<0.01	%	TM124/PM0
cis-1-2-Dichloroethene	<0.01										<0.01	%	TM124/PM0
2,2-Dichloropropane	<0.01										<0.01	%	TM124/PM0
Bromochloromethane	<0.01										<0.01	%	TM124/PM0
Chloroform	<0.01										<0.01	%	TM124/PM0
1,1,1-Trichloroethane	<0.01										<0.01	%	TM124/PM0
1,1-Dichloropropene	<0.01										<0.01	%	TM124/PM0
Carbon tetrachloride	<0.01										<0.01	%	TM124/PM0
1,2-Dichloroethane	<0.01										<0.01	%	TM124/PM0
Benzene	<0.01										<0.01	%	TM124/PM0
Trichloroethene (TCE)	<0.01										<0.01	%	TM124/PM0
1,2-Dichloropropane	<0.01										<0.01	%	TM124/PM0
Dibromomethane	<0.01										<0.01	%	TM124/PM0
Bromodichloromethane	<0.01										<0.01	%	TM124/PM0
cis-1-3-Dichloropropene	<0.01										<0.01	%	TM124/PM0
Toluene	<0.01										<0.01	%	TM124/PM0
trans-1-3-Dichloropropene	<0.01										<0.01	%	TM124/PM0
1,1,2-Trichloroethane	<0.01										<0.01	%	TM124/PM0
Tetrachloroethene (PCE)	<0.01										<0.01	%	TM124/PM0
1,3-Dichloropropane	<0.01										<0.01	%	TM124/PM0
Dibromochloromethane	<0.01										<0.01	%	TM124/PM0
1,2-Dibromoethane	<0.01										<0.01	%	TM124/PM0
Chlorobenzene	<0.01										<0.01	%	TM124/PM0
1,1,1,2-Tetrachloroethane	<0.01										<0.01	%	TM124/PM0
Ethylbenzene	<0.01										<0.01	%	TM124/PM0
p/m-Xylene	<0.01										<0.01	%	TM124/PM0
o-Xylene	<0.01										<0.01	%	TM124/PM0
Styrene	<0.01										<0.01	%	TM124/PM0
Bromoform	<0.01										<0.01	%	TM124/PM0
Isopropylbenzene	<0.01										<0.01	%	TM124/PM0
1,1,2,2-Tetrachloroethane	<0.01										<0.01	%	TM124/PM0
Bromobenzene	<0.01										<0.01	%	TM124/PM0
1,2,3-Trichloropropane	<0.01										<0.01	%	TM124/PM0
Propylbenzene	<0.01										<0.01	%	TM124/PM0
2-Chlorotoluene	<0.01										<0.01	%	TM124/PM0
1,3,5-Trimethylbenzene	<0.01										<0.01	%	TM124/PM0
4-Chlorotoluene	<0.01										<0.01	%	TM124/PM0
tert-Butylbenzene	<0.01										<0.01	%	TM124/PM0
1,2,4-Trimethylbenzene	0.02										<0.01	%	TM124/PM0
sec-Butylbenzene	<0.01										<0.01	%	TM124/PM0
4-Isopropyltoluene	<0.01										<0.01	%	TM124/PM0
1,3-Dichlorobenzene	<0.01										<0.01	%	TM124/PM0
1,4-Dichlorobenzene	<0.01										<0.01	%	TM124/PM0
n-Butylbenzene	<0.01										<0.01	%	TM124/PM0
1,2-Dichlorobenzene	<0.01										<0.01	%	TM124/PM0
1,2-Dibromo-3-chloropropane	<0.01										<0.01	%	TM124/PM0
1,2,4-Trichlorobenzene	<0.01										<0.01	%	TM124/PM0
Hexachlorobutadiene	<0.01										<0.01	%	TM124/PM0
Naphthalene	<0.01										<0.01	%	TM124/PM0
1,2,3-Trichlorobenzene	<0.01										<0.01	%	TM124/PM0

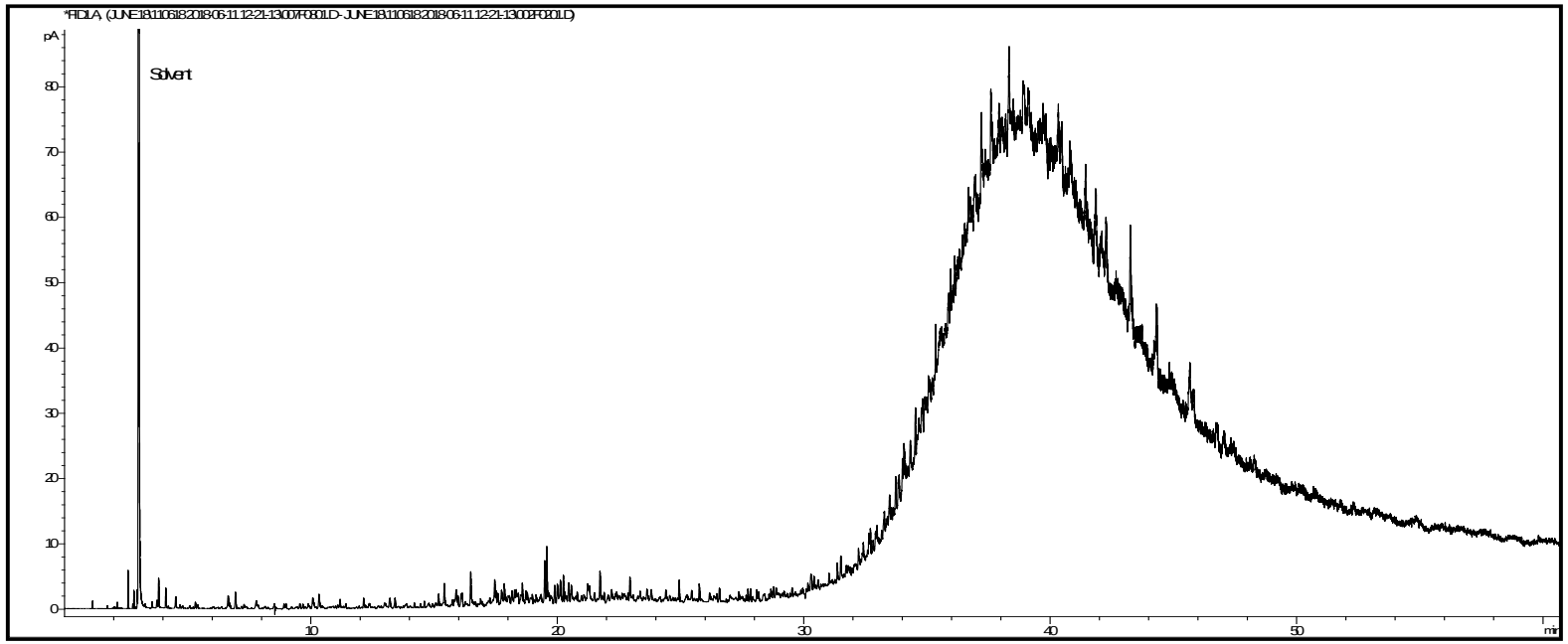
Client Name:	Smith Grant LLP	**JE Job No.:**	18/8828
Reference:	R1742B	**JE Sample No.:**	1
Location:	Heyford Dorchester	**Sample Identity:**	TP1-S1-PRODUCT
Contact:	Scott Miller	**Depth:**	

Description: Black Viscous Tar
Carbon Range: 5-40+
Boiling Point Range (°C): 36-525+

Pristane/Phytane Ratio: N/A
nC_{17}/Pristane Ratio: N/A
Age of Diesel (+/- 2 years)*: N/A

Interpretation: Possible Bitumen

Chromatogram:



*The age of release estimated in this report is based on the nC17/pristane ratio only as prescribed by Christensen and Larsen (1993) and Kaplan, Galperin, Alimi et al., (1996). Age estimation should be treated with caution as it can be influenced by site specific factors that the laboratory are not aware of.

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford Dorchester
Contact: Scott Miller

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 18/8828						

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.: 18/8828

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°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.

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

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

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

ISO17025 accreditation applies to surface water and groundwater and usually 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.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

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.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	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 an Exova Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	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
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

JE Job No: 18/8828

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM1	Modified USEPA 8015B method for the determination of carbon banding in oil and product samples by GC-FID.	PM0	No preparation is required.			AR	
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	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM6	Samples are extracted using Soxtec apparatus and solvent.			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.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	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.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		AR	Yes
TM7	Modified USEPA 3540 and 9071 for oily wastes. In house method for the gravimetric determination of a sample following solvent extraction.	PM6	Samples are extracted using Soxtec apparatus and solvent.			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	
TM13	Determination of Saturates, Aromatics, Resins and Asphaltenes by Thin Layer Chromatography with Flame Ionisation Detection.	PM6	Samples are extracted using Soxtec apparatus and solvent.			AR	Yes

JE Job No: 18/8828

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK 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.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM6	Samples are extracted using Soxtec apparatus and solvent.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM6	Samples are extracted using Soxtec apparatus and solvent.			AR	
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		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
TM124	Modified USEPA 8260. Semi- Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM0	No preparation is required.			AR	

Exova Jones Environmental

Registered Address : Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian, EH28 8PL

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Deeside Industrial Park
Deeside
CH5 2UA

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

Smith Grant LLP
Station House
Station Road
Ruabon
Wrexham
LL14 6DL

Attention :	Scott Miller
Date :	25th June, 2018
Your reference :	R1742B
Our reference :	Test Report 18/9273 Batch 1
Location :	Upper Heyford (Dorchester)
Date samples received :	14th June, 2018
Status :	Final report
Issue :	1

Twelve samples were received for analysis on 14th June, 2018 of which nine 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:

[redacted]

Bruce Leslie
Project Co-ordinator

Client Name: Smith Grant LLP
Reference: R1742B
Location: Upper Heyford (Dorchester)
Contact: Scott Miller
JE Job No.: 18/9273

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	19-20	21-22	23-24		LOD/LOR	Units	Method No.
Sample ID	PH5-HS-SS1	PH5-HS-SS2	PH5-HS-SS3	PH5-HS-SS4	PH5-HS-SS5	PH5-HS-SS6	PH5-HS-S1	PH5-HS-S2	PH5-HS-S3				
Depth	2.00-2.60	2.00-2.60	2.00-2.60	2.00-2.60	2.00-2.60	2.00-2.60							
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J	V J				
Sample Date	13/06/2018	13/06/2018	13/06/2018	13/06/2018	13/06/2018	13/06/2018	14/06/2018	14/06/2018	14/06/2018				
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Sand	Clay	Clayey Sand				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018	14/06/2018				
TPH CWG													
Aliphatics													
>C5-C6 #M	0.5	<0.1	<0.1	<0.1	6.5	0.4	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C6-C8 #M	1.6	0.2	0.6	2.6	34.5	1.6	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C8-C10	3.1	0.7	5.2	29.7	23.5	2.6	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C10-C12 #M	88.8	<0.2	315.9	216.2	110.7	114.2	<0.2	<0.2	<0.2		<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #M	164	<4	326	266	53	122	<4	<4	<4		<4	mg/kg	TM5/PM8/PM16
>C16-C21 #M	384	<7	34	53	51	34	17	<7	<7		<7	mg/kg	TM5/PM8/PM16
>C21-C35 #M	7248	133	239	721	1220	398	120	65	62		<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	7890	134	921	1289	1499	673	137	65	62		<19	mg/kg	TM5/TM36/PM8/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	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	mg/kg	TM36/PM12
>EC8-EC10 #M	<0.1	<0.1	<0.1	<0.1	2.4	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	46.2	<0.2	48.5	29.9	136.6	27.6	0.6	<0.2	<0.2		<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	126	<4	79	48	59	32	13	<4	<4		<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	361	<7	27	42	89	26	81	37	<7		<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	3358	92	152	313	630	188	469	174	103		<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 #	ME	92	307	433	917	274	564	211	103		<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	ME	226	1228	1722	2416	947	701	276	165		<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE #	<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	ug/kg	TM31/PM12
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	728	24	<5	<5	<5		<5	ug/kg	TM31/PM12
m/p-Xylene #	29	<5	36	<5	1622	49	<5	<5	<5		<5	ug/kg	TM31/PM12
o-Xylene #	<5	<5	<5	<5	66	<5	<5	<5	<5		<5	ug/kg	TM31/PM12
Natural Moisture Content	29.8	24.1	23.2	22.2	27.2	22.1	6.5	11.3	9.2		<0.1	%	PM4/PM0
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Sand	Clay	Clayey Sand			None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown			None	PM13/PM0
Other Items	stones	sand, stone	vegetation, stones	roots, stones, slate	stones, carbon, roots	sand, stones	stones, carbon	sand, stones, carbon	stones, roots			None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP
Reference: R1742B
Location: Upper Heyford (Dorchester)
Contact: Scott Miller

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 18/9273						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
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NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 18/9273

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DILUTIONS

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

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

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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.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

ABBREVIATIONS and ACRONYMS USED

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M	MCERTS accredited.
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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.
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NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 18/9273

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	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.			AR	
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	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.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		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	
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		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

Exova Jones Environmental

Registered Address : Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian, EH28 8PL

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Zone 3
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Deeside
CH5 2UA

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

Smith Grant LLP
Station House
Station Road
Ruabon
Wrexham
LL14 6DL

Attention :	Scott Miller
Date :	26th June, 2018
Your reference :	R17426
Our reference :	Test Report 18/9818 Batch 1
Location :	Heycord (Dorchester)
Date samples received :	22nd June, 2018
Status :	Final report
Issue :	1

Two samples were received for analysis on 22nd June, 2018 of which two 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:

[redacted]

Phil Sommerton BSc
Project Manager

Client Name: Smith Grant LLP
Reference: R17426
Location: Heycord (Dorchester)
Contact: Scott Miller
JE Job No.: 18/9818

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	1-2										LOD/LOR	Units	Method No.
Sample ID	PH5-H5-S4												
Depth													
COC No / misc													
Containers	V J												
Sample Date	22/06/2018												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	22/06/2018												
Natural Moisture Content	36.7										<0.1	%	PM4/PM0
Sample Type	NDP											None	PM13/PM0
Sample Colour	NDP											None	PM13/PM0
Other Items	NDP											None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP
Reference: R17426
Location: Heycord (Dorchester)
Contact: Scott Miller

Note:

Asbestos Screen analysis is 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. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level, 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.

Signed on behalf of Jones Environmental Laboratory:

[redacted]

Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
18/9818	1	PH5-H5-S4		2	26/06/2018	**General Description (Bulk Analysis)**	Soil/Stones
					26/06/2018	**Asbestos Fibres**	Fibre Bundles
					26/06/2018	**Asbestos Fibres (2)**	NAD
					26/06/2018	**Asbestos ACM**	NAD
					26/06/2018	**Asbestos ACM (2)**	NAD
					26/06/2018	**Asbestos Type**	NAD
					26/06/2018	**Asbestos Type (2)**	NAD
					26/06/2018	**Asbestos Level Screen**	NAD
18/9818	1	PH5-ASB-S1		3	26/06/2018	**General Description (Bulk Analysis)**	Asbestos cement
					26/06/2018	**Asbestos Fibres**	Fibre Bundles
					26/06/2018	**Asbestos ACM**	Asbestos Cement
					26/06/2018	**Asbestos Type**	Chrysotile
					26/06/2018	**Asbestos Level Screen**	Asbestos level cannot be determined from Screen. Quantification required.

Client Name: Smith Grant LLP **Matrix : Solid**
Reference: R17426
Location: Heycord (Dorchester)
Contact: Scott Miller

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	NDP Reason
18/9818	1	PH5-H5-S4		1-2	Asbestos detected in sample

Client Name: Smith Grant LLP
Reference: R17426
Location: Heycord (Dorchester)
Contact: Scott Miller

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 18/9818						

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.: 18/9818

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°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.

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

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

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

ISO17025 accreditation applies to surface water and groundwater and usually 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.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

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.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	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 an Exova Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	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
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 18/9818

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	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.			AR	
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	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	

Exova Jones Environmental

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Smith Grant LLP
Station House
Station Road
Ruabon
Wrexham
LL14 6DL

Attention :	Scott Miller
Date :	10th July, 2018
Your reference :	R1742B
Our reference :	Test Report 18/10066 Batch 1
Location :	Heyford
Date samples received :	27th June, 2018
Status :	Final report
Issue :	1

Ten samples were received for analysis on 27th June, 2018 of which ten 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:

[redacted]

Bruce Leslie
Project Co-ordinator

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford
Contact: Scott Miller
JE Job No.: 18/10066

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	LOD/LOR	Units	Method No.
Sample ID	Ph5-HS-SS7	Ph5-HS-SS8	Ph5-HS-SS9	Ph5-HS-SS10	Ph5-HS-SS11	Ph5-HS-SS12	Ph5-HS-SS13	Ph5-HS-SS14	Ph5-HS-SS15	Ph5-HS-S5			
Depth	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50				
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J	V J	V J			
Sample Date	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018			
Sample Type	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018	27/06/2018			
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	0.2	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #M	<0.2	<0.2	<0.2	60.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #M	<4	<4	<4	80	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #M	<7	<7	<7	43	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #M	<7	60	<7	663	<7	<7	<7	171	<7	24	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	<19	60	<19	846	<19	<19	<19	171	<19	24	<19	mg/kg	TM5/TM36/PM8/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/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	150	<7	<7	<7	<7	<7	66	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 #	<19	<19	<19	150	<19	<19	<19	<19	<19	66	<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	<38	60	<38	996	<38	<38	<38	171	<38	90	<38	mg/kg	TM5/TM36/PM8/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
Natural Moisture Content	18.3	13.5	16.2	17.2	16.1	16.9	17.4	21.8	16.3	13.7	<0.1	%	PM4/PM0
Sample Type	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clay	Clay		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones	stones	stones	stones	stones	stones	stones	stones	sand, stones	stones, clinker,		None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP

Reference: R1742B

Location: Heyford

Contact: Scott Miller

Matrix : Solid

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
18/10066	1	Ph5-HS-SS7	2.50	1-2	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-SS8	2.50	3-4	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-SS9	2.50	5-6	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-SS10	2.50	7-8	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-SS11	2.50	9-10	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-SS12	2.50	11-12	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-SS13	2.50	13-14	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-SS14	2.50	15-16	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-SS15	2.50	17-18	GRO	Solid Samples were received at a temperature above 9°C.
18/10066	1	Ph5-HS-S5		19-20	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.: 18/10066

SOILS

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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°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.

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

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

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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.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

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.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	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 an Exova Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	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
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 18/10066

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	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.			AR	
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	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.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		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	
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		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

Exova Jones Environmental

Registered Address : Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian, EH28 8PL

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Smith Grant LLP
Station House
Station Road
Ruabon
Wrexham
LL14 6DL

Attention :	Ben Thomas
Date :	12th July, 2018
Your reference :	R1742B
Our reference :	Test Report 18/10241 Batch 1
Location :	Heyford
Date samples received :	29th June, 2018
Status :	Final report
Issue :	1

Twenty nine samples were received for analysis on 29th June, 2018 of which twenty nine 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:

[redacted]

Phil Sommerton BSc
Project Manager

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford
Contact: Ben Thomas
JE Job No.: 18/10241

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	LOD/LOR	Units	Method No.
Sample ID	PH5-HS-S6	PH5-HS-S7	PH5-HS-S8	PH5-HS-S9	PH5-HS-S10	PH5-HS-S11	PH5-HS-S12	PH5-HS-S13	PH5-HS-S14	PH5-HS-S15			
Depth													
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J	V J	V J			
Sample Date	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	29/06/2018			
Sample Type	Clay	Clay	Clay	Clay	Clayey Sand	Clay	Clayey Sand	Clay	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018			
TPH CWG													
Aliphatics													
>C5-C6 #M	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	0.6	0.2 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	0.9	0.2 SV	<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/PM8/PM16
>C12-C16 #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #M	<7	61	<7	<7	9	<7	52	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	<19	61	<19	<19	<19	<19	52	<19	<19	<19	<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Aromatics													
>C5-EC7 #	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #M	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<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/PM8/PM16
>EC12-EC16 #	<4	7	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	31	<7	<7	56	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	37	135	<7	<7	154	<7	37	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 #	37	173	<19	<19	210	<19	37	<19	<19	<19	<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	<38	234	<38	<38	210	<38	89	<38	<38	<38	<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE #	<5 SV	<5	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene #	<5 SV	<5	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	ug/kg	TM31/PM12
Toluene #	<5 SV	<5	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	ug/kg	TM31/PM12
Ethylbenzene #	<5 SV	<5	<5	<5	<5 SV	12	<5 SV	<5	<5	<5	<5	ug/kg	TM31/PM12
m/p-Xylene #	<5 SV	<5	<5	<5	<5 SV	12	<5 SV	<5	<5	<5	<5	ug/kg	TM31/PM12
o-Xylene #	<5 SV	<5	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	ug/kg	TM31/PM12
Natural Moisture Content	20.7	19.3	23.5	21.4	18.1	22.9	53.1	29.0	20.7	24.9	<0.1	%	PM4/PM0
Sample Type	Clay	Clay	Clay	Clay	Clayey Sand	Clay	Clayey Sand	Clay	Clay	Clay		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Dark Brown	Medium Brown	Dark Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones, carbon	carbon, stones	stones, carbon, clincker	stones, roots	stones, carbon	stones	stones	stones	stones	stones		None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford
Contact: Ben Thomas
JE Job No.: 18/10241

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	21-22	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38	39-40	LOD/LOR	Units	Method No.
Sample ID	PH5-HS-S16	PH5-HS-SS16	PH5-HS-SS17	PH5-HS-SS18	PH5-HS-SS19	PH5-HS-SS20	PH5-HS-SS21	PH5-HS-SS22	PH5-HS-SS23	PH5-HS-SS24			
Depth		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J	V J	V J			
Sample Date	29/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018			
Sample Type	Clay	Clay	Clay	Clay	Clayey Sand	Clayey Sand	Clay	Clay	Clayey Sand	Clayey Sand			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018			
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	0.7	<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	129.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #M	193	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #M	34	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #M	319	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	676	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	mg/kg	TM5/TM36/PM8/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 #	15.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	39	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	16	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	143	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 #	214	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	890	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38	mg/kg	TM5/TM36/PM8/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
Natural Moisture Content	17.2	18.8	17.1	21.3	19.3	25.9	22.7	9.7	18.0	14.7	<0.1	%	PM4/PM0
Sample Type	Clay	Clay	Clay	Clay	Clayey Sand	Clayey Sand	Clay	Clay	Clayey Sand	Clayey Sand		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	brick fragment, stones, roots	chalk, stones	sand, stone	stones, carbon	STONES	stones, chalk	vegetation, stones, sand	sand, stones	stones	stones		None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford
Contact: Ben Thomas
JE Job No.: 18/10241

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	41-42	43-44	45-46	47-48	49-50	51-52	53-54	55-56	57-58		LOD/LOR	Units	Method No.
Sample ID	PH5-HS-SS25	PH5-HS-SS26	PH5-HS-SS27	PH5-HS-SS28	PH5-HS-SS29	PH5-HS-SS30	PH5-HS-SS31	PH5-HS-SS32	PH5-HS-SS33				
Depth	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0				
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J	V J				
Sample Date	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	28/06/2018	29/06/2018	29/06/2018	29/06/2018				
Sample Type	Clayey Sand	Clayey Sand	Sand	Clayey Sand	Clay	Clay	Clay	Clay	Clay				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018	29/06/2018				
TPH CWG													
Aliphatics													
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV		<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.6 SV	0.3 SV		<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	6.4	6.5 SV	4.2 SV		<0.1	mg/kg	TM36/PM12
>C10-C12 #M	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	342.6	178.0	173.8		<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #M	<4	<4	<4	<4	<4	<4	479	204	173		<4	mg/kg	TM5/PM8/PM16
>C16-C21 #M	<7	<7	<7	<7	<7	<7	239	302	186		<7	mg/kg	TM5/PM8/PM16
>C21-C35 #M	<7	<7	<7	<7	<7	<7	4612	6501	4650		<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	<19	<19	<19	<19	<19	<19	5679	7192	5187		<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV		<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV		<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 SV	<0.1 SV		<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	26.1	57.7	42.0		<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	98	93	51		<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	165	225	105		<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	1611	2151	1789		<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 #	<19	<19	<19	<19	<19	<19	1900	2527	1987		<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	<38	<38	<38	<38	<38	<38	7579	9719	7174		<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5 SV	<5 SV		<5	ug/kg	TM31/PM12
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5 SV	<5 SV		<5	ug/kg	TM31/PM12
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5 SV	<5 SV		<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	42 SV	38 SV		<5	ug/kg	TM31/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	86 SV	45 SV		<5	ug/kg	TM31/PM12
o-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5 SV	<5 SV		<5	ug/kg	TM31/PM12
Natural Moisture Content	20.5	16.3	17.7	14.7	23.0	26.9	22.4	22.2	14.4		<0.1	%	PM4/PM0
Sample Type	Clayey Sand	Clayey Sand	Sand	Clayey Sand	Clay	Clay	Clay	Clay	Clay			None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown			None	PM13/PM0
Other Items	stones	stones	stones	stones	carbon, stones	chalk, stones	stones	stones	stones, sand			None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford
Contact: Ben Thomas

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 18/10241						

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.: 18/10241

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°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.

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

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

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

ISO17025 accreditation applies to surface water and groundwater and usually 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.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

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.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	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 an Exova Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	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
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 18/10241

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	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.			AR	
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	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.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		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	
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		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

Exova Jones Environmental

Registered Address : Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian, EH28 8PL

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Smith Grant LLP
Station House
Station Road
Ruabon
Wrexham
LL14 6DL

Attention :	Scott Miller
Date :	16th July, 2018
Your reference :	R1742B
Our reference :	Test Report 18/10441 Batch 1
Location :	Heyford (Dorchester)
Date samples received :	3rd July, 2018
Status :	Final report
Issue :	1

Thirteen samples were received for analysis on 3rd July, 2018 of which thirteen 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:

[redacted]

Bruce Leslie
Project Co-ordinator

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford (Dorchester)
Contact: Scott Miller
JE Job No.: 18/10441

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	LOD/LOR	Units	Method No.
Sample ID	PH5-HS-SS34	PH5-HS-SS35	PH5-HS-SS36	PH5-HS-SS37	PH5-HS-SS38	PH5-HS-SS39	PH5-HS-SS40	PH5-HS-SS41	PH5-HS-SS42	PH5-HS-SS43			
Depth	1.5-2.5	2.5	1.5-2.5	2.5	1.2-2.5	1-2.5	1-2.5	1-2.5	1-2.5	1.5-2.5			
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J	V J	V J			
Sample Date	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018	02/07/2018			
Sample Type	Clay	Clay	Clay	Sand	Clay	Clay	Clayey Sand	Clay	Clayey Sand	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	03/07/2018	03/07/2018	03/07/2018	03/07/2018	03/07/2018	03/07/2018	03/07/2018	03/07/2018	03/07/2018	03/07/2018			
TPH CWG													
Aliphatics													
>C5-C6 #M	<0.1 SV	<0.1	<0.1 SV	0.4	0.2 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M	0.2 SV	<0.1	1.5 SV	1.7	2.4 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	1.3 SV	<0.1	7.9 SV	7.6	4.5 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #M	29.5	14.9	133.7	45.3	65.6	<0.2	<0.2	9.3	30.3	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #M	43	32	142	48	67	<4	<4	22	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #M	108	43	171	15	293	56	10	23	44	18	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #M	2587	900	4312	770	7752	1540	191	668	627	643	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	2769	990	4768	888	8185	1596	201	722	701	661	<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Aromatics													
>C5-EC7 #	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #M	<0.1 SV	<0.1	0.1 SV	1.0	0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	16.6	5.2	46.8	<0.2	62.0	6.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	33	17	66	<4	63	15	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	92	34	132	<7	229	53	<7	14	17	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	996	310	1439	271	2824	642	98	317	288	412	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 #	1138	366	1684	272	3178	716	98	331	305	412	<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	3907	1356	6452	1160	11363	2312	299	1053	1006	1073	<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE #	<5 SV	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene #	<5 SV	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Toluene #	<5 SV	<5	26 SV	<5	29 SV	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Ethylbenzene #	<5 SV	<5	48 SV	40	22 SV	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
m/p-Xylene #	13 SV	<5	89 SV	866	79 SV	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
o-Xylene #	<5 SV	<5	<5 SV	57	75 SV	<5	<5	<5	<5	<5	<5	ug/kg	TM31/PM12
Natural Moisture Content	20.4	2.8	23.7	109.8	19.7	10.7	7.3	9.9	11.7	13.2	<0.1	%	PM4/PM0
Sample Type	Clay	Clay	Clay	Sand	Clay	Clay	Clayey Sand	Clay	Clayey Sand	Clay		None	PM13/PM0
Sample Colour	Medium Brown	Light Grey	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones	stones	stones	stones, wet	stones	sand, stones	stones, chalk	sand, carbon, stones, roots	stones	stones, sand		None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford (Dorchester)
Contact: Scott Miller
JE Job No.: 18/10441

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

J E Sample No.	21-22	23-24	25-26	LOD/LOR	Units	Method No.
Sample ID	PH5-HS-SS44	PH5-HS-SS45	PH5-HS-S17			
Depth	1.5-2.5	1.5-2.5				
COC No / misc						
Containers	V J	V J	V J			
Sample Date	02/07/2018	02/07/2018	02/07/2018			
Sample Type	Clayey Sand	Clay	Clay			
Batch Number	1	1	1			
Date of Receipt	03/07/2018	03/07/2018	03/07/2018			
TPH CWG						
Aliphatics						
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #M	1.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #M	80	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #M	106	8	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #M	2123	267	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	2310	275	<19	<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Aromatics						
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #M	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	32	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	74	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	815	109	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 #	921	109	<19	<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	3231	384	<38	<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE #	<5	<5	<5	<5	ug/kg	TM31/PM12
Benzene #	<5	<5	<5	<5	ug/kg	TM31/PM12
Toluene #	<5	<5	<5	<5	ug/kg	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5	ug/kg	TM31/PM12
m/p-Xylene #	<5	<5	<5	<5	ug/kg	TM31/PM12
o-Xylene #	<5	<5	<5	<5	ug/kg	TM31/PM12
Natural Moisture Content	1.4	0.9	18.6	<0.1	%	PM4/PM0
Sample Type	Clayey Sand	Clay	Clay		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones, carbon	stones	stones, carbon		None	PM13/PM0

Client Name: Smith Grant LLP
Reference: R1742B
Location: Heyford (Dorchester)
Contact: Scott Miller

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 18/10441						

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.: 18/10441

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°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.

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

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

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

ISO17025 accreditation applies to surface water and groundwater and usually 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.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

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.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	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 an Exova Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	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
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 18/10441

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	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.			AR	
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	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.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		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	
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		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