

APPENDIX V
CHEMICAL ANALYSIS RESULTS



Jones Environmental Laboratory

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Attention :	Tim Mitchell
Date :	28th July, 2016
Your reference :	A10708
Our reference :	Test Report 16/11924 Batch 1
Location :	Wessex Yard Havant
Date samples received :	20th July, 2016
Status :	Final report
Issue :	1

Twenty four samples were received for analysis on 20th July, 2016 of which twenty 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:

Bruce Leslie
Project Co-ordinator

Please see attached notes for all abbreviations and acronyms

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Tim Mitchell
JE Job No.: 16/11924

Report : Solid

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

J E Sample No.	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS103	WS103	WS104	WS104	WS105	WS105	WS106	WS107	WS107	WS108			
Depth	0.80	2.70	1.30	4.70	0.30	3.70	3.00	0.60	4.00	4.50			
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J	V	V J			
Sample Date	14/07/2016	14/07/2016	13/07/2016	13/07/2016	13/07/2016	13/07/2016	14/07/2016	14/07/2016	14/07/2016	13/07/2016			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	LOD/LOR	Units	Method No.
PAH MS													
Naphthalene [#]	<0.04	<0.04	0.32	<0.04	3.32 ^{AA}	<0.04	1.09	<0.04	0.53	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	0.05	1.12	0.04	8.88 ^{AA}	<0.03	3.93	<0.03	0.04	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene [#]	<0.05	0.25	0.28	0.07	0.52 ^{AA}	<0.05	0.36	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene [#]	<0.04	0.19	0.57	0.10	1.13 ^{AA}	<0.04	0.43	<0.04	0.05	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene [#]	0.05	0.21	8.50	0.41	14.19 ^{AA}	<0.03	3.58	0.23	0.40	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene [#]	<0.04	0.10	3.42	0.07	10.79 ^{AA}	<0.04	3.09	0.07	0.05	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene [#]	0.16	0.80	19.00	0.28	63.49 ^{AA}	<0.03	12.43	0.60	0.44	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene [#]	0.14	0.46	15.06	0.18	61.52 ^{AA}	<0.03	12.30	0.49	0.33	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene [#]	0.13	0.12	6.89	0.12	57.62 ^{AA}	<0.06	6.24	0.30	0.21	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene [#]	0.10	0.09	7.30	0.11	52.40 ^{AA}	<0.02	6.87	0.30	0.21	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene [#]	0.19	0.09	12.93	0.17	112.68 ^{AA}	<0.07	13.46	0.48	0.30	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [#]	0.09	0.05	7.43	0.10	63.90 ^{AA}	<0.04	8.30	0.29	0.16	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene [#]	0.07	<0.04	4.64	0.07	45.59 ^{AA}	<0.04	5.53	0.20	0.10	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene [#]	0.05	<0.04	0.87	<0.04	15.12 ^{AA}	<0.04	1.12	0.06	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	0.08	<0.04	4.63	0.07	41.85 ^{AA}	<0.04	5.46	0.19	0.09	<0.04	<0.04	mg/kg	TM4/PM8
PAH 16 Total	1.1	2.4	93.0	1.8	553.0 ^{AA}	<0.6	84.2	3.2	2.9	<0.6	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.14	0.06	9.31	0.12	81.13 ^{AA}	<0.05	9.69	0.35	0.22	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.05	0.03	3.62	0.05	31.55 ^{AA}	<0.02	3.77	0.13	0.08	<0.02	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	81	102	94	95	110 ^{AA}	87	98	81	100	83	<0	%	TM4/PM8
EPH >C8-C10 [#]	<5	<5	<5	<5	<5	<5	34	<5	<5	<5	<5	mg/kg	TM5/PM8
EPH >C10-C12 [#]	<10	<10	<10	<10	<10	<10	18	<10	<10	<10	<10	mg/kg	TM5/PM8
EPH >C12-C16 [#]	<10	<10	<10	<10	17	<10	36	<10	<10	<10	<10	mg/kg	TM5/PM8
EPH >C16-C21 [#]	57	22	<10	17	314	<10	154	26	<10	<10	<10	mg/kg	TM5/PM8
EPH >C21-C40	87	<10	59	59	2554	75	622	167	165	<10	<10	mg/kg	TM5/PM8
EPH >C8-C40	144	<30	59	76	2885	75	864	193	165	<30	<30	mg/kg	TM5/PM8
GRO (>C4-C6)	<100	<100	<100	<100	<1000 ^{AB}	<100	<100	<100	<100	<100	<100	ug/kg	TM36/PM12
GRO (>C6-C8) [#]	<100	<100	<100	144	<1000 ^{AB}	<100	204	<100	228	<100	<100	ug/kg	TM36/PM12
GRO (>C4-C8)	<100	<100	<100	144	<1000 ^{AB}	<100	204	<100	228	<100	<100	ug/kg	TM36/PM12
Total Phenols HPLC	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	mg/kg	TM26/PM21
Natural Moisture Content	15.5	22.3	25.3	12.6	15.3	25.2	-	16.3	20.3	14.6	<0.1	%	PM4/PM0
Natural Moisture Content	-	-	-	-	-	-	20.7	-	-	-	<0.1	%	PM4/PM0
Hexavalent Chromium [#]	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) [#]	0.0108	0.0979	0.1838	0.1069	0.5595	0.1728	-	0.0105	0.3262	0.1901	<0.0015	g/l	TM38/PM20
Sulphate as SO4 (2:1 Ext)	-	-	-	-	-	-	0.2672	-	-	-	<0.0015	g/l	TM38/PM60
Chromium III	81.6	52.9	50.4	57.1	39.9	39.9	-	46.2	127.7	46.5	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	13.5	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide [#]	<0.5	0.9	<0.5	3.7	8.6	6.8	374.5 ^{AB}	1.9	8.0	<0.5	<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Please see attached notes for all abbreviations and acronyms

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Tim Mitchell
JE Job No.: 16/11924

Report : Solid

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

J E Sample No.	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38	39-40	41-42	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS109A	WS109A	WS110	BH101	BH102	BH103	BH103	TP101 INSIDE	BH101	BH102A			
Depth	0.60	1.50	3.00	11.00	6.50	8.00	9.50-9.60	1.60	0.50-0.60	2.50-2.60			
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	15/07/2016	15/07/2016	15/07/2016	15/07/2016	13/07/2016	14/07/2016	14/07/2016	12/07/2016	15/07/2016	13/07/2016			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	20/07/2016	LOD/LOR	Units	Method No.
PAH MS													
Naphthalene [#]	5.35 ^{AA}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Acenaphthylene	28.73 ^{AA}	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	-	-	<0.03	mg/kg	TM4/PM8
Acenaphthene [#]	2.54 ^{AA}	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	<0.05	mg/kg	TM4/PM8
Fluorene [#]	6.05 ^{AA}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Phenanthrene [#]	30.32 ^{AA}	0.04	<0.03	<0.03	<0.03	<0.03	<0.03	0.11	-	-	<0.03	mg/kg	TM4/PM8
Anthracene [#]	22.01 ^{AA}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Fluoranthene [#]	136.87 ^{AA}	0.06	<0.03	<0.03	0.04	<0.03	<0.03	0.29	-	-	<0.03	mg/kg	TM4/PM8
Pyrene [#]	111.82 ^{AA}	0.05	<0.03	<0.03	0.04	<0.03	<0.03	0.27	-	-	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene [#]	86.61 ^{AA}	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.20	-	-	<0.06	mg/kg	TM4/PM8
Chrysene [#]	96.89 ^{AA}	0.06	<0.02	<0.02	0.02	<0.02	<0.02	0.19	-	-	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene [#]	184.60 ^{AA}	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.37	-	-	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [#]	64.59 ^{AA}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.21	-	-	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene [#]	64.33 ^{AA}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.16	-	-	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene [#]	15.57 ^{AA}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	57.56 ^{AA}	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.15	-	-	<0.04	mg/kg	TM4/PM8
PAH 16 Total	913.8 ^{AA}	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	2.0	-	-	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	132.91 ^{AA}	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.27	-	-	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	51.69 ^{AA}	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.10	-	-	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	103 ^{AA}	99	94	98	99	90	80	102	-	-	<0	%	TM4/PM8
EPH >C8-C10 [#]	244	<5	<5	<5	<5	<5	<5	<5	<5	-	<5	mg/kg	TM5/PM8
EPH >C10-C12 [#]	79	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	mg/kg	TM5/PM8
EPH >C12-C16 [#]	305	<10	<10	<10	<10	<10	<10	<10	48	-	<10	mg/kg	TM5/PM8
EPH >C16-C21 [#]	1546	12	<10	<10	<10	<10	<10	<10	304	-	<10	mg/kg	TM5/PM8
EPH >C21-C40	5810	182	<10	16	29	21	<10	23	1494	-	<10	mg/kg	TM5/PM8
EPH >C8-C40	7984	194	<30	<30	<30	<30	<30	<30	1846	-	<30	mg/kg	TM5/PM8
GRO (>C4-C6)	<1000 ^{AB}	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	ug/kg	TM36/PM12
GRO (>C6-C8) [#]	<1000 ^{AB}	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	ug/kg	TM36/PM12
GRO (>C4-C8)	<1000 ^{AB}	<100	<100	<100	<100	<100	<100	<100	<100	-	<100	ug/kg	TM36/PM12
Total Phenols HPLC	0.68	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	-	-	<0.15	mg/kg	TM26/PM21
Natural Moisture Content	45.2	11.4	23.3	31.6	25.0	32.5	32.3	35.5	11.9	-	<0.1	%	PM4/PM0
Natural Moisture Content	-	-	-	-	-	-	-	-	-	-	<0.1	%	PM4/PM0
Hexavalent Chromium [#]	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) [#]	1.0041	1.5260	0.0150	0.0511	0.1848	0.1192	0.0553	0.0749	-	0.0214	<0.0015	g/l	TM38/PM20
Sulphate as SO4 (2:1 Ext)	-	-	-	-	-	-	-	-	-	-	<0.0015	g/l	TM38/PM60
Chromium III	37.0	101.1	16.3	7.1	48.1	50.4	12.8	42.5	-	-	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide [#]	2502.6 ^{AC}	20.0	1.7	<0.5	<0.5	<0.5	<0.5	6.1	-	-	<0.5	mg/kg	TM89/PM45

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Please see attached notes for all abbreviations and acronyms

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Tim Mitchell
JE Job No.: 16/11924

Report : Solid

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

J E Sample No.	43	44-45											
Sample ID	BH101 D19	BH103											
Depth	10.30	1.50-1.60											
COC No / misc													
Containers	B	V J											
Sample Date	15/07/2016	14/07/2016											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	20/07/2016	20/07/2016											
											Please see attached notes for all abbreviations and acronyms		
											LOD/LOR	Units	Method No.
PAH MS													
Naphthalene #	-	-									<0.04	mg/kg	TM4/PM8
Acenaphthylene	-	-									<0.03	mg/kg	TM4/PM8
Acenaphthene #	-	-									<0.05	mg/kg	TM4/PM8
Fluorene #	-	-									<0.04	mg/kg	TM4/PM8
Phenanthrene #	-	-									<0.03	mg/kg	TM4/PM8
Anthracene #	-	-									<0.04	mg/kg	TM4/PM8
Fluoranthene #	-	-									<0.03	mg/kg	TM4/PM8
Pyrene #	-	-									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	-	-									<0.06	mg/kg	TM4/PM8
Chrysene #	-	-									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	-	-									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	-	-									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	-	-									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	-	-									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	-	-									<0.04	mg/kg	TM4/PM8
PAH 16 Total	-	-									<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	-	-									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	-	-									<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	-	-									<0	%	TM4/PM8
EPH >C8-C10 #	-	-									<5	mg/kg	TM5/PM8
EPH >C10-C12 #	-	-									<10	mg/kg	TM5/PM8
EPH >C12-C16 #	-	-									<10	mg/kg	TM5/PM8
EPH >C16-C21 #	-	-									<10	mg/kg	TM5/PM8
EPH >C21-C40	-	-									<10	mg/kg	TM5/PM8
EPH >C8-C40	-	-									<30	mg/kg	TM5/PM8
GRO (>C4-C6)	-	-									<100	ug/kg	TM36/PM12
GRO (>C6-C8) #	-	-									<100	ug/kg	TM36/PM12
GRO (>C4-C8)	-	-									<100	ug/kg	TM36/PM12
Total Phenols HPLC	-	-									<0.15	mg/kg	TM26/PM21
Natural Moisture Content	-	-									<0.1	%	PM4/PM0
Natural Moisture Content	-	-									<0.1	%	PM4/PM0
Hexavalent Chromium #	-	-									<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	0.1753	0.1205									<0.0015	g/l	TM38/PM20
Sulphate as SO4 (2:1 Ext)	-	-									<0.0015	g/l	TM38/PM60
Chromium III	-	-									<0.5	mg/kg	NONE/NONE
Chromium III	-	-									<0.5	mg/kg	NONE/NONE
Total Cyanide #	-	-									<0.5	mg/kg	TM89/PM45

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Tim Mitchell

Note:

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

Opinions lie outside the scope of our UKAS accreditation.

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

Signed on behalf of Jones Environmental Laboratory:



Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
16/11924	1	WS103	0.80	4	22/07/2016	Mass of Dry Sample	51.2 (g)
					22/07/2016	General Description (Bulk Analysis)	soil-stones
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	WS103	2.70	6	22/07/2016	Mass of Dry Sample	44.7 (g)
					22/07/2016	General Description (Bulk Analysis)	soil-stones
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	WS104	1.30	8	22/07/2016	Mass of Dry Sample	42.9 (g)
					22/07/2016	General Description (Bulk Analysis)	soil-stones
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	WS104	4.70	10	22/07/2016	Mass of Dry Sample	51.1 (g)
					22/07/2016	General Description (Bulk Analysis)	soil-stones
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Tim Mitchell

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
16/11924	1	WS105	0.30	12	22/07/2016	Mass of Dry Sample	50.9 (g)
					22/07/2016	General Description (Bulk Analysis)	Soil/Stone
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	WS105	3.70	14	22/07/2016	Mass of Dry Sample	42.5 (g)
					22/07/2016	General Description (Bulk Analysis)	Soil/Stone
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	WS106	3.00	16	22/07/2016	Mass of Dry Sample	47.2 (g)
					25/07/2016	General Description (Bulk Analysis)	Soil/Stones
					25/07/2016	Asbestos Fibres	Fibre Bundles
					25/07/2016	Asbestos ACM	NAD
					25/07/2016	Asbestos Type	Chrysotile
					25/07/2016	Asbestos Level Screen	<0.1%
					26/07/2016	Asbestos Gravimetric Quantification	<0.001 (mass %)
					26/07/2016	Asbestos PCOM Quantification (Fibres)	<0.001 (mass %)
					26/07/2016	Asbestos Gravimetric & PCOM Total	<0.001 (mass %)
16/11924	1	WS107	0.60	18	22/07/2016	Mass of Dry Sample	45.0 (g)
					25/07/2016	General Description (Bulk Analysis)	Soil/Stones/Clay
					25/07/2016	Asbestos Fibres	NAD
					25/07/2016	Asbestos Fibres (2)	NAD
					25/07/2016	Asbestos ACM	NAD
					25/07/2016	Asbestos ACM (2)	NAD
					25/07/2016	Asbestos Type	NAD
					25/07/2016	Asbestos Type (2)	NAD
					25/07/2016	Asbestos Level Screen	NAD
16/11924	1	WS107	4.00	20	22/07/2016	Mass of Dry Sample	42.3 (g)
					22/07/2016	General Description (Bulk Analysis)	soil-stones
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	WS108	4.50	22	22/07/2016	Mass of Dry Sample	51.8 (g)
					22/07/2016	General Description (Bulk Analysis)	soil-stones
					22/07/2016	Asbestos Fibres	NAD

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Tim Mitchell

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
16/11924	1	WS108	4.50	22	22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	WS109A	0.60	24	22/07/2016	Mass of Dry Sample	37.4 (g)
					22/07/2016	General Description (Bulk Analysis)	soil-stones
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
16/11924	1	WS109A	1.50	26	22/07/2016	Mass of Dry Sample	51.8 (g)
					22/07/2016	General Description (Bulk Analysis)	soil-stones
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
16/11924	1	WS110	3.00	28	22/07/2016	Mass of Dry Sample	49.6 (g)
					25/07/2016	General Description (Bulk Analysis)	Soil-Silt/Stones
					25/07/2016	Asbestos Fibres	NAD
					25/07/2016	Asbestos Fibres (2)	NAD
					25/07/2016	Asbestos ACM	NAD
					25/07/2016	Asbestos ACM (2)	NAD
					25/07/2016	Asbestos Type	NAD
					25/07/2016	Asbestos Type (2)	NAD
16/11924	1	BH101	11.00	30	22/07/2016	Mass of Dry Sample	48.3 (g)
					25/07/2016	General Description (Bulk Analysis)	Soil-Silt/Stones
					25/07/2016	Asbestos Fibres	NAD
					25/07/2016	Asbestos Fibres (2)	NAD
					25/07/2016	Asbestos ACM	NAD
					25/07/2016	Asbestos ACM (2)	NAD
					25/07/2016	Asbestos Type	NAD
					25/07/2016	Asbestos Type (2)	NAD
16/11924	1	BH102	6.50	32	22/07/2016	Mass of Dry Sample	44.0 (g)
					22/07/2016	General Description (Bulk Analysis)	Soil/Clay
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Tim Mitchell

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
16/11924	1	BH102	6.50	32	22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	BH103	8.00	34	22/07/2016	Mass of Dry Sample	42.9 (g)
					22/07/2016	General Description (Bulk Analysis)	Soil/Stone
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	BH103	9.50-9.60	36	22/07/2016	Mass of Dry Sample	43.9 (g)
					22/07/2016	General Description (Bulk Analysis)	Soil/Stone
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD
16/11924	1	TP101 INSIDE	1.60	38	22/07/2016	Mass of Dry Sample	42.4 (g)
					22/07/2016	General Description (Bulk Analysis)	Soil/Stone
					22/07/2016	Asbestos Fibres	NAD
					22/07/2016	Asbestos Fibres (2)	NAD
					22/07/2016	Asbestos ACM	NAD
					22/07/2016	Asbestos ACM (2)	NAD
					22/07/2016	Asbestos Type	NAD
					22/07/2016	Asbestos Type (2)	NAD
					22/07/2016	Asbestos Level Screen	NAD

Matrix : Solid

[illegible]

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Tim Mitchell

Matrix : Solid

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
16/11924	1	WS103	0.80	3-4	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS103	2.70	5-6	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS104	1.30	7-8	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS104	4.70	9-10	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS105	0.30	11-12	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS105	3.70	13-14	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS106	3.00	15-16	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS107	0.60	17-18	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS107	4.00	19-20	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS108	4.50	21-22	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS109A	0.60	23-24	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS109A	1.50	25-26	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	WS110	3.00	27-28	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	BH101	11.00	29-30	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	BH102	6.50	31-32	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	BH103	8.00	33-34	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	BH103	9.50-9.60	35-36	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	TP101 INSIDE	1.60	37-38	GRO	Solid Samples were received at a temperature above 9°C.
16/11924	1	BH101	0.50-0.60	39-40	GRO	Solid Samples were received at a temperature above 9°C.

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/11924

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.

WATERS

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

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

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

NOTE

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

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

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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 a 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	x5 Dilution
AB	x10 Dilution
AC	x50 Dilution

JE Job No: 16/11924

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
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.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
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	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			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	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO ₂ generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid or water samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.			AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7 and 6010B	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes

JE Job No: 16/11924

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7 and 6010B	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7 and 6010B	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			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
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AD	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM60	As received solid samples are extracted with deionised water in a 2:1 ratio of water to solid.			AR	Yes
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.			AR	Yes
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.			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	

JE Job No: 16/11924

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes		AR	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes



Jones Environmental Laboratory

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

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Attention :	Kate Duggan
Date :	31st October, 2016
Your reference :	A10708
Our reference :	Test Report 16/16044 Batch 1
Location :	Wessex Yard Havant
Date samples received :	22nd October, 2016
Status :	Final report
Issue :	1

Five samples were received for analysis on 22nd October, 2016 of which four were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

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

Compiled By:

Phil Sommerton BSc
Project Manager

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Kate Duggan
JE Job No.: 16/16044

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HN0₃

J E Sample No.	1-6	7-12	13-14,16-18	19-24							Please see attached notes for all abbreviations and acronyms		
Sample ID	BH101	BH102A	BH103	WS104									
Depth													
COC No / misc													
Containers	V H N P G	V H N N P G	V N P G	V H N N P G									
Sample Date	19/10/2016	19/10/2016	19/10/2016	19/10/2016									
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water									
Batch Number	1	1	1	1									
Date of Receipt	22/10/2016	22/10/2016	22/10/2016	22/10/2016							LOD/LOR	Units	Method No.
Dissolved Arsenic [#]	12.1	29.6	4.2	12.5							<2.5	ug/l	TM30/PM14
Dissolved Barium [#]	72	779	86	372							<3	ug/l	TM30/PM14
Dissolved Beryllium	<0.5	4.5	<0.5	<0.5							<0.5	ug/l	TM30/PM14
Dissolved Boron	90	32	45	409							<12	ug/l	TM30/PM14
Dissolved Cadmium [#]	<0.5	<0.5	<0.5	<0.5							<0.5	ug/l	TM30/PM14
Total Dissolved Chromium [#]	<1.5	62.7	<1.5	<1.5							<1.5	ug/l	TM30/PM14
Dissolved Copper [#]	<7	157	<7	<7							<7	ug/l	TM30/PM14
Dissolved Lead [#]	<5	95	<5	10							<5	ug/l	TM30/PM14
Dissolved Mercury [#]	<1	<1	<1	<1							<1	ug/l	TM30/PM14
Dissolved Nickel [#]	11	138	<2	6							<2	ug/l	TM30/PM14
Dissolved Selenium [#]	<3	<3	<3	<3							<3	ug/l	TM30/PM14
Dissolved Vanadium [#]	2.5	87.4	<1.5	2.5							<1.5	ug/l	TM30/PM14
Dissolved Zinc [#]	16	335	<3	32							<3	ug/l	TM30/PM14
Total Hardness Dissolved (as CaCO3)	474	260	340	472							<1	mg/l	TM30/PM14
PAH MS													
Naphthalene	<0.1 ^B	0.1 ^B	<0.1 ^B	1.6 ^B							<0.1	ug/l	TM4/PM30
Acenaphthylene	0.02	0.02	0.02	0.44							<0.01	ug/l	TM4/PM30
Acenaphthene	0.04	0.01	0.01	11.71							<0.01	ug/l	TM4/PM30
Fluorene	0.02	<0.01	0.02	5.18							<0.01	ug/l	TM4/PM30
Phenanthrene	0.03	<0.01	0.01	5.24							<0.01	ug/l	TM4/PM30
Anthracene	<0.01	<0.01	<0.01	0.75							<0.01	ug/l	TM4/PM30
Fluoranthene	<0.01	<0.01	<0.01	1.36							<0.01	ug/l	TM4/PM30
Pyrene	<0.01	<0.01	<0.01	0.79							<0.01	ug/l	TM4/PM30
Benzo(a)anthracene	<0.01	<0.01	<0.01	0.06							<0.01	ug/l	TM4/PM30
Chrysene	<0.01	<0.01	<0.01	0.06							<0.01	ug/l	TM4/PM30
Benzo(b)fluoranthene	<0.01	<0.01	<0.01	0.05							<0.01	ug/l	TM4/PM30
Benzo(a)pyrene	<0.01	<0.01	<0.01	0.02							<0.01	ug/l	TM4/PM30
Indeno(123cd)pyrene	<0.01	<0.01	<0.01	0.01							<0.01	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.01	<0.01	<0.01	<0.01							<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	<0.01	<0.01	<0.01	0.01							<0.01	ug/l	TM4/PM30
PAH 16 Total	0.1	0.1	<0.1	27.3							<0.1	ug/l	TM4/PM30
Benzo(b)fluoranthene	<0.01	<0.01	<0.01	0.04							<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	0.01							<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	94	95	94	96							<0	%	TM4/PM30

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Kate Duggan
JE Job No.: 16/16044

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HN0₃

J E Sample No.	1-6	7-12	13-14,16-18	19-24							Please see attached notes for all abbreviations and acronyms		
Sample ID	BH101	BH102A	BH103	WS104									
Depth													
COC No / misc													
Containers	V H N N P G	V H N N P G	V N P G	V H N N P G									
Sample Date	19/10/2016	19/10/2016	19/10/2016	19/10/2016									
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water									
Batch Number	1	1	1	1									
Date of Receipt	22/10/2016	22/10/2016	22/10/2016	22/10/2016							LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 #	<5	<5	<5	<5							<5	ug/l	TM36/PM12
>C6-C8 #	<5	<5	<5	<5							<5	ug/l	TM36/PM12
>C8-C10 #	<5	<5	<5	<5							<5	ug/l	TM36/PM12
>C10-C12 #	<5	<5	<5	<5							<5	ug/l	TM5/PM30
>C12-C16 #	<10	<10	<10	<10							<10	ug/l	TM5/PM30
>C16-C21 #	<10	<10	<10	<10							<10	ug/l	TM5/PM30
>C21-C35 #	<10	<10	<10	<10							<10	ug/l	TM5/PM30
Total aliphatics C5-35 #	<10	<10	<10	<10							<10	ug/l	TM5/PM30/PM12
Aromatics													
>C5-EC7 #	<5	<5	<5	19							<5	ug/l	TM36/PM12
>EC7-EC8 #	<5	<5	<5	<5							<5	ug/l	TM36/PM12
>EC8-EC10 #	<5	<5	<5	<5							<5	ug/l	TM36/PM12
>EC10-EC12 #	<5	<5	<5	58							<5	ug/l	TM5/PM30
>EC12-EC16 #	<10	<10	<10	60							<10	ug/l	TM5/PM30
>EC16-EC21 #	<10	<10	<10	10							<10	ug/l	TM5/PM30
>EC21-EC35 #	<10	<10	<10	<10							<10	ug/l	TM5/PM30
Total aromatics C5-35 #	<10	<10	<10	147							<10	ug/l	TM5/PM30/PM12
Total aliphatics and aromatics(C5-35) #	<10	<10	<10	147							<10	ug/l	TM5/PM30/PM12
MTBE #	<5	<5	<5	<5							<5	ug/l	TM31/PM12
Benzene #	<5	<5	<5	19							<5	ug/l	TM31/PM12
Toluene #	<5	<5	<5	<5							<5	ug/l	TM31/PM12
Ethylbenzene #	<5	<5	<5	<5							<5	ug/l	TM31/PM12
m/p-Xylene #	<5	<5	<5	<5							<5	ug/l	TM31/PM12
o-Xylene #	<5	<5	<5	<5							<5	ug/l	TM31/PM12
Total Phenols HPLC	<0.1	<0.1	<0.1	<0.1							<0.1	mg/l	TM26/PM0
Sulphate #	262.0	93.6	72.0	0.6							<0.5	mg/l	TM38/PM0
Total Cyanide #	0.05	0.01	0.57	0.10							<0.01	mg/l	TM89/PM0
Hexavalent Chromium	<0.006	<0.006	<0.006	<0.006							<0.006	mg/l	TM38/PM0
Total Dissolved Chromium III	<6	63	<6	<6							<6	ug/l	NONE/NONE
pH #	7.55	7.87	7.82	7.49							<0.01	pH units	TM73/PM0

Client Name: Omnia
Reference: A10708
Location: Wessex Yard Havant
Contact: Kate Duggan

[illegible]

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/16044

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.

WATERS

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

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

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

NOTE

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

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

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
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 a 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: 16/16044

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID. Including determination of	PM30/PM12	CWG GC-FID	Yes			
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.				
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7 and 6010B	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.				
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7 and 6010B	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes			
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
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			
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.				
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.	Yes			

JE Job No: 16/16044

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM0	No preparation is required.	Yes			
NONE	No Method Code	NONE	No Method Code				

APPENDIX VI
ORIGIN OF GAC VALUES

Residential with Homegrown Products – OECv2 Oct 2015

Constituent	Unit	GAC	Origin of Risk Assessment Value
Arsenic	mg/kg	37	LQM CIEH Suitable for Use Levels (S4UL) 2015- Inorganic Arsenic
Beryllium	mg/kg	1.7	LQM CIEH Suitable for Use Levels (S4UL) 2015
Boron	mg/kg	290	
Cadmium	mg/kg	11	
Chromium VI	mg/kg	6	
Chromium III	mg/kg	910	
Lead	mg/kg	200	
Mercury	mg/kg	40	LQM CIEH Suitable for Use Levels (S4UL) 2015- Inorganic Mercury
Nickel	mg/kg	180	LQM CIEH Suitable for Use Levels (S4UL) 2015
Selenium	mg/kg	250	
Copper	mg/kg	2400	
Zinc	mg/kg	3700	
Vanadium	mg/kg	410	
Phenol	mg/kg	280	LQM CIEH Suitable for Use Levels (S4UL) 2015 1%SOM
Cyanide	mg/kg	791	CLEA 1.04 OEC Derived Value
Naphthalene	mg/kg	2.3	LQM CIEH Suitable for Use Levels (S4UL) 2015 based on a sandy loam as defined in SR3 (EA 2009) 1% SOM
Acenaphthylene	mg/kg	170	
Acenaphthene	mg/kg	210	
Fluorene	mg/kg	170	
Phenanthrene	mg/kg	95	
Anthracene	mg/kg	2400	
Fluoranthene	mg/kg	280	
Pyrene	mg/kg	620	
Benzo(a)Anthracene ^l	mg/kg	7.2	
Chrysene	mg/kg	15	
Benzo(b)Fluoranthene	mg/kg	2.6	
Benzo(k)Fluoranthene	mg/kg	77	
Benzo(a)Pyrene	mg/kg	2.2	
Indeno(123-cd)Pyrene	mg/kg	27	
Dibenzo(a,h)Anthracene	mg/kg	0.24	
Benzo(ghi)Perylene	mg/kg	320	
Benzene	mg/kg	0.087	LQM CIEH Suitable for Use Levels (S4UL) 2015 1%SOM
Toluene	mg/kg	130	
Ethylbenzene	mg/kg	47	
Xylenes	mg/kg	56	LQM CIEH Suitable for Use Levels (S4UL) 2015 1% SOM o-Xylene
TPH CWG (Speciated)			
Aliphatic			LQM CIEH Suitable for Use Levels (S4UL) 2015 based on a sandy loam as

Residential with Homegrown Products – OECv2 Oct 2015

Constituent	Unit	GAC	Origin of Risk Assessment Value
Aliphatic EC 5-6	mg/kg	42	defined in SR3 (EA 2009) 1% SOM
Aliphatic EC >6-8	mg/kg	100	
Aliphatic EC >8-10	mg/kg	27	
Aliphatic EC >10-12	mg/kg	130	
Aliphatic EC > 12-16	mg/kg	1100	
Aliphatic EC > 16-35	mg/kg	65000	
Aliphatic EC >35-44	mg/kg	65000	
Aromatic			LQM CIEH Suitable for Use Levels (S4UL) 2015 based on a sandy loam as defined in SR3 (EA 2009) 1% SOM
Aromatic EC 5-7	mg/kg	70	
Aromatic EC>7-8	mg/kg	130	
Aromatic EC> 8-10	mg/kg	34	
Aromatic EC> 10-12	mg/kg	74	
Aromatic EC> 12-16	mg/kg	140	
Aromatic EC> 16-21	mg/kg	260	
Aromatic EC> 21-35	mg/kg	1100	
Aromatic EC> 35-44	mg/kg	1100	
Banded TPH			
Aliphatic EC 5-6	mg/kg	42	LQM CIEH Suitable for Use Levels (S4UL) 2015 based on a sandy loam as defined in SR3 (EA 2009) 1% SOM, utilising the most conservative of the Ali/Aro chain lengths.
Aliphatic EC >6-8	mg/kg	100	
Aliphatic EC >8-10	mg/kg	27	
Aromatic EC> 10-12	mg/kg	74	
Aromatic EC> 12-16	mg/kg	140	
Aromatic EC> 16-21	mg/kg	260	
Aromatic EC> 21-35	mg/kg	1100	
Aromatic EC> 35-44	mg/kg	1100	

Determinand	Units	Hardness Banding (CaCO3 mg/l)	Freshwater EQS	Source
Arsenic	ug/l		50	WFD EQS 2010 (Freshwater in England & Wales)
Boron	ug/l		2000	Freshwater EQS (AA) - Dangerous Substances Directive (List II)
Cadmium	ug/l	<40	<0.08	WFD EQS 2010 (Freshwater in England & Wales)
		40-50	0.08	
		50-100	0.09	
		100-200	0.15	
		>200	0.25	
Chromium	ug/l		4.7	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Copper	ug/l	0-50	1	WFD EQS 2010 (Freshwater in England & Wales)
		50-100	6	
		100-250	10	
		>250	28	
Cyanide (Free)	ug/l		1	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Iron	ug/l		1000	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Lead	ug/l		7.2	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Mercury	ug/l		0.05	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Nickel	ug/l		20	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Selenium	ug/l		10	Drinking Water Directive
Sulphate	mg/l		400	Freshwater EQS (AA) - Dangerous Substances Directive (List II)
Zinc	ug/l	0-50	8	(AA) WFD EQS 2010 (Freshwater in England & Wales)
		50-100	50	
		100-250	75	
		>250	125	
pH			6 to 9	Freshwater EQS (AA) - Dangerous Substances Directive (List II)
Organics				
Phenol (total)	ug/l		7.7	(AA) WFD EQS 2010 (Freshwater in England & Wales)
MTBE	ug/l		30	Ireland (IGV)
TPH Aliphatic				
Aliphatic C5-C6	ug/l		15,000	WHO Petroleum Products in Drinking Water
Aliphatic C6-C8	ug/l		15,000	WHO Petroleum Products in Drinking Water
Aliphatic C8-C10	ug/l		300	WHO Petroleum Products in Drinking Water
Aliphatic C10-C12	ug/l		300	WHO Petroleum Products in Drinking Water
Aliphatic C12-C16	ug/l		300	WHO Petroleum Products in Drinking Water
Aliphatic C16-C21	ug/l		300	WHO Petroleum Products in Drinking Water
Aliphatic C21-C35	ug/l		300	WHO Petroleum Products in Drinking Water
TPH Aromatic				
Aromatic C5-C7	ug/l		10	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Aromatic C7-C8	ug/l		50	Freshwater EQS (AA) - Dangerous Substances Directive (List II)
Aromatic C8-C10	ug/l		20	Freshwater EQS (AA) - Dangerous Substances Directive (List II)
Aromatic C10-C12	ug/l		100	WHO Petroleum Products in Drinking Water
Aromatic C12-C16	ug/l		100	WHO Petroleum Products in Drinking Water
Aromatic C16-C21	ug/l		90	WHO Petroleum Products in Drinking Water
Aromatic C21-C35	ug/l		90	WHO Petroleum Products in Drinking Water
BTEX				
Benzene	ug/l		10	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Toluene	ug/l		50	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Ethylbenzene	ug/l		20	Freshwater EQS (AA) - Dangerous Substances Directive (List II)
Xylenes	ug/l		30	(AA) WFD EQS 2010 (Freshwater in England & Wales)
PAH				
Anthracene	ug/l		0.1	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Benzo(a)Pyrene	ug/l		0.005	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Fluoranthene	ug/l		0.1	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Naphthalene	ug/l		2.4	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Benzo(b/k)fluoranthene	ug/l		0.003	(AA) WFD EQS 2010 (Freshwater in England & Wales)
Benzo(ghi)perylene & Indeno(1,2,3-cd)perylene	ug/l		0.002	(AA) WFD EQS 2010 (Freshwater in England & Wales)