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Preliminary Report Number : 17-70811

Project / Site name:	Burrows Yard	Samples received on:	13/12/2017
Your job number:	10013618	Samples instructed on:	14/12/2017
Your order number:		Analysis completed by:	Not Complete
Report Issue Number:	0	Report issued on:	27/12/2017
Samples Analysed:	2 bulk samples - 44 soil samples		

Signed 

Dr Claire Stone
Quality Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Preliminary reports provided at the request of the client should be considered as incomplete and have not been through the complete quality control procedure.

Results contained in preliminary reports may be subject to change and therefore should not be used as a basis for decision making, except at the risk of the client.

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876271	876272	876273	876274	876275
Sample Reference				ABH04	ABH04	ABH04	ABH01	ABH01
Sample Number				1	2	3	1	2
Depth (m)				2.20	3.80	4.50	0.50	3.00-3.50
Date Sampled				08/12/2017	11/12/2017	11/12/2017	04/12/2017	04/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	-	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	-	27	10	13	36
Total mass of sample received	kg	0.001	NONE	-	1.9	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile- Loose Fibres	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	-	Not-detected	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.4	-	-	7.5
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	2.8	16	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	0.54	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	0.30	0.77	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	0.28	0.52	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	0.28	0.41	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.19	0.19	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	0.18	0.16	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	3.99	19.1	-	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	19	-	-	20
Boron (water soluble)	mg/kg	0.2	MCERTS	-	1.6	-	-	3.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	< 4.0
Chromium (III)	mg/kg	1	NONE	-	42	-	50	36
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	42	-	51	36
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	44	-	-	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	53	-	-	64
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	33	-	-	35
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	160	-	-	130

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Project / Site name: Burrows Yard

Lab Sample Number				876271	876272	876273	876274	876275
Sample Reference				ABH04	ABH04	ABH04	ABH01	ABH01
Sample Number				1	2	3	1	2
Depth (m)				2.20	3.80	4.50	0.50	3.00-3.50
Date Sampled				08/12/2017	11/12/2017	11/12/2017	04/12/2017	04/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	350	< 1.0	-	< 1.0
Toluene	ug/kg	1	MCERTS	-	1100	< 1.0	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	710	< 1.0	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	3100	< 1.0	-	< 1.0
o-xylene	ug/kg	1	MCERTS	-	950	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	11	< 0.1	-	< 0.1
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	0.20	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	1.7	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	15	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	44	< 2.0	-	2.5
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	30	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	10	< 8.0	-	9.9
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	100	< 10	-	17

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	0.35	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	1.1	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	7.2	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	21	22	-	1.9
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	24	10	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	21	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	27	30	-	13
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	100	67	-	20



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Project / Site name: Burrows Yard

Lab Sample Number	876271	876272	876273	876274	876275
Sample Reference	ABH04	ABH04	ABH04	ABH01	ABH01
Sample Number	1	2	3	1	2
Depth (m)	2.20	3.80	4.50	0.50	3.00-3.50
Date Sampled	08/12/2017	11/12/2017	11/12/2017	04/12/2017	04/12/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Environmental Forensics

Broadscan		N/A	NONE	-	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876276	876277	876278	876279	876280
Sample Reference				ABH02	ABH02	ABH03	ABH03	ATP01a
Sample Number				1	2	1	2	None Supplied
Depth (m)				0.50-1.00	2.90-3.00	0.50-1.00	3.00-3.50	0.50-0.60
Date Sampled				06/12/2017	06/12/2017	07/12/2017	07/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	22	20	15	22	15
Total mass of sample received	kg	0.001	NONE	1.5	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile- Hard/Cement Type Material	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Detected	-	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	7.6	-	7.9	-
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	-	0.42	-	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	-	0.68	-	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	-	0.60	-	< 0.05	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.48	-	< 0.05	-
Chrysene	mg/kg	0.05	MCERTS	-	0.53	-	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	0.47	-	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.25	-	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	0.44	-	< 0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	0.33	-	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.35	-	< 0.05	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	4.55	-	< 0.80	-
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	15	-	11	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.8	-	2.4	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (III)	mg/kg	1	NONE	22	16	32	19	78
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	16	33	19	79
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	44	-	14	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	190	-	36	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	31	-	18	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	420	-	72	-

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Project / Site name: Burrows Yard

Lab Sample Number				876276	876277	876278	876279	876280
Sample Reference				ABH02	ABH02	ABH03	ABH03	ATP01a
Sample Number				1	2	1	2	None Supplied
Depth (m)				0.50-1.00	2.90-3.00	0.50-1.00	3.00-3.50	0.50-0.60
Date Sampled				06/12/2017	06/12/2017	07/12/2017	07/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Toluene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
o-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC5 - EC6								
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	45	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	49	-	< 10	-
TPH-CWG - Aromatic >EC5 - EC7								
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	1.9	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	2.6	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	36	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	45	-	12	-



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Project / Site name: Burrows Yard

Lab Sample Number				876276	876277	876278	876279	876280
Sample Reference				ABH02	ABH02	ABH03	ABH03	ATP01a
Sample Number				1	2	1	2	None Supplied
Depth (m)				0.50-1.00	2.90-3.00	0.50-1.00	3.00-3.50	0.50-0.60
Date Sampled				06/12/2017	06/12/2017	07/12/2017	07/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Environmental Forensics								
Broadscan					N/A	NONE	-	-

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Project / Site name: Burrows Yard

Lab Sample Number				876281	876282	876283	876284	876285
Sample Reference				ATP03	ATP04	ATP05	ATP06	ATP06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90-1.00	1.20-1.30	1.20-1.30	0.50	2.00-2.10
Date Sampled				06/12/2017	06/12/2017	06/12/2017	05/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	-	< 0.1
Moisture Content	%	N/A	NONE	15	8.6	28	-	20
Total mass of sample received	kg	0.001	NONE	2.0	1.9	1.9	-	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile- Loose Fibrous Debris, Amosite- Loose Fibres	Chrysotile- Loose Fibres	Chrysotile- Loose Fibres	Chrysotile- Loose Fibres	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7.6
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	-	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	16
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	1.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	< 4.0
Chromium (III)	mg/kg	1	NONE	23	13	17	-	60
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	15	19	-	61
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	150

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Project / Site name: Burrows Yard

Lab Sample Number				876281	876282	876283	876284	876285
Sample Reference				ATP03	ATP04	ATP05	ATP06	ATP06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90-1.00	1.20-1.30	1.20-1.30	0.50	2.00-2.10
Date Sampled				06/12/2017	06/12/2017	06/12/2017	05/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
Toluene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
o-xylene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	-	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC5 - EC6								
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	3.5
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	150
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	220
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	55
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	420
TPH-CWG - Aromatic >EC5 - EC7								
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	5.6
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	110
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	300
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	120
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	530



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876281	876282	876283	876284	876285
Sample Reference				ATP03	ATP04	ATP05	ATP06	ATP06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90-1.00	1.20-1.30	1.20-1.30	0.50	2.00-2.10
Date Sampled				06/12/2017	06/12/2017	06/12/2017	05/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Environmental Forensics								
Broadscan					N/A	NONE	-	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876286	876287	876288	876289	876290
Sample Reference				ATP08A	ATP08A	ATP09	ATP10	ATP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-2.00	2.20	1.30-1.40	0.10-2.10	2.10-2.60
Date Sampled				07/12/2017	07/12/2017	06/12/2017	06/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	20	32	20	19	17
Total mass of sample received	kg	0.001	NONE	1.4	1.8	1.7	1.8	1.9

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Chrysotile- Loose Fibres	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Detected	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7.7
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	0.51	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	0.35	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	0.29	-	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.30	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	0.28	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	1.73	-	-	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	13
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	1.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	< 4.0	-
Chromium (III)	mg/kg	1	NONE	8.0	-	20	23	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.0	-	20	24	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	21
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	110

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876286	876287	876288	876289	876290
Sample Reference				ATP08A	ATP08A	ATP09	ATP10	ATP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-2.00	2.20	1.30-1.40	0.10-2.10	2.10-2.60
Date Sampled				07/12/2017	07/12/2017	06/12/2017	06/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Toluene	ug/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
o-xylene	ug/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	-	-	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	1.2	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	46	-	-	120
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	54	-	-	130
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	1.7
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	48	-	-	140
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	53	-	-	150



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876286	876287	876288	876289	876290
Sample Reference				ATP08A	ATP08A	ATP09	ATP10	ATP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-2.00	2.20	1.30-1.40	0.10-2.10	2.10-2.60
Date Sampled				07/12/2017	07/12/2017	06/12/2017	06/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Environmental Forensics								
Broadscan					N/A	NONE	-	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876291	876292	876293	876294	876295
Sample Reference				ATP11	ATP11	ATP12	ATP12	M01a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	2.00-2.20	0.00-2.20	2.20-2.50	0.00-0.50
Date Sampled				05/12/2017	05/12/2017	05/12/2017	05/12/2017	04/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	21	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	20	18	12	19	15
Total mass of sample received	kg	0.001	NONE	1.7	1.8	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile- Loose Fibres	-	Chrysotile- Loose Fibrous Debris; Chrysotile, Crocidolite, Amosite- Loose Fibres	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	Detected	-	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	7.4	-	8.2	7.9
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	1100

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.33
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.19
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.24
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	1.9
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.40
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	4.3
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	3.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	2.6
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	2.4
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	2.8
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	1.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	2.0
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	1.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.42
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	1.6

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	< 0.80	-	< 0.80	25.4
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	13	25
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	0.8	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	< 0.2	0.9
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	< 4.0
Chromium (III)	mg/kg	1	NONE	32	-	30	-	52
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	-	30	15	52
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	11	170
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	15	190
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	21	34
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	62	780

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876291	876292	876293	876294	876295
Sample Reference				ATP11	ATP11	ATP12	ATP12	M01a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	2.00-2.20	0.00-2.20	2.20-2.50	0.00-0.50
Date Sampled				05/12/2017	05/12/2017	05/12/2017	05/12/2017	04/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	1.5
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	4.5
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	14
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	120
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	140
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	2.4
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	4.8
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	< 10	24
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	< 10	140
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	12	170



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876291	876292	876293	876294	876295
Sample Reference				ATP11	ATP11	ATP12	ATP12	M01a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	2.00-2.20	0.00-2.20	2.20-2.50	0.00-0.50
Date Sampled				05/12/2017	05/12/2017	05/12/2017	05/12/2017	04/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Environmental Forensics								
Broadscan					N/A	NONE	-	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876296	876297	876298	876299	876300
Sample Reference				M02a	M02a	M02c	M03a	M04a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.00	0.00-1.00	0.00-2.00	0.00-0.70	0.00-1.00
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	-	< 0.1	-	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	-	11	-	14	11
Total mass of sample received	kg	0.001	NONE	-	2.0	-	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Crocidolite- Loose Fibres	Chrysotile- Loose Fibres	-	Chrysotile- Loose Fibres
Asbestos in Soil	Type	N/A	ISO 17025	-	Detected	Detected	Not-detected	Detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	9.6	-	8.5	10.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	3100	-	1200	2000

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.32	0.26
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.33	0.18
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.19	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.23	0.12
Phenanthrene	mg/kg	0.05	MCERTS	-	0.77	-	2.0	1.2
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.34	0.25
Fluoranthene	mg/kg	0.05	MCERTS	-	1.4	-	4.9	2.5
Pyrene	mg/kg	0.05	MCERTS	-	1.0	-	3.8	2.0
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.87	-	2.9	1.6
Chrysene	mg/kg	0.05	MCERTS	-	0.81	-	3.3	1.8
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	1.1	-	3.7	2.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.48	-	2.1	0.85
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	0.80	-	2.7	1.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	0.63	-	2.1	1.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.65	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.71	-	2.2	1.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	8.51	-	31.6	16.5
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	24	-	47	55
Boron (water soluble)	mg/kg	0.2	MCERTS	-	2.0	-	1.5	1.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	0.9	-	2.3	2.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	< 4.0
Chromium (III)	mg/kg	1	NONE	-	17	-	25	11
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	18	-	25	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	110	-	200	150
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	160	-	620	700
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	17	-	31	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	710	-	1700	4500

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876296	876297	876298	876299	876300
Sample Reference				M02a	M02a	M02c	M03a	M04a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.00	0.00-1.00	0.00-2.00	0.00-0.70	0.00-1.00
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	1.9	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	3.8	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	14	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	95	-	48	38
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	110	-	56	42
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	1.9	-	1.1	1.9
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	2.2	-	2.9	2.4
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	15	-	22	17
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	110	-	91	69
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	130	-	120	90



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876296	876297	876298	876299	876300
Sample Reference				M02a	M02a	M02c	M03a	M04a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.00	0.00-1.00	0.00-2.00	0.00-0.70	0.00-1.00
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Environmental Forensics								
Broadscan					N/A	NONE	To follow	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876301	876302	876303	876304	876305
Sample Reference				M05a	M6	M6	M6A	M6B
Sample Number				None Supplied	Centre	Edge	Edge	Edge
Depth (m)				0.50	0.00-1.40	0.00-1.40	0.00-1.00	0.00
Date Sampled				05/12/2017	07/12/2017	07/12/2017	07/12/2017	07/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	-	< 0.1	-	-
Moisture Content	%	N/A	NONE	4.1	-	14	-	-
Total mass of sample received	kg	0.001	NONE	1.2	-	1.7	-	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile- Loose Fibrous Debris	Chrysotile- Loose Fibrous Debris	Chrysotile- Loose Fibres, Loose Fibrous Debris	Chrysotile- Loose Fibrous Debris
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Detected	Detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	-	8.6	-	-
Total Sulphate as SO ₄	mg/kg	50	MCERTS	4800	-	2200	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	6.0	-	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Fluorene	mg/kg	0.05	MCERTS	0.19	-	0.18	-	-
Phenanthrene	mg/kg	0.05	MCERTS	0.33	-	1.3	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	0.19	-	-
Fluoranthene	mg/kg	0.05	MCERTS	0.36	-	2.5	-	-
Pyrene	mg/kg	0.05	MCERTS	0.35	-	2.1	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.31	-	1.8	-	-
Chrysene	mg/kg	0.05	MCERTS	0.45	-	1.4	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.35	-	1.8	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.26	-	1.0	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.27	-	1.4	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	1.1	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	1.2	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	8.82	-	16.0	-	-
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.1	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	-	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	-
Chromium (III)	mg/kg	1	NONE	6.3	-	35	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	6.6	-	36	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	34	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	200	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	4.7	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.6	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	280	-	-	-	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876301	876302	876303	876304	876305
Sample Reference				M05a	M6	M6	M6A	M6B
Sample Number				None Supplied	Centre	Edge	Edge	Edge
Depth (m)				0.50	0.00-1.40	0.00-1.40	0.00-1.00	0.00
Date Sampled				05/12/2017	07/12/2017	07/12/2017	07/12/2017	07/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	16	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	500	-	57	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	520	-	61	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	12	-	2.9	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	14	-	3.8	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	17	-	15	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	1000	-	200	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	1100	-	220	-	-



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876301	876302	876303	876304	876305
Sample Reference				M05a	M6	M6	M6A	M6B
Sample Number				None Supplied	Centre	Edge	Edge	Edge
Depth (m)				0.50	0.00-1.40	0.00-1.40	0.00-1.00	0.00
Date Sampled				05/12/2017	07/12/2017	07/12/2017	07/12/2017	07/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Environmental Forensics								
Broadscan					N/A	NONE	To follow	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876306	876307	876308	876309	876310
Sample Reference				ALIF01a	ALIF02a	ALIF02a	ALIF03a	ALIF04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.80	0.50	0.30
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	20	-	< 0.1	-
Moisture Content	%	N/A	NONE	11	13	-	13	-
Total mass of sample received	kg	0.001	NONE	2.0	1.9	-	0.87	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile- Loose Fibres	Chrysotile- Loose Fibrous Debris	Chrysotile- Sheeting Board Debris, Loose Fibres, Loose Fibrous Debris
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Detected	Detected	Detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	-	-
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	-	< 4.0	-
Chromium (III)	mg/kg	1	NONE	41	16	-	20	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	41	17	-	20	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876306	876307	876308	876309	876310
Sample Reference				ALIF01a	ALIF02a	ALIF02a	ALIF03a	ALIF04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.80	0.50	0.30
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	-	-	-	-	-
Toluene	ug/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	ug/kg	1	MCERTS	-	-	-	-	-
o-xylene	ug/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876306	876307	876308	876309	876310
Sample Reference				ALIF01a	ALIF02a	ALIF02a	ALIF03a	ALIF04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.80	0.50	0.30
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Environmental Forensics								
Broadscan				N/A	NONE	-	-	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876311	876312	876313	876314	
Sample Reference				ALIF05	ALIF07a	ALIF06	ALIF12	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.40	0.60	0.50	0.60	
Date Sampled				05/12/2017	05/12/2017	05/12/2017	05/12/2017	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	-	
Moisture Content	%	N/A	NONE	10	17	18	-	
Total mass of sample received	kg	0.001	NONE	1.9	1.5	1.2	-	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile- Loose Fibres	-	-	Chrysotile- Loose Fibres	
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	Not-detected	Detected	

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	-	
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	
Chromium (III)	mg/kg	1	NONE	22	12	18	-	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	13	19	-	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876311	876312	876313	876314	
Sample Reference				ALIF05	ALIF07a	ALIF06	ALIF12	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.40	0.60	0.50	0.60	
Date Sampled				05/12/2017	05/12/2017	05/12/2017	05/12/2017	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	-	-	-	-	
Toluene	ug/kg	1	MCERTS	-	-	-	-	
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	-	
p & m-xylene	ug/kg	1	MCERTS	-	-	-	-	
o-xylene	ug/kg	1	MCERTS	-	-	-	-	
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	-	

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876311	876312	876313	876314	
Sample Reference				ALIF05	ALIF07a	ALIF06	ALIF12	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.40	0.60	0.50	0.60	
Date Sampled				05/12/2017	05/12/2017	05/12/2017	05/12/2017	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Environmental Forensics								
Broadscan				N/A	NONE	-	-	-



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876315	876316			
Sample Reference				M6	ALIF01a			
Sample Number				None Supplied	None Supplied			
Depth (m)				0.00	0.30			
Date Sampled				07/12/2017	04/12/2017			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Bulk Analysis)				Units	Limit of detection	Accreditation Status		
Asbestos Identification Name				Type	N/A	ISO 17025	Chrysotile-Hard/Cement Type Material	Chrysotile-Hard/Cement Type Material



Preliminary Report Number : 17-70811

Project / Site name: Burrows Yard

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
876271	ABH04	1	2.20	-
876272	ABH04	2	3.80	Light grey clay and sand.
876273	ABH04	3	4.50	Light brown sandy gravel.
876274	ABH01	1	0.50	Brown loam and sand with gravel and rubble.
876275	ABH01	2	3.00-3.50	Brown clay and sand.
876276	ABH02	1	0.50-1.00	To Follow
876277	ABH02	2	2.90-3.00	Brown clay and sand with gravel and vegetation.
876278	ABH03	1	0.50-1.00	Brown loam and sand with gravel and vegetation.
876279	ABH03	2	3.00-3.50	Grey clay.
876280	ATP01a	None Supplied	0.50-0.60	To Follow
876281	ATP03	None Supplied	0.90-1.00	To Follow
876282	ATP04	None Supplied	1.20-1.30	Brown sandy clay with rubble and gravel
876283	ATP05	None Supplied	1.20-1.30	To Follow
876284	ATP06	None Supplied	0.50	-
876285	ATP06	None Supplied	2.00-2.10	Brown clay and sand.
876286	ATP08A	None Supplied	0.40-2.00	To Follow
876287	ATP08A	None Supplied	2.20	To Follow
876288	ATP09	None Supplied	1.30-1.40	To Follow
876289	ATP10	None Supplied	0.10-2.10	Brown gravelly sand with brick.
876290	ATP10	None Supplied	2.10-2.60	Brown clay.
876291	ATP11	None Supplied	1.20	Brown gravelly clay.
876292	ATP11	None Supplied	2.00-2.20	Brown clay.
876293	ATP12	None Supplied	0.00-2.20	Brown loam and gravel with vegetation and stones.
876294	ATP12	None Supplied	2.20-2.50	Grey sandy clay.
876295	M01a	None Supplied	0.00-0.50	Brown loam and sand with gravel and vegetation.
876296	M02a	None Supplied	0.00-0.00	-
876297	M02a	None Supplied	0.00-1.00	Brown loam and sand with gravel.
876298	M02c	None Supplied	0.00-2.00	-
876299	M03a	None Supplied	0.00-0.70	Brown loam and sand with gravel and vegetation.
876300	M04a	None Supplied	0.00-1.00	Brown loam and sand with vegetation and gravel.
876301	M05a	None Supplied	0.50	Brown gravel with tar.
876302	M6	Centre	0.00-1.40	-
876303	M6	Edge	0.00-1.40	Brown loam and sand with gravel and vegetation.
876304	M6A	Edge	0.00-1.00	-
876305	M6B	Edge	0.00	-
876306	ALIF01a	None Supplied	0.30	Brown loam and sand with gravel and vegetation.
876307	ALIF02a	None Supplied	0.30	Brown loam and sand with stones and gravel
876308	ALIF02a	None Supplied	0.80	-
876309	ALIF03a	None Supplied	0.50	Brown loam and sand with gravel.
876310	ALIF04	None Supplied	0.30	-
876311	ALIF05	None Supplied	0.40	Light brown sand with gravel and rubble.
876312	ALIF07a	None Supplied	0.60	Brown loam and sand with gravel and rubble.
876313	ALIF06	None Supplied	0.50	Grey sand with gravel.
876314	ALIF12	None Supplied	0.60	-

Preliminary Report Number : 17-70811

Project / Site name: Burrows Yard

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
PRO (Soil)	Determination of hydrocarbons C6-C10 by headspace GC-MS.	In-house method based on USEPA8260	L088-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
TO - Broadscan in soil	Qualitative GC-MS scan based on the NIST and Wiley 2013 mass spectral library.	In house method - GC-MS broadscan.		W	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L038-PL	D	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L088/76-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

**Laura Cohu**

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Analytical Report Number : 17-70811

Project / Site name:	Burrows Yard	Samples received on:	13/12/2017
Your job number:	10013618	Samples instructed on:	14/12/2017
Your order number:		Analysis completed by:	08/01/2018
Report Issue Number:	1	Report issued on:	08/01/2018
Samples Analysed:	2 bulk samples - 44 soil samples		

Signed:

Jordan Hill
Reporting Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876271	876272	876273	876274	876275
Sample Reference				ABH04	ABH04	ABH04	ABH01	ABH01
Sample Number				1	2	3	1	2
Depth (m)				2.20	3.80	4.50	0.50	3.00-3.50
Date Sampled				08/12/2017	11/12/2017	11/12/2017	04/12/2017	04/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	-	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	-	27	10	13	36
Total mass of sample received	kg	0.001	NONE	-	1.9	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	-	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.005	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.005	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.4	-	-	7.5
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	2.8	16	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	0.54	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	0.30	0.77	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	0.28	0.52	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	0.28	0.41	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.19	0.19	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	0.18	0.16	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	3.99	19.1	-	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	19	-	-	20
Boron (water soluble)	mg/kg	0.2	MCERTS	-	1.6	-	-	3.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	< 4.0
Chromium (III)	mg/kg	1	NONE	-	42	-	50	36
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	42	-	51	36
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	44	-	-	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	53	-	-	64
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	33	-	-	35
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	160	-	-	130

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number	876271	876272	876273	876274	876275
Sample Reference	ABH04	ABH04	ABH04	ABH01	ABH01
Sample Number	1	2	3	1	2
Depth (m)	2.20	3.80	4.50	0.50	3.00-3.50
Date Sampled	08/12/2017	11/12/2017	11/12/2017	04/12/2017	04/12/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Monoaromatics

Benzene	µg/kg	1	MCERTS	-	350	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	1100	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	710	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	3100	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	950	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	11	< 0.1	-	< 0.1
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	0.20	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	1.7	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	15	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	44	< 2.0	-	2.5
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	30	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	10	< 8.0	-	9.9
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	100	< 10	-	17

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	0.35	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	1.1	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	7.2	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	21	22	-	1.9
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	24	10	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	21	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	27	30	-	13
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	100	67	-	20

Environmental Forensics

Broadscan		N/A	NONE	-	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876276	876277	876278	876279	876280
Sample Reference				ABH02	ABH02	ABH03	ABH03	ATP01a
Sample Number				1	2	1	2	None Supplied
Depth (m)				0.50-1.00	2.90-3.00	0.50-1.00	3.00-3.50	0.50-0.60
Date Sampled				06/12/2017	06/12/2017	07/12/2017	07/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	22	20	15	22	15
Total mass of sample received	kg	0.001	NONE	1.5	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Detected	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	0.006	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	0.006	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	7.6	-	7.9	-
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	-	0.42	-	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	-	0.68	-	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	-	0.60	-	< 0.05	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.48	-	< 0.05	-
Chrysene	mg/kg	0.05	MCERTS	-	0.53	-	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	0.47	-	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.25	-	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	0.44	-	< 0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	0.33	-	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.35	-	< 0.05	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	4.55	-	< 0.80	-
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	15	-	11	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.8	-	2.4	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (III)	mg/kg	1	NONE	22	16	32	19	78
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	16	33	19	79
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	44	-	14	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	190	-	36	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	31	-	18	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	420	-	72	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876276	876277	876278	876279	876280
Sample Reference				ABH02	ABH02	ABH03	ABH03	ATP01a
Sample Number				1	2	1	2	None Supplied
Depth (m)				0.50-1.00	2.90-3.00	0.50-1.00	3.00-3.50	0.50-0.60
Date Sampled				06/12/2017	06/12/2017	07/12/2017	07/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Monoaromatics

Benzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	45	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	49	-	< 10	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	1.9	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	2.6	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	36	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	45	-	12	-

Environmental Forensics

Broadscan		N/A	NONE	-	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number	876281	876282	876283	876284	876285
Sample Reference	ATP03	ATP04	ATP05	ATP06	ATP06
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.90-1.00	1.20-1.30	1.20-1.30	0.50	2.00-2.10
Date Sampled	06/12/2017	06/12/2017	06/12/2017	05/12/2017	05/12/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	15	20
Total mass of sample received	kg	0.001	NONE	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Amosite	Chrysotile	Chrysotile	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.004	< 0.001	< 0.001	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.004	< 0.001	< 0.001	< 0.001	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7.6
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	-	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	16
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	1.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	< 4.0
Chromium (III)	mg/kg	1	NONE	23	13	17	-	60
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	15	19	-	61
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	150

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876281	876282	876283	876284	876285
Sample Reference				ATP03	ATP04	ATP05	ATP06	ATP06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90-1.00	1.20-1.30	1.20-1.30	0.50	2.00-2.10
Date Sampled				06/12/2017	06/12/2017	06/12/2017	05/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Monoaromatics

Benzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	3.5
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	150
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	220
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	55
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	420

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	5.6
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	110
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	300
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	120
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	530

Environmental Forensics

Broadscan		N/A	NONE	-	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876286	876287	876288	876289	876290
Sample Reference				ATP08A	ATP08A	ATP09	ATP10	ATP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-2.00	2.20	1.30-1.40	0.10-2.10	2.10-2.60
Date Sampled				07/12/2017	07/12/2017	06/12/2017	06/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	20	32	20	19	17
Total mass of sample received	kg	0.001	NONE	1.4	1.8	1.7	1.8	1.9

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	0.003	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	0.003	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7.7
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	0.51	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	0.35	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	0.29	-	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.30	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	0.28	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	1.73	-	-	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	13
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	1.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	< 4.0	-
Chromium (III)	mg/kg	1	NONE	8.0	-	20	23	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.0	-	20	24	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	21
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	110

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876286	876287	876288	876289	876290
Sample Reference				ATP08A	ATP08A	ATP09	ATP10	ATP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-2.00	2.20	1.30-1.40	0.10-2.10	2.10-2.60
Date Sampled				07/12/2017	07/12/2017	06/12/2017	06/12/2017	06/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	1.2	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	46	-	-	120
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	54	-	-	130

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	1.7
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	48	-	-	140
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	53	-	-	150

Environmental Forensics

Broadscan		N/A	NONE	-	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876291	876292	876293	876294	876295
Sample Reference				ATP11	ATP11	ATP12	ATP12	M01a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	2.00-2.20	0.00-2.20	2.20-2.50	0.00-0.50
Date Sampled				05/12/2017	05/12/2017	05/12/2017	05/12/2017	04/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	21	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	20	18	12	19	15
Total mass of sample received	kg	0.001	NONE	1.7	1.8	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	Chrysotile & Crocidolite & Amosite	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	Detected	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	0.002	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	0.002	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	7.4	-	8.2	7.9
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	1100

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.33
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.19
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.24
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	1.9
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.40
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	4.3
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	3.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	2.6
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	2.4
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	2.8
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	1.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	2.0
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	1.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	0.42
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	1.6

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	< 0.80	-	< 0.80	25.4
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	13	25
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	0.8	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	< 0.2	0.9
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	< 4.0
Chromium (III)	mg/kg	1	NONE	32	-	30	-	52
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	-	30	15	52
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	11	170
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	15	190
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	21	34
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	62	780

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number	876291	876292	876293	876294	876295
Sample Reference	ATP11	ATP11	ATP12	ATP12	M01a
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.20	2.00-2.20	0.00-2.20	2.20-2.50	0.00-0.50
Date Sampled	05/12/2017	05/12/2017	05/12/2017	05/12/2017	04/12/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Monoaromatics

Benzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	1.5
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	4.5
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	14
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	120
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	140

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	2.4
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	4.8
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	< 10	24
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	< 10	140
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	12	170

Environmental Forensics

Broadscan		N/A	NONE	-	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876296	876297	876298	876299	876300
Sample Reference				M02a	M02a	M02c	M03a	M04a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.00	0.00-1.00	0.00-2.00	0.00-0.70	0.00-1.00
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	-	< 0.1	-	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	-	11	-	14	11
Total mass of sample received	kg	0.001	NONE	-	2.0	-	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Crocidolite	Chrysotile	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	-	Detected	Detected	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	< 0.001	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	< 0.001	-	< 0.001

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	9.6	-	8.5	10.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	3100	-	1200	2000

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.32	0.26
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.33	0.18
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.19	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.23	0.12
Phenanthrene	mg/kg	0.05	MCERTS	-	0.77	-	2.0	1.2
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.34	0.25
Fluoranthene	mg/kg	0.05	MCERTS	-	1.4	-	4.9	2.5
Pyrene	mg/kg	0.05	MCERTS	-	1.0	-	3.8	2.0
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.87	-	2.9	1.6
Chrysene	mg/kg	0.05	MCERTS	-	0.81	-	3.3	1.8
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	1.1	-	3.7	2.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.48	-	2.1	0.85
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	0.80	-	2.7	1.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	0.63	-	2.1	1.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.65	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.71	-	2.2	1.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	8.51	-	31.6	16.5
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	24	-	47	55
Boron (water soluble)	mg/kg	0.2	MCERTS	-	2.0	-	1.5	1.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	0.9	-	2.3	2.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	< 4.0
Chromium (III)	mg/kg	1	NONE	-	17	-	25	11
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	18	-	25	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	110	-	200	150
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	160	-	620	700
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	17	-	31	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	710	-	1700	4500

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876296	876297	876298	876299	876300
Sample Reference				M02a	M02a	M02c	M03a	M04a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.00	0.00-1.00	0.00-2.00	0.00-0.70	0.00-1.00
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Monoaromatics

Benzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	1.9	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	3.8	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	14	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	95	-	48	38
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	110	-	56	42

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	1.9	-	1.1	1.9
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	2.2	-	2.9	2.4
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	15	-	22	17
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	110	-	91	69
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	130	-	120	90

Environmental Forensics

Broadscan		N/A	NONE	See attached	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876301	876302	876303	876304	876305
Sample Reference				M05a	M6	M6	M6A	M6B
Sample Number				None Supplied	Centre	Edge	Edge	Edge
Depth (m)				0.50	0.00-1.40	0.00-1.40	0.00-1.00	0.00
Date Sampled				05/12/2017	07/12/2017	07/12/2017	07/12/2017	07/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	-	< 0.1	-	-
Moisture Content	%	N/A	NONE	4.1	-	14	-	-
Total mass of sample received	kg	0.001	NONE	1.2	-	1.7	-	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	Chrysotile	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	< 0.001	0.018	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	< 0.001	0.018	< 0.001

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	-	8.6	-	-
Total Sulphate as SO ₄	mg/kg	50	MCERTS	4800	-	2200	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	6.0	-	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Fluorene	mg/kg	0.05	MCERTS	0.19	-	0.18	-	-
Phenanthrene	mg/kg	0.05	MCERTS	0.33	-	1.3	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	0.19	-	-
Fluoranthene	mg/kg	0.05	MCERTS	0.36	-	2.5	-	-
Pyrene	mg/kg	0.05	MCERTS	0.35	-	2.1	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.31	-	1.8	-	-
Chrysene	mg/kg	0.05	MCERTS	0.45	-	1.4	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.35	-	1.8	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.26	-	1.0	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.27	-	1.4	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	1.1	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	1.2	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	8.82	-	16.0	-	-
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.1	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	-	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	-
Chromium (III)	mg/kg	1	NONE	6.3	-	35	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	6.6	-	36	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	34	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	200	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	4.7	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.6	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	280	-	-	-	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876301	876302	876303	876304	876305
Sample Reference				M05a	M6	M6	M6A	M6B
Sample Number				None Supplied	Centre	Edge	Edge	Edge
Depth (m)				0.50	0.00-1.40	0.00-1.40	0.00-1.00	0.00
Date Sampled				05/12/2017	07/12/2017	07/12/2017	07/12/2017	07/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	16	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	500	-	57	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	520	-	61	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	12	-	2.9	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	14	-	3.8	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	17	-	15	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	1000	-	200	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	1100	-	220	-	-

Environmental Forensics

Broadscan		N/A	NONE	See attached	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876306	876307	876308	876309	876310
Sample Reference				ALIF01a	ALIF02a	ALIF02a	ALIF03a	ALIF04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.80	0.50	0.30
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	20	-	< 0.1	-
Moisture Content	%	N/A	NONE	11	13	-	13	-
Total mass of sample received	kg	0.001	NONE	2.0	1.9	-	0.87	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	< 0.001	0.075
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	< 0.001	0.075

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	-
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	-	-
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	-	< 4.0	-
Chromium (III)	mg/kg	1	NONE	41	16	-	20	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	41	17	-	20	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876306	876307	876308	876309	876310
Sample Reference				ALIF01a	ALIF02a	ALIF02a	ALIF03a	ALIF04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.30	0.80	0.50	0.30
Date Sampled				04/12/2017	04/12/2017	04/12/2017	04/12/2017	05/12/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-

Environmental Forensics

Broadscan		N/A	NONE	-	-	-	-	-
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Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number	876311	876312	876313	876314	
Sample Reference	ALIF05	ALIF07a	ALIF06	ALIF12	
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)	0.40	0.60	0.50	0.60	
Date Sampled	05/12/2017	05/12/2017	05/12/2017	05/12/2017	
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	10	17
Total mass of sample received	kg	0.001	NONE	1.9	1.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	Chrysotile	
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	Not-detected	Detected	
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	< 0.001	
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	< 0.001	

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	
Total Sulphate as SO ₄	mg/kg	50	MCERTS	-	-	-	-	

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	-	
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	
Chromium (III)	mg/kg	1	NONE	22	12	18	-	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	13	19	-	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	

Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876311	876312	876313	876314	
Sample Reference				ALIF05	ALIF07a	ALIF06	ALIF12	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.40	0.60	0.50	0.60	
Date Sampled				05/12/2017	05/12/2017	05/12/2017	05/12/2017	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Monoaromatics

Benzene	µg/kg	1	MCERTS	-	-	-	-	
Toluene	µg/kg	1	MCERTS	-	-	-	-	
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	
o-xylene	µg/kg	1	MCERTS	-	-	-	-	
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	

Environmental Forensics

Broadscan		N/A	NONE	-	-	-	-	
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Analytical Report Number: **17-70811**
Project / Site name: **Burrows Yard**
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
876271	ABH04	2.20	123	Loose Fibres	Chrysotile	0.005	0.005
876278	ABH03	0.50-1.00	138	Hard/Cement Type Material	Chrysotile	0.006	0.006
876281	ATP03	0.90-1.00	161	Loose Fibres & Loose Fibrous Debris	Chrysotile & Amosite	0.004	0.004
876282	ATP04	1.20-1.30	132	Loose Fibres	Chrysotile	< 0.001	< 0.001
876283	ATP05	1.20-1.30	106	Loose Fibres	Chrysotile	< 0.001	< 0.001
876284	ATP06	0.50	128	Loose Fibres	Chrysotile	< 0.001	< 0.001
876289	ATP10	0.10-2.10	118	Loose Fibres	Chrysotile	0.003	0.003
876291	ATP11	1.20	120	Loose Fibres	Chrysotile	< 0.001	< 0.001
876293	ATP12	0.00-2.20	127	Loose Fibrous Debris & Loose Fibres	Chrysotile & Crocidolite & Amosite	0.002	0.002
876297	M02a	0.00-1.00	125	Loose Fibres	Crocidolite	< 0.001	< 0.001
876298	M02c	0.00-2.00	126	Loose Fibres	Chrysotile	< 0.001	< 0.001



Analytical Report Number: **17-70811**
Project / Site name: **Burrows Yard**
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
876300	M04a	0.00-1.00	130	Loose Fibres	Chrysotile	< 0.001	< 0.001
876302	M6	0.00-1.40	115	Loose Fibrous Debris	Chrysotile	< 0.001	< 0.001
876303	M6	0.00-1.40	138	Loose Fibrous Debris	Chrysotile	< 0.001	< 0.001
876304	M6A	0.00-1.00	142	Loose Fibres & Loose Fibrous Debris	Chrysotile	0.018	0.018
876305	M6B	0.00	139	Loose Fibrous Debris	Chrysotile	< 0.001	< 0.001
876308	ALIF02a	0.80	142	Loose Fibres	Chrysotile	< 0.001	< 0.001
876309	ALIF03a	0.50	122	Loose Fibrous Debris	Chrysotile	< 0.001	< 0.001
876310	ALIF04	0.30	129	Sheeting/Board Debris & Loose Fibres & Loose Fibrous Debris	Chrysotile	0.075	0.075
876311	ALIF05	0.40	135	Loose Fibres	Chrysotile	< 0.001	< 0.001
876314	ALIF12	0.60	136	Loose Fibres	Chrysotile	< 0.001	< 0.001

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



Analytical Report Number: 17-70811

Project / Site name: Burrows Yard

Lab Sample Number				876315	876316			
Sample Reference				M6	ALIF01a			
Sample Number				None Supplied	None Supplied			
Depth (m)				0.00	0.30			
Date Sampled				07/12/2017	04/12/2017			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Bulk Analysis)				Units	Limit of detection	Accreditation Status		
Asbestos Identification Name				Type	N/A	ISO 17025	Chrysotile-Hard/Cement Type Material	Chrysotile-Hard/Cement Type Material



Analytical Report Number : 17-70811

Project / Site name: Burrows Yard

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
876271	ABH04	1	2.20	-
876272	ABH04	2	3.80	Light grey clay and sand.
876273	ABH04	3	4.50	Light brown sandy gravel.
876274	ABH01	1	0.50	Brown loam and sand with gravel and rubble.
876275	ABH01	2	3.00-3.50	Brown clay and sand.
876276	ABH02	1	0.50-1.00	Brown gravelly sand with clinker
876277	ABH02	2	2.90-3.00	Brown clay and sand with gravel and vegetation.
876278	ABH03	1	0.50-1.00	Brown loam and sand with gravel and vegetation.
876279	ABH03	2	3.00-3.50	Grey clay.
876280	ATP01a	None Supplied	0.50-0.60	Brown gravelly sand with clinker
876281	ATP03	None Supplied	0.90-1.00	Brown gravelly sand with clinker
876282	ATP04	None Supplied	1.20-1.30	Brown sandy clay with rubble and gravel
876283	ATP05	None Supplied	1.20-1.30	Brown gravelly sand with clinker
876284	ATP06	None Supplied	0.50	-
876285	ATP06	None Supplied	2.00-2.10	Brown clay and sand.
876286	ATP08A	None Supplied	0.40-2.00	Brown gravelly sand with clinker
876287	ATP08A	None Supplied	2.20	Brown gravelly sand with clinker
876288	ATP09	None Supplied	1.30-1.40	Brown gravelly sand with clinker
876289	ATP10	None Supplied	0.10-2.10	Brown gravelly sand with brick.
876290	ATP10	None Supplied	2.10-2.60	Brown clay.
876291	ATP11	None Supplied	1.20	Brown gravelly clay.
876292	ATP11	None Supplied	2.00-2.20	Brown clay.
876293	ATP12	None Supplied	0.00-2.20	Brown loam and gravel with vegetation and stones.
876294	ATP12	None Supplied	2.20-2.50	Grey sandy clay.
876295	M01a	None Supplied	0.00-0.50	Brown loam and sand with gravel and vegetation.
876296	M02a	None Supplied	0.00-0.00	-
876297	M02a	None Supplied	0.00-1.00	Brown loam and sand with gravel.
876298	M02c	None Supplied	0.00-2.00	-
876299	M03a	None Supplied	0.00-0.70	Brown loam and sand with gravel and vegetation.
876300	M04a	None Supplied	0.00-1.00	Brown loam and sand with vegetation and gravel.
876301	M05a	None Supplied	0.50	Brown gravel with tar. **
876302	M6	Centre	0.00-1.40	-
876303	M6	Edge	0.00-1.40	Brown loam and sand with gravel and vegetation.
876304	M6A	Edge	0.00-1.00	-
876305	M6B	Edge	0.00	-
876306	ALIF01a	None Supplied	0.30	Brown loam and sand with gravel and vegetation.
876307	ALIF02a	None Supplied	0.30	Brown loam and sand with stones and gravel
876308	ALIF02a	None Supplied	0.80	-
876309	ALIF03a	None Supplied	0.50	Brown loam and sand with gravel.
876310	ALIF04	None Supplied	0.30	-
876311	ALIF05	None Supplied	0.40	Light brown sand with gravel and rubble.
876312	ALIF07a	None Supplied	0.60	Brown loam and sand with gravel and rubble.
876313	ALIF06	None Supplied	0.50	Grey sand with gravel.
876314	ALIF12	None Supplied	0.60	-

** Non MCERTS matrix.

Analytical Report Number : 17-70811

Project / Site name: Burrows Yard

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
PRO (Soil)	Determination of hydrocarbons C6-C10 by headspace GC-MS.	In-house method based on USEPA8260	L088-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
TO - Broadscan in soil	Qualitative GC-MS scan based on the NIST and Wiley 2013 mass spectral library.	In house method - GC-MS broadscan.		W	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L038-PL	D	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L088/76-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Sample Deviation Report



Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
M05a		S	17-70811	876301	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
M05a		S	17-70811	876301	b	PRO (Soil)	L088-PL	b
M05a		S	17-70811	876301	b	Speciated EPA-16 PAHs in soil	L064-PL	b
M05a		S	17-70811	876301	b	TPHCWG (Soil)	L088/76-PL	b



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Analytical Report Number : 17-70814

Project / Site name:	Burrows Yard	Samples received on:	13/12/2017
Your job number:	10013618	Samples instructed on:	14/12/2017
Your order number:		Analysis completed by:	27/12/2017
Report Issue Number:	1	Report issued on:	27/12/2017
Samples Analysed:	6 10:1 WAC samples		

Signed: 

Dr Claire Stone
Quality Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

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Waste Acceptance Criteria Analytical Results							
Report No:	17-70814						
					Client: ARCADISCON		
Location	Burrows Yard						
Lab Reference (Sample Number)	876333 / 876334				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	04/12/2017				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	M01a						
Depth (m)	0.00-0.50						
Solid Waste Analysis							
TOC (%)**	4.0				3%	5%	6%
Loss on Ignition (%) **	9.3				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	140				500	--	--
Total PAH (WAC-17) (mg/kg)	23				100	--	--
pH (units)**	7.7				--	>6	--
Acid Neutralisation Capacity (mol / kg)	5.7				--	To be evaluated	To be evaluated
Eluate Analysis					Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
	mg/l			mg/kg			
Arsenic *	0.0078			0.0531	0.5	2	25
Barium *	0.0207			0.142	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0014			0.0093	0.5	10	70
Copper *	0.015			0.10	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0008			0.0053	0.5	10	30
Nickel *	0.0015			0.010	0.4	10	40
Lead *	0.012			0.079	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.066			0.45	4	50	200
Chloride *	1.4			9.4	800	4000	25000
Fluoride	0.093			0.64	10	150	500
Sulphate *	2.2			15	1000	20000	50000
TDS	44			300	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	4.36			29.8	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	85						
Moisture (%)	15						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.					** = UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation					** = MCERTS accredited		

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
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Iss No 17-70814-1 Burrows Yard 10013618

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Waste Acceptance Criteria Analytical Results

Report No:	17-70814						
					Client: ARCADISCON		
Location	Burrows Yard						
Lab Reference (Sample Number)	876335 / 876336				Landfill Waste Acceptance Criteria		
Sampling Date	04/12/2017				Limits		
Sample ID	M02a				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.00-1.00						
Solid Waste Analysis							
TOC (%)**	1.6				3%	5%	6%
Loss on Ignition (%) **	4.2				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	140				500	--	--
Total PAH (WAC-17) (mg/kg)	8.3				100	--	--
pH (units)**	7.9				--	>6	--
Acid Neutralisation Capacity (mol / kg)	16				--	To be evaluated	To be evaluated
Eluate Analysis					Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
	mg/l			mg/kg			
Arsenic *	0.0125			0.0927	0.5	2	25
Barium *	0.0243			0.181	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0019			0.014	0.5	10	70
Copper *	0.012			0.090	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0064			0.0479	0.5	10	30
Nickel *	0.0009			0.0070	0.4	10	40
Lead *	0.021			0.16	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.060			0.45	4	50	200
Chloride *	1.1			7.8	800	4000	25000
Fluoride	0.23			1.7	10	150	500
Sulphate *	4.5			33	1000	20000	50000
TDS	59			440	4000	60000	100000
Phenol Index (Monhydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	3.15			23.4	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	89						
Moisture (%)	11						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.					** = UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and I2 cannot be held responsible for any discrepancies with current legislation					** = MCERTS accredited		

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

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Waste Acceptance Criteria Analytical Results

Report No:	17-70814						
					Client: ARCADISCON		
Location	Burrows Yard						
Lab Reference (Sample Number)	876337 / 876338				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	04/12/2017				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	M03a						
Depth (m)	0.00-0.70						
Solid Waste Analysis							
TOC (%)**	4.3				3%	5%	6%
Loss on Ignition (%) **	11.0				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	70				500	--	--
Total PAH (WAC-17) (mg/kg)	22				100	--	--
pH (units)**	7.9				--	>6	--
Acid Neutralisation Capacity (mol / kg)	6.8				--	To be evaluated	To be evaluated
Eluate Analysis							
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test		
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0100			0.0732	0.5	2	25
Barium *	0.0328			0.240	20	100	300
Cadmium *	0.0002			0.0013	0.04	1	5
Chromium *	0.0011			0.0082	0.5	10	70
Copper *	0.025			0.18	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0063			0.0463	0.5	10	30
Nickel *	0.0030			0.022	0.4	10	40
Lead *	0.036			0.27	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.090			0.65	4	50	200
Chloride *	1.4			10	800	4000	25000
Fluoride	0.26			1.9	10	150	500
Sulphate *	4.1			30	1000	20000	50000
TDS	59			430	4000	60000	100000
Phenol Index (Monhydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	7.31			53.5	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	86						
Moisture (%)	14						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation							
** = MCERTS accredited							

* = UKAS accredited (liquid eluate analysis only)

** = MCERTS accredited

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Waste Acceptance Criteria Analytical Results

Report No:	17-70814						
					Client: ARCADISCON		
Location	Burrows Yard						
Lab Reference (Sample Number)	876339 / 876340				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	05/12/2017				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	M04a						
Depth (m)	0.00-1.00						
Solid Waste Analysis							
TOC (%)**	4.0				3%	5%	6%
Loss on Ignition (%) **	9.6				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	0.033				1	--	--
Mineral Oil (mg/kg)	74				500	--	--
Total PAH (WAC-17) (mg/kg)	19				100	--	--
pH (units)**	7.6				--	>6	--
Acid Neutralisation Capacity (mol / kg)	4.4				--	To be evaluated	To be evaluated
Eluate Analysis							
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test		
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0115			0.0915	0.5	2	25
Barium *	0.0246			0.196	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0007			0.0058	0.5	10	70
Copper *	0.017			0.13	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0037			0.0293	0.5	10	30
Nickel *	0.0015			0.012	0.4	10	40
Lead *	0.034			0.27	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.11			0.84	4	50	200
Chloride *	1.4			11	800	4000	25000
Fluoride	0.20			1.6	10	150	500
Sulphate *	2.9			23	1000	20000	50000
TDS	54			430	4000	60000	100000
Phenol Index (Monhydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	4.56			36.3	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	89						
Moisture (%)	11						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited			

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
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Waste Acceptance Criteria Analytical Results

Report No:	17-70814						
					Client: ARCADISCON		
Location	Burrows Yard						
Lab Reference (Sample Number)	876341 / 876342				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	05/12/2017				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	M05a						
Depth (m)	0.50						
Solid Waste Analysis							
TOC (%)**	3.2				3%	5%	6%
Loss on Ignition (%) **	9.2				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	1300				500	--	--
Total PAH (WAC-17) (mg/kg)	11				100	--	--
pH (units)**	7.3				--	>6	--
Acid Neutralisation Capacity (mol / kg)	1.0				--	To be evaluated	To be evaluated
Eluate Analysis							
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test		
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0020			0.0172	0.5	2	25
Barium *	0.0633			0.538	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0011			0.0091	0.5	10	70
Copper *	0.0092			0.078	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0024			0.0202	0.5	10	30
Nickel *	0.0011			0.0096	0.4	10	40
Lead *	0.049			0.42	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.036			0.31	4	50	200
Chloride *	0.80			6.8	800	4000	25000
Fluoride	0.051			< 0.50	10	150	500
Sulphate *	3.2			27	1000	20000	50000
TDS	30			260	4000	60000	100000
Phenol Index (Monhydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	4.28			36.4	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	96						
Moisture (%)	4.1						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation					** = UKAS accredited (liquid eluate analysis only)		
					** = MCERTS accredited		

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Waste Acceptance Criteria Analytical Results

Report No:	17-70814						
					Client: ARCADISCON		
Location	Burrows Yard						
Lab Reference (Sample Number)	876779 / 876780				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	07/12/2017				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	M6						
Depth (m)	0.00-1.40						
Solid Waste Analysis							
TOC (%)**	4.7				3%	5%	6%
Loss on Ignition (%) **	10.4				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	180				500	--	--
Total PAH (WAC-17) (mg/kg)	16				100	--	--
pH (units)**	7.7				--	>6	--
Acid Neutralisation Capacity (mol / kg)	2.3				--	To be evaluated	To be evaluated
Eluate Analysis							
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test		
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0085			0.0630	0.5	2	25
Barium *	0.0143			0.106	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0016			0.012	0.5	10	70
Copper *	0.029			0.21	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0016			0.0117	0.5	10	30
Nickel *	0.0014			0.010	0.4	10	40
Lead *	0.0093			0.069	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.044			0.33	4	50	200
Chloride *	1.6			12	800	4000	25000
Fluoride	0.26			1.9	10	150	500
Sulphate *	4.4			32	1000	20000	50000
TDS	57			420	4000	60000	100000
Phenol Index (Monhydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	9.24			68.6	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.7						
Dry Matter (%)	85						
Moisture (%)	15						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.							
				*= UKAS accredited (liquid eluate analysis only)			
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Analytical Report Number : 17-70814

Project / Site name: Burrows Yard

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
876333	M01a	None Supplied	0.00-0.50	Brown loam and sand with gravel and vegetation.
876335	M02a	None Supplied	0.00-1.00	Brown loam and sand with gravel.
876337	M03a	None Supplied	0.00-0.70	Brown loam and sand with gravel and vegetation.
876339	M04a	None Supplied	0.00-1.00	Brown loam and sand with vegetation and gravel.
876341	M05a	None Supplied	0.50	Brown gravel with tar. **
876779	M6	None Supplied	0.00-1.40	Brown loam and sand with gravel and vegetation.

** Non MCERTS matrix.

Analytical Report Number : 17-70814

Project / Site name: Burrows Yard

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance on Sampling and Testing of Wastes to Meet Landfill Waste Acceptance"	L046-UK	W	NONE
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L047-PL	D	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L005-PL	W	MCERTS
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests"	L009-PL	D	MCERTS

Iss No 17-70814-1 Burrows Yard 10013618

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The results included within the report are representative of the samples submitted for analysis.

Page 9 of 11



Analytical Report Number : 17-70814

Project / Site name: Burrows Yard

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
M05a		S	17-70814	876341	b	BTEX in soil (Monoaromatics)	L073B-PL	b
M05a		S	17-70814	876341	b	Mineral Oil (Soil) C10 - C40	L076-PL	b
M05a		S	17-70814	876341	b	PCB's By GC-MS in soil	L027-PL	b
M05a		S	17-70814	876341	b	Speciated WAC-17 PAHs in soil	L064-PL	b
M05a		S	17-70814	876341	b	Total BTEX in soil (Poland)	L073-PL	b

Laura Cohu

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Analytical Report Number: 17-70811

Project / Site Name:	Burrows Yard	Samples received on:	13/12/2017
Your job number:	10013618	Samples instructed on:	14/12/2017
Your order number:	14003179	Analysis completed by:	28/12/2017
Report issue number:	1	Report issued on:	02/01/2018
Samples Analysed:	2	Pages (inc):	Page 1 of 4

Signed:



Neil Donovan

Environmental Forensics Manager

For & on behalf of i2 Analytical Ltd.

Report 17-70811

Laboratory Reference	Client reference	Depth
876296	MO2a	0.00-0.00
876301	MO5a	0.50

GC-MS Broadscan for identification of coal tar.

Two soil samples were received in a plastic tubs.

Owing to the scope of the testing, gas chromatography coupled with mass spectrometry (GC-MS) was used.

Although comprehensive, the suite above is only able to detect and identify those compounds amenable to each particular technique and therefore would not be able to cover every possible compound.

GC-MS Broadscan

The sample was extracted with dichloromethane (DCM) prior to evaporative concentration to produce a sample extract suitable for GC-MS analysis.

The GC-MS method was designed to cover an analyte range with boiling points from approximately 40°C to over 600°C.

Qualification each individual component was compared against both the NIST 2011 and Wiley 2010 mass spectral libraries for identification. A match factor of >80% indicates a confident match and was used in this instance.

Owing to the potential low levels present in the soil, matches between 50% and 80% were manually reviewed.

Results and comments

The GC-MS analysis was run through deconvolution analysis prior to comparison against the NIST 2011 library as well as our own bespoke Coal Tar library. The latter contains approximately 160 of the most commonly encountered components present in coal tar.

The analysis of the deconvoluted mass spectra starts with the presence of certain indicator compounds and then, depending on whether their presence has been detected or not, moves to supporting indicator compounds.

Laboratory Reference	Coal Tar Result (mg/kg)
876296	N/D
876301	N/D

Key – N/D = none detected

Comments

Although trace levels of the indicator compounds were found in the majority of samples, the levels present are low enough as to exclude coal tar as being the main binder present.

The highest concentration of Benzo[a]pyrene, a primary marker compound, was still <10mg/kg and thus it can be said no evidence of coal tar was detected in these samples.

Disclaimer

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The results included within the report are representative of the samples submitted for analysis.

**Laura Cohu**

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Analytical Report Number : 18-73003

Project / Site name:	Burrows Yard	Samples received on:	17/01/2018
Your job number:	10013618	Samples instructed on:	17/01/2018
Your order number:		Analysis completed by:	25/01/2018
Report Issue Number:	1	Report issued on:	25/01/2018
Samples Analysed:	3 water samples		

Signed:

Jordan Hill
Reporting Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

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Analytical Report Number: 18-73003

Project / Site name: Burrows Yard

Lab Sample Number				889725	889726	889727		
Sample Reference				ABH01S	ABH01D	ABH02D		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				None Supplied	None Supplied	None Supplied		
Date Sampled				16/01/2018	16/01/2018	16/01/2018		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

General Inorganics

pH	pH Units	N/A	ISO 17025	7.1	6.6	6.3		
Sulphate as SO ₄	µg/l	45	ISO 17025	13800	40900	39800		
Sulphate as SO ₄	mg/l	0.045	ISO 17025	13.8	40.9	39.8		
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0		
Dissolved Organic Carbon (DOC)	mg/l	0.1	NONE	2.94	1.11	0.78		
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	2.94	1.11	0.78		
Nitrate as N	mg/l	0.01	ISO 17025	0.07	2.40	4.39		
Nitrate as NO ₃	mg/l	0.05	ISO 17025	0.33	10.7	19.5		
Nitrite as N	µg/l	1	ISO 17025	< 1.0	5.1	76		
Nitrite as NO ₂	µg/l	5	ISO 17025	< 5.0	17	250		
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	230	110	55		
Carbonate	mgCaCO ₃ /l	10	NONE	230	110	55		
Dissolved Carbon Dioxide	mg/l	1	NONE	38	60	60		
Dissolved Oxygen	mg/l	1	NONE	4.2	6.5	6.4		

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16		
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1	ISO 17025	8.4	< 1.0	2.1		
Boron (dissolved)	µg/l	10	ISO 17025	180	120	89		
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08		
Chromium (dissolved)	µg/l	0.4	ISO 17025	< 0.4	0.4	0.4		
Copper (dissolved)	µg/l	0.7	ISO 17025	< 0.7	< 0.7	< 0.7		
Iron (dissolved)	mg/l	0.004	ISO 17025	1.5	0.16	0.12		
Fe ²⁺	mg/l	0.2	NONE	< 0.20	< 0.20	< 0.20		
Fe ³⁺	mg/l	0.2	NONE	1.48	< 0.20	< 0.20		
Lead (dissolved)	µg/l	1	ISO 17025	3.5	1.1	< 1.0		
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5		
Nickel (dissolved)	µg/l	0.3	ISO 17025	< 0.3	1.0	0.9		
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0		
Zinc (dissolved)	µg/l	0.4	ISO 17025	11	10	12		
Iron (total)	mg/l	0.004	ISO 17025	18	0.36	0.17		



Analytical Report Number: 18-73003

Project / Site name: Burrows Yard

Lab Sample Number				889725	889726	889727		
Sample Reference				ABH01S	ABH01D	ABH02D		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				None Supplied	None Supplied	None Supplied		
Date Sampled				16/01/2018	16/01/2018	16/01/2018		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	µg/l	10	ISO 17025	< 10.0	< 10.0	< 10.0		
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TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10		

TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10		

Environmental Forensics

Gases

Methane	mg/l	0.1	NONE	0.3	< 0.1	< 0.1		
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U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 18-73003

Project / Site name: Burrows Yard

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Alkalinity in Water	Determination of Alkalinity by discrete analyser (colorimetry). Accredited matrices: SW, PW, GW.	In house method based on MEWAM & USEPA Method 310.2.	L082-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Carbonate in water	Determination of Carbonate by titration using 0.1M HCl by discrete analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B-PL	W	NONE
Dissolved Carbon Dioxide in water	Determination of dissolved carbon dioxide in water by colorimetry and calculation.	In house method - based on Alkalinity	L025-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen.	In-house method	L086-PL	W	NONE
Iron (II) and Iron (III) in water	Determination of Iron II and Iron II in water by coloration with phenanthroline.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L079-PL	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-OES (total)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW (Al, Fe, Cu, Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	W	ISO 17025
PRO (Waters)	Determination of hydrocarbons C6-C10 by headspace GC-MS. Accredited Matrices SW, PW. GW.	In-house method based on USEPA8260	L088-PL	W	ISO 17025

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The results included within the report are representative of the samples submitted for analysis.

Page 4 of 5



Analytical Report Number : 18-73003

Project / Site name: Burrows Yard

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
TO - Gases C1-C4	Determination of volatile hydrocarbons by GC-MS Headspace.	In-house method		W	NONE
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser. Accredited matrices: SW PW GW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

**Maxime Pegre**

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Analytical Report Number : 18-73092

Project / Site name:	Burrows Yard	Samples received on:	17/01/2018
Your job number:	10013618	Samples instructed on:	17/01/2018
Your order number:		Analysis completed by:	26/01/2018
Report Issue Number:	1	Report issued on:	26/01/2018
Samples Analysed:	1 water sample		

Signed:

Jordan Hill
Reporting Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

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Analytical Report Number: 18-73092

Project / Site name: Burrows Yard

Lab Sample Number				890222				
Sample Reference				ABH02S				
Sample Number				None Supplied				
Depth (m)				None Supplied				
Date Sampled				10/01/2018				
Time Taken				1330				
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

General Inorganics

pH	pH Units	N/A	ISO 17025	6.6				
Sulphate as SO ₄	µg/l	45	ISO 17025	113000				
Sulphate as SO ₄	mg/l	0.045	ISO 17025	113				
Sulphide	µg/l	5	NONE	< 5.0				
Dissolved Organic Carbon (DOC)	mg/l	0.1	NONE	1.41				
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	1.41				
Nitrate as N	mg/l	0.01	ISO 17025	2.18				
Nitrate as NO ₃	mg/l	0.05	ISO 17025	9.67				
Nitrite as N	µg/l	1	ISO 17025	50				
Nitrite as NO ₂	µg/l	5	ISO 17025	170				
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	130				
Carbonate	mgCaCO ₃ /l	10	NONE	130				
Dissolved Carbon Dioxide	mg/l	1	NONE	60				
Dissolved Oxygen	mg/l	1	NONE	10				

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01				
Fluorene	µg/l	0.01	ISO 17025	< 0.01				
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01				
Anthracene	µg/l	0.01	ISO 17025	< 0.01				
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Pyrene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Chrysene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01				

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16				
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0				
Boron (dissolved)	µg/l	10	ISO 17025	120				
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08				
Chromium (dissolved)	µg/l	0.4	ISO 17025	0.4				
Copper (dissolved)	µg/l	0.7	ISO 17025	2.2				
Iron (dissolved)	mg/l	0.004	ISO 17025	0.40				
Fe ²⁺	mg/l	0.2	NONE	< 0.20				
Fe ³⁺	mg/l	0.2	NONE	0.37				
Lead (dissolved)	µg/l	1	ISO 17025	1.5				
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5				
Nickel (dissolved)	µg/l	0.3	ISO 17025	2.6				
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0				
Zinc (dissolved)	µg/l	0.4	ISO 17025	15				

Iron (total)	mg/l	0.004	ISO 17025	0.43				
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Analytical Report Number: 18-73092

Project / Site name: Burrows Yard

Lab Sample Number				890222				
Sample Reference				ABH02S				
Sample Number				None Supplied				
Depth (m)				None Supplied				
Date Sampled				10/01/2018				
Time Taken				1330				
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/l	1	ISO 17025	< 1.0				
Toluene	µg/l	1	ISO 17025	< 1.0				
Ethylbenzene	µg/l	1	ISO 17025	< 1.0				
p & m-xylene	µg/l	1	ISO 17025	< 1.0				
o-xylene	µg/l	1	ISO 17025	< 1.0				
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0				

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	µg/l	10	ISO 17025	< 10.0				
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10				

Environmental Forensics

Gases

Methane	mg/l	0.1	NONE	< 0.1				
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U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 18-73092

Project / Site name: Burrows Yard

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Alkalinity in Water	Determination of Alkalinity by discrete analyser (colorimetry). Accredited matrices: SW, PW, GW.	In house method based on MEWAM & USEPA Method 310.2.	L082-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Carbonate in water	Determination of Carbonate by titration using 0.1M HCl by discrete analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B-PL	W	NONE
Dissolved Carbon Dioxide in water	Determination of dissolved carbon dioxide in water by colorimetry and calculation.	In house method - based on Alkalinity	L025-PL	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE
Dissolved Oxygen in water	Determination of dissolved oxygen.	In-house method	L086-PL	W	NONE
Iron (II) and Iron (III) in water	Determination of Iron II and Iron II in water by coloration with phenanthroline.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L079-PL	W	NONE
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-OES (total)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW (Al, Fe, Cu, Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	W	ISO 17025
PRO (Waters)	Determination of hydrocarbons C6-C10 by headspace GC-MS. Accredited Matrices SW, PW. GW.	In-house method based on USEPA8260	L088-PL	W	ISO 17025

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The results included within the report are representative of the samples submitted for analysis.

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