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Analytical Report Number : 14-53393

Project / Site name:	Royston	**Samples received on:**	15/04/2014
Your job number:	72302	**Samples instructed on:**	15/04/2014
Your order number:		**Analysis completed by:**	25/04/2014
Report Issue Number:	1	**Report issued on:**	25/04/2014
Samples Analysed:	32 soil samples		

Signed:

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

Signed:

Rexona Rahman
Customer Services Manager
For & on behalf of i2 Analytical Ltd.

Other office located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland

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

Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				331990	331991	331992	331993	331994
Sample Reference				TP6	TP6	TP7	TP8	TP9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.30	0.60	0.50
Date Sampled				10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
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	-	18	14	17	18
Total mass of sample received	kg	0.001	NONE	-	0.47	0.44	0.48	0.46
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	-
General Inorganics								
pH	pH Units	N/A	MCERTS	-	-	8.0	8.1	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	< 1	-
Free Cyanide	mg/kg	1	NONE	-	-	-	< 1	-
Total Sulphate as SO_4	mg/kg	100	ISO 17025	-	-	-	320	-
Total Sulphate as SO_4	%	0.01	ISO 17025	-	-	-	-	-
Water Soluble Sulphate (Soil Equivalent)	g/l	0.0025	MCERTS	-	-	-	0.012	-
Water Soluble Sulphate as SO_4 (2:1)	mg/kg	2.5	MCERTS	-	-	-	12	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	0.0060	-
Sulphide	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Organic Matter	%	0.1	MCERTS	-	1.3	2.6	0.7	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	2	MCERTS	-	-	-	< 2.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Acenaphthylene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	< 0.10	-
Fluorene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Phenanthrene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	< 0.10	-
Fluoranthene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Pyrene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Benzo(a)anthracene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	< 0.10	-
Benzo(k)fluoranthene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	< 0.10	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Dibenz(a,h)anthracene	mg/kg	0.2	MCERTS	-	-	-	< 0.20	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	-	-	< 1.6	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				331990	331991	331992	331993	331994
Sample Reference				TP6	TP6	TP7	TP8	TP9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.30	0.60	0.50
Date Sampled				10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	3.9	< 1.0	< 1.0
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	< 0.1	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	1.0	2.3	0.5	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	< 4.0	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	10	< 1.0	-
Lead (aqua regia extractable)	mg/kg	2	MCERTS	-	< 2.0	19	< 2.0	< 2.0
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	< 2.0
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	2	MCERTS	-	< 2.0	15	< 2.0	-
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								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
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	-	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	-	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
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	-	-	24	-	14
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	24	-	14

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				331995	331996	331997	331998	331999
Sample Reference				TP10	CP4	CP4	CP1	CP1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.40	1.40	0.20	1.50
Date Sampled				10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
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	12	15	16	14	17
Total mass of sample received	kg	0.001	NONE	0.43	0.44	0.47	0.42	0.48
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected	-
General Inorganics								
pH	pH Units	N/A	MCERTS	-	8.1	8.1	8.0	8.1
Total Cyanide	mg/kg	1	MCERTS	-	< 1	-	< 1	-
Free Cyanide	mg/kg	1	NONE	-	< 1	-	< 1	-
Total Sulphate as SO_4	mg/kg	100	ISO 17025	-	180	230	470	120
Total Sulphate as SO_4	%	0.01	ISO 17025	-	-	0.023	-	0.012
Water Soluble Sulphate (Soil Equivalent)	g/l	0.0025	MCERTS	-	0.013	0.013	0.015	0.015
Water Soluble Sulphate as SO_4 (2:1)	mg/kg	2.5	MCERTS	-	13	13	15	15
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.0064	0.0065	0.0075	0.0076
Sulphide	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Organic Matter	%	0.1	MCERTS	1.9	1.3	-	1.3	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Acenaphthylene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	-	< 0.10	-
Fluorene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Phenanthrene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	-	< 0.10	-
Fluoranthene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Pyrene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Benzo(a)anthracene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	-	< 0.10	-
Benzo(k)fluoranthene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	-	< 0.10	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Dibenz(a,h)anthracene	mg/kg	0.2	MCERTS	< 0.20	< 0.20	-	< 0.20	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.6	< 1.6	-	< 1.6	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				331995	331996	331997	331998	331999
Sample Reference				TP10	CP4	CP4	CP1	CP1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.40	1.40	0.20	1.50
Date Sampled				10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.3	< 1.0	-	< 1.0	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	18	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	< 0.1	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6	0.9	-	1.1	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	2.8	< 1.0	-	< 1.0	-
Lead (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	12	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	2	MCERTS	8.1	< 2.0	-	< 2.0	-
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								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
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	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
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	-	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332000	332001	332002	332003	332004
Sample Reference				CP2	CP2	CP3	CP3	CP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	1.00	0.30	1.50	0.10
Date Sampled				10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
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	15	15	16	14	18
Total mass of sample received	kg	0.001	NONE	0.45	0.44	0.48	0.50	0.52
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	Not-detected
General Inorganics								
pH	pH Units	N/A	MCERTS	-	8.3	-	8.3	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Free Cyanide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphate as SO_4	mg/kg	100	ISO 17025	-	100	-	360	-
Total Sulphate as SO_4	%	0.01	ISO 17025	-	0.010	-	0.036	-
Water Soluble Sulphate (Soil Equivalent)	g/l	0.0025	MCERTS	-	0.010	-	0.012	-
Water Soluble Sulphate as SO_4 (2:1)	mg/kg	2.5	MCERTS	-	10	-	12	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.0051	-	0.0059	-
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	0.5	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	2	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.2	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.2	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.2	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.2	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.2	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.2	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.2	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	-	-	-	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332000	332001	332002	332003	332004
Sample Reference				CP2	CP2	CP3	CP3	CP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	1.00	0.30	1.50	0.10
Date Sampled				10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	1.0	-	< 1.0
Barium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	< 0.1	-	< 0.1	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	-	1.1	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Copper (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Lead (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	6.9	-	-
Zinc (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
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								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	< 10

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332005	332006	332007	332008	332009
Sample Reference				CP5	CP7	CP7	CP6	CP6
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	0.30	1.00	0.60	1.25
Date Sampled				10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
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	16	18	18	17	18
Total mass of sample received	kg	0.001	NONE	0.47	0.41	0.38	0.41	0.44
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	-	-
General Inorganics								
pH	pH Units	N/A	MCERTS	8.3	8.3	8.3	8.1	8.4
Total Cyanide	mg/kg	1	MCERTS	-	< 1	-	< 1	-
Free Cyanide	mg/kg	1	NONE	-	< 1	-	< 1	-
Total Sulphate as SO_4	mg/kg	100	ISO 17025	160	190	590	< 100	190
Total Sulphate as SO_4	%	0.01	ISO 17025	0.016	-	0.059	-	0.019
Water Soluble Sulphate (Soil Equivalent)	g/l	0.0025	MCERTS	0.013	0.012	0.019	0.013	0.013
Water Soluble Sulphate as SO_4 (2:1)	mg/kg	2.5	MCERTS	13	12	19	13	13
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0067	0.0058	0.0094	0.0066	0.0066
Sulphide	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Organic Matter	%	0.1	MCERTS	-	0.4	-	0.7	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Acenaphthylene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Acenaphthene	mg/kg	0.1	MCERTS	-	< 0.10	-	< 0.10	-
Fluorene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Phenanthrene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Anthracene	mg/kg	0.1	MCERTS	-	< 0.10	-	< 0.10	-
Fluoranthene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Pyrene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Benzo(a)anthracene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	< 0.10	-	< 0.10	-
Benzo(k)fluoranthene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	< 0.10	-	< 0.10	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Dibenz(a,h)anthracene	mg/kg	0.2	MCERTS	-	< 0.20	-	< 0.20	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	< 1.6	-	< 1.6	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332005	332006	332007	332008	332009
Sample Reference				CP5	CP7	CP7	CP6	CP6
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	0.30	1.00	0.60	1.25
Date Sampled				10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.4	-	0.7	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Lead (aqua regia extractable)	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	2	MCERTS	-	< 2.0	-	2.2	-
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								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332010	332011	332012	332013	332014
Sample Reference				CP8	CP8	WS1	WS2	WS3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	1.50	0.20	0.40	0.60
Date Sampled				10/04/2014	10/04/2014	11/04/2014	11/04/2014	11/04/2014
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	16	16	10	16	17
Total mass of sample received	kg	0.001	NONE	0.41	0.39	0.41	0.40	0.44
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	-	-
General Inorganics								
pH	pH Units	N/A	MCERTS	8.3	8.2	-	8.4	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	-	-	-
Free Cyanide	mg/kg	1	NONE	< 1	-	-	-	-
Total Sulphate as SO_4	mg/kg	100	ISO 17025	< 100	110	-	-	-
Total Sulphate as SO_4	%	0.01	ISO 17025	-	0.011	-	-	-
Water Soluble Sulphate (Soil Equivalent)	g/l	0.0025	MCERTS	0.014	0.013	-	-	-
Water Soluble Sulphate as SO_4 (2:1)	mg/kg	2.5	MCERTS	14	12	-	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0068	0.0062	-	-	-
Sulphide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Organic Matter	%	0.1	MCERTS	0.3	-	2.6	0.1	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	2	MCERTS	< 2.0	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthylene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	-	< 0.10	-	-
Fluorene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Phenanthrene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Anthracene	mg/kg	0.1	MCERTS	< 0.10	-	< 0.10	-	-
Fluoranthene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Pyrene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Benzo(a)anthracene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	-	< 0.10	-	-
Benzo(k)fluoranthene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	-	< 0.10	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Dibenz(a,h)anthracene	mg/kg	0.2	MCERTS	< 0.20	-	< 0.20	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.6	-	< 1.6	-	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332010	332011	332012	332013	332014
Sample Reference				CP8	CP8	WS1	WS2	WS3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	1.50	0.20	0.40	0.60
Date Sampled				10/04/2014	10/04/2014	11/04/2014	11/04/2014	11/04/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	3.6	< 1.0	< 1.0
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	15	-	< 1.0
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	< 0.1	-	< 0.1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	-	2.2	0.4	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Copper (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	16	< 1.0	< 1.0
Lead (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	-	22	< 2.0	< 2.0
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	< 2.0
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	11	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	-	19	< 2.0	< 2.0
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								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
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	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
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	< 10	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332015	332016	332017	332018	332019
Sample Reference				TP11	TP12	TP13	TP15	TP17
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.35	0.60	0.15	0.25	1.00
Date Sampled				11/04/2014	11/04/2014	11/04/2014	11/04/2014	14/04/2014
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	12	12	12	15	22
Total mass of sample received	kg	0.001	NONE	0.47	0.48	0.41	0.47	0.45
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	-	-
General Inorganics								
pH	pH Units	N/A	MCERTS	-	-	-	-	8.4
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Free Cyanide	mg/kg	1	NONE	-	-	-	-	-
Total Sulphate as SO_4	mg/kg	100	ISO 17025	-	-	-	-	220
Total Sulphate as SO_4	%	0.01	ISO 17025	-	-	-	-	0.022
Water Soluble Sulphate (Soil Equivalent)	g/l	0.0025	MCERTS	-	-	-	-	0.0088
Water Soluble Sulphate as SO_4 (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	8.8
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	-	0.0044
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	2	MCERTS	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.2	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.2	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.2	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.2	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.2	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.2	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.2	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	-	-	-	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332015	332016	332017	332018	332019
Sample Reference				TP11	TP12	TP13	TP15	TP17
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.35	0.60	0.15	0.25	1.00
Date Sampled				11/04/2014	11/04/2014	11/04/2014	11/04/2014	14/04/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	4.5	< 1.0	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	26	< 1.0	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.5	2.4	0.2	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	4.9	4.1	12	< 1.0	-
Lead (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	< 2.0	24	< 2.0	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	15	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	2	MCERTS	< 2.0	< 2.0	18	< 2.0	-
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								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	-	-

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332020	332021			
Sample Reference				TP19	TP23			
Sample Number				None Supplied	None Supplied			
Depth (m)				1.20	1.30			
Date Sampled				14/04/2014	14/04/2014			
Time Taken				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	21	17			
Total mass of sample received	kg	0.001	NONE	0.41	0.44			
Asbestos in Soil	Type	N/A	ISO 17025	-	-			
General Inorganics								
pH	pH Units	N/A	MCERTS	8.4	8.4			
Total Cyanide	mg/kg	1	MCERTS	-	-			
Free Cyanide	mg/kg	1	NONE	-	-			
Total Sulphate as SO_4	mg/kg	100	ISO 17025	160	200			
Total Sulphate as SO_4	%	0.01	ISO 17025	0.016	0.020			
Water Soluble Sulphate (Soil Equivalent)	g/l	0.0025	MCERTS	0.0086	0.011			
Water Soluble Sulphate as SO_4 (2:1)	mg/kg	2.5	MCERTS	8.6	11			
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0043	0.0055			
Sulphide	mg/kg	1	MCERTS	-	-			
Organic Matter	%	0.1	MCERTS	-	-			
Total Phenols								
Total Phenols (monohydric)	mg/kg	2	MCERTS	-	-			
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-			
Acenaphthylene	mg/kg	0.2	MCERTS	-	-			
Acenaphthene	mg/kg	0.1	MCERTS	-	-			
Fluorene	mg/kg	0.2	MCERTS	-	-			
Phenanthrene	mg/kg	0.2	MCERTS	-	-			
Anthracene	mg/kg	0.1	MCERTS	-	-			
Fluoranthene	mg/kg	0.2	MCERTS	-	-			
Pyrene	mg/kg	0.2	MCERTS	-	-			
Benzo(a)anthracene	mg/kg	0.2	MCERTS	-	-			
Chrysene	mg/kg	0.05	MCERTS	-	-			
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-			
Benzo(k)fluoranthene	mg/kg	0.2	MCERTS	-	-			
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-			
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	MCERTS	-	-			
Dibenz(a,h)anthracene	mg/kg	0.2	MCERTS	-	-			
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-			
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	-			

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Analytical Report Number: 14-53393

Project / Site name: Royston

Lab Sample Number				332020	332021			
Sample Reference				TP19	TP23			
Sample Number				None Supplied	None Supplied			
Depth (m)				1.20	1.30			
Date Sampled				14/04/2014	14/04/2014			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-			
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-			
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-			
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-			
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-			
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-			
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-			
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-			
Lead (aqua regia extractable)	mg/kg	2	MCERTS	-	-			
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-			
Nickel (aqua regia extractable)	mg/kg	2	MCERTS	-	-			
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-			
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-			
Zinc (aqua regia extractable)	mg/kg	2	MCERTS	-	-			
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								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-			
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-			
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	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	0.1	MCERTS	-	-			
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-			
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	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	-	-			

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Analytical Report Number : 14-53393

Project / Site name: Royston

* 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 topsoil/loam 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 2 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
331990	TP6	None Supplied	0.10	-
331991	TP6	None Supplied	0.40	Beige sandy topsoil with chalk and vegetation.
331992	TP7	None Supplied	0.30	Brown sandy topsoil with chalk and vegetation.
331993	TP8	None Supplied	0.60	Beige chalk. **
331994	TP9	None Supplied	0.50	Beige sandy topsoil with vegetation.
331995	TP10	None Supplied	0.20	Brown topsoil and sand with chalk and vegetation.
331996	CP4	None Supplied	0.40	Beige topsoil and sand with chalk and vegetation.
331997	CP4	None Supplied	1.40	Beige topsoil and sand with chalk and vegetation.
331998	CP1	None Supplied	0.20	Beige topsoil and sand with chalk and vegetation.
331999	CP1	None Supplied	1.50	Beige chalk. **
332000	CP2	None Supplied	0.60	White chalk. **
332001	CP2	None Supplied	1.00	White chalk. **
332002	CP3	None Supplied	0.30	Beige clay with chalk.
332003	CP3	None Supplied	1.50	Beige chalk. **
332004	CP5	None Supplied	0.10	Beige chalk. **
332005	CP5	None Supplied	1.50	Beige chalk. **
332006	CP7	None Supplied	0.30	Beige chalk. **
332007	CP7	None Supplied	1.00	Beige chalk. **
332008	CP6	None Supplied	0.60	Beige sandy topsoil with chalk and vegetation.
332009	CP6	None Supplied	1.25	Beige topsoil and sand.
332010	CP8	None Supplied	0.15	Beige chalk. **
332011	CP8	None Supplied	1.50	Beige chalk. **
332012	WS1	None Supplied	0.20	Brown sandy topsoil with chalk and vegetation.
332013	WS2	None Supplied	0.40	Beige chalk. **
332014	WS3	None Supplied	0.60	Beige sandy topsoil with chalk and vegetation.
332015	TP11	None Supplied	0.35	Beige chalk. **
332016	TP12	None Supplied	0.60	Beige chalk. **
332017	TP13	None Supplied	0.15	Brown topsoil and sand with chalk and vegetation.
332018	TP15	None Supplied	0.25	Beige chalk. **
332019	TP17	None Supplied	1.00	Beige chalk. **
332020	TP19	None Supplied	1.20	Beige chalk. **
332021	TP23	None Supplied	1.30	Beige chalk. **

** Non MCerts Matrix

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Analytical Report Number : 14-53393

Project / Site name: Royston

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

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	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073S-PL	W	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	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	D	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 3, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L023-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 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. Stones not passing through a 10 mm sieve is determined gravimetrically and reported as a percentage of the dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by extraction with water followed by ICP-OES. Results reported corrected for extraction ratio (soil equivalent) as g/l and mg/kg; and upon the 2:1	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L038-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
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	ISO 17025
TPHCWG (Soil)	Determination of pentane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L076-PL	W	MCERTS

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Analytical Report Number : 14-53393

Project / Site name: Royston

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

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.

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