

APPENDIX 3: CHEMICAL TESTING



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Analytical Report Number : 21-77432

Project / Site name:	Ellesmere	Samples received on:	24/05/2021
Your job number:	N10010	Samples instructed on/ Analysis started on:	24/05/2021
Your order number:	PO-1117	Analysis completed by:	01/06/2021
Report Issue Number:	1	Report issued on:	01/06/2021
Samples Analysed:	1 bulk sample - 4 leachate samples - 9 soil samples		

Signed:



Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
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.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-77432
Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number	1884051	1884052	1884053	1884054	1884055
Sample Reference	WS01	WS01	WS04	WS05	TP02
Sample Number	1	2	2	2	1
Depth (m)	0.20	2.85	0.50	0.50	0.50
Date Sampled	20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)					
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	13
Total mass of sample received	kg	0.001	NONE	1.5	2.0

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	Not-detected	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	5.8	8.2	6.6	7.4	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Complex Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.013	0.0079	0.0084	0.12	-
Total Sulphur	mg/kg	50	MCERTS	350	< 50	110	630	-
Organic Matter	%	0.1	MCERTS	3.3	< 0.1	0.8	5.6	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
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Speciated PAHs

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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	-
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Analytical Report Number: 21-77432
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Your Order No: PO-1117

Lab Sample Number	1884051	1884052	1884053	1884054	1884055
Sample Reference	WS01	WS01	WS04	WS05	TP02
Sample Number	1	2	2	2	1
Depth (m)	0.20	2.85	0.50	0.50	0.50
Date Sampled	20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)					

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.3	3.0	5.6	10	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	61	20	37	140	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.44	0.20	0.28	0.78	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	< 0.2	0.2	2.8	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.4	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	7.2	10	19	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	4.7	7.6	23	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	88	9.1	17	87	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	7.2	9.0	15	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	18	7.1	15	25	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	68	12	35	130	-

Monoaromatics & Oxygenates

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 C10 - C40	mg/kg	10	MCERTS	< 10	< 10	< 10	58	-
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TPH2 (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 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	-	-	< 8.0	25	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	30	-

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	< 1.0	-
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	13	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	14	-

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Sample Number	1	2	2	2	1
Depth (m)	0.20	2.85	0.50	0.50	0.50
Date Sampled	20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)					

Pesticides

Alachlor	µg/kg	10	NONE	< 10	-	-	-	< 10
Aldrin	µg/kg	10	NONE	< 10	-	-	-	< 10
Azinphos-ethyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Azinphos-methyl	µg/kg	10	NONE	< 10	-	-	-	< 10
BHC-alpha (benzene hexachloride)	µg/kg	10	NONE	< 10	-	-	-	< 10
BHC-beta	µg/kg	10	NONE	< 10	-	-	-	< 10
BHC-delta	µg/kg	10	NONE	< 10	-	-	-	< 10
BHC-gamma (Lindane, gamma HCH)	µg/kg	10	NONE	< 10	-	-	-	< 10
Bifenthrin	µg/kg	10	NONE	< 10	-	-	-	< 10
Carbophenothion	µg/kg	10	NONE	< 10	-	-	-	< 10
Chlordane-cis	µg/kg	10	NONE	< 10	-	-	-	< 10
Chlordane-trans	µg/kg	10	NONE	< 10	-	-	-	< 10
Chlorfenvinphos	µg/kg	10	NONE	< 10	-	-	-	< 10
Chlorothalonil	µg/kg	20	NONE	< 20	-	-	-	< 20
Chlorpyrifos	µg/kg	10	NONE	< 10	-	-	-	< 10
Cyfluthrin (Sum)	µg/kg	10	NONE	< 10	-	-	-	< 10
Cyhalothrin (Lambda)	µg/kg	10	NONE	< 10	-	-	-	< 10
Cypermethrin (Sum)	µg/kg	10	NONE	< 10	-	-	-	< 10
DDD-o,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDD-p,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDE-o,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDE-p,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDT-o,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDT-p,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
Deltamethrin	µg/kg	10	NONE	< 10	-	-	-	< 10
Demeton-O	µg/kg	10	NONE	< 10	-	-	-	< 10
Demeton-S	µg/kg	10	NONE	< 10	-	-	-	< 10
Diazinon	µg/kg	10	NONE	< 10	-	-	-	< 10
Dichlorobenzonitrile, 2,6-	µg/kg	10	NONE	< 10	-	-	-	< 10
Dichlorvos	µg/kg	10	NONE	< 10	-	-	-	< 10
Dieldrin	µg/kg	10	NONE	< 10	-	-	-	< 10
Dimethoate	µg/kg	10	NONE	< 10	-	-	-	< 10
Dimethylvinphos	µg/kg	10	NONE	< 10	-	-	-	< 10
Endosulfan I (alpha isomer)	µg/kg	10	NONE	< 10	-	-	-	< 10
Endosulfan II (beta isomer)	µg/kg	10	NONE	< 10	-	-	-	< 10
Endosulfan sulfate	µg/kg	10	NONE	< 10	-	-	-	< 10
Endrin	µg/kg	20	NONE	< 20	-	-	-	< 20
Endrin aldehyde	µg/kg	10	NONE	< 10	-	-	-	< 10
Endrin ketone	µg/kg	10	NONE	< 10	-	-	-	< 10
Ethion	µg/kg	10	NONE	< 10	-	-	-	< 10
Etrinfos	µg/kg	10	NONE	< 10	-	-	-	< 10
Fenitrothion	µg/kg	10	NONE	< 10	-	-	-	< 10
Fenthion	µg/kg	10	NONE	< 10	-	-	-	< 10
Fenvalerate (Sum)	µg/kg	10	NONE	< 10	-	-	-	< 10
Heptachlor	µg/kg	10	NONE	< 10	-	-	-	< 10
Heptachlor exo-epoxide	µg/kg	10	NONE	< 10	-	-	-	< 10
Hexachlorobenzene	µg/kg	10	NONE	< 10	-	-	-	< 10
Hexachlorobutadiene	µg/kg	10	NONE	< 10	-	-	-	< 10
Isodrin	µg/kg	20	NONE	< 20	-	-	-	< 20
Malathion	µg/kg	10	NONE	< 10	-	-	-	< 10
Methacrifos	µg/kg	10	NONE	< 10	-	-	-	< 10
Methoxychlor, p,p'-	µg/kg	20	NONE	< 20	-	-	-	< 20

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 Project / Site name: Ellesmere
 Your Order No: PO-1117

Lab Sample Number				1884051	1884052	1884053	1884054	1884055
Sample Reference				WS01	WS01	WS04	WS05	TP02
Sample Number				1	2	2	2	1
Depth (m)				0.20	2.85	0.50	0.50	0.50
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)								
Mevinphos, E+Z	µg/kg	10	NONE	< 10	-	-	-	< 10
Omethoate	µg/kg	20	NONE	< 20	-	-	-	< 20
Parathion	µg/kg	10	NONE	< 10	-	-	-	< 10
Parathion-methyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Pendimethalin	µg/kg	10	NONE	< 10	-	-	-	< 10
Pentachlorobenzene	µg/kg	10	NONE	< 10	-	-	-	< 10
Permethrin, Cis-	µg/kg	10	NONE	< 10	-	-	-	< 10
Permethrin, Trans-	µg/kg	10	NONE	< 10	-	-	-	< 10
Phorate	µg/kg	10	NONE	< 10	-	-	-	< 10
Phosalone	µg/kg	10	NONE	< 10	-	-	-	< 10
Phosphamidon (Sum)	µg/kg	10	NONE	< 10	-	-	-	< 10
Pirimiphos-ethyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Pirimiphos-methyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Propetamphos	µg/kg	10	NONE	< 10	-	-	-	< 10
Propyzamide	µg/kg	10	NONE	< 10	-	-	-	< 10
Tecnazene	µg/kg	10	NONE	< 10	-	-	-	< 10
Tetrachlorobenzene, 1,2,4,5-	µg/kg	10	NONE	< 10	-	-	-	< 10
Trichlorobenzene, 1,2,3-	µg/kg	10	NONE	< 10	-	-	-	< 10
Trichlorobenzene, 1,3,5-	µg/kg	10	NONE	< 10	-	-	-	< 10
Trifluralin	µg/kg	10	NONE	< 10	-	-	-	< 10

Herbicides

Aldicarb	µg/kg	10	NONE	< 10	-	-	-	< 10
Aldicarb Sulfone	µg/kg	10	NONE	< 10	-	-	-	< 10
Aldicarb Sulfoxide	µg/kg	50	NONE	< 50	-	-	-	< 50
Atrazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Carbaryl	µg/kg	10	NONE	< 10	-	-	-	< 10
Carbofuran	µg/kg	10	NONE	< 10	-	-	-	< 10
Carbofuran, 3-OH	µg/kg	20	NONE	< 20	-	-	-	< 20
Chlortoluron	µg/kg	10	NONE	< 10	-	-	-	< 10
Cyanazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Diiflubenuron	µg/kg	50	NONE	< 50	-	-	-	< 50
Diuron	µg/kg	10	NONE	< 10	-	-	-	< 10
Fluometuron	µg/kg	10	NONE	< 10	-	-	-	< 10
Isoproturon	µg/kg	10	NONE	< 10	-	-	-	< 10
Linuron	µg/kg	20	NONE	< 20	-	-	-	< 20
Methiocarb	µg/kg	10	NONE	< 10	-	-	-	< 10
Methomyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Oxamyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Prometryn	µg/kg	10	NONE	< 10	-	-	-	< 10
Propazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Propoxur	µg/kg	10	NONE	< 10	-	-	-	< 10
Siduron	µg/kg	10	NONE	< 10	-	-	-	< 10
Simazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Tebuthiuron	µg/kg	10	NONE	< 10	-	-	-	< 10
Terbutylazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Terbutryn	µg/kg	10	NONE	< 10	-	-	-	< 10
Thiadiazuron	µg/kg	10	NONE	< 10	-	-	-	< 10
Trietazine	µg/kg	10	NONE	< 10	-	-	-	< 10

Acid Herbicides

2,3,6-TBA	µg/kg	50	NONE	< 50	-	-	-	< 50
2,4,5-T	µg/kg	10	NONE	< 10	-	-	-	< 10

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Sample Reference				WS01	WS01	WS04	WS05	TP02
Sample Number				1	2	2	2	1
Depth (m)				0.20	2.85	0.50	0.50	0.50
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)								
2,4,5-TP (Fenoprop)	µg/kg	10	NONE	< 10	-	-	-	< 10
2,4-D	µg/kg	10	NONE	< 10	-	-	-	< 10
2,4-DB	µg/kg	10	NONE	< 10	-	-	-	< 10
4-CPA	µg/kg	20	NONE	< 20	-	-	-	< 20
Bromacil	µg/kg	10	NONE	< 10	-	-	-	< 10
Bromoxynil	µg/kg	10	NONE	< 10	-	-	-	< 10
Clopyralid	µg/kg	100	NONE	< 100	-	-	-	< 100
Dicamba	µg/kg	20	NONE	< 20	-	-	-	< 20
Diclofop	µg/kg	10	NONE	< 10	-	-	-	< 10
Dichlorprop	µg/kg	10	NONE	< 10	-	-	-	< 10
Dinoseb	µg/kg	10	NONE	< 10	-	-	-	< 10
Flamprop	µg/kg	50	NONE	< 50	-	-	-	< 50
Flamprop-Isopropyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Ioxynil	µg/kg	10	NONE	< 10	-	-	-	< 10
MCPA	µg/kg	10	NONE	< 10	-	-	-	< 10
MCPB	µg/kg	20	NONE	< 20	-	-	-	< 20
MCPP (Mecoprop)	µg/kg	10	NONE	< 10	-	-	-	< 10
Picloram	µg/kg	50	NONE	< 50	-	-	-	< 50

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-77432
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Your Order No: PO-1117

Lab Sample Number	1884056	1884057	1884058	1884059
Sample Reference	TP02	TP04	TP06	TP07
Sample Number	2	2	2	1
Depth (m)	1.40	1.00	1.40	0.10
Date Sampled	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	33
Total mass of sample received	kg	0.001	NONE	1.2

Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.7	6.6	6.3	5.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Complex Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.28	0.0075	0.0064	0.011
Total Sulphur	mg/kg	50	MCERTS	2500	< 50	< 50	260
Organic Matter	%	0.1	MCERTS	3.7	< 0.1	< 0.1	2.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80
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Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)							
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.9	3.1	3.2	8.4
Barium (aqua regia extractable)	mg/kg	1	MCERTS	52	12	10	61
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.64	0.20	0.16	0.59
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	< 0.2	< 0.2	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	3.7	4.5	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	4.7	4.2	40
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	4.6	6.0	61
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	5.0	6.6	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	16	4.7	6.1	19
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	51	10	15	66

Monoaromatics & Oxygenates

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 C10 - C40	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
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TPH2 (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
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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	-	-	-	-

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Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)							
Pesticides							
Alachlor	µg/kg	10	NONE	-	-	-	< 10
Aldrin	µg/kg	10	NONE	-	-	-	< 10
Azinphos-ethyl	µg/kg	10	NONE	-	-	-	< 10
Azinphos-methyl	µg/kg	10	NONE	-	-	-	< 10
BHC-alpha (benzene hexachloride)	µg/kg	10	NONE	-	-	-	< 10
BHC-beta	µg/kg	10	NONE	-	-	-	< 10
BHC-delta	µg/kg	10	NONE	-	-	-	< 10
BHC-gamma (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	-	< 10
Bifenthrin	µg/kg	10	NONE	-	-	-	< 10
Carbophenothion	µg/kg	10	NONE	-	-	-	< 10
Chlordane-cis	µg/kg	10	NONE	-	-	-	< 10
Chlordane-trans	µg/kg	10	NONE	-	-	-	< 10
Chlorfenvinphos	µg/kg	10	NONE	-	-	-	< 10
Chlorothalonil	µg/kg	20	NONE	-	-	-	< 20
Chlorpyrifos	µg/kg	10	NONE	-	-	-	< 10
Cyfluthrin (Sum)	µg/kg	10	NONE	-	-	-	< 10
Cyhalothrin (Lambda)	µg/kg	10	NONE	-	-	-	< 10
Cypermethrin (Sum)	µg/kg	10	NONE	-	-	-	< 10
DDD-o,p'	µg/kg	10	NONE	-	-	-	< 10
DDD-p,p'	µg/kg	10	NONE	-	-	-	< 10
DDE-o,p'	µg/kg	10	NONE	-	-	-	< 10
DDE-p,p'	µg/kg	10	NONE	-	-	-	< 10
DDT-o,p'	µg/kg	10	NONE	-	-	-	< 10
DDT-p,p'	µg/kg	10	NONE	-	-	-	< 10
Deltamethrin	µg/kg	10	NONE	-	-	-	< 10
Demeton-O	µg/kg	10	NONE	-	-	-	< 10
Demeton-S	µg/kg	10	NONE	-	-	-	< 10
Diazinon	µg/kg	10	NONE	-	-	-	< 10
Dichlorobenzonitrile, 2,6-	µg/kg	10	NONE	-	-	-	< 10
Dichlorvos	µg/kg	10	NONE	-	-	-	< 10
Dieldrin	µg/kg	10	NONE	-	-	-	< 10
Dimethoate	µg/kg	10	NONE	-	-	-	< 10
Dimethylvinphos	µg/kg	10	NONE	-	-	-	< 10
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	-	< 10
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	-	< 10
Endosulfan sulfate	µg/kg	10	NONE	-	-	-	< 10
Endrin	µg/kg	20	NONE	-	-	-	< 20
Endrin aldehyde	µg/kg	10	NONE	-	-	-	< 10
Endrin ketone	µg/kg	10	NONE	-	-	-	< 10
Ethion	µg/kg	10	NONE	-	-	-	< 10
Etrifos	µg/kg	10	NONE	-	-	-	< 10
Fenitrothion	µg/kg	10	NONE	-	-	-	< 10
Fenthion	µg/kg	10	NONE	-	-	-	< 10
Fenvalerate (Sum)	µg/kg	10	NONE	-	-	-	< 10
Heptachlor	µg/kg	10	NONE	-	-	-	< 10
Heptachlor exo-epoxide	µg/kg	10	NONE	-	-	-	< 10
Hexachlorobenzene	µg/kg	10	NONE	-	-	-	< 10
Hexachlorobutadiene	µg/kg	10	NONE	-	-	-	< 10
Isodrin	µg/kg	20	NONE	-	-	-	< 20
Malathion	µg/kg	10	NONE	-	-	-	< 10
Methacrifos	µg/kg	10	NONE	-	-	-	< 10
Methoxychlor, p,p'-	µg/kg	20	NONE	-	-	-	< 20

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Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)							
Mevinphos, E+Z	µg/kg	10	NONE	-	-	-	< 10
Omethoate	µg/kg	20	NONE	-	-	-	< 20
Parathion	µg/kg	10	NONE	-	-	-	< 10
Parathion-methyl	µg/kg	10	NONE	-	-	-	< 10
Pendimethalin	µg/kg	10	NONE	-	-	-	< 10
Pentachlorobenzene	µg/kg	10	NONE	-	-	-	< 10
Permethrin, Cis-	µg/kg	10	NONE	-	-	-	< 10
Permethrin, Trans-	µg/kg	10	NONE	-	-	-	< 10
Phorate	µg/kg	10	NONE	-	-	-	< 10
Phosalone	µg/kg	10	NONE	-	-	-	< 10
Phosphamidon (Sum)	µg/kg	10	NONE	-	-	-	< 10
Pirimiphos-ethyl	µg/kg	10	NONE	-	-	-	< 10
Pirimiphos-methyl	µg/kg	10	NONE	-	-	-	< 10
Propetamphos	µg/kg	10	NONE	-	-	-	< 10
Propyzamide	µg/kg	10	NONE	-	-	-	< 10
Tecnazene	µg/kg	10	NONE	-	-	-	< 10
Tetrachlorobenzene, 1,2,4,5-	µg/kg	10	NONE	-	-	-	< 10
Trichlorobenzene, 1,2,3-	µg/kg	10	NONE	-	-	-	< 10
Trichlorobenzene, 1,3,5-	µg/kg	10	NONE	-	-	-	< 10
Trifluralin	µg/kg	10	NONE	-	-	-	< 10

Herbicides

Aldicarb	µg/kg	10	NONE	-	-	-	< 10
Aldicarb Sulfone	µg/kg	10	NONE	-	-	-	< 10
Aldicarb Sulfoxide	µg/kg	50	NONE	-	-	-	< 50
Atrazine	µg/kg	10	NONE	-	-	-	< 10
Carbaryl	µg/kg	10	NONE	-	-	-	< 10
Carbofuran	µg/kg	10	NONE	-	-	-	< 10
Carbofuran, 3-OH	µg/kg	20	NONE	-	-	-	< 20
Chlortoluron	µg/kg	10	NONE	-	-	-	< 10
Cyanazine	µg/kg	10	NONE	-	-	-	< 10
Diiflubenzuron	µg/kg	50	NONE	-	-	-	< 50
Diuron	µg/kg	10	NONE	-	-	-	< 10
Fluometuron	µg/kg	10	NONE	-	-	-	< 10
Isoproturon	µg/kg	10	NONE	-	-	-	< 10
Linuron	µg/kg	20	NONE	-	-	-	< 20
Methiocarb	µg/kg	10	NONE	-	-	-	< 10
Methomyl	µg/kg	10	NONE	-	-	-	< 10
Oxamyl	µg/kg	10	NONE	-	-	-	< 10
Prometryn	µg/kg	10	NONE	-	-	-	< 10
Propazine	µg/kg	10	NONE	-	-	-	< 10
Propoxur	µg/kg	10	NONE	-	-	-	< 10
Siduron	µg/kg	10	NONE	-	-	-	< 10
Simazine	µg/kg	10	NONE	-	-	-	< 10
Tebuthiuron	µg/kg	10	NONE	-	-	-	< 10
Terbutylazine	µg/kg	10	NONE	-	-	-	< 10
Terbutryn	µg/kg	10	NONE	-	-	-	< 10
Thiadiazuron	µg/kg	10	NONE	-	-	-	< 10
Trietazine	µg/kg	10	NONE	-	-	-	< 10

Acid Herbicides

2,3,6-TBA	µg/kg	50	NONE	-	-	-	< 50
2,4,5-T	µg/kg	10	NONE	-	-	-	< 10

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Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)							
2,4,5-TP (Fenoprop)	µg/kg	10	NONE	-	-	-	< 10
2,4-D	µg/kg	10	NONE	-	-	-	< 10
2,4-DB	µg/kg	10	NONE	-	-	-	< 10
4-CPA	µg/kg	20	NONE	-	-	-	< 20
Bromacil	µg/kg	10	NONE	-	-	-	< 10
Bromoxynil	µg/kg	10	NONE	-	-	-	< 10
Clopyralid	µg/kg	100	NONE	-	-	-	< 100
Dicamba	µg/kg	20	NONE	-	-	-	< 20
Diclofop	µg/kg	10	NONE	-	-	-	< 10
Dichlorprop	µg/kg	10	NONE	-	-	-	< 10
Dinoseb	µg/kg	10	NONE	-	-	-	< 10
Flamprop	µg/kg	50	NONE	-	-	-	< 50
Flamprop-Isopropyl	µg/kg	10	NONE	-	-	-	< 10
Ioxynil	µg/kg	10	NONE	-	-	-	< 10
MCPA	µg/kg	10	NONE	-	-	-	< 10
MCPB	µg/kg	20	NONE	-	-	-	< 20
MCPP (Mecoprop)	µg/kg	10	NONE	-	-	-	< 10
Picloram	µg/kg	50	NONE	-	-	-	< 50

U/S = Unsuitable Sample I/S = Insufficient Sample



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Project / Site name: Ellesmere

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Lab Sample Number	1884061	1884062	1884063	1884064
Sample Reference	WS01	WS04	WS05	TP07
Sample Number	1	2	2	1
Depth (m)	0.20	0.50	0.50	0.10
Date Sampled	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)				

General Inorganics

pH	pH Units	N/A	ISO 17025	6.5	6.7	7.5	6.5
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
Sulphate as SO4	mg/l	0.1	ISO 17025	2.3	1.6	57.8	5.8

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0	1.0	27	1.2
Barium (dissolved)	µg/l	0.05	ISO 17025	9.4	12	47	16
Beryllium (dissolved)	µg/l	0.2	ISO 17025	0.7	0.2	0.2	0.6
Boron (dissolved)	µg/l	10	ISO 17025	19	13	210	22
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	< 0.08
Chromium (dissolved)	µg/l	0.4	ISO 17025	1.7	2.8	11	1.6
Copper (dissolved)	µg/l	0.7	ISO 17025	15	12	75	34
Lead (dissolved)	µg/l	1	ISO 17025	2.3	3.9	7.5	6.0
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	4.0	5.1	13	6.2
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	< 4.0
Vanadium (dissolved)	µg/l	1.7	ISO 17025	< 1.7	< 1.7	23	< 1.7
Zinc (dissolved)	µg/l	0.4	ISO 17025	21	9.5	27	24

U/S = Unsuitable Sample I/S = Insufficient Sample



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Lab Sample Number				1884060
Sample Reference				WS05A
Sample Number				1
Depth (m)				0.00
Date Sampled				20/05/2021
Time Taken				None Supplied
Analytical Parameter (Bulk Analysis)				

Asbestos Identification	Type	N/A	ISO 17025	Chrysotile- Hard/Cement Type Material
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U/S = Unsuitable Sample I/S = Insufficient Sample

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* 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 *
1884051	WS01	1	0.2	Brown clay and loam with gravel and vegetation.
1884052	WS01	2	2.85	Brown sand.
1884053	WS04	2	0.5	Brown clay and sand with gravel and vegetation.
1884054	WS05	2	0.5	Brown clay and loam with gravel and vegetation.
1884055	TP02	1	0.5	Brown clay and loam with gravel and vegetation.
1884056	TP02	2	1.4	Brown clay and loam with gravel and vegetation.
1884057	TP04	2	1	Brown sand with gravel and vegetation.
1884058	TP06	2	1.4	Brown sand with gravel and vegetation.
1884059	TP07	1	0.1	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 21-77432

Project / Site name: Ellesmere

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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-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
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in Bulks	Asbestos Identification in bulk material with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	W	ISO 17025
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
Metals by ICP-OES in leachate	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
Boron in leachate	Determination of boron in leachate. Sample acidified and followed by ICP-OES.	In-house method based on MEWAM	L039-PL	W	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
Complex Cyanide in soil	Determination of complex cyanide by calculation.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
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
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	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	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 (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	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
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate	Determination of pH in leachate by electrometric measurement.	In house method.	L005-PL	W	ISO 17025

Analytical Report Number : 21-77432
Project / Site name: Ellesmere

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
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
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
TPH2 (Soil)	Determination of hydrocarbons C6-C10 by headspace GC-MS.	In-house method based on USEPA8260	L088-PL	W	MCERTS
Total cyanide in leachate	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	ISO 17025
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
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
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Pesticides by GC-MS/MS	Determination of Pesticides in soil by GC MS/MS	In-house method	L055B-PL	W	NONE
Herbicides by LC-MS	Determination of Herbicides in soil by LC MS	In-house method	L056B-PL	W	NONE
Acid Herbicides by LC-MS	Determination of Acid Herbicides by LC MS	In-house method	L057B-PL	W	NONE
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025

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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



Liv Gatehouse
Exploration & Testing Associates Limited
3 Siskin Drive
Middlemarch Business Park
Coventry
CV3 4FJ

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
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Watford,
Herts,
WD18 8YS

e: results@explorationtesting.uk

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 21-79772

Project / Site name:	Ellesmere	Samples received on:	28/05/2021
Your job number:	N10010	Samples instructed on / Analysis started on:	28/05/2021
Your order number:	1120	Analysis completed by:	23/06/2021
Report Issue Number:	1	Report issued on:	23/06/2021
Samples Analysed:	6 soil samples		

Signed: *A. Czerwińska*
Agnieszka Czerwińska
#REF!
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.



Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-79772

Project / Site name: Ellesmere

Your Order No: 1120

Lab Sample Number	1895782	1895783	1895784	1895785	1895786
Sample Reference	WS01	WS03	TP02	TP03	TP05
Sample Number	1	2	2	1	1
Depth (m)	1.00	2.00	1.50	1.00	0.50
Date Sampled	20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)					
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.4	8.3
Total mass of sample received	kg	0.001	NONE	1.0	1.0

Geotechnical

Geotechnical Testing - Various		N/A	NONE	See attached	See attached	See attached	See attached	See attached
--------------------------------	--	-----	------	--------------	--------------	--------------	--------------	--------------

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.7	7.4	6.6	7.6	7.4
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.056	0.44	0.018	0.0065
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	14.2	55.5	442	17.7	6.5
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	2.7	2.1	1.6	14	1.1
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	14	11	25	13	14
Magnesium (leachate equivalent)	mg/l	2.5	NONE	7.2	5.6	12	6.6	7.0

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-79772

Project / Site name: Ellesmere

Your Order No: 1120

Lab Sample Number	1895787			
Sample Reference	TP07			
Sample Number	2			
Depth (m)	2.00			
Date Sampled	20/05/2021			
Time Taken	None Supplied			
Analytical Parameter (Soil Analysis)				
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	6.2
Total mass of sample received	kg	0.001	NONE	1.0

Geotechnical

Geotechnical Testing - Various		N/A	NONE	See attached
--------------------------------	--	-----	------	--------------

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.013
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	13.4
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	2.0
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	14
Magnesium (leachate equivalent)	mg/l	2.5	NONE	7.0

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-79772

Project / Site name: Ellesmere

* 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 *
1895782	WS01	1	1	Brown sandy clay with gravel.
1895783	WS03	2	2	Brown sandy clay with gravel and vegetation.
1895784	TP02	2	1.5	Grey clay and sand with gravel.
1895785	TP03	1	1	Brown sandy clay with gravel and vegetation.
1895786	TP05	1	0.5	Brown sandy gravel with vegetation.
1895787	TP07	2	2	Brown clay and sand with gravel.

Analytical Report Number : 21-79772

Project / Site name: Ellesmere

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
Geotechnical Testing in Soil	See attached geotechnical report	See attached geotechnical report		W	NONE
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	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.	L099-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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

APPENDIX 4: GEOTECHNICAL TESTING



Laboratory Test Report

Client:	Exploration and Testing Associates Limited
Job Number:	N10010
Project:	Ellesmere
Report Number:	L21-232
Date Received:	03.06.2021
Client Contact:	Liv Gatehouse
Address:	'number three' Siskin Drive, Middlemarch Business Park, Coventry, CV3 4FJ
Testing Required:	Water Content – BS EN ISO 17892-1:2014 Determination of Liquid and Plastic Limits and Plasticity Index – BS EN ISO 17892-12:2018 Particle Size Distribution – BS EN ISO 17892-4:2016
Date Testing Started:	21.06.2021
Date Testing Finished:	28.06.2021
Date Report Issued:	29.06.2021
Reviewed By:	 N. Hodson – Materials Director
Authorised By:	 N. O'Brien – Laboratory Manager
Remarks:	(*) Denotes testing is outside of UKAS Accreditation Scope.

Samples will be stored for one month after the report has been issued before being disposed of.

The published results are appertaining only to the specimens tested.

Exploration & Testing Associates Limited, registered in England and Wales # 11803869 at 8B Bowburn South Ind Est, Bowburn, Durham, DH6 5AD

PARTICLE SIZE DISTRIBUTION

Job Ref

N10010.1

Borehole/Pit No.

TP01

Site Name

Ellesmere

Sample No.

2

Soil Description

Brown, Gravelly SAND with Clay Pockets

Depth, m

2.60

Specimen
Reference

Specimen
Depth

m

Sample Type

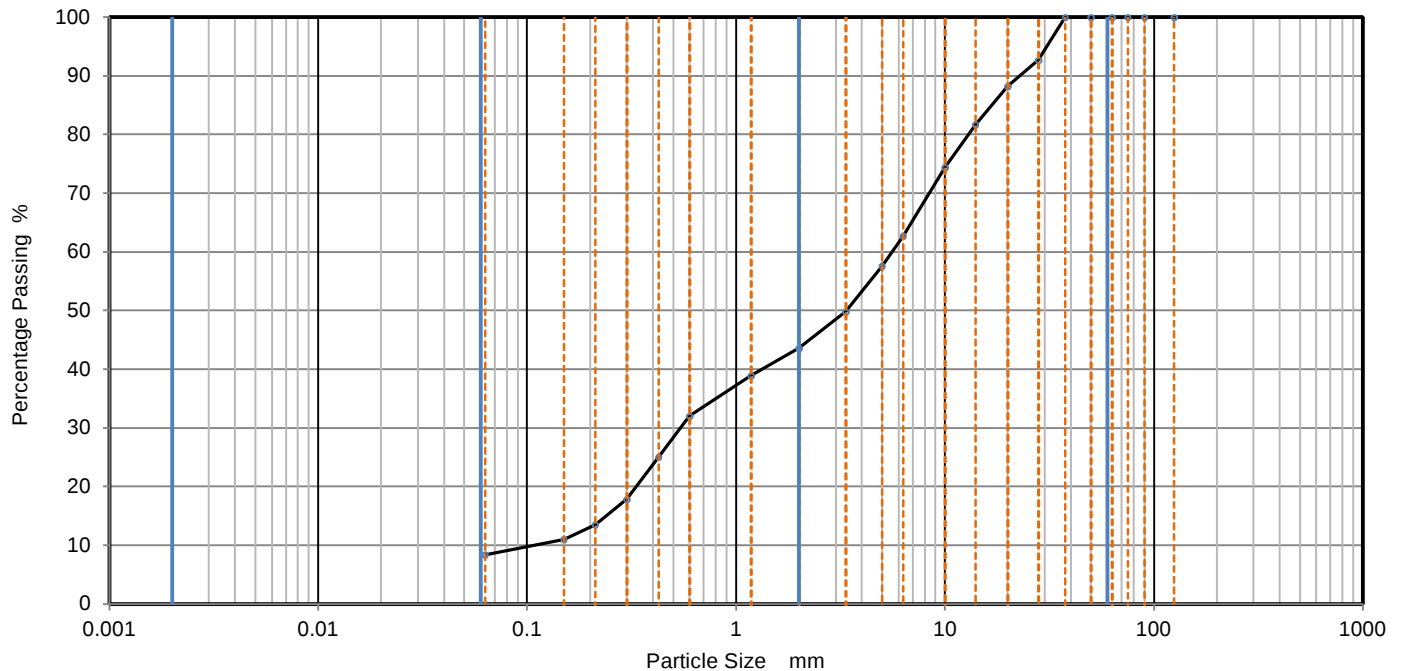
B

Test Method

BS EN ISO 17892-4:2016 - Wet & Dry Sieving

KeyLAB ID

EAT_202106293



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	93		
20	88		
14	82		
10	74		
6.3	63		
5	58		
3.35	50		
2	44		
1.18	39		
0.6	32		
0.425	25		
0.3	18		
0.212	14		
0.15	11		
0.063	8.4		

Sample Proportions	% dry mass
Very coarse	0
Gravel	56
Sand	35
Fines <0.063mm	8

Grading Analysis	
D ₁₀₀	mm
D ₆₀	mm
D ₃₀	mm
D ₁₀	mm
Uniformity Coefficient	47
Curvature Coefficient	0.45

Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date

Approved By

29/06/2021 16:22

N O'Brien

UKAS Accreditation
No: 20632

PARTICLE SIZE DISTRIBUTION

Job Ref

N10010.1

Borehole/Pit No.

TP02

Site Name

Ellesmere

Sample No.

1

Soil Description

Brown, Gravelly SANDY with Clay Pockets

Depth, m

2.70

Specimen
Reference

Specimen
Depth

m

Sample Type

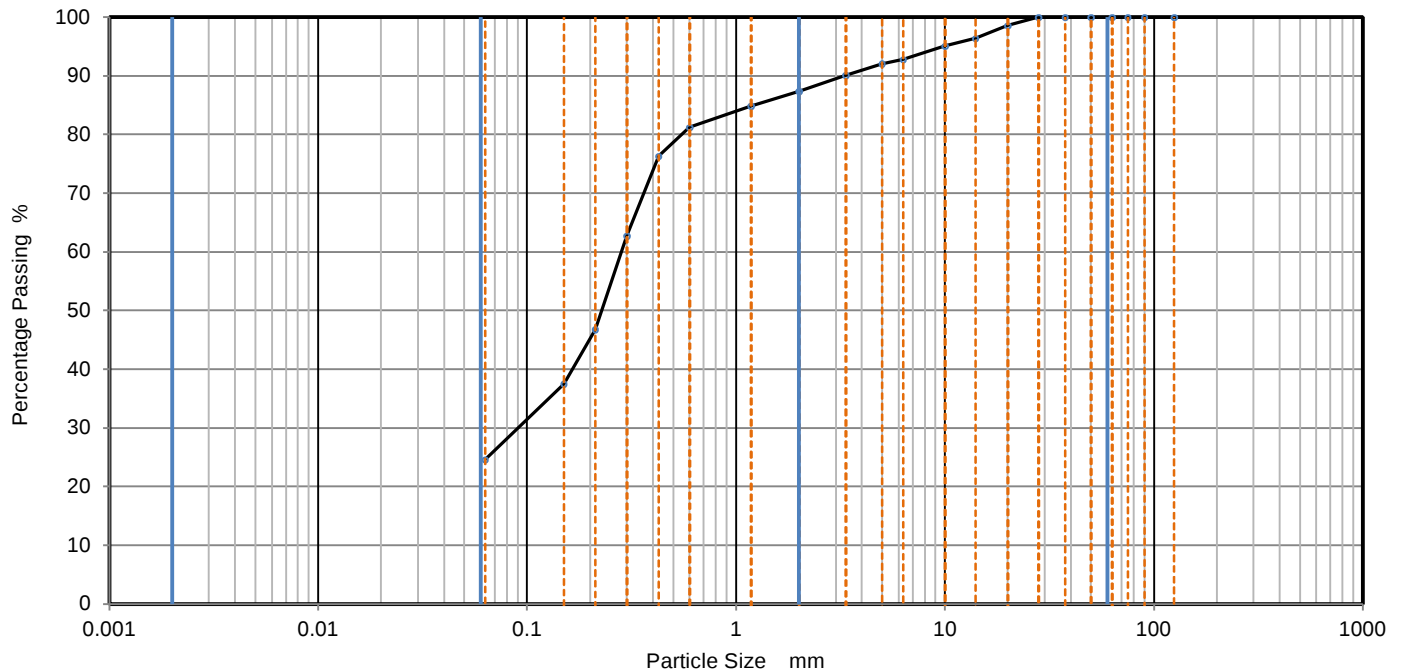
B

Test Method

BS EN ISO 17892-4:2016 - Wet & Dry Sieving

KeyLAB ID

EAT_202106296



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	99		
14	96		
10	95		
6.3	93		
5	92		
3.35	90		
2	87		
1.18	85		
0.6	81		
0.425	76		
0.3	63		
0.212	47		
0.15	38		
0.063	24.6		

Sample Proportions	% dry mass
Very coarse	0
Gravel	13
Sand	63
Fines <0.063mm	25

Grading Analysis	
D ₁₀₀	mm
D ₆₀	mm
D ₃₀	mm
D ₁₀	mm
Uniformity Coefficient	
Curvature Coefficient	

Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date

29/06/2021 16:22

Approved By

N O'Brien

UKAS Accreditation
No: 20632

PARTICLE SIZE DISTRIBUTION

Job Ref

N10010.1

Borehole/Pit No.

TP03

Site Name

Ellesmere

Sample No.

3

Soil Description

Brown, Slightly Clayey, Gravelly SAND

Depth, m

2.80

Specimen Reference

Specimen Depth

m

Sample Type

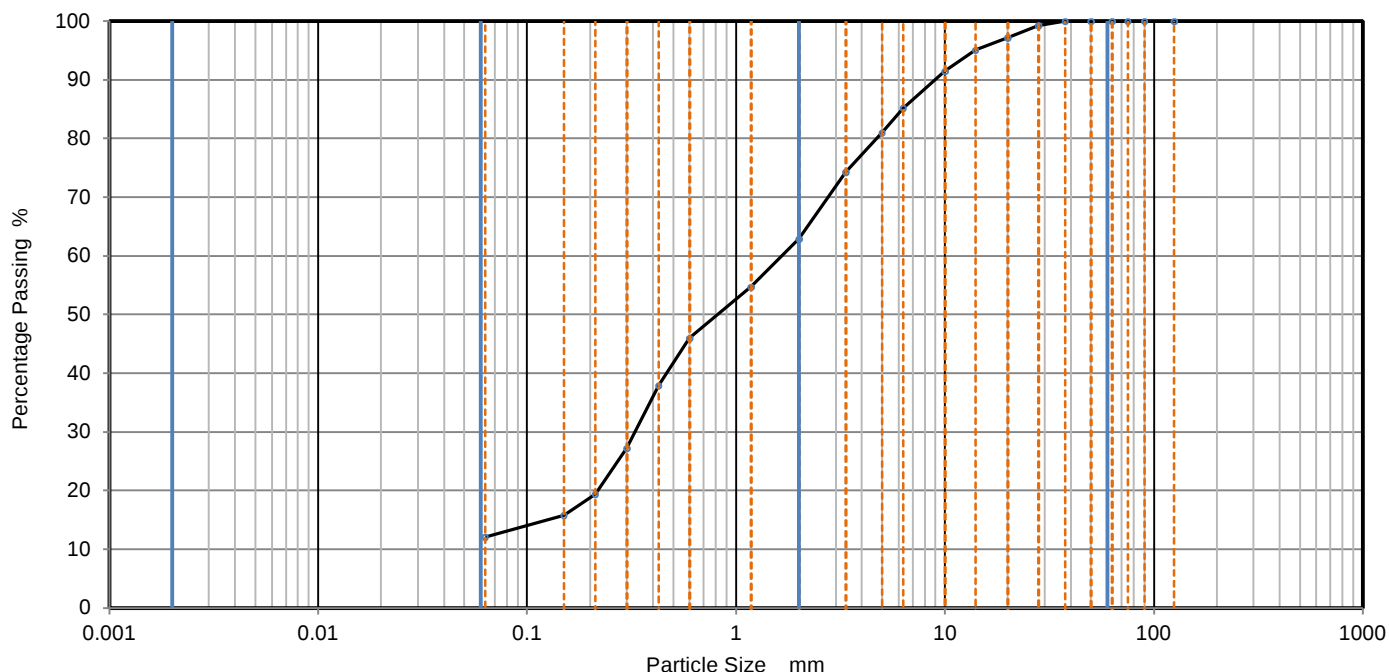
B

Test Method

BS EN ISO 17892-4:2016 - Wet & Dry Sieving

KeyLAB ID

EAT_202106299



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	99		
20	97		
14	95		
10	92		
6.3	85		
5	81		
3.35	74		
2	63		
1.18	55		
0.6	46		
0.425	38		
0.3	27		
0.212	19		
0.15	16		
0.063	12.1		

Sample Proportions	% dry mass
Very coarse	0
Gravel	37
Sand	51
Fines <0.063mm	12

Grading Analysis	
D ₁₀₀	mm
D ₆₀	mm
D ₃₀	mm
D ₁₀	mm
Uniformity Coefficient	
Curvature Coefficient	

Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By		UKAS Accreditation No: 20632
29/06/2021 16:23	N O'Brien		



PARTICLE SIZE DISTRIBUTION

Job Ref

N10010.1

Borehole/Pit No.

TP05

Site Name

Ellesmere

Sample No.

1

Soil Description

Brown/Red, Gravelly SAND

Depth, m

1.00

Specimen
ReferenceSpecimen
Depth

m

Sample Type

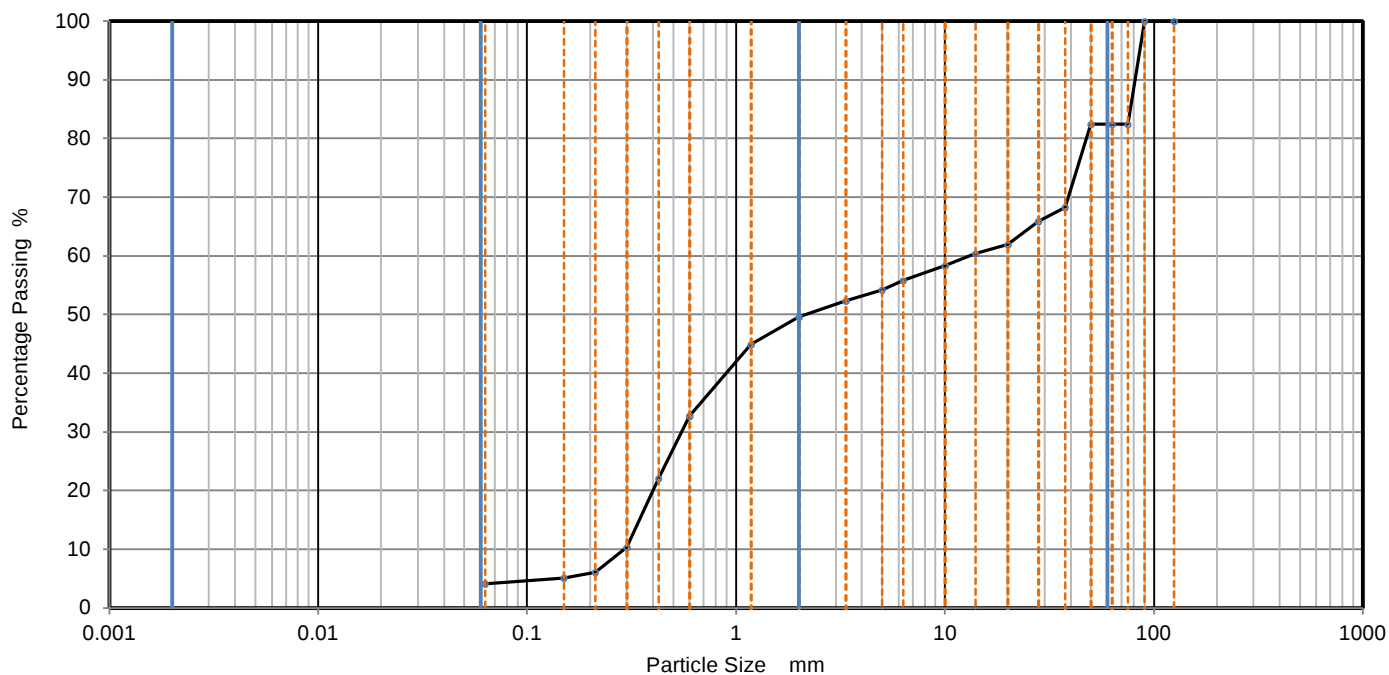
B

Test Method

BS EN ISO 17892-4:2016 - Wet & Dry Sieving

KeyLAB ID

EAT_2021062911



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	82		
63	82		
50	82		
37.5	68		
28	66		
20	62		
14	60		
10	58		
6.3	56		
5	54		
3.35	52		
2	50		
1.18	45		
0.6	33		
0.425	22		
0.3	10		
0.212	6		
0.15	5		
0.063	4.1		

Sample Proportions	% dry mass
Very coarse	18
Gravel	33
Sand	46
Fines <0.063mm	4

Grading Analysis	
D ₁₀₀	mm
D ₆₀	mm
D ₃₀	mm
D ₁₀	mm
Uniformity Coefficient	45
Curvature Coefficient	0.078

Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date

Approved By

29/06/2021 16:19

N O'Brien



PARTICLE SIZE DISTRIBUTION

Job Ref

N10010.1

Borehole/Pit No.

TP07

Site Name

Ellesmere

Sample No.

1

Soil Description

Brown, Slightly Gravelly SAND

Depth, m

1.50

Specimen
ReferenceSpecimen
Depth

m

Sample Type

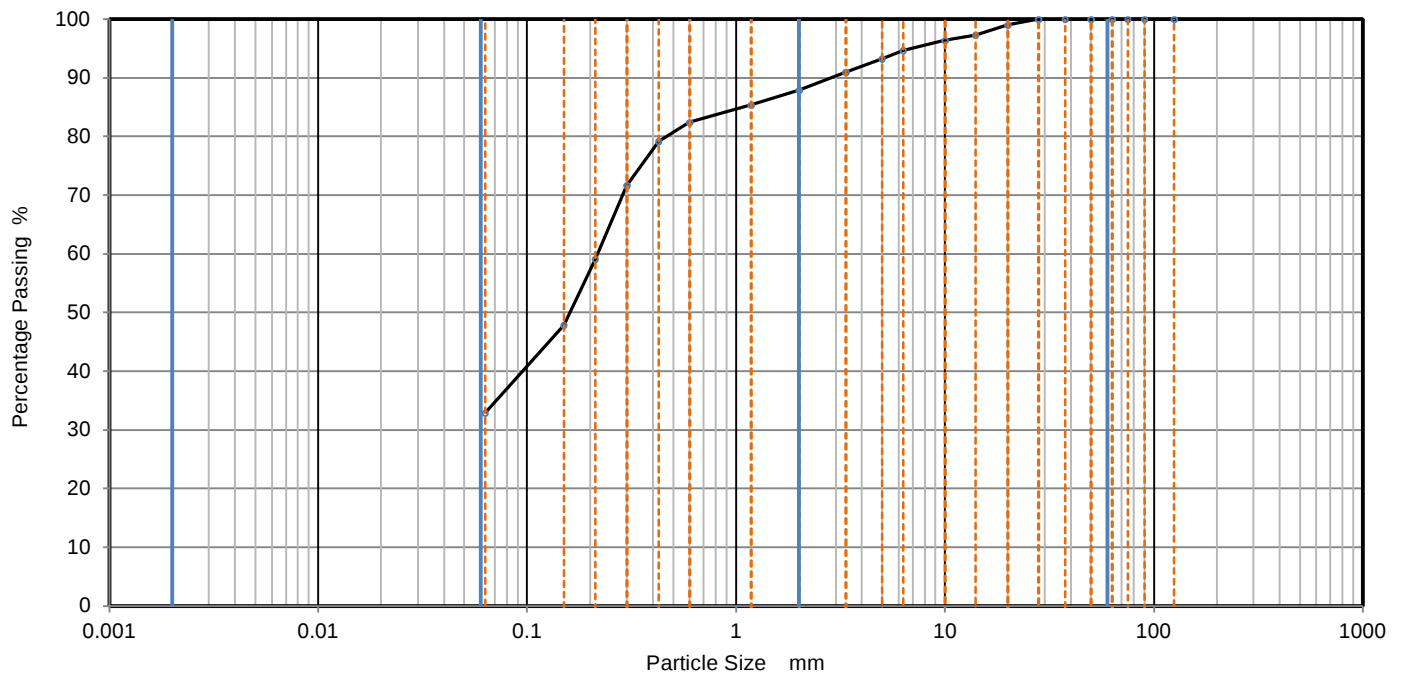
B

Test Method

BS EN ISO 17892-4:2016 - Wet & Dry Sieving

KeyLAB ID

EAT_2021062913



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	99		
14	97		
10	96		
6.3	95		
5	93		
3.35	91		
2	88		
1.18	85		
0.6	82		
0.425	79		
0.3	72		
0.212	59		
0.15	48		
0.063	32.9		

Sample Proportions	% dry mass
Very coarse	0
Gravel	12
Sand	55
Fines <0.063mm	33

Grading Analysis	
D ₁₀₀	mm
D ₆₀	mm
D ₃₀	mm
D ₁₀	mm
Uniformity Coefficient	
Curvature Coefficient	

Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By	
29/06/2021 16:20	N O'Brien	

PARTICLE SIZE DISTRIBUTION

Job Ref

N10010.1

Borehole/Pit No.

TP08

Site Name

Ellesmere

Sample No.

2

Soil Description

Brown SAND

Depth, m

1.60

Specimen Reference

Specimen Depth

m

Sample Type

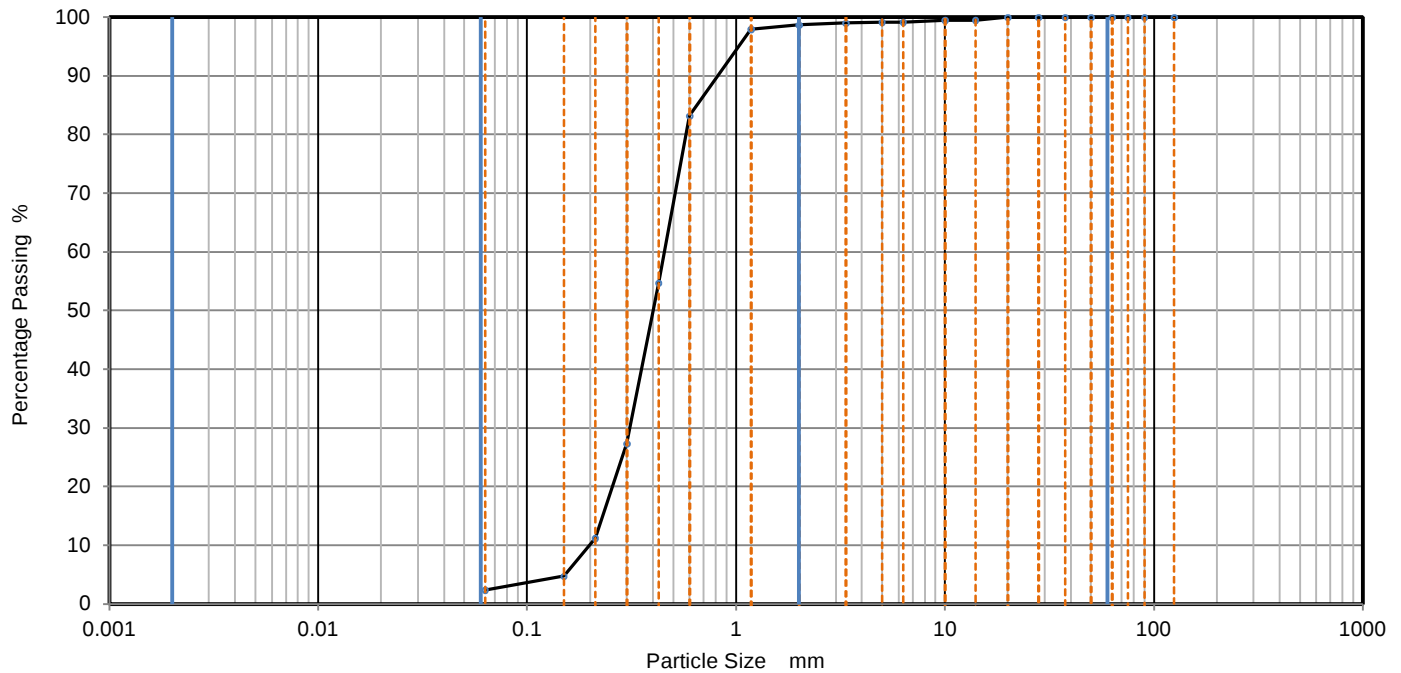
B

Test Method

BS EN ISO 17892-4:2016 - Wet & Dry Sieving

KeyLAB ID

EAT_2021062915



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	99		
3.35	99		
2	99		
1.18	98		
0.6	83		
0.425	55		
0.3	27		
0.212	11		
0.15	5		
0.063	2.4		

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	96
Fines <0.063mm	2

Grading Analysis	
D ₁₀₀	mm
D ₆₀	mm
D ₃₀	mm
D ₁₀	mm
Uniformity Coefficient	2.3
Curvature Coefficient	1.1

Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By		UKAS Accreditation No: 20632
29/06/2021 16:21	N O'Brien		

APPENDIX 5: MONITORING





GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :

Elesmere

Contract No :

N 10 0 10

Date :

25/05/2021

Background Readings:

O ₂ % v/v :	211	CO ₂ % v/v :	0.1	CH ₄ % v/v :	0.0	Weather Conditions :	Overcast 9 degrees	Equipment Used:	Technician:
H ₂ S ppm :	0	CO ppm :	0	Pressure Trend :	Increasing	Ground Conditions :	Damp	GA5000	OG

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O ₂ (% v/v)		CO ₂ (% v/v)		CH ₄ (% v/v)		H ₂ S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
WS01	08:40	1005	-0.03	17.5	17.5	2.6	2.6	0.0	0.0	0	0	0.3	0.3	0.0	-	157	-	2.58
WS02	09:10	1005	-0.10	20.1	20.1	0.1	0.1	0.0	0.0	0	0	0.0	0.0	0.0	-	210	-	2.58
WS03	08:30	1005	-0.17	21	21	0.3	0.3	0.0	0.0	0	0	0.0	0.0	0.0	-	3.27	-	3.57
WS04	09:00	1005	-0.05	19.3	19.3	1.7	1.7	0.0	0.0	0	0	0.3	0.2	14	-	159	-	2.30
WS05	08:50	1005	-0.14	13.1	13.1	4.4	4.4	0.0	0.0	0	0	0.3	0.3	5.2	-	127	-	180

Remarks :

NR -Not recorded



GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :

Elesmere

Contract No :

N 10 0 10

Date :

02/06/2021

Background Readings:

O ₂ % v/v :	211	CO ₂ % v/v :	0.1	CH ₄ % v/v :	0.0	Weather Conditions :	Sunny and dry, 18 degrees	Equipment Used:	Technician:
H ₂ S ppm :	0	CO ppm :	0	Pressure Trend :	Increasing	Ground Conditions :	Dry	GA5000	OG

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O ₂ (% v/v)		CO ₂ (% v/v)		CH ₄ (% v/v)		H ₂ S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
WS01	-	1005	0.00	17.3	17.5	3.1	3.1	0.0	0.0	0	1	0.0	0.0	-	-	164	-	2.58
WS02	-	1005	0.10	18.2	18.2	2.1	2.1	0.0	0.0	0	1	0.0	0.0	-	-	210	-	2.50
WS03	-	1005	0.00	18.6	18.6	2.8	2.8	0.0	0.0	0	0	0.2	0.2	-	-	3.29	-	3.42
WS04	-	1005	0.00	17.9	17.9	3.0	3.0	0.0	0.0	1	0	-0.3	0.0	-	-	173	-	2.30
WS05	-	1005	0.07	9.8	9.8	5.5	5.5	0.0	0.0	0	0	-0.1	0.0	-	-	149	-	176

Remarks :

NR -Not recorded

DURHAM**T.** 0191 3896543**E.** enquiries@explorationtesting.uk
Unit 8B, Bowburn South Industrial
Estate, Durham,
DH6 5AD.**COVENTRY****T.** 02476 880452**E.** enquiries@explorationtesting.uk
'number three' Siskin Drive,
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Appendix 4: Soil Chemical Results Summary

STATISTICAL APPROACH FOR ASSESSING RISK TO HUMAN HEALTH FROM CONTAMINATED LAND 2008

CIEH/CLAIRE Guidance on Comparing Soil Contamination Data with a Critical Concentration May 2008

**STAGE 1
QA CHECK**

Are data of acceptable quality
Lab sampling errors / erroneous results
Are data sufficient to characterise area of interest

No

Review CSM, update sampling and analytical strategy

yes

**STAGE 2
DATA SCREENING**

Compare all data against GSAC
Do any values exceed GSAC?

No

True mean is less than critical concentration
No action required

Yes

**STAGE 3
ZONING AND
OUTLIER CHECK**

Plot data on bubble chart
Plot histogram
Identify and deal with non detects

Outliers

Assess Outliers directly against GSAC

Non detects to DL or DL/2
Remove outliers

**STAGE 4
UPPER CONFIDENCE
LIMIT**

With outliers removed
do any values exceed GSAC ?

No

True mean is less than critical concentration
No action required

Yes

With outliers removed are data normally Distributed
Histogram
Shapiro Wilkes test, q-q plot

Normal

Non-normal

Normal Distributed data
UCL from Students t-test

Non-normal Distributed data
UCL from Chebychev theorem

Compare UCL to GSAC
Does UCL exceed GSAC?

No

True mean is less than critical concentration
No action required

Yes

true mean is greater than critical concentration
Further action required

Human Health Generic QRA Worksheet

Ellesmere Marina

BMW2025

GSAC Hierarchy

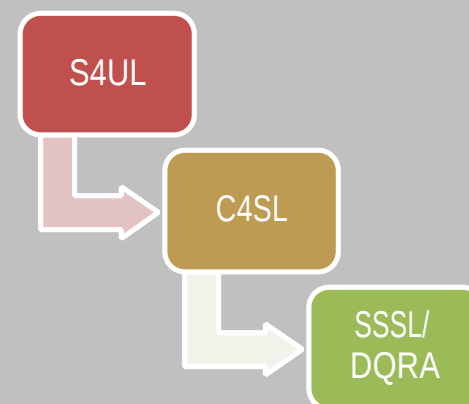
Define CSM -Is site represented by a standard land use?

Residential with / without homegrown produce

Commercial / Industrial

Public Open Space -Residential (S4UL/C4SL only)

Public Open Space -Park (S4UL/C4SL only)



GSAC Type (BWB, LQM S4UL, C4SL, Bespoke)	LQM_CIEH_S4UL
Key Receptor/CSM (Residential/Commercial/POS)	S4UL Residential with homegrown produce
Organic Matter % (If unknown use 1%)	1

Generic Assessment Criteria

Ellesmere Marina
BMW2025

S4UL Residential
with homegrown
produce
mg/ kg



Source

Arsenic	3.70E+01	LQM_CIEH_S4UL
Barium	1.35E+03	LQM_CIEH_S4UL
Beryllium	1.70E+00	LQM_CIEH_S4UL
Boron	2.90E+02	LQM_CIEH_S4UL
Cadmium	1.10E+01	LQM_CIEH_S4UL
Chromium V	6.00E+00	LQM_CIEH_S4UL
Chromium II	9.10E+02	LQM_CIEH_S4UL
Copper	2.40E+03	LQM_CIEH_S4UL
Lead*	2.00E+02	DEFRA_C4SL
Inorganic Mercury	4.00E+01	LQM_CIEH_S4UL
Nickel	1.80E+02	LQM_CIEH_S4UL
Selenium	2.50E+02	LQM_CIEH_S4UL
Vanadium	4.10E+02	LQM_CIEH_S4UL
Zinc	3.70E+03	LQM_CIEH_S4UL
Cyanide (Free)	4.30E+01	BWB
Cyanide (Complex)	2.13E+02	BWB
Phenols (Total)	1.20E+02	LQM_CIEH_S4UL
Benzene	8.70E-02	LQM_CIEH_S4UL
Toluene	1.30E+02	LQM_CIEH_S4UL
Ethyl benzene	4.70E+01	LQM_CIEH_S4UL
Total Xyl	5.60E+01	LQM_CIEH_S4UL
TPH (EC5-6) all	4.20E+01	LQM_CIEH_S4UL
TPH (>EC6-8) all	1.00E+02	LQM_CIEH_S4UL
TPH (>EC8-10) all	2.70E+01	LQM_CIEH_S4UL
TPH (>EC10-12) a	1.30E+02	LQM_CIEH_S4UL
TPH (>EC12-16) a	1.10E+03	LQM_CIEH_S4UL
TPH (>EC16-21) a	6.50E+04	LQM_CIEH_S4UL
TPH (>EC21-35) a	6.50E+04	LQM_CIEH_S4UL
TPH (>EC35-44) a	6.50E+04	LQM_CIEH_S4UL
TPH (>EC6-7) aromatic	7.00E+01	LQM_CIEH_S4UL
TPH (>EC7-8) aromatic	1.30E+02	LQM_CIEH_S4UL
TPH (>EC8-10) all	3.40E+01	LQM_CIEH_S4UL
TPH (>EC10-12) a	7.40E+01	LQM_CIEH_S4UL
TPH (>EC12-16) a	1.40E+02	LQM_CIEH_S4UL
TPH (>EC16-21) a	2.60E+02	LQM_CIEH_S4UL
TPH (>EC21-35) a	1.10E+03	LQM_CIEH_S4UL
TPH (>EC35-44) a	1.10E+03	LQM_CIEH_S4UL
Total TF	5.00E+02	LQM_CIEH_S4UL
Naphthalene	2.30E+00	LQM_CIEH_S4UL
Acenaphthylene	1.70E+02	LQM_CIEH_S4UL
Acenaphthene	2.10E+02	LQM_CIEH_S4UL
Fluorene	1.70E+02	LQM_CIEH_S4UL
Phenanthrene	9.50E+01	LQM_CIEH_S4UL
Anthracene	2.40E+03	LQM_CIEH_S4UL
Fluoranthene	2.80E+02	LQM_CIEH_S4UL
Pyrene	6.20E+02	LQM_CIEH_S4UL
Benzo(a)anthracene	7.20E+00	LQM_CIEH_S4UL

Generic Assessment Criteria

Ellesmere Marina
BMW/2025S4UL Residential
with homegrown
produce
mg/ kg**BWB**CONSULTANCY | ENVIRONMENT
INFRASTRUCTURE | BUILDINGS

Source

Chrysene	1.50E+01	LQM_CIEH_S4UL
Benzo(b)fluoranthene	2.60E+00	LQM_CIEH_S4UL
Benzo(k)fluoranthene	7.70E+01	LQM_CIEH_S4UL
Benzo(a)pyrene	2.20E+00	LQM_CIEH_S4UL
Indeno(1,2,3-c,d)pyrene	2.70E+01	LQM_CIEH_S4UL
Dibenzo(a,h)anthracene	2.40E-01	LQM_CIEH_S4UL
Benzo(g,h,i)perylene	3.20E+02	LQM_CIEH_S4UL
Coal Tar (B(a)P as surrogate)	7.90E-01	LQM_CIEH_S4UL
Tetrachloroethene	1.80E-01	LQM_CIEH_S4UL
Trichloroethene	1.60E-02	LQM_CIEH_S4UL
cis-1,2-Dichloroethene	1.10E-01	LQM_CIEH_S4UL
Vinyl Chloride (VC)	6.40E-04	LQM_CIEH_S4UL
1,1,2,2-Tetrachloroethane (PCA)	1.60E+00	LQM_CIEH_S4UL
1,1,1-Trichloroethane (TCA)	8.80E+00	LQM_CIEH_S4UL
1,2-Dichloroethane	7.10E-03	LQM_CIEH_S4UL
Carbon Tetrachloride	2.60E-02	LQM_CIEH_S4UL
Carbon disulphide	1.40E-01	LQM_CIEH_S4UL

[illegible]

[illegible]

[illegible]

Determinant	Number of test	Range (mg/kg)	S4UL Residential with hor	Detection Limit (mg/kg)	Min	Max	No. of Exceedance	No. Non detect	< or not
Arsenic	8	<3 to 10	3.70E+01	0	3	10	0	192	<
Barium	8	<10 to 140	1.35E+03	0	10	140	0	192	<
Beryllium	8	<0.16 to 0.78	1.70E+00	0	0.16	0.78	0	192	<
Boron	8	<0.2 to 2.8	2.90E+02	0	0.2	2.8	0	192	<
Cadmium	8	<0.2 to 0.4	1.10E+01	0	0.2	0.4	0	192	<
Chromium V	8	<4 to 4	6.00E+00	0	4	4	0	192	<
Chromium II	8	<3.7 to 19	9.10E+02	0	3.7	19	0	192	<
Copper	8	<4.2 to 40	2.40E+03	0	4.2	40	0	192	<
Lead*	8	<4.6 to 88	2.00E+02	0	4.6	88	0	192	<
Inorganic Mercury	8	<0.3 to 0.3	4.00E+01	0	0.3	0.3	0	192	<
Nickel	8	<5 to 23	1.80E+02	0	5	23	0	192	<
Selenium	8	<1 to 1	2.50E+02	0	1	1	0	192	<
Vanadium	8	<4.7 to 25	4.10E+02	0	4.7	25	0	192	<
Zinc	8	<10 to 130	3.70E+03	0	10	130	0	192	<
Cyanide (Free)	8	<1 to 1	4.30E+01	0	1	1	0	192	<
Cyanide (Complex)	8	<1 to 1	2.13E+02	0	1	1	0	192	<
Phenols (Total)	8	<1 to 1	1.20E+02	0	1	1	0	192	<
Benzene	2	<0.001 to 0.001	8.70E-02	0	0.001	0.001	0	198	<
Toluene	2	<0.001 to 0.001	1.30E+02	0	0.001	0.001	0	198	<
Ethyl benzene	2	<0.001 to 0.001	4.70E+01	0	0.001	0.001	0	198	<
Total Xyl	2	<0.002 to 0.002	5.60E+01	0	0.002	0.002	0	198	<
TPH (EC5-6) all	2	<0.001 to 0.001	4.20E+01	0	0.001	0.001	0	198	<
TPH (>EC6-8) all	2	<0.001 to 0.001	1.00E+02	0	0.001	0.001	0	198	<
TPH (>EC8-10) all	2	<0.001 to 0.001	2.70E+01	0	0.001	0.001	0	198	<
TPH (>EC10-12) all	2	<1 to 1	1.30E+02	0	1	1	0	198	<
TPH (>EC12-16) all	2	<2 to 2	1.10E+03	0	2	2	0	198	<
TPH (>EC16-21) all	2	<8 to 8	6.50E+04	0	8	8	0	198	<
TPH (>EC21-35) all	2	<8 to 25	6.50E+04	0	8	25	0	198	<
TPH (>EC35-44) all	0	<0 to 0	6.50E+04	0	0	0	0	198	<
TPH (>EC6-7) aromatic	2	<0.001 to 0.001	7.00E+01	0	0.001	0.001	0	198	<
TPH (>EC7-8) aromatic	2	<0.001 to 0.001	1.30E+02	0	0.001	0.001	0	198	<
TPH (>EC8-10) all	2	<0.001 to 0.001	3.40E+01	0	0.001	0.001	0	198	<
TPH (>EC10-12) all	2	<1 to 1	7.40E+01	0	1	1	0	198	<
TPH (>EC12-16) all	2	<2 to 2	1.40E+02	0	2	2	0	198	<
TPH (>EC16-21) all	2	<10 to 10	2.60E+02	0	10	10	0	198	<
TPH (>EC21-35) all	2	<10 to 13	1.10E+03	0	10	13	0	198	<
TPH (>EC35-44) all	0	<0 to 0	1.10E+03	0	0	0	0	192	<
Total TF	8	<10 to 58	5.00E+02	0	10	58	0	192	<
Naphthalene	8	<0.05 to 0.05	2.30E+00	0	0.05	0.05	0	192	<
Acenaphthylene	8	<0.05 to 0.05	1.70E+02	0	0.05	0.05	0	192	<
Acenaphthene	8	<0.05 to 0.05	2.10E+02	0	0.05	0.05	0	192	<
Fluorene	8	<0.05 to 0.05	1.70E+02	0	0.05	0.05	0	192	<
Phenanthrene	8	<0.05 to 0.05	9.50E+01	0	0.05	0.05	0	192	<
Anthracene	8	<0.05 to 0.05	2.40E+03	0	0.05	0.05	0	192	<
Fluoranthene	8	<0.05 to 0.05	2.80E+02	0	0.05	0.05	0	192	<
Pyrene	8	<0.05 to 0.05	6.20E+02	0	0.05	0.05	0	192	<
Benzo(a)anthracene	8	<0.05 to 0.05	7.20E+00	0	0.05	0.05	0	192	<
Chrysene	8	<0.05 to 0.05	1.50E+01	0	0.05	0.05	0	192	<
Benzo(b)fluoranthene	8	<0.05 to 0.05	2.60E+00	0	0.05	0.05	0	192	<
Benzo(k)fluoranthene	8	<0.05 to 0.05	7.70E+01	0	0.05	0.05	0	192	<
Benzo(a)pyrene	8	<0.05 to 0.05	2.20E+00	0	0.05	0.05	0	192	<
Indeno(1,2,3-c,d)pyrene	8	<0.05 to 0.05	2.70E+01	0	0.05	0.05	0	192	<
Dibenzo(a,h)anthracene	8	<0.05 to 0.05	2.40E-01	0	0.05	0.05	0	192	<
Benzo(g,h,i)perylene	8	<0.05 to 0.05	3.20E+02	0	0.05	0.05	0	192	<
Coal Tar (B(a)P as surrogate)	8	<0.05 to 0.05	7.90E-01	0	0.05	0.05	0	192	<
Tetrachloroethene	0	<0 to 0	1.80E-01	0	0	0	0	200	<
Trichloroethene	0	<0 to 0	1.60E-02	0	0	0	0	200	<
cis-1,2-Dichloroethene	0	<0 to 0	1.10E-01	0	0	0	0	200	<
Vinyl Chloride (VC)	0	<0 to 0	6.40E-04	0	0	0	0	200	<
1,1,2,2-Tetrachloroethane (PCA)	0	<0 to 0	1.60E+00	0	0	0	0	200	<

Appendix 5: Soil Leachate Chemical Results Summary

*EQS Standard: Phenol and Benzene annual average of 300µg/l; Toluene 500µg/l for Freshwater, 400µg/l for Saltwater; 1,1,1-TCA 1,000µg/l.

Project Name:	Ellesmere Marina
Project Number:	BMW2025
Assessment for:	Soil Leachate Assessment
Laboratory:	i2
Receptor:	Freshwater
Receptor Water Hardness:	<40 (No Data)



100 = Assessment Criteria Exceedance)
50 = M-BAT Bioavailability Assessment Required

Contaminant		Units	Detection Limit	Guideline Concentration	Source	Number of Samples	Min	Max	No of Exceedances	WS01 0.20	WS04 0.50	WS05 0.50	TP07 0.10
Heavy Metals	Arsenic	µg/l	1.00	50	EQS Freshwater	4	<1.00	27.00	0	< 1.0	1	27	1.2
	Barium	mg/l	0.00	700	UK DWS	4	0.01	0.05	0	0.01	0.01	0.05	0.02
	Beryllium	µg/l	0.20	None Available		4	0.20	0.70	0	0.7	0.2	0.2	0.6
	Cadmium	µg/l	0.08	0.08	EQS Freshwater	4	<0.08	<0.08	0	< 0.08	< 0.08	< 0.08	< 0.08
	Chromium III	µg/l	0.40	4.7	EQS Freshwater	4	1.60	11.00	1	1.7	2.8	11	1.6
	Copper	µg/l	0.70	1	EQS Freshwater	4	12.00	75.00	4	15	12	75	34
	Lead	µg/l	1.00	1.2	EQS Freshwater	4	2.30	7.50	4	2.3	3.9	7.5	6
	Mercury	µg/l	0.50	0.07	EQS Freshwater	4	<0.50	<0.50	0	< 0.5	< 0.5	< 0.5	< 0.5
	Nickel	µg/l	0.30	4	EQS Freshwater	4	4.00	13.00	3	4	5.1	13	6.2
	Selenium	µg/l	4.00	10	UK DWS	4	<0.40	<0.40	0	< 4.0	< 4.0	< 4.0	< 4.0
	Vanadium	µg/l	1.70	None Available		4	<1.70	23.00	0	< 1.7	< 1.7	23	1.7
	Zinc	µg/l	0.40	10.9	EQS Freshwater	4	9.50	27.00	3	21	9.5	27	24
	Sulphate	mg/l	0.10	400	EQS Freshwater	4	1.60	57.80	0	2.3	1.6	57.8	5.8
	Boron	µg/l	10.00	2000	EQS Freshwater	4	13.00	210.00	0	19	13	210	22
	pH					4	6.50	7.50	0	6.50	6.7	7.5	6.5
ic s	Cyanide (total)	µg/l	10.00	1	EQS Freshwater	4	<10	<10	0	< 10	< 10	< 10	< 10

Appendix 6: Hazwaste Assessment

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



4Z8VW-JKK2H-HDWJR

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

Job name

BMW2025 Ellemere Merina - The Nursery

Description/Comments

Project

BMW2025 Ellemere Merina - The Nursery

Site

BMW2025 Ellemere Merina - The Nursery

Classified by

Name: **Richard Robinson**
Date: **08 Jul 2021 13:05 GMT**
Telephone: **0115 924 1100**
Company: **BWB Consulting Ltd**
Waterfront House, Station Street
Nottingham
NG2 3DQ

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification:

Course
Hazardous Waste Classification
3 year Refresher overdue

Date
08 Dec 2016

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01	0.20	Non Hazardous		2
2	WS01[2]	2.85	Non Hazardous		4
3	WS04	0.50	Non Hazardous		6
4	WS05	0.50	Non Hazardous		9
5	TP02[2]	1.40	Non Hazardous		12
6	TP04	1.00	Non Hazardous		14
7	TP06	1.40	Non Hazardous		16
8	TP07	0.10	Non Hazardous		18

Related documents

#	Name	Description
1	BWB Contaminated Land Suite WM3	waste stream template used to create this Job

Report

Created by: Richard Robinson

Created date: 08 Jul 2021 13:05 GMT

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	20
Appendix B: Rationale for selection of metal species	21
Appendix C: Version	22

Classification of sample: WS01



Non Hazardous Waste

Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS01	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.20 m	
Moisture content:	
21%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: **21% No Moisture Correction applied (MC)**

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	confirm TPH has NOT arisen from diesel or petrol				☒							
2	arsenic { arsenic trioxide }				8.3	mg/kg	1.32	10.959	mg/kg	0.0011 %		
	033-003-00-0	215-481-4	1327-53-3									
3	beryllium { beryllium oxide }				0.44	mg/kg	2.775	1.221	mg/kg	0.000122 %		
	004-003-00-8	215-133-1	1304-56-9									
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.6	mg/kg	13.43	8.058	mg/kg	0.000806 %		
			10294-33-4, 10294-34-5, 7637-07-2									
5	cadmium { cadmium sulfide }			1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6									
6	chromium { chromium(III) oxide (worst case) }				13	mg/kg	1.462	19	mg/kg	0.0019 %		
		215-160-9	1308-38-9									
7	copper { dicopper oxide; copper (I) oxide }				12	mg/kg	1.126	13.511	mg/kg	0.00135 %		
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead chromate }			1	88	mg/kg	1.56	137.264	mg/kg	0.0088 %		
	082-004-00-2	231-846-0	7758-97-6									
9	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel dihydroxide }				10	mg/kg	1.579	15.795	mg/kg	0.00158 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
12	zinc { zinc chromate }				68	mg/kg	2.774	188.642	mg/kg	0.0189 %		
	024-007-00-3	236-878-9	13530-65-9									
13	pH				5.8	pH		5.8	pH	5.8 pH		
			PH									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-912-4	206-44-0								
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-581-5	85-01-8								
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-927-3	129-00-0								
32	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
Total:									0.0361 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS01[2]



Non Hazardous Waste

Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS01[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
2.85 m	
Moisture content:	
13%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: **13% No Moisture Correction applied (MC)**

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	confirm TPH has NOT arisen from diesel or petrol				☒						
2	arsenic { arsenic trioxide }				3 mg/kg	1.32	3.961	mg/kg	0.000396 %		
	033-003-00-0	215-481-4	1327-53-3								
3	beryllium { beryllium oxide }				0.2 mg/kg	2.775	0.555	mg/kg	0.0000555 %		
	004-003-00-8	215-133-1	1304-56-9								
4	boron { boron tribromide/trichloride/trifluoride (combined) }				<0.2 mg/kg	13.43	<2.686	mg/kg	<0.000269 %		<LOD
			10294-33-4, 10294-34-5, 7637-07-2								
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6								
6	chromium { chromium(III) oxide (worst case) }				7.2 mg/kg	1.462	10.523	mg/kg	0.00105 %		
		215-160-9	1308-38-9								
7	copper { dicopper oxide; copper (I) oxide }				4.7 mg/kg	1.126	5.292	mg/kg	0.000529 %		
	029-002-00-X	215-270-7	1317-39-1								
8	lead { lead chromate }			1	9.1 mg/kg	1.56	14.194	mg/kg	0.00091 %		
	082-004-00-2	231-846-0	7758-97-6								
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
10	nickel { nickel dihydroxide }				7.2 mg/kg	1.579	11.372	mg/kg	0.00114 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8										
12	zinc { zinc chromate }				12 mg/kg	2.774	33.29	mg/kg	0.00333 %		
	024-007-00-3	236-878-9	13530-65-9								
13	pH				8.2 pH		8.2	pH	8.2 pH		
			PH								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-912-4	206-44-0								
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-581-5	85-01-8								
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-927-3	129-00-0								
32	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
Total:									0.00925 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS04



Non Hazardous Waste

Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS04	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.50 m	
Moisture content:	
13%	
(no correction)	

Hazard properties

None identified

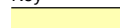
Determinands

Moisture content: **13% No Moisture Correction applied (MC)**

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	confirm TPH has NOT arisen from diesel or petrol				☒						
2	arsenic { arsenic trioxide }				5.6 mg/kg	1.32	7.394 mg/kg		0.000739 %		
	033-003-00-0	215-481-4	1327-53-3								
3	beryllium { beryllium oxide }				0.28 mg/kg	2.775	0.777 mg/kg		0.0000777 %		
	004-003-00-8	215-133-1	1304-56-9								
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.2 mg/kg	13.43	2.686 mg/kg		0.000269 %		
			10294-33-4, 10294-34-5, 7637-07-2								
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg		<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6								
6	chromium { chromium(III) oxide (worst case) }				10 mg/kg	1.462	14.616 mg/kg		0.00146 %		
		215-160-9	1308-38-9								
7	copper { dicopper oxide; copper (I) oxide }				7.6 mg/kg	1.126	8.557 mg/kg		0.000856 %		
	029-002-00-X	215-270-7	1317-39-1								
8	lead { lead chromate }			1	17 mg/kg	1.56	26.517 mg/kg		0.0017 %		
	082-004-00-2	231-846-0	7758-97-6								
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg		<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
10	nickel { nickel dihydroxide }				9 mg/kg	1.579	14.215 mg/kg		0.00142 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg		<0.000141 %		<LOD
	034-002-00-8										
12	zinc { zinc chromate }				35 mg/kg	2.774	97.095 mg/kg		0.00971 %		
	024-007-00-3	236-878-9	13530-65-9								
13	pH				6.6 pH		6.6 pH		6.6 pH		
			PH								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
15	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
16	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
19	xylene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
21	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
22	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
23	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
24	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
25	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
26	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
27	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
29	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
30	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
31	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
32	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
33	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
34	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
35	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
36	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
Total:								0.0182 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WS05	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.50 m	
Moisture content:	
23%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: 23% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	confirm TPH has NOT arisen from diesel or petrol				☒					
2	arsenic { arsenic trioxide }				10 mg/kg	1.32	13.203 mg/kg	0.00132 %		
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				0.78 mg/kg	2.775	2.165 mg/kg	0.000216 %		
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				2.8 mg/kg	13.43	37.604 mg/kg	0.00376 %		
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	0.4 mg/kg	1.285	0.514 mg/kg	0.00004 %		
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide (worst case) }				19 mg/kg	1.462	27.77 mg/kg	0.00278 %		
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead chromate }			1	87 mg/kg	1.56	135.704 mg/kg	0.0087 %		
	082-004-00-2	231-846-0	7758-97-6							
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				15 mg/kg	1.579	23.692 mg/kg	0.00237 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium sulposelenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				130 mg/kg	2.774	360.639 mg/kg	0.0361 %		
	024-007-00-3	236-878-9	13530-65-9							
13	pH				7.4 pH		7.4 pH	7.4 pH		
			PH							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	TPH (C6 to C40) petroleum group				58 mg/kg		58 mg/kg	0.0058 %			
			TPH								
16	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
17	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
19	xylene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
20	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
21	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
22	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
23	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
24	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
25	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
26	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
27	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
28	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
29	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
30	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-912-4	206-44-0								
31	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
32	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
33	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
34	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-581-5	85-01-8								
35	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-927-3	129-00-0								
36	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
Total:									0.0646 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No calorific materials or volatile contamination present.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0058%)

Classification of sample: TP02[2]



Non Hazardous Waste

Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP02[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.40 m	
Moisture content:	
33%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: **33% No Moisture Correction applied (MC)**

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	confirm TPH has NOT arisen from diesel or petrol				☒						
2	arsenic { arsenic trioxide }				7.9 mg/kg	1.32	10.431 mg/kg	0.00104 %			
	033-003-00-0	215-481-4	1327-53-3								
3	beryllium { beryllium oxide }				0.64 mg/kg	2.775	1.776 mg/kg	0.000178 %			
	004-003-00-8	215-133-1	1304-56-9								
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.5 mg/kg	13.43	6.715 mg/kg	0.000672 %			
			10294-33-4, 10294-34-5, 7637-07-2								
5	cadmium { cadmium sulfide }			1	0.4 mg/kg	1.285	0.514 mg/kg	0.00004 %			
	048-010-00-4	215-147-8	1306-23-6								
6	chromium { chromium(III) oxide (worst case) }				15 mg/kg	1.462	21.923 mg/kg	0.00219 %			
		215-160-9	1308-38-9								
7	copper { dicopper oxide; copper (I) oxide }				12 mg/kg	1.126	13.511 mg/kg	0.00135 %			
	029-002-00-X	215-270-7	1317-39-1								
8	lead { lead chromate }			1	15 mg/kg	1.56	23.397 mg/kg	0.0015 %			
	082-004-00-2	231-846-0	7758-97-6								
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
10	nickel { nickel dihydroxide }				23 mg/kg	1.579	36.328 mg/kg	0.00363 %			
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
	034-002-00-8										
12	zinc { zinc chromate }				51 mg/kg	2.774	141.481 mg/kg	0.0141 %			
	024-007-00-3	236-878-9	13530-65-9								
13	pH				6.7 pH		6.7 pH	6.7 pH			
			PH								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-912-4	206-44-0								
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-581-5	85-01-8								
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-927-3	129-00-0								
32	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
Total:									0.0263 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP04



Non Hazardous Waste

Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP04	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.00 m	
Moisture content:	
4.3%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: 4.3% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	confirm TPH has NOT arisen from diesel or petrol				☒						
2	arsenic { arsenic trioxide }				3.1 mg/kg	1.32	4.093 mg/kg		0.000409 %		
	033-003-00-0	215-481-4	1327-53-3								
3	beryllium { beryllium oxide }				0.2 mg/kg	2.775	0.555 mg/kg		0.0000555 %		
	004-003-00-8	215-133-1	1304-56-9								
4	boron { boron tribromide/trichloride/trifluoride (combined) }				<0.2 mg/kg	13.43	<2.686 mg/kg		<0.000269 %		<LOD
			10294-33-4, 10294-34-5, 7637-07-2								
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg		<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6								
6	chromium { chromium(III) oxide (worst case) }				3.7 mg/kg	1.462	5.408 mg/kg		0.000541 %		
		215-160-9	1308-38-9								
7	copper { dicopper oxide; copper (I) oxide }				4.7 mg/kg	1.126	5.292 mg/kg		0.000529 %		
	029-002-00-X	215-270-7	1317-39-1								
8	lead { lead chromate }			1	4.6 mg/kg	1.56	7.175 mg/kg		0.00046 %		
	082-004-00-2	231-846-0	7758-97-6								
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg		<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
10	nickel { nickel dihydroxide }				5 mg/kg	1.579	7.897 mg/kg		0.00079 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg		<0.000141 %		<LOD
	034-002-00-8										
12	zinc { zinc chromate }				10 mg/kg	2.774	27.741 mg/kg		0.00277 %		
	024-007-00-3	236-878-9	13530-65-9								
13	pH				6.6 pH		6.6 pH		6.6 pH		
			PH								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-912-4	206-44-0								
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-581-5	85-01-8								
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-927-3	129-00-0								
32	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
Total:									0.0074 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP06



Non Hazardous Waste

Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP06	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.40 m	
Moisture content:	
4.6%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: **4.6% No Moisture Correction applied (MC)**

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	confirm TPH has NOT arisen from diesel or petrol				☒						
2	arsenic { arsenic trioxide }				3.2 mg/kg	1.32	4.225	mg/kg	0.000423 %		
	033-003-00-0	215-481-4	1327-53-3								
3	beryllium { beryllium oxide }				0.16 mg/kg	2.775	0.444	mg/kg	0.0000444 %		
	004-003-00-8	215-133-1	1304-56-9								
4	boron { boron tribromide/trichloride/trifluoride (combined) }				<0.2 mg/kg	13.43	<2.686	mg/kg	<0.000269 %		<LOD
			10294-33-4, 10294-34-5, 7637-07-2								
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6								
6	chromium { chromium(III) oxide (worst case) }				4.5 mg/kg	1.462	6.577	mg/kg	0.000658 %		
		215-160-9	1308-38-9								
7	copper { dicopper oxide; copper (I) oxide }				4.2 mg/kg	1.126	4.729	mg/kg	0.000473 %		
	029-002-00-X	215-270-7	1317-39-1								
8	lead { lead chromate }			1	6 mg/kg	1.56	9.359	mg/kg	0.0006 %		
	082-004-00-2	231-846-0	7758-97-6								
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
10	nickel { nickel dihydroxide }				6.6 mg/kg	1.579	10.425	mg/kg	0.00104 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8										
12	zinc { zinc chromate }				15 mg/kg	2.774	41.612	mg/kg	0.00416 %		
	024-007-00-3	236-878-9	13530-65-9								
13	pH				6.3 pH		6.3	pH	6.3 pH		
			PH								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-912-4	206-44-0								
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-581-5	85-01-8								
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-927-3	129-00-0								
32	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
Total:									0.00924 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP07



Non Hazardous Waste

Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP07	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.10 m		
Moisture content:		
24%		
(no correction)		

Hazard properties

None identified

Determinands

Moisture content: **24% No Moisture Correction applied (MC)**

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	confirm TPH has NOT arisen from diesel or petrol				☒							
2	arsenic { arsenic trioxide }				8.4	mg/kg	1.32	11.091	mg/kg	0.00111 %		
	033-003-00-0	215-481-4	1327-53-3									
3	beryllium { beryllium oxide }				0.59	mg/kg	2.775	1.637	mg/kg	0.000164 %		
	004-003-00-8	215-133-1	1304-56-9									
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.5	mg/kg	13.43	6.715	mg/kg	0.000672 %		
			10294-33-4, 10294-34-5, 7637-07-2									
5	cadmium { cadmium sulfide }			1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6									
6	chromium { chromium(III) oxide (worst case) }				16	mg/kg	1.462	23.385	mg/kg	0.00234 %		
		215-160-9	1308-38-9									
7	copper { dicopper oxide; copper (I) oxide }				40	mg/kg	1.126	45.036	mg/kg	0.0045 %		
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead chromate }			1	61	mg/kg	1.56	95.149	mg/kg	0.0061 %		
	082-004-00-2	231-846-0	7758-97-6									
9	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel dihydroxide }				14	mg/kg	1.579	22.113	mg/kg	0.00221 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
12	zinc { zinc chromate }				66	mg/kg	2.774	183.094	mg/kg	0.0183 %		
	024-007-00-3	236-878-9	13530-65-9									
13	pH				5.6	pH		5.6	pH	5.6 pH		
			PH									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-912-4	206-44-0								
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-581-5	85-01-8								
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-927-3	129-00-0								
32	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
Total:									0.037 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

• confirm TPH has NOT arisen from diesel or petrol

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

• boron tribromide/trichloride/trifluoride (combined) (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride
Data source: N/A
Data source date: 06 Aug 2015
Hazard Statements: EUH014 , Acute Tox. 2 H330 , Acute Tox. 2 H300 , Skin Corr. 1A H314 , Skin Corr. 1B H314

• chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

• salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

• TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

• acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

• acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

• anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

◆ **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

◆ **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

◆ **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

◆ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

◆ **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

◆ **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

◆ **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on risk phrases

beryllium {beryllium oxide}

Worst case species based on risk phrases

boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on risk phrases

cadmium {cadmium sulfide}

Worst case species based on risk phrases

chromium {chromium(III) oxide (worst case)}

All chromium VI concentrations below LoD.

copper {dicopper oxide; copper (I) oxide}

Most likely common species

lead {lead chromate}

Worst case species based on risk phrases

mercury {mercury dichloride}

Worst case species based on risk phrases

nickel {nickel dihydroxide}

Worst case species based on risk phrases

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on risk phrases

zinc {zinc chromate}

Worst case species based on risk phrases

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: VersionHazWasteOnline Classification Engine: **WM3 1st Edition v1.1, May 2018**

HazWasteOnline Classification Engine Version: 2021.187.4816.9162 (06 Jul 2021)

HazWasteOnline Database: 2021.187.4816.9162 (06 Jul 2021)

This classification utilises the following guidance and legislation:

WM3 v1.1 - Waste Classification - 1stEditionv1.1-May2018**CLP Regulation** - Regulation1272/2008/ECof16December2008**1st ATP** - Regulation790/2009/ECof10August2009**2nd ATP** - Regulation286/2011/ECof10March2011**3rd ATP** - Regulation618/2012/EUof10July2012**4th ATP** - Regulation487/2013/EUof8May2013**Correction to 1st ATP** - Regulation758/2013/EUof7August2013**5th ATP** - Regulation944/2013/EUof2October2013**6th ATP** - Regulation605/2014/EUof5June2014**WFD Annex III replacement** - Regulation1357/2014/EUof18December2014**Revised List of Waste 2014** - Decision2014/955/EUof18December2014**7th ATP** - Regulation2015/1221/EUof24July2015**8th ATP** - Regulation(EU)2016/918of19May2016**9th ATP** - Regulation(EU)2016/1179of19July2016**10th ATP** - Regulation(EU)2017/776of4May2017**HP14 amendment** - Regulation(EU)2017/997of8June2017**13th ATP** - Regulation(EU)2018/1480of4October2018**14th ATP** - Regulation(EU)2020/217of4October2019**15th ATP** - Regulation(EU)2020/1182of19May2020**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)****Regulations 2019** - UK:2019No.720of27thMarch2019**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)****Regulations 2020** - UK:2020No.1567of16thDecember2020**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK: 2020 No. 1540 of 16th December 2020**POPs Regulation 2019** - Regulation(EU)2019/1021of20June2019

