Envirocheck®

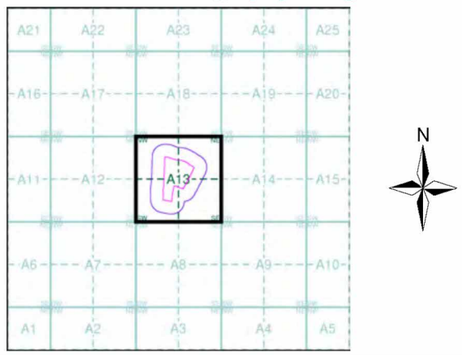
LANDMARK INFORMATION GROUP®

Historical Aerial Photography

Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

Order Number:	303503232_1_1
Customer Ref:	UK22.6213
National Grid Reference:	429190, 435800
Slice:	A
Site Area (Ha):	5.13
Search Buffer (m):	100

Site Details

Leeds City Academy, Bedford Field, Woodhouse Cliff, Leeds, LS6 2LG

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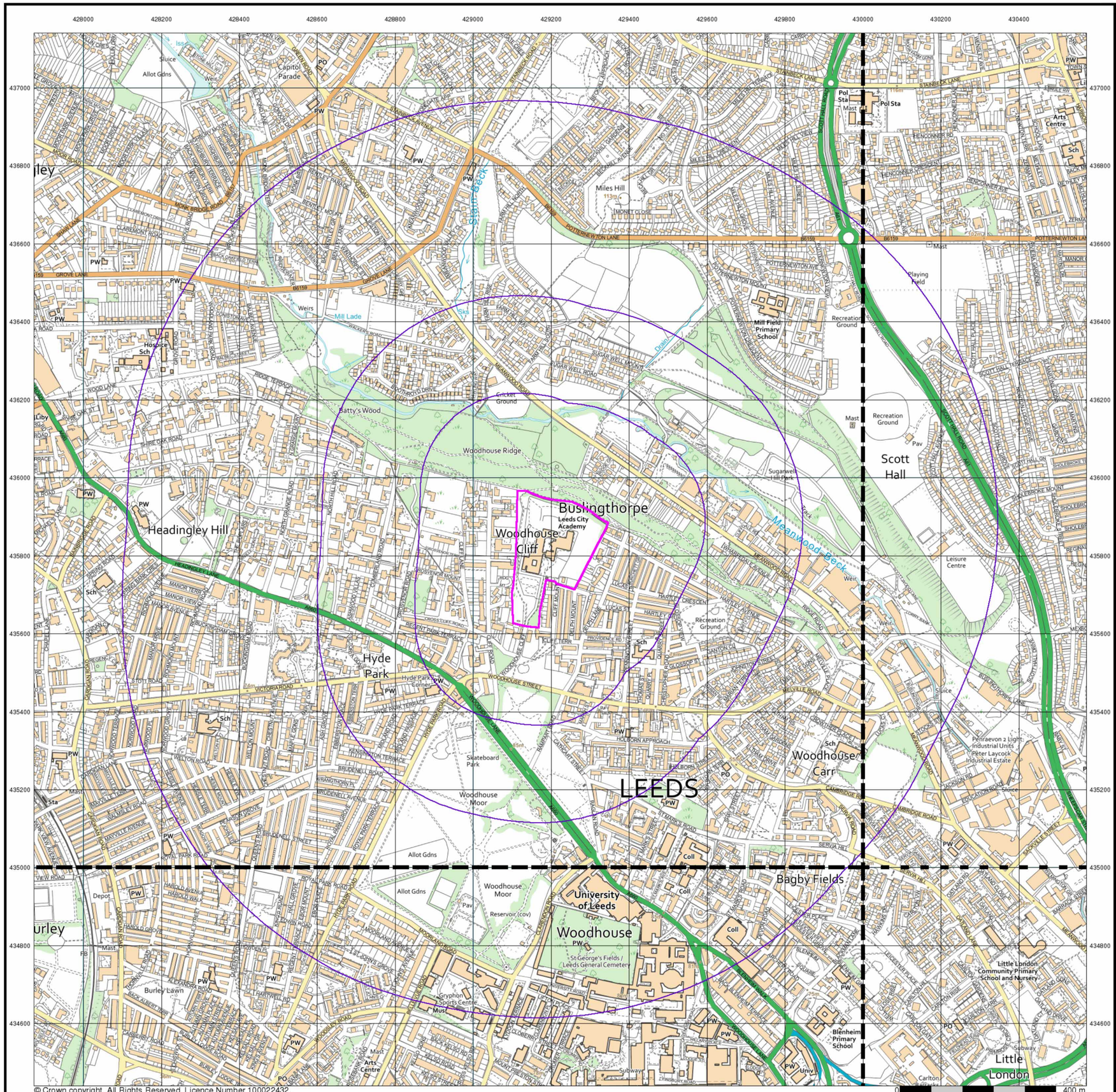

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VectorMap Local

Published 2022

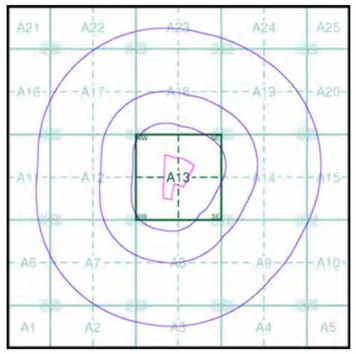
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

SE23NE 2022 Variable	SE33NW 2022 Variable
SE23SE 2022 Variable	SE33SW 2022 Variable

Historical Map - Slice A



Order Details

Order Number:	303503232_1_1
Customer Ref:	UK22.6213
National Grid Reference:	429190, 435800
Slice:	A
Site Area (Ha):	5.13
Search Buffer (m):	1000

Site Details

Leeds City Academy, Bedford Field, Woodhouse Cliff, Leeds, LS6 2LG

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APPENDIX G

Site Specific Borehole Logs


Well


Well


Well


Well


Well


Well

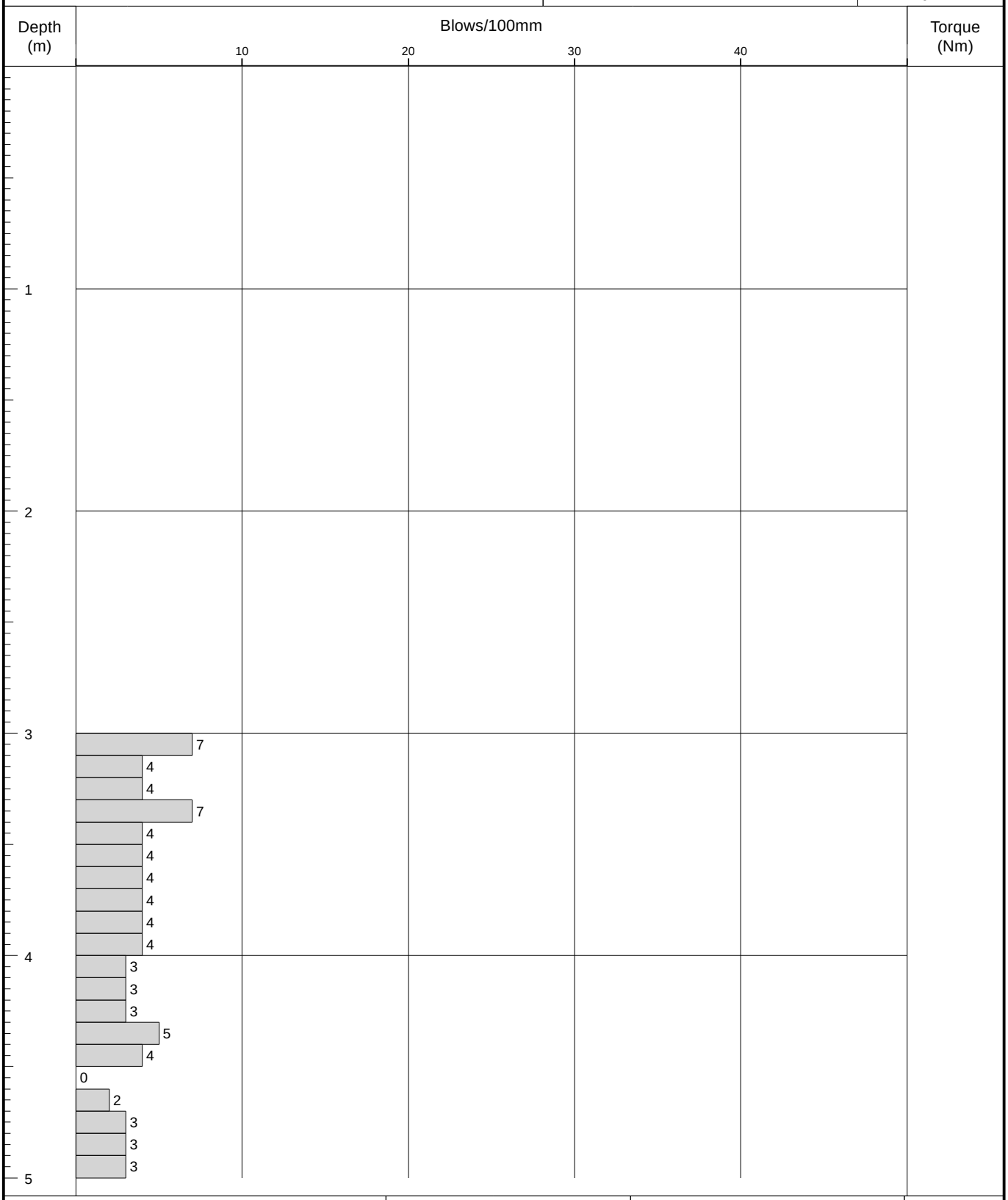

Well


Well

Probe Log

Borehole No.
WS01 DP
Sheet 1 of 1

Project Name:	Leeds City Academy	Project No. UK22.6213	Co-ords: -173534.65 - 7135738.49	Hole Type DP
Location:	Leeds City Academy, Bedford Field, Woodhouse Cliff, LS2 2LG		Level:	Scale 1:25
Client:	Adept Consulting Engineer		Dates: 13/12/2022 - 13/12/2022	Logged By JP



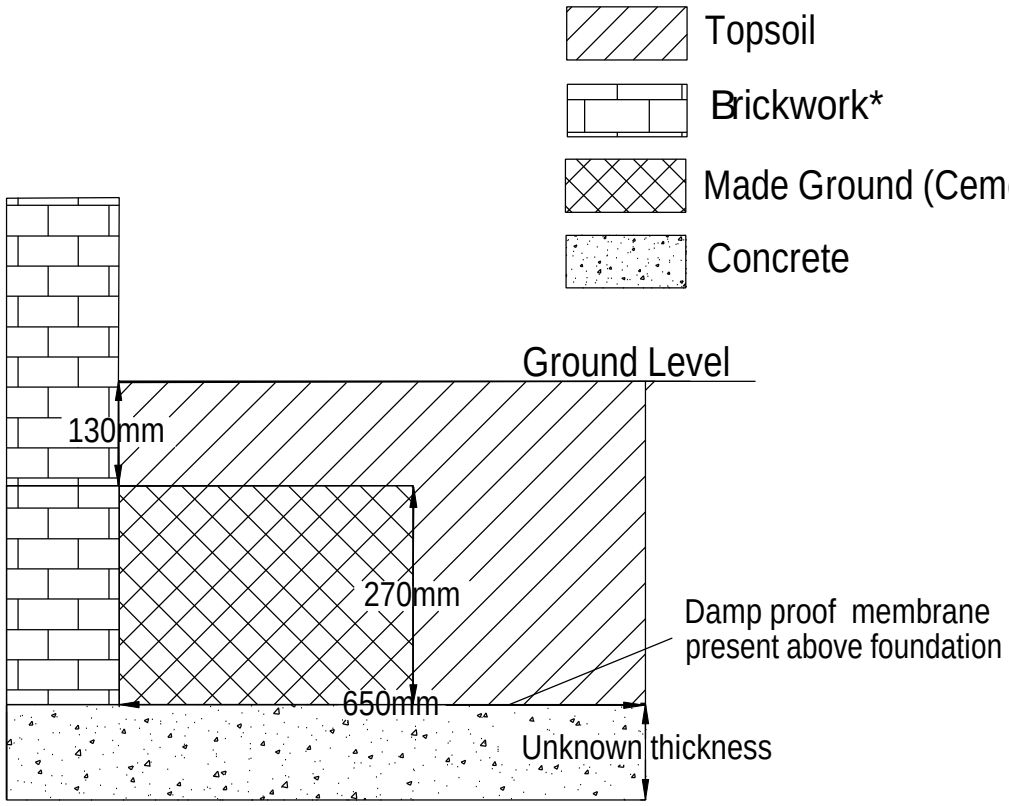
Remarks

Fall Height	750	Cone Base Diameter	
Hammer Wt	64	Final Depth	5.00
Probe Type	DPSH-B	Log Scale	1:25

APPENDIX H

Foundation Exposure Schematics

Foundation Exposure 1 (FE01)

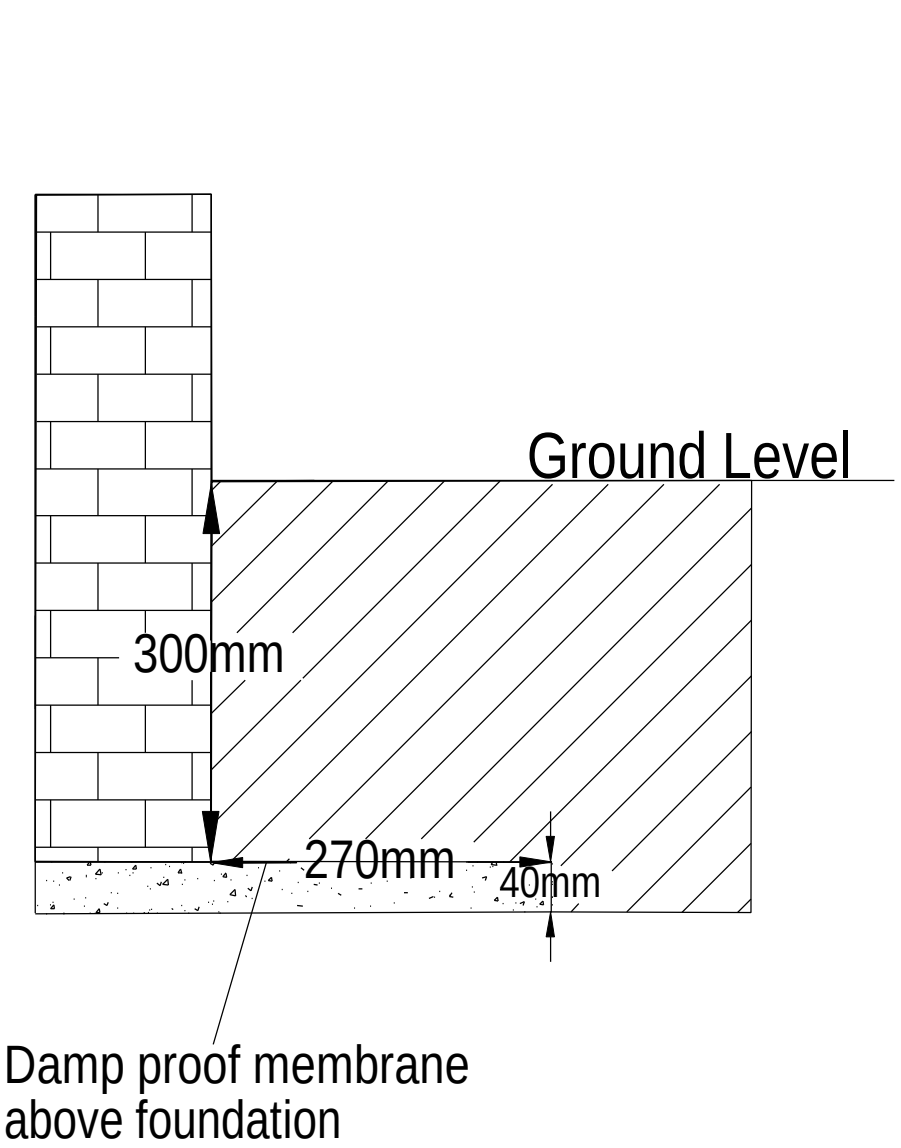


*Brickwork assumed to be resting on foundation at depth, unable to determine depth due to cemented made ground above foundation.

Appendix H

Title:	FE01
Project:	UK22.6213 - Leeds City Academy
Scale:	NTS - For Illustration purposes only
Drawn By:	JP
Job No:	UK22.6213
Dwg No:	FE01/LCA/AppH
Date:	January 2023

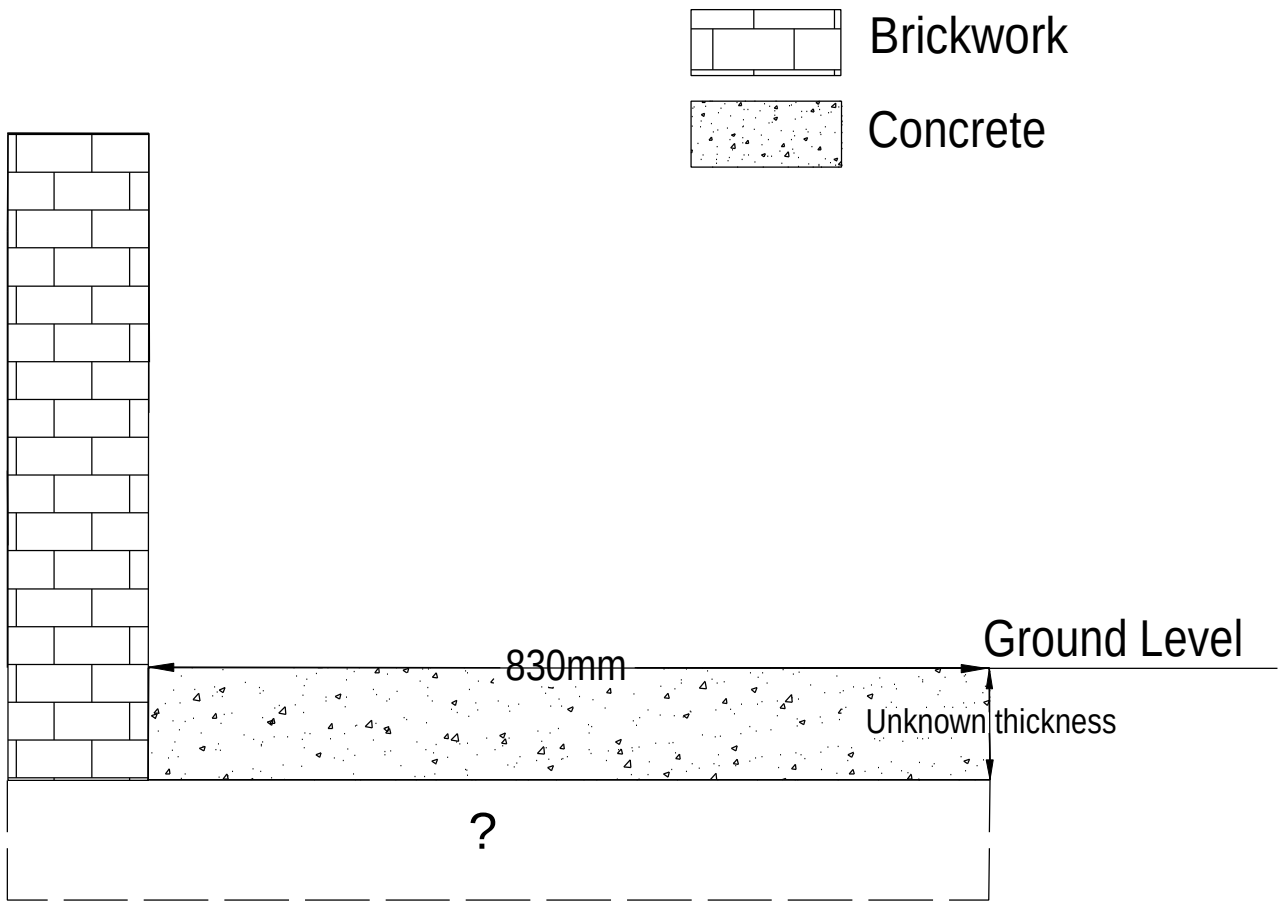
Foundation Exposure 2 (FE02)



Appendix H

Title:	FE02
Project:	UK22.6213 - Leeds City Academy
Scale:	NTS - For Illustration purposes only
Drawn By:	JP
Job No:	UK22.6213
Dwg No:	FE02/LCA/AppH
Date:	January 2023

Foundation Exposure 3 (FE03)



Foundation depth could not be found after using hydraulic breaker. Exposure pit could not be extended outward due to proximity to services

Appendix H

Title:	FE03
Project:	UK22.6213 - Leeds City Academy
Scale:	NTS - For Illustration purposes only
Drawn By:	JP
Job No:	UK22.6213
Dwg No:	FE03/LCA/AppH
Date:	January 2023

APPENDIX I

Laboratory Results –Environmental

Element Materials Technology
Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

[redacted]

EPS Ltd
7B Caxton House
Broad Street
Cambourne
Cambridgeshire
CB23 6JN

4225

Attention :	James Bowley
Date :	29th December, 2022
Your reference :	UK22-6213
Our reference :	Test Report 22/20896 Batch 1
Location :	Leeds City Academy
Date samples received :	17th December, 2022
Status :	Final Report
Issue :	1

Nine samples were received for analysis on 17th December, 2022 of which seven were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

[redacted]

Liza Klebe
Project Co-ordinator

Client Name: EPS Ltd
Reference: UK22-6213
Location: Leeds City Academy
Contact: James Bowley
EMT Job No: 22/20896

Report : Solid

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

EMT Sample No.	1-4	9-12	13-16	17-20	21-24	29-32	33-36				LOD/LOR	Units	Method No.
Sample ID	BH01ES1	BH02ES2	WS01ES1	WS01ES2	WS02ES1	WS03ES2	WS04ES1						
Depth	6.00-6.30	0.70-1.00	0.10-0.20	0.50-0.80	0.30-0.40	0.10-0.30	0.20-0.40						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	15/12/2022	14/12/2022	13/12/2022	13/12/2022	13/12/2022	13/12/2022	13/12/2022						
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clay						
Batch Number	1	1	1	1	1	1	1						
Date of Receipt	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022						
Arsenic #M	0.5	0.9	8.3	-	4.0	9.4	1.6				<0.5	mg/kg	TM30/PM15
Cadmium #M	<0.1	<0.1	0.1	-	0.8	<0.1	0.1				<0.1	mg/kg	TM30/PM15
Chromium #M	34.9	65.5	61.3	-	15.7	37.1	68.6				<0.5	mg/kg	TM30/PM15
Copper #M	4	17	24	-	9	22	18				<1	mg/kg	TM30/PM15
Lead #M	8	9	44	-	14	51	9				<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1	<0.1	-	<0.1	0.2	<0.1				<0.1	mg/kg	TM30/PM15
Nickel #M	18.5	43.7	26.0	-	8.0	19.0	43.9				<0.7	mg/kg	TM30/PM15
Selenium #M	<1	2	1	-	<1	2	<1				<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #M	-	-	-	-	629	250	66				<50	mg/kg	TM50/PM29
Zinc #M	44	116	90	-	56	70	113				<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #M	<0.04	<0.04	0.08	-	0.05	0.08	<0.04				<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	0.08	-	<0.03	0.09	<0.03				<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	0.12	-	0.08	0.12	<0.05				<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04	0.14	-	0.07	0.13	<0.04				<0.04	mg/kg	TM4/PM8
Phenanthrene #M	<0.03	<0.03	1.29	-	0.66	1.22	0.14				<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	0.26	-	0.16	0.26	<0.04				<0.04	mg/kg	TM4/PM8
Fluoranthene #M	<0.03	<0.03	1.61	-	0.85	1.70	0.18				<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	1.35	-	0.73	1.47	0.15				<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	0.73	-	0.41	0.77	0.10				<0.06	mg/kg	TM4/PM8
Chrysene #M	<0.02	<0.02	0.77	-	0.42	0.83	0.08				<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	<0.07	<0.07	1.06	-	0.57	1.17	0.10				<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	0.62	-	0.34	0.73	<0.04				<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	<0.04	<0.04	0.33	-	0.19	0.40	<0.04				<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	0.07	-	0.04	0.08	<0.04				<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	0.28	-	0.17	0.32	<0.04				<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	-	-	-	-				<0.04	mg/kg	TM4/PM8
PAH 16 Total	<0.6	<0.6	8.8	-	4.7	9.4	0.8				<0.6	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	8.79	-	-	-	-				<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	0.76	-	0.41	0.84	0.07				<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	0.30	-	0.16	0.33	0.03				<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	84	82	84	-	85	84	86				<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30	<30	<30	-	-	-	-				<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: EPS Ltd
Reference: UK22-6213
Location: Leeds City Academy
Contact: James Bowley
EMT Job No: 22/20896

Report : Solid

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

EMT Sample No.	1-4	9-12	13-16	17-20	21-24	29-32	33-36				LOD/LOR	Units	Method No.
Sample ID	BH01ES1	BH02ES2	WS01ES1	WS01ES2	WS02ES1	WS03ES2	WS04ES1						
Depth	6.00-6.30	0.70-1.00	0.10-0.20	0.50-0.80	0.30-0.40	0.10-0.30	0.20-0.40						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	15/12/2022	14/12/2022	13/12/2022	13/12/2022	13/12/2022	13/12/2022	13/12/2022						
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clay						
Batch Number	1	1	1	1	1	1	1						
Date of Receipt	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022						
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #M	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #M	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	0.7	<0.1	<0.1	-	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL) #M	3.6	<0.2	<0.2	-	<0.2	<0.2	<0.2				<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL) #M	<4	<4	<4	-	<4	<4	<4				<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL) #M	<7	<7	<7	-	<7	<7	<7				<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL) #M	<7	<7	<7	-	<7	<7	<7				<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35 (EH+HS_CU_1D_AL)	<19	<19	<19	-	<19	<19	<19				<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #M	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR) #	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2				<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR) #	<4	<4	<4	-	<4	9	<4				<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR) #	<7	<7	14	-	<7	36	<7				<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR) #	<7	<7	36	-	33	95	<7				<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 (EH+HS_CU_1D_AR) #	<19	<19	50	-	33	140	<19				<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35) (EH+HS_CU_1D_Total)	<38	<38	50	-	<38	140	<38				<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE #	<5	<5	<5	-	<5	<5	<5				<5	ug/kg	TM36/PM12
Benzene #	<5	<5	<5	-	<5	<5	<5				<5	ug/kg	TM36/PM12
Toluene #	<5	<5	7	-	<5	<5	<5				<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	<5	<5	-	<5	<5	<5				<5	ug/kg	TM36/PM12
m/p-Xylene #	<5	<5	<5	-	<5	<5	<5				<5	ug/kg	TM36/PM12
o-Xylene #	8	<5	<5	-	<5	<5	<5				<5	ug/kg	TM36/PM12
PCB 28 #	<5	<5	<5	-	-	-	-				<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	-	-	-	-				<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	-	-	-	-				<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	-	-	-	-				<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	-	-	-	-				<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	-	-	-	-				<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	-	-	-	-				<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	-	-	-	-				<35	ug/kg	TM17/PM8
Total Phenols HPLC	-	-	-	-	<0.15	<0.15	<0.15				<0.15	mg/kg	TM26/PM21B
Natural Moisture Content	8.6	10.2	16.6	-	6.1	17.0	10.7				<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3				<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #M	0.0071	0.0042	-	<0.0015	0.0648	<0.0015	0.0035				<0.0015	g/l	TM38/PM20
Chromium III	34.9	65.5	61.3	-	15.7	37.1	68.6				<0.5	mg/kg	NONE/NONE

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: EPS Ltd
Reference: UK22-6213
Location: Leeds City Academy
Contact: James Bowley
EMT Job No: 22/20896

Report : Solid

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

EMT Sample No.	1-4	9-12	13-16	17-20	21-24	29-32	33-36				LOD/LOR	Units	Method No.
Sample ID	BH01ES1	BH02ES2	WS01ES1	WS01ES2	WS02ES1	WS03ES2	WS04ES1						
Depth	6.00-6.30	0.70-1.00	0.10-0.20	0.50-0.80	0.30-0.40	0.10-0.30	0.20-0.40						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	15/12/2022	14/12/2022	13/12/2022	13/12/2022	13/12/2022	13/12/2022	13/12/2022						
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clay						
Batch Number	1	1	1	1	1	1	1						
Date of Receipt	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022	17/12/2022						
Total Cyanide #M	-	-	-	-	<0.5	<0.5	<0.5				<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.03	0.07	1.68	-	-	-	-				<0.02	%	TM21/PM24
Organic Matter	-	-	-	-	0.6	3.8	<0.2				<0.2	%	TM21/PM24
Loss on Ignition #	1.5	3.8	4.7	-	-	-	-				<1.0	%	TM22/PM0
pH #M	7.44	8.63	8.10	8.50	9.79	7.77	8.25				<0.01	pH units	TM73/PM11
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clay					None	PM13/PM0
Sample Colour	Light Brown	Medium Brown	Dark Brown	Medium Brown	Medium Brown	Dark Brown	Medium Brown					None	PM13/PM0
Other Items	stones	stones, sand	stones	STONES, SAND	stones, sand	stones, roots	stones, sand					None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

CEN 10:1 LEACHATE RESULTS BS EN 12547-2

Mass of sample taken (kg)	-	Moisture Content Ratio (%) =	5.1
Mass of dry sample (kg) =	0.09	Dry Matter Content Ratio (%) =	95.2
Particle Size <4mm =	>95%		

		Landfill Waste Acceptance Criteria Limits		
EMT Job No	**22/20896**			
Sample No	**3**			
Client Sample No	**BH01ES1**	**Inert Waste Landfill**	**Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill**	**Hazardous Waste Landfill**
Depth/Other	**6.00-6.30**			
Sample Date	**15/12/2022**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.03	3	5	6
Loss on Ignition (%)	1.5	-	-	10
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg) (EH_CU_1D_AL)	<30	500	-	-
PAH Sum of 17(mg/kg)	<0.64	100	-	-
pH (pH Units)	7.44	-	>6	-
ANC to pH 7 (mol/kg)	-	-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	-	-	to be evaluated	to be evaluated

Eluate Analysis	**10:1 conc^{n} leached**		**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	C_{10}	**A_{10}**			
	mg/l	**mg/kg**	**mg/kg**		
Arsenic	<0.0025	<0.025	0.5	2	25
Barium	<0.003	<0.03	20	100	300
Cadmium	<0.0005	<0.005	0.04	1	5
Chromium	<0.0015	<0.015	0.5	10	70
Copper	<0.007	<0.07	2	50	100
Mercury	<0.001	<0.01	0.01	0.2	2
Molybdenum	<0.002	<0.02	0.5	10	30
Nickel	<0.002	<0.02	0.4	10	40
Lead	<0.005	<0.05	0.5	10	50
Antimony	<0.002	<0.02	0.06	0.7	5
Selenium	<0.003	<0.03	0.1	0.5	7
Zinc	<0.003	<0.03	4	50	200
Chloride	<0.3	<3	800	15000	25000
Fluoride	<0.3	<3	10	150	500
Sulphate as SO4	1.9	19	1000	20000	50000
Total Dissolved Solids	<35	<350	4000	60000	100000
Phenol	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	<2	<20	500	800	1000

All solid results are expressed on a dry weight basis unless stated otherwise.

CEN 10:1 LEACHATE RESULTS BS EN 12547-2

Mass of sample taken (kg)	-	Moisture Content Ratio (%) =	10.3
Mass of dry sample (kg) =	0.09	Dry Matter Content Ratio (%) =	90.7
Particle Size <4mm =	>95%		

		Landfill Waste Acceptance Criteria Limits		
EMT Job No	**22/20896**			
Sample No	**11**			
Client Sample No	**BH02ES2**	**Inert Waste Landfill**	**Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill**	**Hazardous Waste Landfill**
Depth/Other	**0.70-1.00**			
Sample Date	**14/12/2022**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.07	3	5	6
Loss on Ignition (%)	3.8	-	-	10
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg) (EH_CU_1D_AL)	<30	500	-	-
PAH Sum of 17(mg/kg)	<0.64	100	-	-
pH (pH Units)	8.63	-	>6	-
ANC to pH 7 (mol/kg)	-	-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	-	-	to be evaluated	to be evaluated

Eluate Analysis	**10:1 conc^{n} leached**		**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	C_{10}	**A_{10}**			
	mg/l	**mg/kg**	**mg/kg**		
Arsenic	<0.0025	<0.025	0.5	2	25
Barium	<0.003	<0.03	20	100	300
Cadmium	<0.0005	<0.005	0.04	1	5
Chromium	<0.0015	<0.015	0.5	10	70
Copper	<0.007	<0.07	2	50	100
Mercury	<0.001	<0.01	0.01	0.2	2
Molybdenum	<0.002	<0.02	0.5	10	30
Nickel	<0.002	<0.02	0.4	10	40
Lead	<0.005	<0.05	0.5	10	50
Antimony	<0.002	<0.02	0.06	0.7	5
Selenium	<0.003	<0.03	0.1	0.5	7
Zinc	<0.003	<0.03	4	50	200
Chloride	<0.3	<3	800	15000	25000
Fluoride	0.7	7	10	150	500
Sulphate as SO4	0.7	7	1000	20000	50000
Total Dissolved Solids	53	530	4000	60000	100000
Phenol	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	<2	<20	500	800	1000

All solid results are expressed on a dry weight basis unless stated otherwise.

CEN 10:1 LEACHATE RESULTS BS EN 12547-2

Mass of sample taken (kg)	-	Moisture Content Ratio (%) =	17.5
Mass of dry sample (kg) =	0.09	Dry Matter Content Ratio (%) =	85.1
Particle Size <4mm =	>95%		

		Landfill Waste Acceptance Criteria Limits		
EMT Job No	**22/20896**			
Sample No	**15**			
Client Sample No	**WS01ES1**	**Inert Waste Landfill**	**Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill**	**Hazardous Waste Landfill**
Depth/Other	**0.10-0.20**			
Sample Date	**13/12/2022**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.68	3	5	6
Loss on Ignition (%)	4.7	-	-	10
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg) (EH_CU_1D_AL)	<30	500	-	-
PAH Sum of 17(mg/kg)	8.79	100	-	-
pH (pH Units)	8.10	-	>6	-
ANC to pH 7 (mol/kg)	-	-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	-	-	to be evaluated	to be evaluated

Eluate Analysis	**10:1 conc^{n} leached**		**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	C_{10}	**A_{10}**			
	mg/l	**mg/kg**	**mg/kg**		
Arsenic	0.0029	0.029	0.5	2	25
Barium	0.016	0.16	20	100	300
Cadmium	<0.0005	<0.005	0.04	1	5
Chromium	<0.0015	<0.015	0.5	10	70
Copper	<0.007	<0.07	2	50	100
Mercury	<0.001	<0.01	0.01	0.2	2
Molybdenum	<0.002	<0.02	0.5	10	30
Nickel	<0.002	<0.02	0.4	10	40
Lead	<0.005	<0.05	0.5	10	50
Antimony	<0.002	<0.02	0.06	0.7	5
Selenium	<0.003	<0.03	0.1	0.5	7
Zinc	<0.003	<0.03	4	50	200
Chloride	<0.3	<3	800	15000	25000
Fluoride	0.7	7	10	150	500
Sulphate as SO4	<0.5	<5	1000	20000	50000
Total Dissolved Solids	78	780	4000	60000	100000
Phenol	<0.01	<0.1	1	-	-
Dissolved Organic Carbon	4	40	500	800	1000

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: EPS Ltd

Reference: UK22-6213

Location: Leeds City Academy

Contact: James Bowley

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
22/20896	1	BH01ES1	6.00-6.30	1-4	Trace of PAH's & Possible degraded kerosene
22/20896	1	BH02ES2	0.70-1.00	9-12	No interpretation possible
22/20896	1	WS01ES1	0.10-0.20	13-16	PAH's
22/20896	1	WS02ES1	0.30-0.40	21-24	Trace of possible lubricating oil
22/20896	1	WS03ES2	0.10-0.30	29-32	PAH's
22/20896	1	WS04ES1	0.20-0.40	33-36	No interpretation possible

Client Name: EPS Ltd
Reference: UK22-6213
Location: Leeds City Academy
Contact: James Bowley

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Asbestos sub-samples are retained for not less than 6 months from the date of analysis unless specifically requested.

The LOQ of the Asbestos Quantification is 0.001% dry fibre of dry mass of sample.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

Where trace asbestos is reported the amount of asbestos will be <0.1%.

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analyst Name	Date Of Analysis	Analysis	Result
22/20896	1	BH01ES1	6.00-6.30	4	Anthony Carman	28/12/2022	**General Description (Bulk Analysis)**	Brown Soil/Stones
					Anthony Carman	28/12/2022	**Asbestos Fibres**	NAD
					Anthony Carman	28/12/2022	**Asbestos ACM**	NAD
					Anthony Carman	28/12/2022	**Asbestos Type**	NAD
22/20896	1	BH02ES2	0.70-1.00	12	Anthony Carman	28/12/2022	**General Description (Bulk Analysis)**	Brown Soil/Stones
					Anthony Carman	28/12/2022	**Asbestos Fibres**	NAD
					Anthony Carman	28/12/2022	**Asbestos ACM**	NAD
					Anthony Carman	28/12/2022	**Asbestos Type**	NAD
22/20896	1	WS01ES1	0.10-0.20	16	Anthony Carman	28/12/2022	**General Description (Bulk Analysis)**	Brown Soil/Stones
					Anthony Carman	28/12/2022	**Asbestos Fibres**	NAD
					Anthony Carman	28/12/2022	**Asbestos ACM**	NAD
					Anthony Carman	28/12/2022	**Asbestos Type**	NAD
22/20896	1	WS02ES1	0.30-0.40	23	Anthony Carman	28/12/2022	**General Description (Bulk Analysis)**	Brown Soil/Stones
					Anthony Carman	28/12/2022	**Asbestos Fibres**	NAD
					Anthony Carman	28/12/2022	**Asbestos ACM**	NAD
					Anthony Carman	28/12/2022	**Asbestos Type**	NAD
22/20896	1	WS03ES2	0.10-0.30	31	Anthony Carman	28/12/2022	**General Description (Bulk Analysis)**	Brown Soil/Stones
					Anthony Carman	28/12/2022	**Asbestos Fibres**	NAD
					Anthony Carman	28/12/2022	**Asbestos ACM**	NAD
					Anthony Carman	28/12/2022	**Asbestos Type**	NAD
22/20896	1	WS04ES1	0.20-0.40	35	Anthony Carman	28/12/2022	**General Description (Bulk Analysis)**	Brown Soil/Stones
					Anthony Carman	28/12/2022	**Asbestos Fibres**	NAD
					Anthony Carman	28/12/2022	**Asbestos ACM**	NAD
					Anthony Carman	28/12/2022	**Asbestos Type**	NAD

Client Name: EPS Ltd
Reference: UK22-6213
Location: Leeds City Academy
Contact: James Bowley

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 22/20896						

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

EMT Job No.: 22/20896

SOILS and ASH

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. Asbestos samples are retained for 6 months.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C. Ash samples are dried at 37°C ±5°C.

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

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

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

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

WATERS

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

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

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

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

STACK EMISSIONS

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation for Dioxins and Furans and Dioxin like PCBs has been performed on XAD-2 Resin, only samples which use this resin will be within our MCERTS scope.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

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

DILUTIONS

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

BLANKS

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

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.
Laboratory records are kept for a period of no less than 6 years.

REPORTS FROM THE SOUTH AFRICA LABORATORY

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

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

Customer Provided Information

Sample ID and depth is information provided by the customer.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

HWOL ACRONYMS AND OPERATORS USED

HS	Headspace Analysis.
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent.
CU	Clean-up - e.g. by florisil, silica gel.
1D	GC - Single coil gas chromatography.
Total	Aliphatics & Aromatics.
AL	Aliphatics only.
AR	Aromatics only.
2D	GC-GC - Double coil gas chromatography.
#1	EH_Total but with humics mathematically subtracted
#2	EU_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +).
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry.

EMT Job No: 22/20896

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		AR	Yes

EMT Job No: 22/20896

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	No
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.			AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21B	As Received samples are extracted in Methanol: Water (60:40) by reciprocal shaker.			AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma –Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma –Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes

EMT Job No: 22/20896

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) –Al anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) –Al anions comparable to BS ISO 15923-1: 2013l	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes	Yes	AD	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) –Al anions comparable to BS ISO 15923-1: 2013l	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes	Yes	AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 Second edition (2021)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

EMT Job No: 22/20896

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes	Yes	AR	Yes
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

APPENDIX J

Waste Classification Report

HazWasteOnline™

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:

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

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

9EUZK-D893F-ZEIA3

Job name

UK22.6213 Leeds City Academy

Description/Comments

Project

UK22.6213

Site

Leeds City Academy

Classified by

Name:
Lee Anderson
Date:
03 Jan 2023 14:11 GMT
Telephone:
[redacted]

Company:
Environmental Strategies Ltd EPS
10-12 East Parade
Leeds
LS1 2BH

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: **CERTIFIED**

Course	Date
Hazardous Waste Classification	03 Dec 2020

Next 3 year Refresher due by Dec 2023

Purpose of classification

2 - Material Characterisation

Address of the waste

Leeds City Academy **Post Code** NA

SIC for the process giving rise to the waste

43290 Other construction installation

Description of industry/producer giving rise to the waste

Extension of existing school buildings for additional classrooms and dining area

Description of the specific process, sub-process and/or activity that created the waste

Soils excavated during redevelopment including for foundations and soft landscaping

Description of the waste

Soils that persist beneath site

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	BH01ES1-15/12/2022-6.00-6.30m	6.0-6.3	Non Hazardous		3
2	BH02ES2-14/12/2022-0.70-1.00m	0.7-1.0	Non Hazardous		6
3	WS01ES1-13/12/2022-0.10-0.20m	0.1-0.2	Non Hazardous		8
4	WS02ES1-13/12/2022-0.30-0.40m	0.3-0.4	Non Hazardous		11
5	WS03ES2-13/12/2022-0.10-0.30m	0.1-0.3	Non Hazardous		13
6	WS04ES1-13/12/2022-0.20-0.40m	0.2-0.4	Non Hazardous		16

Related documents

#	Name	Description
1	EMT-22-20896-Batch-1-202212291144.HWOL	Element .hwol file used to populate the Job
2	EPS Waste Stream	waste stream template used to create this Job

Report

Created by: Lee Anderson

Created date: 03 Jan 2023 14:11 GMT

Classification of sample: BH01ES1-15/12/2022-6.00-6.30m

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

Sample details

Sample name:
BH01ES1-15/12/2022-6.00-6.30m
Sample Depth:
6.0-6.3 m
Moisture content:
8.6%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.6% Dry Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic pentoxide }	033-004-00-6	215-116-9	1303-28-2		0.5 mg/kg	1.534	0.706 mg/kg	0.0000706 %	✓	
2	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34.9 mg/kg	1.462	46.969 mg/kg	0.0047 %	✓	
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		4 mg/kg	1.126	4.147 mg/kg	0.000415 %	✓	
4	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	8 mg/kg		7.366 mg/kg	0.000737 %	✓	
5	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
6	nickel { nickel }	028-002-00-7	231-111-4	7440-02-0	7	18.5 mg/kg		17.035 mg/kg	0.0017 %	✓	
7	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
8	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		44 mg/kg	1.245	50.43 mg/kg	0.00504 %	✓	
9	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
10	acenaphthylene		205-917-1	208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
11	acenaphthene		201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
12	fluorene		201-695-5	86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
13	phenanthrene		201-581-5	85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
15	fluoranthene		205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
17		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
18		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
19		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
20		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
21		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
22		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
23		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
24		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
26		TPH (C6 to C40) petroleum group				<38	mg/kg		<38	mg/kg	<0.0038 %		<LOD
				TPH									
27		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
28		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
29		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
30		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
31		xylene				0.008	mg/kg		0.0073	mg/kg	0.000000737 %	✓	
		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]									
32		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
33		pH				7.44	pH		7.44	pH	7.44 pH		
				PH									
34		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
35		cadmium (non-pyrophoric); [1] cadmium oxide (non-pyrophoric) [2]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]									
										Total:	0.0168 %		

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 Deteminand - 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 Contained within soil matrix and therefore reduced flammability

Hazard Statements hit:

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

Because of determinand:

xylene: (conc.: 7.37e-07%)

Classification of sample: BH02ES2-14/12/2022-0.70-1.00m

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

Sample details

Sample name:
BH02ES2-14/12/2022-0.70-1.00m
Sample Depth:
0.7-1.0 m
Moisture content:
10.2%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.2% Dry Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic pentoxide }	033-004-00-6	215-116-9	1303-28-2		0.9 mg/kg	1.534	1.253 mg/kg	0.000125 %	✓	
2	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		65.5 mg/kg	1.462	86.871 mg/kg	0.00869 %	✓	
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		17 mg/kg	1.126	17.369 mg/kg	0.00174 %	✓	
4	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	9 mg/kg		8.167 mg/kg	0.000817 %	✓	
5	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
6	nickel { nickel }	028-002-00-7	231-111-4	7440-02-0	7	43.7 mg/kg		39.655 mg/kg	0.00397 %	✓	
7	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.55 mg/kg	0.000255 %	✓	
8	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		116 mg/kg	1.245	131.023 mg/kg	0.0131 %	✓	
9	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
10	acenaphthylene		205-917-1	208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
11	acenaphthene		201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
12	fluorene		201-695-5	86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
13	phenanthrene		201-581-5	85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
15	fluoranthene		205-912-4	206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
17		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
18		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
19		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
20		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
21		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
22		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
23		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
24		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
26		TPH (C6 to C40) petroleum group				<38	mg/kg		<38	mg/kg	<0.0038 %		<LOD
				TPH									
27		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
28		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
29		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
30		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
31		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<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]									
32		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
33		pH				8.63	pH		8.63	pH	8.63 pH		
				PH									
34		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
35		cadmium (non-pyrophoric); [1] cadmium oxide (non-pyrophoric) [2]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]									
										Total:	0.0326 %		

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 Deteminand - 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: WS01ES1-13/12/2022-0.10-0.20m

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

Sample details

Sample name:
WS01ES1-13/12/2022-0.10-0.20m
Sample Depth:
0.1-0.2 m
Moisture content:
16.6%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 16.6% Dry Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic pentoxide }	033-004-00-6	215-116-9	1303-28-2		8.3 mg/kg	1.534	10.919 mg/kg	0.00109 %	✓	
2	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		61.3 mg/kg	1.462	76.838 mg/kg	0.00768 %	✓	
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	23.174 mg/kg	0.00232 %	✓	
4	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	44 mg/kg		37.736 mg/kg	0.00377 %	✓	
5	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
6	nickel { nickel }	028-002-00-7	231-111-4	7440-02-0	7	26 mg/kg		22.298 mg/kg	0.00223 %	✓	
7	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.205 mg/kg	0.00012 %	✓	
8	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	96.076 mg/kg	0.00961 %	✓	
9	naphthalene	601-052-00-2	202-049-5	91-20-3		0.08 mg/kg		0.0686 mg/kg	0.00000686 %	✓	
10	acenaphthylene		205-917-1	208-96-8		0.08 mg/kg		0.0686 mg/kg	0.00000686 %	✓	
11	acenaphthene		201-469-6	83-32-9		0.12 mg/kg		0.103 mg/kg	0.0000103 %	✓	
12	fluorene		201-695-5	86-73-7		0.14 mg/kg		0.12 mg/kg	0.000012 %	✓	
13	phenanthrene		201-581-5	85-01-8		1.29 mg/kg		1.106 mg/kg	0.000111 %	✓	
14	anthracene		204-371-1	120-12-7		0.26 mg/kg		0.223 mg/kg	0.0000223 %	✓	
15	fluoranthene		205-912-4	206-44-0		1.61 mg/kg		1.381 mg/kg	0.000138 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16		pyrene		204-927-3	129-00-0		1.35	mg/kg		1.158	mg/kg	0.000116 %	✓	
17		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.73	mg/kg		0.626	mg/kg	0.0000626 %	✓	
18		chrysene	601-048-00-0	205-923-4	218-01-9		0.77	mg/kg		0.66	mg/kg	0.000066 %	✓	
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.62	mg/kg		0.532	mg/kg	0.0000532 %	✓	
20		indeno[123-cd]pyrene		205-893-2	193-39-5		0.33	mg/kg		0.283	mg/kg	0.0000283 %	✓	
21		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.07	mg/kg		0.06	mg/kg	0.000006 %	✓	
22		benzo[ghi]perylene		205-883-8	191-24-2		0.28	mg/kg		0.24	mg/kg	0.000024 %	✓	
23		coronene		205-881-7	191-07-1		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
24		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.76	mg/kg		0.652	mg/kg	0.0000652 %	✓	
25		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.3	mg/kg		0.257	mg/kg	0.0000257 %	✓	
26		TPH (C6 to C40) petroleum group			TPH		50	mg/kg		42.882	mg/kg	0.00429 %	✓	
27		polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
28		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
29		toluene	601-021-00-3	203-625-9	108-88-3		0.007	mg/kg		0.006	mg/kg	0.0000006 %	✓	
30		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
31		xylene	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]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
32		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<**LOD**
33		pH			PH		8.1	pH		8.1	pH	8.1 pH		
34		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
35		cadmium (non-pyrophoric); [1] cadmium oxide (non-pyrophoric) [2]	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		0.1	mg/kg		0.0858	mg/kg	0.00000858 %	✓	
											Total:	0.032 %		

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 Deteminand - 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 Contained within soil matrix and therefore reduced flammability

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 6.0e-07%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00429%)

Classification of sample: WS02ES1-13/12/2022-0.30-0.40m

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

Sample details

Sample name:
WS02ES1-13/12/2022-0.30-0.40m
Sample Depth:
0.3-0.4 m
Moisture content:
6.1%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.1% Dry Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic pentoxide }	033-004-00-6	215-116-9	1303-28-2		4 mg/kg	1.534	5.783 mg/kg	0.000578 %	✓	
2	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		15.7 mg/kg	1.462	21.627 mg/kg	0.00216 %	✓	
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9 mg/kg	1.126	9.55 mg/kg	0.000955 %	✓	
4	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	14 mg/kg		13.195 mg/kg	0.00132 %	✓	
5	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
6	nickel { nickel }	028-002-00-7	231-111-4	7440-02-0	7	8 mg/kg		7.54 mg/kg	0.000754 %	✓	
7	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
8	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		56 mg/kg	1.245	65.696 mg/kg	0.00657 %	✓	
9	naphthalene	601-052-00-2	202-049-5	91-20-3		0.05 mg/kg		0.0471 mg/kg	0.00000471 %	✓	
10	acenaphthylene		205-917-1	208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<**LOD**
11	acenaphthene		201-469-6	83-32-9		0.08 mg/kg		0.0754 mg/kg	0.00000754 %	✓	
12	fluorene		201-695-5	86-73-7		0.07 mg/kg		0.066 mg/kg	0.0000066 %	✓	
13	phenanthrene		201-581-5	85-01-8		0.66 mg/kg		0.622 mg/kg	0.0000622 %	✓	
14	anthracene		204-371-1	120-12-7		0.16 mg/kg		0.151 mg/kg	0.0000151 %	✓	
15	fluoranthene		205-912-4	206-44-0		0.85 mg/kg		0.801 mg/kg	0.0000801 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		pyrene				0.73	mg/kg		0.688	mg/kg	0.0000688 %	✓	
			204-927-3	129-00-0									
17		benzo[a]anthracene				0.41	mg/kg		0.386	mg/kg	0.0000386 %	✓	
		601-033-00-9	200-280-6	56-55-3									
18		chrysene				0.42	mg/kg		0.396	mg/kg	0.0000396 %	✓	
		601-048-00-0	205-923-4	218-01-9									
19		benzo[a]pyrene; benzo[def]chrysene				0.34	mg/kg		0.32	mg/kg	0.000032 %	✓	
		601-032-00-3	200-028-5	50-32-8									
20		indeno[123-cd]pyrene				0.19	mg/kg		0.179	mg/kg	0.0000179 %	✓	
			205-893-2	193-39-5									
21		dibenz[a,h]anthracene				0.04	mg/kg		0.0377	mg/kg	0.00000377 %	✓	
		601-041-00-2	200-181-8	53-70-3									
22		benzo[ghi]perylene				0.17	mg/kg		0.16	mg/kg	0.000016 %	✓	
			205-883-8	191-24-2									
23		benzo[b]fluoranthene				0.41	mg/kg		0.386	mg/kg	0.0000386 %	✓	
		601-034-00-4	205-911-9	205-99-2									
24		benzo[k]fluoranthene				0.16	mg/kg		0.151	mg/kg	0.0000151 %	✓	
		601-036-00-5	205-916-6	207-08-9									
25		TPH (C6 to C40) petroleum group				<38	mg/kg		<38	mg/kg	<0.0038 %		<LOD
				TPH									
26		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
27		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
28		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
29		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<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]									
30		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
31		pH				9.79	pH		9.79	pH	9.79 pH		
				PH									
32		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
33		cadmium (non-pyrophoric); [1] cadmium oxide (non-pyrophoric) [2]				0.8	mg/kg		0.754	mg/kg	0.0000754 %	✓	
		048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]									
34		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 }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
										Total:	0.017 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS03ES2-13/12/2022-0.10-0.30m

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

Sample details

Sample name:
WS03ES2-13/12/2022-0.10-0.30m
Sample Depth:
0.1-0.3 m
Moisture content:
17%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic pentoxide }	033-004-00-6	215-116-9	1303-28-2		9.4 mg/kg	1.534	12.323 mg/kg	0.00123 %	✓	
2	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37.1 mg/kg	1.462	46.345 mg/kg	0.00463 %	✓	
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	21.171 mg/kg	0.00212 %	✓	
4	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	51 mg/kg		43.59 mg/kg	0.00436 %	✓	
5	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.2 mg/kg		0.171 mg/kg	0.0000171 %	✓	
6	nickel { nickel }	028-002-00-7	231-111-4	7440-02-0	7	19 mg/kg		16.239 mg/kg	0.00162 %	✓	
7	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.402 mg/kg	0.00024 %	✓	
8	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	74.47 mg/kg	0.00745 %	✓	
9	naphthalene	601-052-00-2	202-049-5	91-20-3		0.08 mg/kg		0.0684 mg/kg	0.00000684 %	✓	
10	acenaphthylene		205-917-1	208-96-8		0.09 mg/kg		0.0769 mg/kg	0.00000769 %	✓	
11	acenaphthene		201-469-6	83-32-9		0.12 mg/kg		0.103 mg/kg	0.0000103 %	✓	
12	fluorene		201-695-5	86-73-7		0.13 mg/kg		0.111 mg/kg	0.0000111 %	✓	
13	phenanthrene		201-581-5	85-01-8		1.22 mg/kg		1.043 mg/kg	0.000104 %	✓	
14	anthracene		204-371-1	120-12-7		0.26 mg/kg		0.222 mg/kg	0.0000222 %	✓	
15	fluoranthene		205-912-4	206-44-0		1.7 mg/kg		1.453 mg/kg	0.000145 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		pyrene				1.47	mg/kg		1.256	mg/kg	0.000126 %	✓	
			204-927-3	129-00-0									
17		benzo[a]anthracene				0.77	mg/kg		0.658	mg/kg	0.0000658 %	✓	
		601-033-00-9	200-280-6	56-55-3									
18		chrysene				0.83	mg/kg		0.709	mg/kg	0.0000709 %	✓	
		601-048-00-0	205-923-4	218-01-9									
19		benzo[a]pyrene; benzo[def]chrysene				0.73	mg/kg		0.624	mg/kg	0.0000624 %	✓	
		601-032-00-3	200-028-5	50-32-8									
20		indeno[123-cd]pyrene				0.4	mg/kg		0.342	mg/kg	0.0000342 %	✓	
			205-893-2	193-39-5									
21		dibenz[a,h]anthracene				0.08	mg/kg		0.0684	mg/kg	0.00000684 %	✓	
		601-041-00-2	200-181-8	53-70-3									
22		benzo[ghi]perylene				0.32	mg/kg		0.274	mg/kg	0.0000274 %	✓	
			205-883-8	191-24-2									
23		benzo[b]fluoranthene				0.84	mg/kg		0.718	mg/kg	0.0000718 %	✓	
		601-034-00-4	205-911-9	205-99-2									
24		benzo[k]fluoranthene				0.33	mg/kg		0.282	mg/kg	0.0000282 %	✓	
		601-036-00-5	205-916-6	207-08-9									
25		TPH (C6 to C40) petroleum group				140	mg/kg		119.658	mg/kg	0.012 %	✓	
				TPH									
26		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
27		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
28		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
29		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<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]									
30		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
31		pH				7.77	pH		7.77	pH	7.77 pH		
				PH									
32		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
33		cadmium (non-pyrophoric); [1] cadmium oxide (non-pyrophoric) [2]				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]									
34		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 }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
										Total:	0.0346 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	This determinand is defined in the EU CLP Table 3
<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 Contained within soil matrix and therefore reduced flammability

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.012%)

Classification of sample: WS04ES1-13/12/2022-0.20-0.40m

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

Sample details

Sample name:
WS04ES1-13/12/2022-0.20-0.40m
Sample Depth:
0.2-0.4 m
Moisture content:
10.7%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.7% Dry Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic pentoxide }	033-004-00-6	215-116-9	1303-28-2		1.6 mg/kg	1.534	2.217 mg/kg	0.000222 %	✓	
2	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		68.6 mg/kg	1.462	90.572 mg/kg	0.00906 %	✓	
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	18.307 mg/kg	0.00183 %	✓	
4	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	9 mg/kg		8.13 mg/kg	0.000813 %	✓	
5	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
6	nickel { nickel }	028-002-00-7	231-111-4	7440-02-0	7	43.9 mg/kg		39.657 mg/kg	0.00397 %	✓	
7	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
8	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		113 mg/kg	1.245	127.058 mg/kg	0.0127 %	✓	
9	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
10	acenaphthylene		205-917-1	208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
11	acenaphthene		201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
12	fluorene		201-695-5	86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
13	phenanthrene		201-581-5	85-01-8		0.14 mg/kg		0.126 mg/kg	0.0000126 %	✓	
14	anthracene		204-371-1	120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
15	fluoranthene		205-912-4	206-44-0		0.18 mg/kg		0.163 mg/kg	0.0000163 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16		pyrene		204-927-3	129-00-0		0.15	mg/kg		0.136	mg/kg	0.0000136 %	✓	
17		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.1	mg/kg		0.0903	mg/kg	0.00000903 %	✓	
18		chrysene	601-048-00-0	205-923-4	218-01-9		0.08	mg/kg		0.0723	mg/kg	0.00000723 %	✓	
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
20		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
21		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
22		benzo[ghi]perylene		205-883-8	191-24-2		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
23		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.07	mg/kg		0.0632	mg/kg	0.00000632 %	✓	
24		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.03	mg/kg		0.0271	mg/kg	0.00000271 %	✓	
25		TPH (C6 to C40) petroleum group			TPH		<38	mg/kg		<38	mg/kg	<0.0038 %		<LOD
26		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
27		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
28		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
29		xylene	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]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
30		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
31		pH			PH		8.25	pH		8.25	pH	8.25 pH		
32		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
33		cadmium (non-pyrophoric); [1] cadmium oxide (non-pyrophoric) [2]	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		0.1	mg/kg		0.0903	mg/kg	0.00000903 %	✓	
34		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 }	006-007-00-5				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
											Total:	0.0328 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	This determinand is defined in the EU CLP Table 3
<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 GB MCL determinands

- **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

- **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6
Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

- **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

- **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

- **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

- **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

- **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

- **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

- **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

- **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

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

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source: http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2; H371

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

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

GB MCL index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

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

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

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

EU 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)
Hazard Statements: Acute Tox. 2; H330 , Acute Tox. 1; H310 , Acute Tox. 2; H300 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , EUH032 , EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

Appendix B: Rationale for selection of metal species

arsenic {arsenic pentoxide}

Worst Case

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

Worst case species

copper {dicopper oxide; copper (I) oxide}

Worst case species

lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species

mercury {mercury}

Worst case species

nickel {nickel}

Worst case species

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

Worst case species

zinc {zinc oxide}

Elemental Zinc with no CrVI

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case species

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}

Standard Approach

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2022.364.5467.10136 (30 Dec 2022)
HazWasteOnline Database: 2022.364.5467.10136 (30 Dec 2022)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1stEditionv1.2.GB-Oct2021
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 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
GB MCL List - version1.1of09June2021

APPENDIX K

Laboratory Results –Geotechnical

GQF-008-48
Issue 01 - Oct 22

Summary of Classification Test Results

Project No.
J225953

Project Name
Leeds City Academy

Hole No.	Sample				Soil Description	Density bulk Mg/m^3	Density dry Mg/m^3	*w* %	Passing 425µm %	LL %	PL %	PI %	Particle density Mg/m^3	Remarks
	Ref	Top	Base	Type										
BH01	2	2.00	2.45	B	Brown slightly sandy slightly gravelly CLAY.			9.7	55	26	19	7		
BH02	3	1.50	2.00	B	Brown slightly sandy slightly gravelly CLAY.			12	69	38	26	12		

All tests performed in accordance with BS1377:1990 unless specified otherwise

Date Printed 03/02/2023

Key

Density test
Linear measurement unless :
wd - water displacement
wi - immersion in water

Liquid Limit
4pt cone unless :
cas - Casagrande method
1pt - single point test

Particle density
sp - small pyknometer
gj - gas jar

TTL

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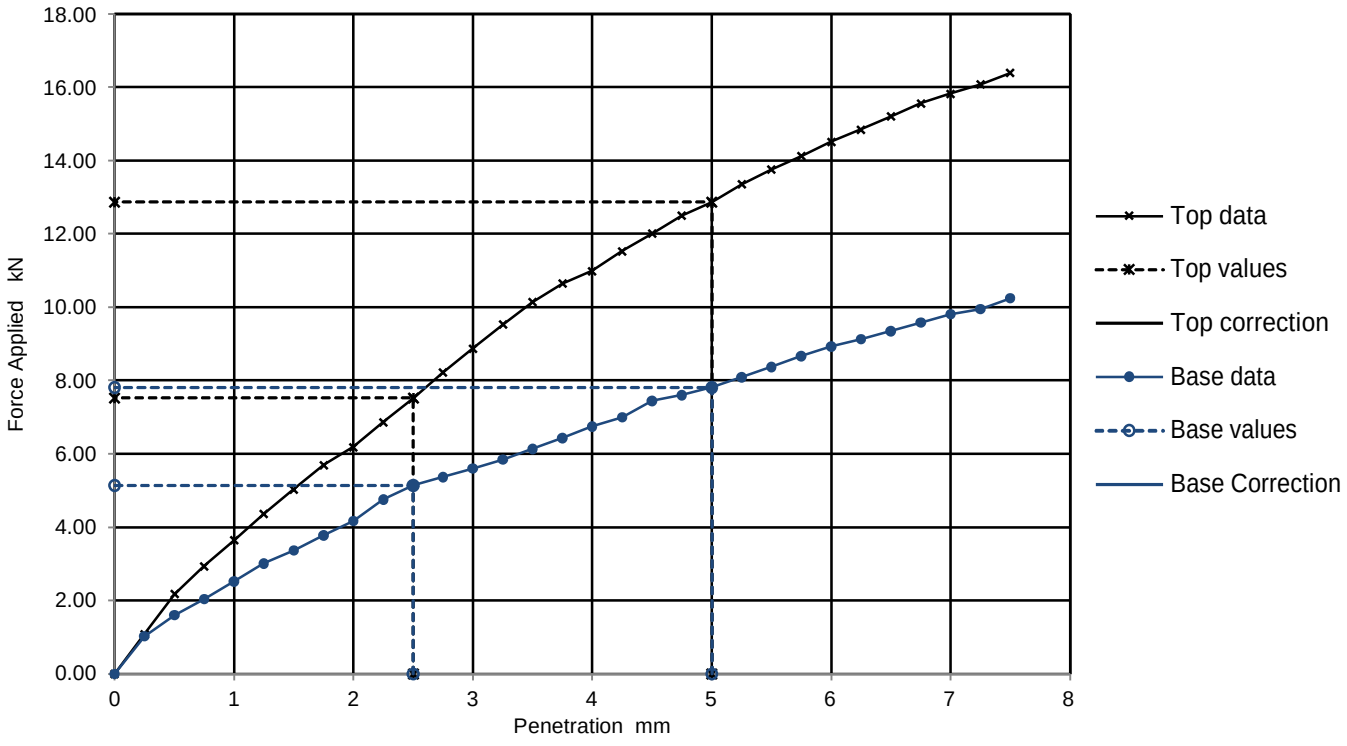
INDEX

GQF-008-36 Issue 01 - Oct 22	California Bearing Ratio (CBR)			Job Ref	J222096
				Borehole/Pit No.	BH01
Project Name	Leeds City Academy			Sample No.	2
Soil Description	Light brown gravelly CLAY.			Depth m	2.00
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description				KeyLAB ID	TTLP202301034
Test Method	BS1377 : Part 4 : 1990, clause 7			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		27	%	Dry density after soaking		Mg/m^3
Initial Specimen details	Bulk density	2.14	Mg/m^3	Surcharge applied	0	kg
	Dry density	1.96	Mg/m^3		0	kPa
	Moisture content	9.2	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	No	57	64	64	N/A	9.4
BASE	No	39	39	39		9.0

Remarks

Date Printed	26/01/2023

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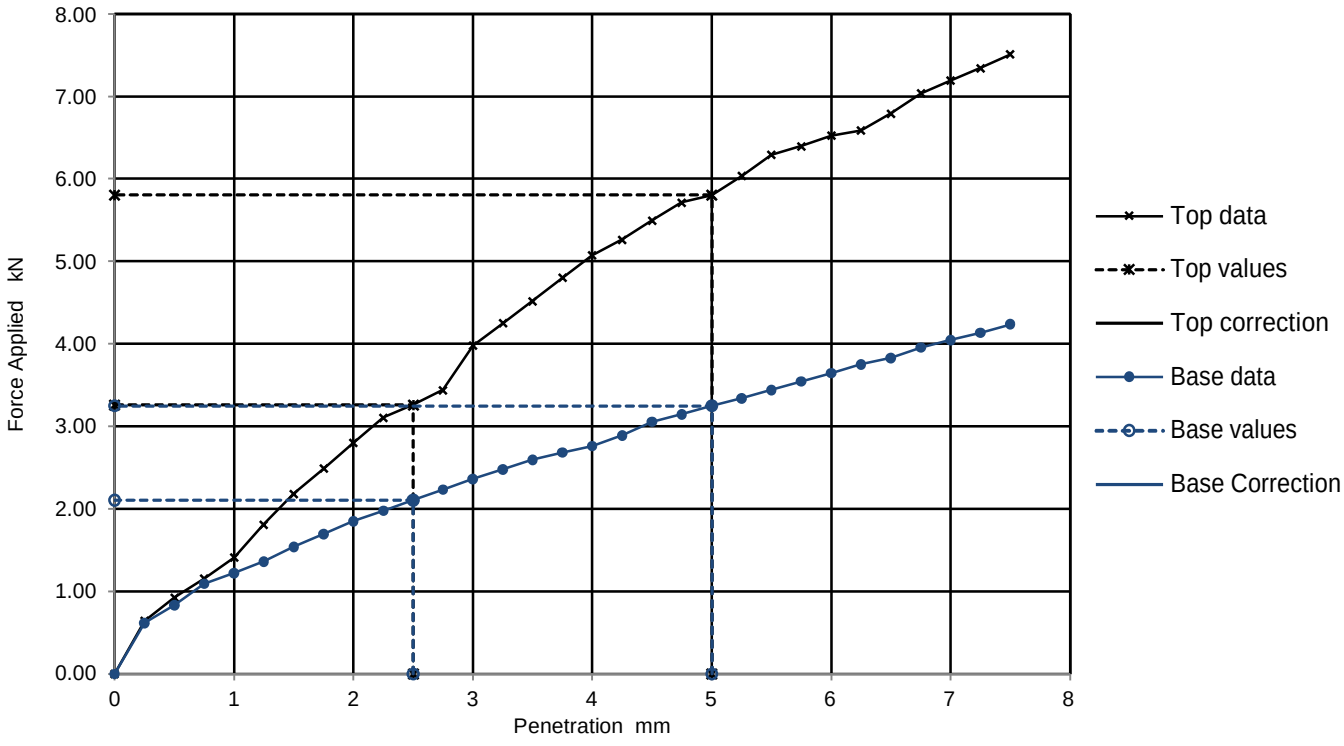
CBR

GQF-008-36 Issue 01 - Oct 22	California Bearing Ratio (CBR)			Job Ref	J222096
				Borehole/Pit No.	BH02
Project Name	Leeds City Academy			Sample No.	3
Soil Description	Light brown gravelly CLAY.			Depth m	1.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description				KeyLAB ID	TTLP2023010310
Test Method	BS1377 : Part 4 : 1990, clause 7			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		3	%	Dry density after soaking		Mg/m^3
Initial Specimen details	Bulk density	2.07	Mg/m^3	Surcharge applied	0	kg
	Dry density	1.84	Mg/m^3		0	kPa
	Moisture content	12.5	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	No	25	29	29	N/A	12.3
BASE	No	16	16	16		12.7

Remarks

Date Printed	26/01/2023

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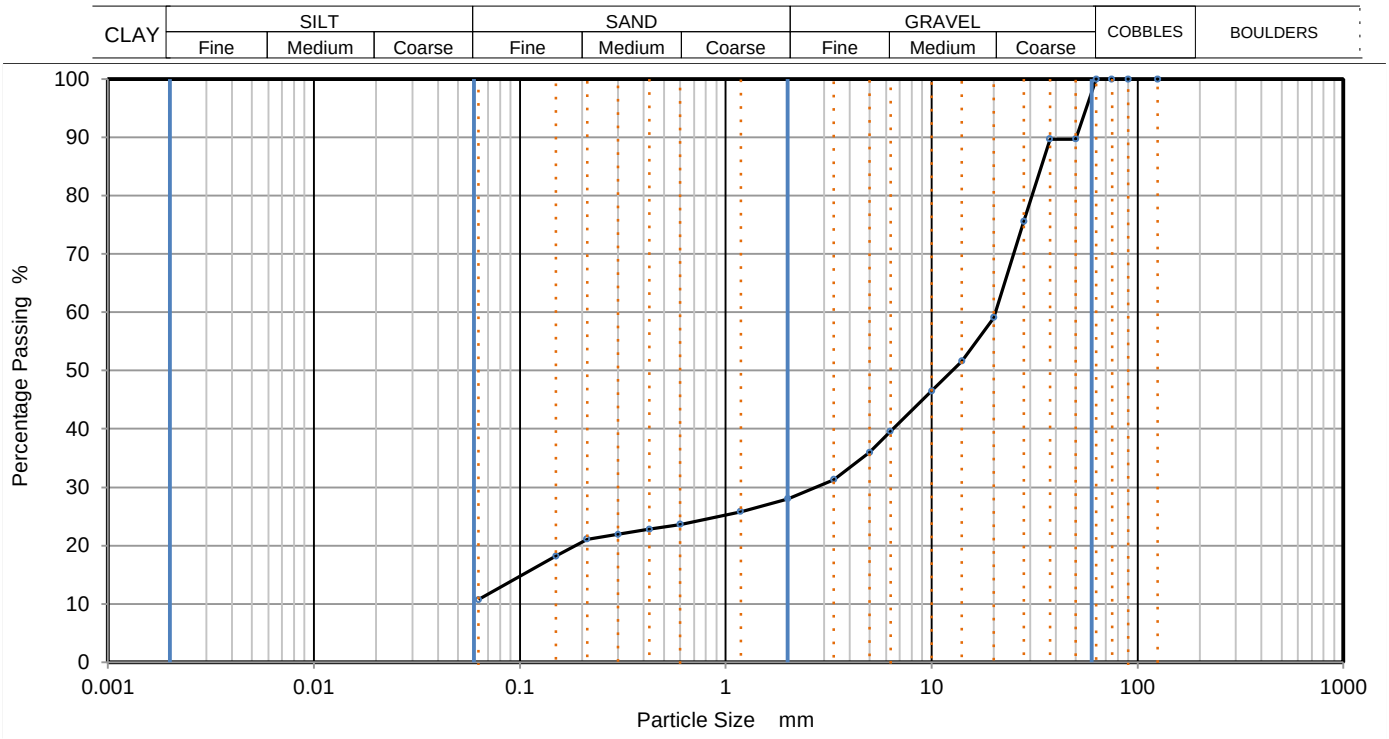
CBR

GQF-008-55 Issue 01 - Oct 22	**PARTICLE SIZE DISTRIBUTION**			Job Ref	J222096
				Borehole/Pit No.	BH01
Project Name	Leeds City Academy			Sample No.	3
Soil Description	Brown sandy clayey GRAVEL.			Depth, m	2.75
Specimen Reference		Specimen Depth	m	Sample Type	D
Test Method	BS1377:Part 2:1990, clause 9.2			KeyLAB ID	TTLP202301035



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	90		
37.5	90		
28	76		
20	59		
14	52		
10	47		
6.3	40		
5	36		
3.35	31		
2	28		
1.18	26		
0.6	24		
0.425	23		
0.3	22		
0.212	21		
0.15	18		
0.063	11		

Dry Mass of sample, g	1422

Sample Proportions	% dry mass
Very coarse	0
Gravel	72
Sand	17
Fines <0.063mm	11

Grading Analysis		
D100	mm	
D60	mm	20.4
D30	mm	2.74
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Date Printed	26/01/2023

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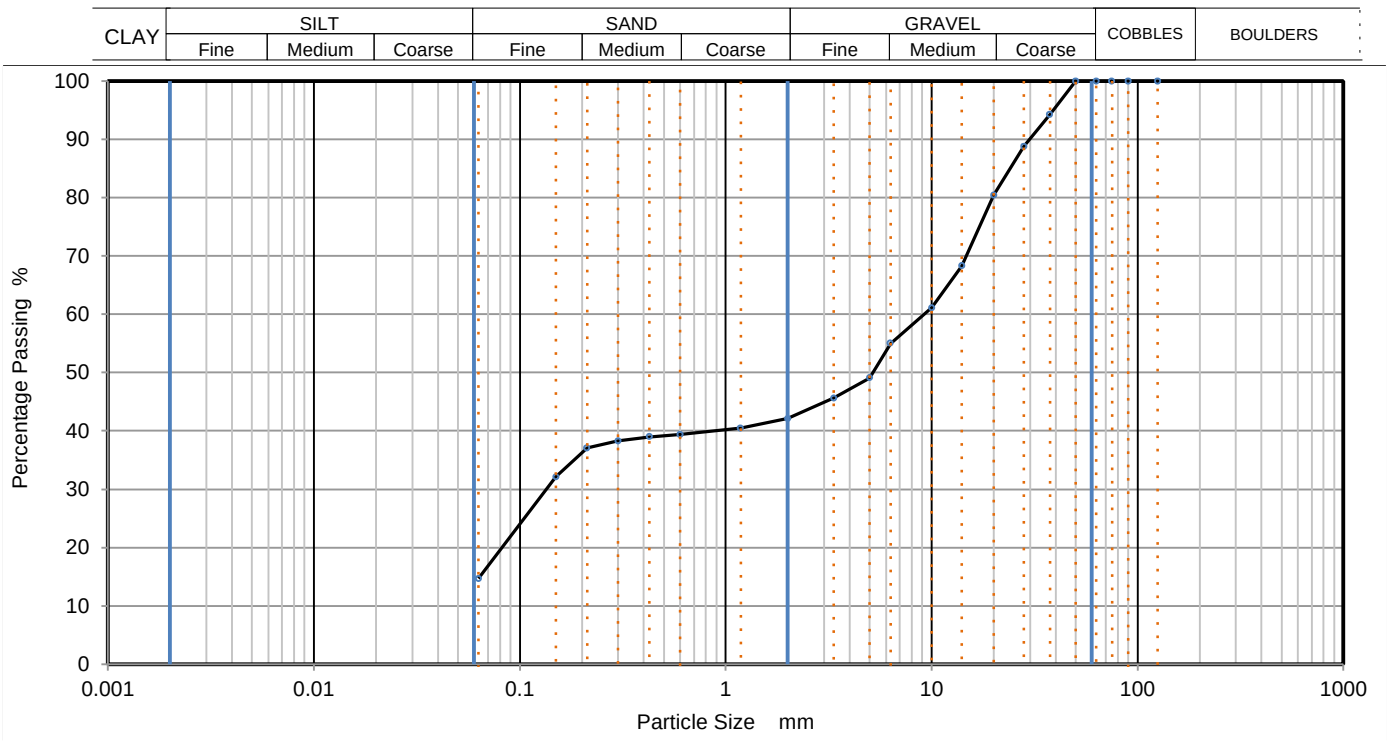
PSD

GQF-008-55 Issue 01 - Oct 22	**PARTICLE SIZE DISTRIBUTION**			Job Ref	J222096
				Borehole/Pit No.	BH01
Project Name	Leeds City Academy			Sample No.	5
Soil Description	Brown very sandy clayey GRAVEL.			Depth, m	4.75
Specimen Reference		Specimen Depth	m	Sample Type	D
Test Method	BS1377:Part 2:1990, clause 9.2			KeyLAB ID	TTLP202301036



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	94		
28	89		
20	80		
14	68		
10	61		
6.3	55		
5	49		
3.35	46		
2	42		
1.18	41		
0.6	39		
0.425	39		
0.3	38		
0.212	37		
0.15	32		
0.063	15		

Dry Mass of sample, g	1134

Sample Proportions	% dry mass
Very coarse	0
Gravel	58
Sand	27
Fines <0.063mm	15

Grading Analysis		
D100	mm	
D60	mm	9.18
D30	mm	0.135
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Date Printed	26/01/2023

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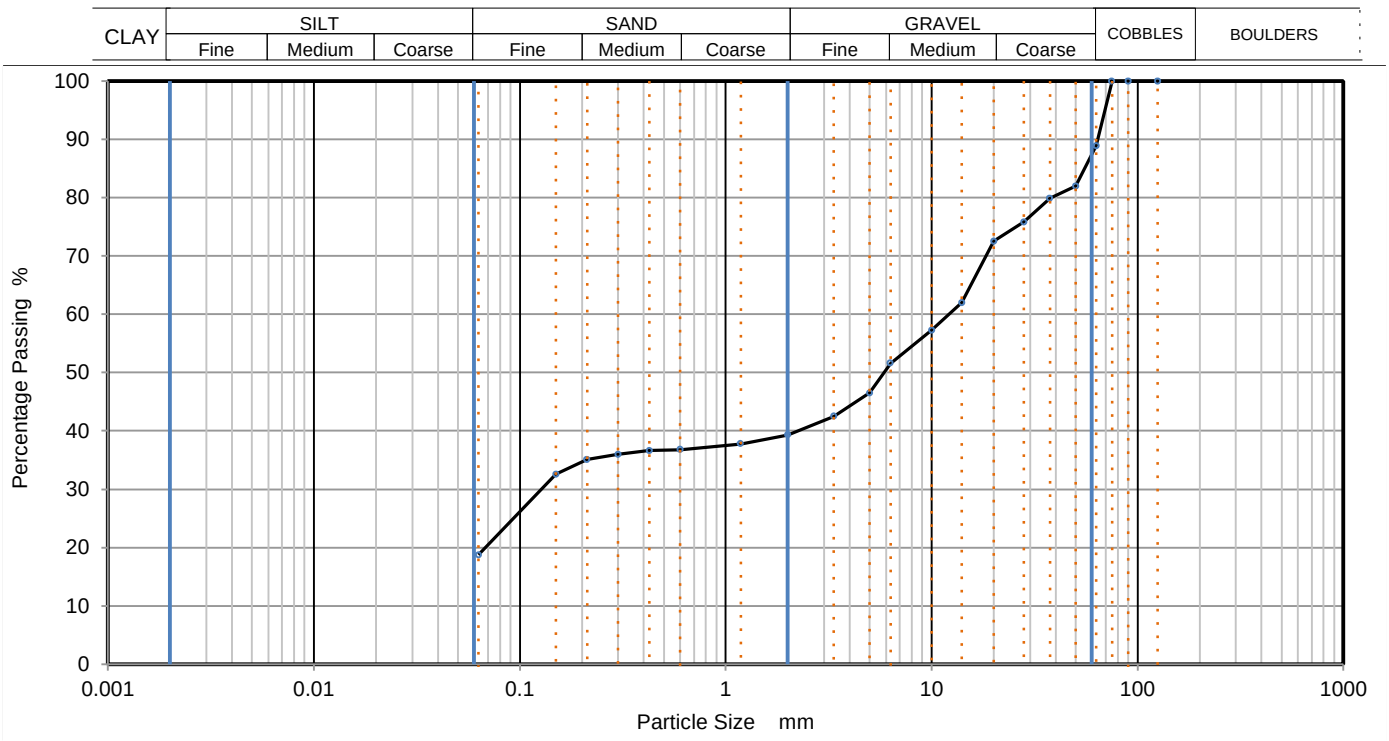
PSD

GQF-008-55 Issue 01 - Oct 22	**PARTICLE SIZE DISTRIBUTION**			Job Ref	J222096
				Borehole/Pit No.	BH01
Project Name	Leeds City Academy			Sample No.	4
Soil Description	Brown very sandy clayey GRAVEL with one cobble.			Depth, m	8.00
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS1377:Part 2:1990, clause 9.2			KeyLAB ID	TTLP202301038



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	89		
50	82		
37.5	80		
28	76		
20	73		
14	62		
10	57		
6.3	52		
5	47		
3.35	43		
2	39		
1.18	38		
0.6	37		
0.425	37		
0.3	36		
0.212	35		
0.15	33		
0.063	19		

Dry Mass of sample, g	3607

Sample Proportions	% dry mass
Very coarse	11
Gravel	50
Sand	21
Fines <0.063mm	19

Grading Analysis		
D100	mm	
D60	mm	12.1
D30	mm	0.127
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Date Printed	26/01/2023

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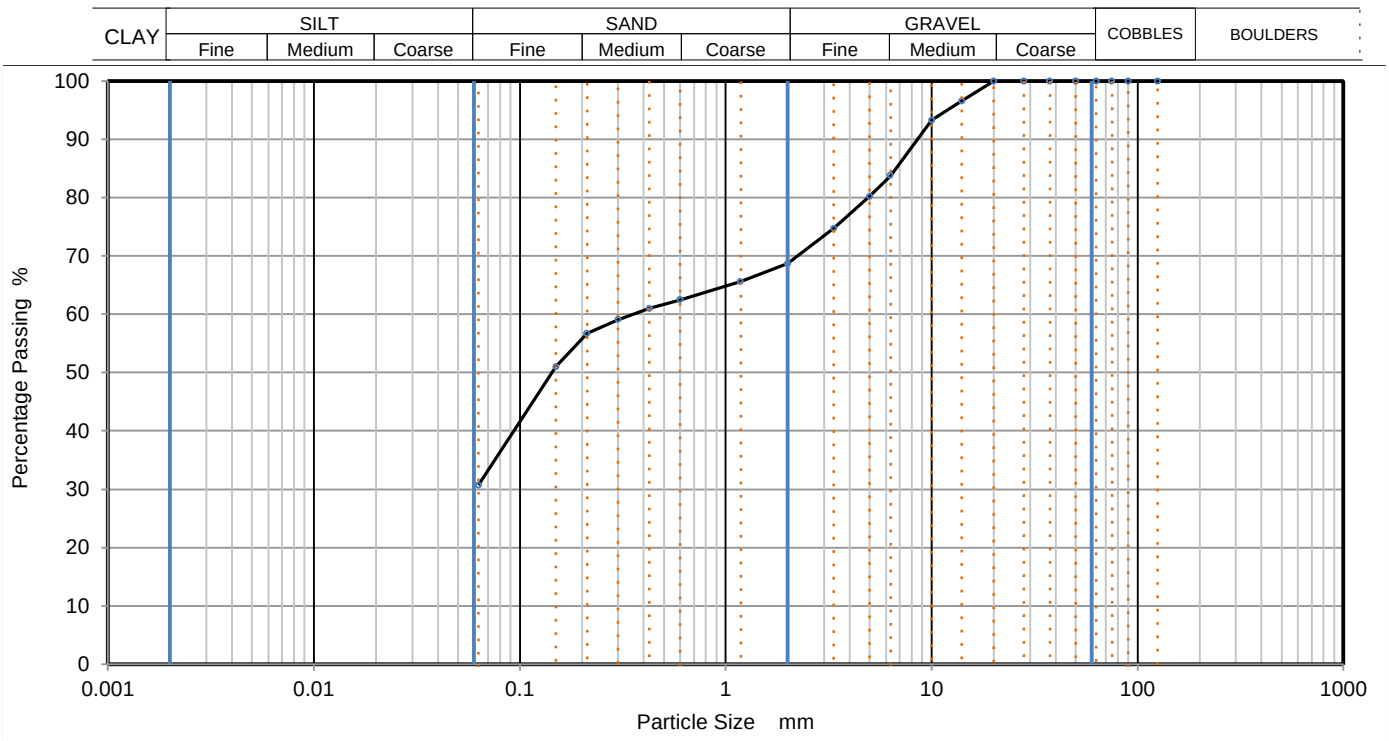
PSD

GQF-008-55 Issue 01 - Oct 22	**PARTICLE SIZE DISTRIBUTION**			Job Ref	J222096
				Borehole/Pit No.	BH02
Project Name	Leeds City Academy			Sample No.	2
Soil Description	Brown very gravelly very silty SAND.			Depth, m	1.20
Specimen Reference		Specimen Depth	m	Sample Type	D
Test Method	BS1377:Part 2:1990, clause 9.2			KeyLAB ID	TTLP202301039



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	97		
10	93		
6.3	84		
5	80		
3.35	75		
2	69		
1.18	66		
0.6	63		
0.425	61		
0.3	59		
0.212	57		
0.15	51		
0.063	31		

Dry Mass of sample, g	317

Sample Proportions	% dry mass
Very coarse	0
Gravel	31
Sand	38
Fines <0.063mm	31

Grading Analysis		
D100	mm	
D60	mm	0.355
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

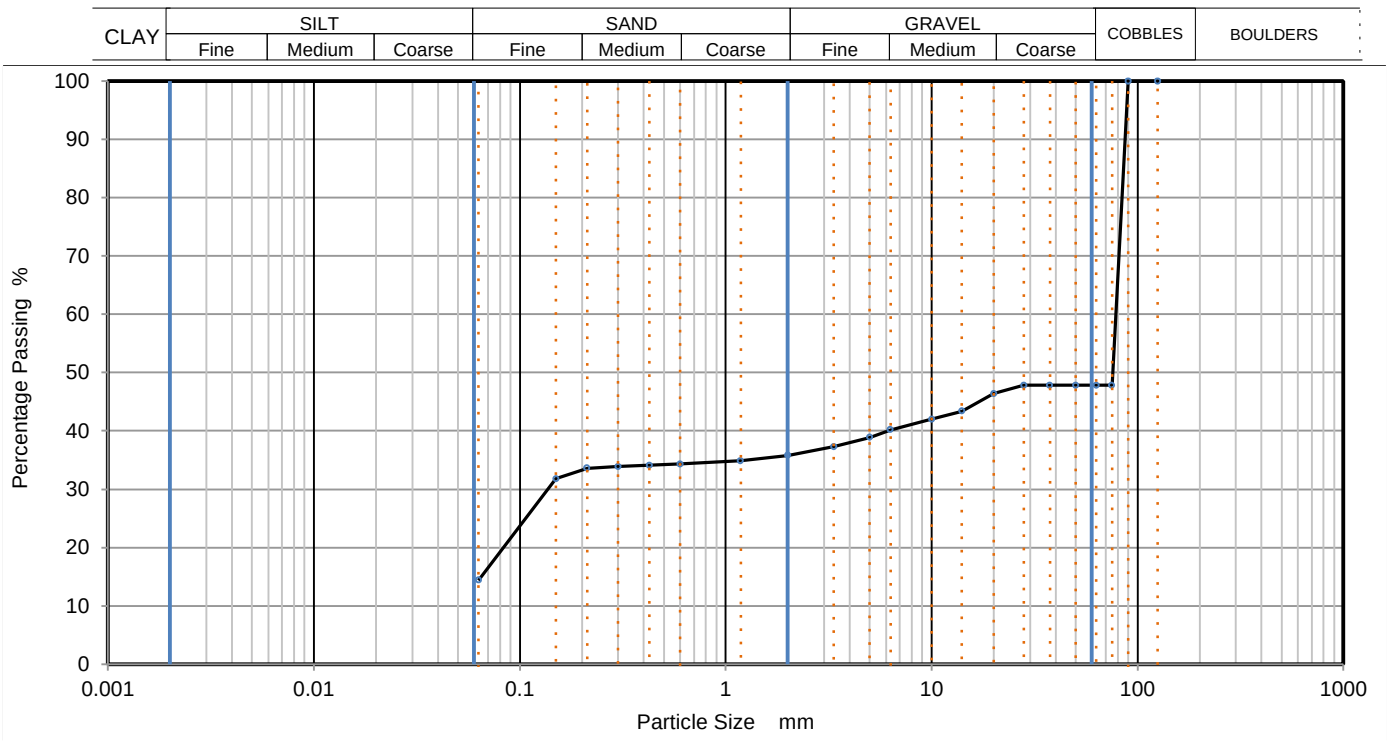
Preparation and testing in accordance with BS1377 unless noted below

Date Printed	26/01/2023

UKAS TESTING
7758

PSD

GQF-008-55 Issue 01 - Oct 22	**PARTICLE SIZE DISTRIBUTION**			Job Ref	J222096
				Borehole/Pit No.	BH02
Project Name	Leeds City Academy			Sample No.	11
Soil Description	Brown gravelly very sandy clayey COBBLES.			Depth, m	6.00
Specimen Reference		Specimen Depth	m	Sample Type	D
Test Method	BS1377:Part 2:1990, clause 9.2			KeyLAB ID	TTLP2023010311



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	48		
63	48		
50	48		
37.5	48		
28	48		
20	46		
14	43		
10	42		
6.3	40		
5	39		
3.35	37		
2	36		
1.18	35		
0.6	34		
0.425	34		
0.3	34		
0.212	34		
0.15	32		
0.063	14		

Dry Mass of sample, g	967

Sample Proportions	% dry mass
Very coarse	52
Gravel	12
Sand	22
Fines <0.063mm	14

Grading Analysis		
D100	mm	
D60	mm	78.3
D30	mm	0.137
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

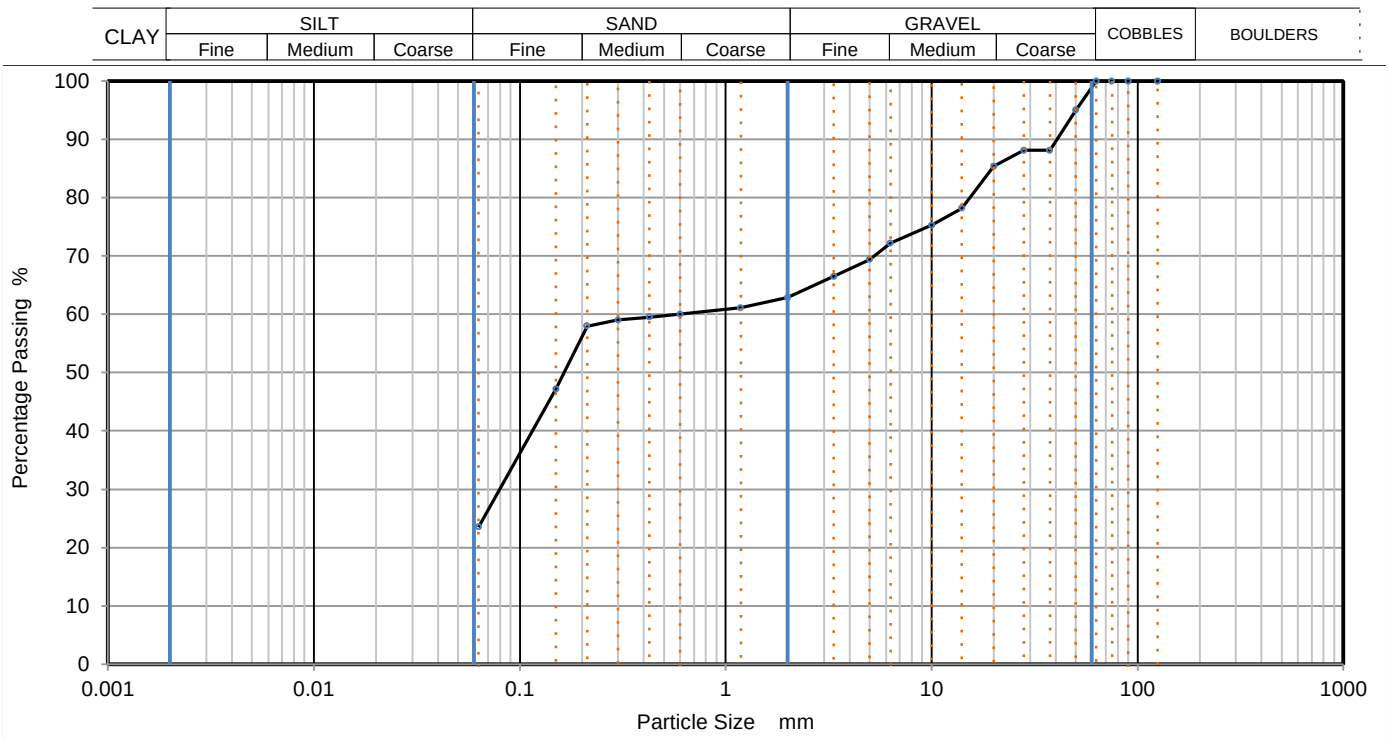
Preparation and testing in accordance with BS1377 unless noted below

Date Printed	26/01/2023

UKAS TESTING
7758

PSD

GQF-008-55 Issue 01 - Oct 22	**PARTICLE SIZE DISTRIBUTION**			Job Ref	J222096
				Borehole/Pit No.	BH02
Project Name	Leeds City Academy			Sample No.	13
Soil Description	Brown sandy gravelly CLAY.			Depth, m	6.00
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS1377:Part 2:1990, clause 9.2			KeyLAB ID	TTLP2023010312



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	95		
37.5	88		
28	88		
20	85		
14	78		
10	75		
6.3	72		
5	69		
3.35	67		
2	63		
1.18	61		
0.6	60		
0.425	60		
0.3	59		
0.212	58		
0.15	47		
0.063	24		

Dry Mass of sample, g	2613

Sample Proportions	% dry mass
Very coarse	0
Gravel	37
Sand	39
Fines <0.063mm	24

Grading Analysis		
D100	mm	
D60	mm	0.603
D30	mm	0.0799
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

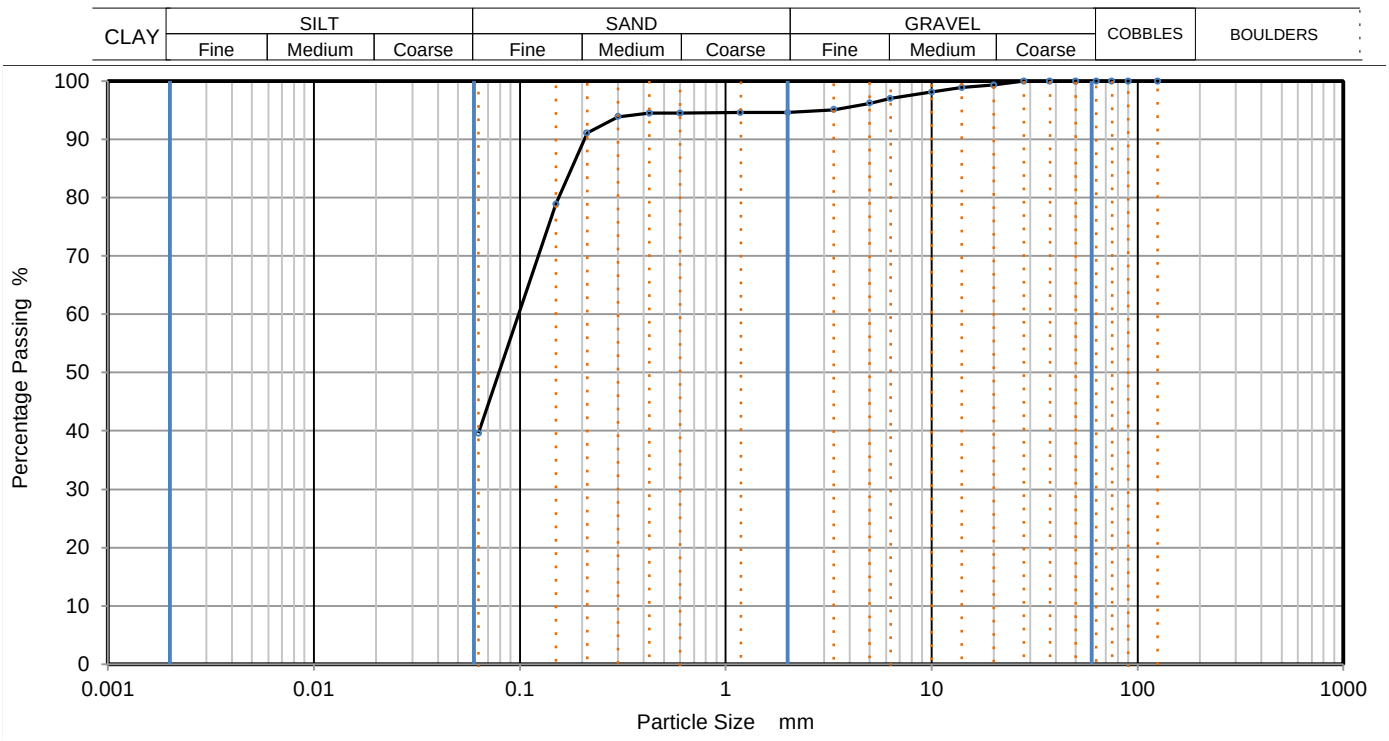
Preparation and testing in accordance with BS1377 unless noted below

Date Printed	26/01/2023

UKAS TESTING
7758

PSD

GQF-008-55 Issue 01 - Oct 22	**PARTICLE SIZE DISTRIBUTION**			Job Ref	J222096
				Borehole/Pit No.	BH02
Project Name	Leeds City Academy			Sample No.	14
Soil Description	Brown gravelly very silty SAND.			Depth, m	6.20
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS1377:Part 2:1990, clause 9.2			KeyLAB ID	TTLP2023010313



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	99		
10	98		
6.3	97		
5	96		
3.35	95		
2	95		
1.18	95		
0.6	95		
0.425	95		
0.3	94		
0.212	91		
0.15	79		
0.063	40		

Dry Mass of sample, g	2613

Sample Proportions	% dry mass
Very coarse	0
Gravel	5
Sand	55
Fines <0.063mm	40

Grading Analysis		
D100	mm	
D60	mm	0.0988
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Date Printed	26/01/2023

UKAS TESTING
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PSD

Certificate of Analysis

Certificate Number 23-00449 *Issued:* 11-Jan-23

Client The Testing Laboratory
Unit 2 James Road
Adwick-le-Street
Doncaster
DN6 7HH

Our Reference 23-00449

Client Reference J222096

Order No (not supplied)

Contract Title LEEDS CITY ACADEMY UK22-6213

Description 5 Soil samples.

Date Received 09-Jan-23

Date Started 09-Jan-23

Date Completed 11-Jan-23

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By [redacted]

Kirk Bridgewood
General Manager

2139

Summary of Chemical Analysis
Soil Samples

Our Ref 23-00449
Client Ref J222096
Contract Title LEEDS CITY ACADEMY UK22-6213

			Lab No	2106521	2106522	2106523	2106524	2106525
			.Sample ID	BH01	BH2	BH2	BH01	BH01
			Depth	9.00	5.00	4.00	0.50-1.60	2.00-2.45
			Other ID		9	7	1	2
			Sample Type	d	d	d	b	b
			Sampling Date	n/s	n/s	n/s	n/s	n/s
			Sampling Time	n/s	n/s	n/s	n/s	n/s
Test	Method	LOD	Units					
Inorganics								
pH	DETSC 2008#		pH	7.7	7.6	7.6	9.3	8.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	21	17	22	24	13

Information in Support of the Analytical Results

Our Ref 23-00449
Client Ref J222096
Contract LEEDS CITY ACADEMY UK22-6213

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
2106521	BH01 9.00 SOIL		PT 1L	Sample date not supplied, Anions 2:1 (30 days), pH + Conductivity (7 days)	
2106522	BH2 5.00 SOIL		PT 1L	Sample date not supplied, Anions 2:1 (30 days), pH + Conductivity (7 days)	
2106523	BH2 4.00 SOIL		PT 1L	Sample date not supplied, Anions 2:1 (30 days), pH + Conductivity (7 days)	
2106524	BH01 0.50-1.60 SOIL		PG	Sample date not supplied, Anions 2:1 (30 days), pH + Conductivity (7 days)	
2106525	BH01 2.00-2.45 SOIL		PG	Sample date not supplied, Anions 2:1 (30 days), pH + Conductivity (7 days)	

Key: P-Plastic T-Tub G-Bag

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 18/01/2023

Contract	**UK22.6213 Leeds City Academy**
Serial No.	**42018_1**

Client:

Environmental Protection Strategies Ltd
Unit 7
Caxton House
Broad Street
Great Cambourne
Cambridge
CB23 6JN

Soil Property Testing Ltd

15, 16, 18 Halcyon Court, St Margaret's Way, Stukeley Meadows, Huntingdon, Cambridgeshire, PE29 6DG

[redacted]

Samples Submitted By:

Environmental Protection Strategies Ltd

Samples Labelled:

UK22.6213 Leeds City Academy

Approved Signatories:

☑ **J.C. Garner B.Eng (Hons) FGS**
Technical Director & Quality Manager

☐ **W. Johnstone**
Materials Lab Manager

[redacted]

Date Received: 13/01/2023

Samples Tested Between: 13/01/2023 **and** 18/01/2023

Remarks:

For the attention of James Bowley
Your Reference No: UK22.6213
Your Order No: 31112

Notes:

1. All remaining samples or remnants from this contract will be disposed of after 21 days from today, unless we are notified to the contrary.
2. This test report may not be reproduced other than in full except with the prior written approval of the issuing laboratory.
3. The results within this report only relate to the items tested or sampled.

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 18/01/2023

0998

Contract	UK22.6213 Leeds City Academy		
Serial No.	42018_1	Target Date	27/01/2023
Scheduled By	Environmental Protection Strategies Ltd		
Schedule Remarks			

Bore Hole No.	Type	Sample Ref.	Top Depth	Point Load Test																		Sample Remarks
BH01	-	-	11.76	1																		
BH01	-	-	13.24	1																		
BH02	-	-	10.29	1																		
Totals				3																		End of Schedule

TEST REPORT

ISSUED BY SOIL PROPERTY TESTING LTD

DATE ISSUED: 18/01/2023

Contract	UK22.6213 Leeds City Academy
Serial No.	42018_1

FRANKLIN POINT LOAD TESTS

Borehole /Pit No.	Depth (m)	Type	Reference	Description	Test Config	Core Dia (mm)	Distance between Points* D (mm)	Load at Failure, P (kN)	Uncorrected Point Load Intact, Is (MN/m²)	Corrected Point Load Intact, Is50 (MN/m²)
BH01	11.76 - 11.85	-	-	Yellowish brown SANDSTONE with greyish brown staining	A	85.71	59	3.90	1.14	1.22
						8.15	38	4.70	3.34	2.94
BH01	13.24 - 13.38	-	-	Yellowish brown SANDSTONE with greyish brown and very dark grey mottling	A	85.05	47	1.50	0.69	0.67
						84.55	54	4.80	1.66	1.71
						84.58	43	2.70	1.48	1.38
BH02	10.29 - 10.40	-	-	Yellowish brown SANDSTONE with brown and dark grey mottling	A	84.88	40	1.50	0.93	0.84
						84.38	39	3.00	1.93	1.73
						85.13	33	3.10	2.84	2.36

Method of Test: International Journal of Rock Mechanics, Mineral Science and Geomechanics. Vol. 22 No. 2 1985

Remarks * Equivalent Core Diameter

APPENDIX L

Generic Screening Criteria

EPS Generic Quantitative Risk Assessment - Commercial Landuse

Contaminant	Soil Targets			Groundwater Targets		
	Human Health	Controlled Waters		Human Health	Controlled Waters	
		Surface Water	Groundwater		Surface Water	Groundwater
Unit	mg/kg			µg/l		
Arsenic	See C4SL	n/c	n/c	n/c	50	10
Cadmium	See C4SL	n/c	n/c	n/c	2.5#	5
Chromium III	8600	n/c	n/c	n/c	4.7	50
Chromium VI	See C4SL	n/c	n/c	n/c	3.4	
Copper	68000	n/c	n/c	n/c	93.1#	2000
Mercury (elemental)	58	0.085	1.22	95 (sol)	1	1
Nickel	980	n/c	n/c	n/c	14.8#	20
Lead	See C4SL	n/c	n/c	n/c	27.7#	10
Selenium	12000	n/c	n/c	n/c	10	10
Zinc	730000	n/c	n/c	n/c	373#	3000
Benzene	See C4SL	0.064	0.0064	20,000	10	1
Toluene	56000* (869)	1.33	12.6	21,000,000 (sol)	74	700
Ethylbenzene	5700* (518)	0.77	11.5	960,000 (sol)	20	300
Xylene (Para)	5900** (576)	1.18	19.6	980,000 (sol)	30	500
MTBE#	7900	4.41	0.026	7,800,000	2600	15
Benzo(a)Pyrene	see C4SL	n/c	n/c	n/c	0.005 (0.00017)	0.01
Naphthalene	190** (76.4)	0.11	0.11	23,000 (sol)	2	2
Aliphatic C5-C6	3200** (304)	4.06	0.81	190,000 (sol)	50	10
Aliphatic C6-C8	7800** (144)	17.8	3.57	150,000 (sol)	50	10
Aliphatic C8-C10	2000** (78)	n/c	n/c	5,700 (sol)	50	10
Aliphatic C10-C12	9700** (48)	n/c	n/c	3,600 (sol)	50	10
Aliphatic C12-C16	59000**(24)	n/c	n/c	n/c	50	10
Aliphatic C16-C35	1600000	n/c	n/c	n/c	50	10
Aromatic C8-C10	3500*(613)	6.71	1.34	190,000 (sol)	50	10
Aromatic C10-C12	16000** (364)	10.6	2.13	660,000 (sol)	50	10
Aromatic C12-C16	36000**(169)	21.2	4.23	3,700,000 (sol)	50	10
Aromatic C16-C21	28000	n/c	n/c	n/c	50	10
Aromatic C21-C35	28000	n/c	n/c	n/c	50	10
Tetrachloroethene	See C4SL	0.24	0.24	4,600	10	10
Trichloroethene	See C4SL	0.13	0.13	530	10	10
cis-1,2 Dichloroethene		0.21	0.21	13,000	50	50
Vinyl Chloride	See C4SL	0.0012	0.0012	63	0.5	0.5

Notes:
f = Oral, dermal and inhalation exposure compared with oral HCV N/C = Not Calculated
* = S4UL exceeds vapour saturation limit (in brackets) ** = S4UL exceeds solubility saturation limit (in brackets)
Human Health Groundwater GAC with (sol) exceed aqueous solubility
n/c = not calculated. Under normal conditions contaminant exhibits low solubility /volatility, therefore risks from leaching and or vapour pathways are considered low.

To establish suitable compliance criteria for Surface Water review of basline groundwater quality in England and Wales was completed following research reported in Shand, P, Edmunds, W M, Lawrence, A R, Smedle y, P L, and Burke, S. 2007. The natural (baseline) quality of groundwater in England and Wales. British Geological Survey Research Report No. RR/07/06. Where compliance criteria was found below the 97.7 percentile of baseline value, the latter was adopted as GAC.

Soil Targets

Targets for Human Health have been taken from *S4ULs 'Suitable For Use Levels for Human Health Risk Assessment' – LQM and CIEH (2014)* derived using standard sandy loam soil with 1% SOM, except (#) = *EIC/AGS/CL:AIRE GAC 'Soil Generic Assessment Criteria' (2010)* . For sites where ground conditions differ significantly from sandy loam or site-specific SOM and pH are available, the generic human health targets may be revised.

Targets for Controlled waters have been derived using EA Remedial Targets Worksheet (v3.1) - using standard Sandy Loam ground conditions as described in Science Report SC050021/SR3, assuming no degradation for a 10m compliance distance with criteria of EQS or UKDWS for Surface Water and Groundwater respectively (see notes for GW targets).

Groundwater Targets
For Surface Water, targets have been taken as Freshwater EQS where available. For MTBE Predicted No Effect Concentration (European Risk Assessment Report, 2002) was used. For individual TPH fractions, in absence of UK EQS, a 5 times multiplier of UKDWS has been taken.

For Groundwater, targets have been taken as UKDWS where available. In the absence of UK targets internationally recognised criteria were adopted. For MTBE, WHO taste threshold has been adopted.

Targets for Human Health have been taken from *Society of Brownfield Risk Assessment (SoBRA) 'Development of Generic Assessment Criteria for Assessing Vapour Risks to Human Health from Volatile Contaminants in Groundwater' - Version 1.0, February 2017,* derived using sandy soil and 1%SOM. GAC were set up assuming source at 50cm below typical ground bearing slab of 15cm thickness. GAC were derived for vapour pathways only. For sites where ground conditions, or differ significantly from described above, the generic human health targets may be revised.

EPS Generic Quantitative Risk Assessment

Generic Screening Criteria (C4SLs) - All Land Uses

Contaminant	Soil Targets					
	Residential		Allotments	Commercial	Public Open Spaces	
	With Home Grown Produce	Without Home Grown Produce			Residential	Parks
Unit	mg/kg					
Arsenic	37	40	49	640	79	168
Benzene	0.87	3.3	0.18	98	140	230
Benzo(a)pyrene	5	5.3	5.7	76	10	21
Cadmium	26	149	4.9	410	220	880
Chromium (VI)	21	21	170	49	23	250
Lead	200	310	80	2330	630	1300
Chloroethene (Vinyl Chloride)	0.017	0.029	0.0058	2.2	7.8	19
Trichloroethene (TCE)	0.043	0.045	0.16	3.4	79	69
Tetrachloroethene (PCE)	1.6	1.6	11	130	3400	2500

Notes:

Targets for Human Health have been taken from the publicly available Category 4 Screening Levels (C4SLs) for assessment of land affected by contamination issued by DEFRA/CL:AIRE in December 2013 and May 2021.

Within the modelling for C4SLs, a Soil Organic Matter content of 6% has been used. Reference to site-specific data should be made where possible.

The C4SLs for the contaminant benzene along with the three chlorinated solvents are the most susceptable to changes in SOM.

May-22

APPENDIX M

Method Statement for Encountering Unexpected Contamination

METHOD STATEMENT

ACTIONS TO BE TAKEN IN THE EVENT OF DISCOVERING UNEXPECTED CONTAMINATION DURING INTRUSIVE GROUNDWORKS

If at any point during intrusive groundworks at a site, evidence of unforeseen contamination is encountered in the form of significant noxious odours, discolouration, or instability within soils or sheen/ discolouration in groundwater, the following actions will be taken:

- Intrusive works in the immediate area of the impacted ground will be suspended and the continuation of work in other areas of the site will be considered within the context of the site specific health & safety plan.
- Environmental Protection Strategies Ltd (EPS) will be contacted and appraised of the situation so that arrangements can be made to characterise the impact and determine what action may be necessary in addition to the scheduled site works. Where possible / health & safety plan permits, digital photographs of the impacted ground will be taken and emailed to EPS at the address below to assist in the initial assessment
- It may well be necessary for EPS to attend site to undertake visual inspection and obtain samples for field and/or laboratory analysis, although the actions taken will be dependent on the nature of what is encountered
- In cases where EPS consider the unforeseen contamination likely to pose a significant risk of significant harm to adjacent site users or local environmental receptors, the local authority and the Environment Agency will be informed of the situation and the actions being taken
- Once appropriate action has been agreed and undertaken, a written summary will be produced by EPS for submission to the Local Authority, (and where relevant, the Environment Agency) in accordance with planning requirements. The submission will include details of work undertaken, analytical results of investigative and validation samples obtained and conclusions and recommendations for any further actions considered necessary
- Where regulatory bodies have been involved, site works should only recommence following their agreement and in all cases should only recommence when the site manager considers it safe to do so within the context of the site specific health & safety plan.

EPS Contact Details:

Marcus Bell Associate Director
Will Evans Director
Steve Bullock Director
[redacted]

Email: [redacted] (Automatically forwarded to the above and office-based personnel)

10-12 East Parade
Leeds
LS1 2BH

[redacted]

Registered Number: 12124295