

**CONTAMINATED LAND ASSESSMENT
LAND TO THE WEST OF RODNEY STREET
ANCOATS, MANCHESTER
WATES CONSTRUCTION LTD
GEA-22434-22-182
JULY 2022**

IDOM



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TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
SECTION 1 INTRODUCTION	1
SECTION 2 PHASE 1 (NON-INTRUSIVE INVESTIGATION)	2
2.1 INTRODUCTION	2
2.2 SITE LOCATION AND SETTING	2
2.3 SITE HISTORY	2
2.4 GEOLOGY, HYDROGEOLOGY & HYDROLOGY	3
2.5 CURRENT SITE ISSUES	3
2.6 RADON GAS	4
2.7 PREVIOUS INVESTIGATIONS	4
SECTION 3 SITE INVESTIGATION RATIONALE	5
3.1 INTRODUCTION	5
3.2 SITE INVESTIGATION METHODS	6
SECTION 4 GROUND CONDITIONS	6
4.1 SURFACE GROUND CONDITIONS	6
4.2 SUB-SURFACE GROUND CONDITIONS	6
SECTION 5 ENVIRONMENTAL ASSESSMENT	7
5.1 SOIL QUALITY	7
5.2 WASTE CLASSIFICATION, OFF-SITE DISPOSAL OR RE-USE	11
SECTION 6 RISK ASSESSMENT	12
SECTION 7 UPDATED CONCEPTUAL MODEL	14
SECTION 8 PRELIMINARY REMEDIATION STRATEGY	15
SECTION 9 CONCLUSIONS	17
APPENDIX 1	19
Site Location Drawings	19
Site Investigation Plan	19
APPENDIX 2	20
Trial Pit Logs and Photographs	20
APPENDIX 3	21
Laboratory Analysis Certificates	21
APPENDIX 4	22
HazWasteOnline Assessment	22
APPENDIX 5	23
Contaminant Summary Sketch's	23

EXECUTIVE SUMMARY

A Contaminated Land Assessment was requested by Wates Construction Ltd. The purpose of the assessment was to identify any contaminative issues associated with former land use at *land to the west of Rodney Street, Ancoats* which might impact on the site's redevelopment.

SITE DETAILS

Approximate site area	0.65 ha
Current use / historic use	Residential and commercial/industrial processes.
Proposed use	Residential development with associated infrastructure and soft landscaping.

PHASE 1 NON-INTRUSIVE INVESTIGATION (Undertaken Previously)

Expected geology	Made ground over slightly gravelly Clays.
Groundwater	The site is underlain by a Secondary, undifferentiated Aquifer associated with the superficial deposits and a Principle Aquifer (Collyhurst Formation). The site is not located within a Source Protection Zone (SPZ). There are no groundwater abstractions within 500m of the site.
Surface water	The nearest surface water feature is Rochdale Canal recorded 110m southeast of the site flowing east with River Quality B. There are no surface water abstractions within 1km. There are several discharge consents within 500m of the site, all relating to the United Utilities stormwater overflow outages and treated effluent from a pumping station.

PHASE 2 EXPLORATORY INVESTIGATION (Undertaken Previously)

Ground Conditions	Made Ground/topsoil was encountered up to 1.4 m bgl. Underlying the Made Ground was natural clay.
Contamination	The Made Ground was noted to contain clinker and brick and is subject to widespread contamination with respect to future site users by lead, arsenic, pH, PAH compounds and asbestos (fibres and fragments). PAH contamination was also encountered in samples of topsoil and a sample of natural clay was impacted by heavy metals (lead and arsenic). The type and nature of contamination is generally consistent with previous phases of site investigation.

PHASE 2 EXPLORATORY INVESTIGATION

Ground Conditions	Made Ground/topsoil was encountered up to 1.4 m bgl. Underlying the Made Ground was natural clay.
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Contamination	The Made Ground was noted to contain various relics from former demolition including clinker, brick, metal, ceramic, bitumen pipe, glass and fibre glass. The site was found to be subject to moderate contamination with respect to future site users by lead, arsenic, pH, PAH compounds and asbestos (fibres and fragments). The type and nature of contamination is generally consistent with previous phases of site investigation.
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RECOMMENDATIONS	
Remediation	Remedial measures will be required to manage the risks in the context of the proposed development and protect future site users. Remedial control measures are warranted to ensure that soft landscaped areas are devoid of contaminants and suitable for end use. Such measures should include the removal of any gross contamination and relict infrastructure and the provision of clean cover in areas of soft landscaping.
Waste classification	Waste classification (ie. hazardous or non-hazardous) was undertaken on 6 samples of the made ground. Three of the samples would be classed as hazardous waste for disposal as a result of localised asbestos and hydrocarbon contamination. It is also recommended that ash encountered in MTP07/MTP10 should be re-tested before any waste disposal activities. The remaining made ground is likely to be classed as non-hazardous/inert waste.

SECTION 1 INTRODUCTION

- 1.1 Wates Construction Ltd (Wates) proposes to develop an area of land located to the west of Rodney Street, Ancoats for residential development purposes. The proposed development includes the erection of two residential apartment buildings, one of 8 storeys (68 apartments) and one of 5 storeys (50 apartments), to form a total of 118 residential apartments; and erection of 10, 3 storey townhouses; together with car and cycle parking provision, hard and soft landscaping including public realm, access, substation and other associated works.
- 1.2 IDOM Merebrook Limited (IDOM) has been commissioned by Wates to undertake supplementary site investigation works and to advise on the geo-environmental implications of the redevelopment of the site for the proposed end use.
- 1.3 The objectives of the investigation are to:
- i.* Assess surface and sub-surface ground conditions present at the site;
 - ii.* Delineation of hotspots identified by EPS;
 - iii.* Identify hazards associated with ground contamination which may place constraints on the site and the proposed development;
 - iv.* Evaluate the risks associated with any identified hazards; and
 - v.* Provide preliminary recommendations for the mitigation of any significant risks identified.
- 1.4 A Phase 1 (Non-intrusive Investigation) and a Phase 2 (Geo-Environmental Assessment) have been undertaken for the subject site.
- 1.5 The following reports have been completed for the site and were available to IDOM:
- i.* Curtins; Rodney Street, Ancoats – Phase 1 Preliminary Risk Assessment (ref: 079056-CUR-00-XX-DR-GE-001) dated July 2021;
 - ii.* EPS; Land off Rodney Street – Phase 2 Geo-Environmental Assessment (ref: UK21.5551), dated December 2021.
- 1.6 The contaminative status of the site and the implications with respect to development have been interpreted in accordance with the current government guidance on source-pathway-receptor risk assessment. This report uses a Tier 1 risk assessment to ascribe a conservative qualitative appraisal of the hazards associated with the site.
- 1.7 This report has been prepared for Wates Construction Ltd for the sole purpose described above and no extended duty of care to any third party is implied or offered. Third parties making reference to the report should consult Wates Construction Ltd and IDOM as to the extent to which the findings may be appropriate for their use.

SECTION 2 PHASE 1 (NON-INTRUSIVE INVESTIGATION)

2.1 INTRODUCTION

- 2.1.1 A Phase 1 Preliminary Risk Assessment was undertaken for the subject site by Curtins (ref: 079056-CUR-00-XX-DR-GE-001) dated July 2021. A concise summary of the report is provided below.

2.2 SITE LOCATION AND SETTING

- 2.2.1 The site lies to the east of Ancoats, Manchester, approximately 1.30km east of Manchester Victoria train station.
- 2.2.2 The site is located at National Grid Reference 385304, 398959 and indicated on drawing 22424-001-001, presented in Appendix 1 of this report.
- 2.2.3 The site lies in an area of predominantly soft landscaping between Rodney Street to the east, Jersey Street in the south, and Wadeford Close to the west. The site is roughly rectangular and occupies an area of c.0.65ha.
- 2.2.4 Throughout the site lie small areas of hard standing which include asphalt, concrete and flagstone sections. An iron fence surrounds the perimeter of the southern half of the site, and several deciduous trees lie along the site perimeter.
- 2.2.5 The site was predominantly flat, with the northern sections surrounded by a bund of soil around 0.50m above ground level.
- 2.2.6 The site is set within a residential area with a multi-storey tower block immediately north and several double story properties within the wider surroundings.

2.3 SITE HISTORY

- 2.3.1 Earliest mapping records (1840's) show the site as residential, developed with multiple rows of terraced housing with gardens and outhouses.
- 2.3.2 By 1963 the site appears to have been redeveloped after the demolition of the terraced housing and an unnamed works was constructed in the north of the site.
- 2.3.3 By 1969 the Derwent residential building is shown to have been erected in the south of the site, and new terraced residential properties are shown within the north of the site.
- 2.3.4 By 1983 the Rochdale Canal arms located to the west of the site is shown to have been infilled and repurposed to include a new industrial estate and residential buildings.
- 2.3.5 By 1999, Portland Street Industrial Estate is shown to have been constructed on part of the recreation ground to the west of the site.

- 2.3.6 By 2006, all properties on the site are shown to have been demolished, leaving the site covered in mostly soft landscaping as of present.
- 2.3.7 The risk from Made Ground posed to the site's end-users and groundwater is considered to be Moderate/Low taking into account the site's historical industrial land use and periods of redevelopment.
- 2.3.8 The risk posed to surface water and groundwater receptors is considered to be Low due to lack of abstraction points within 500m and the thickness of low permeability superficial deposits underlying the site over the Principal Aquifer in Collyhurst Formation.
- 2.3.9 The risk posed to site end-users from groundwater generating gases arising from Made Ground and demolition materials on the site is considered to be Moderate/Low accounting for the anticipated thickness of Made Ground soils underlying the site.

2.4 GEOLOGY, HYDROGEOLOGY & HYDROLOGY

- 2.4.1 The published geological map indicates that the site is underlain by superficial Devensian Till overlying bedrock geology of the Collyhurst Sandstone Formation.
- 2.4.2 A total of 13no. boreholes were complete by EPS between September and October 2021 to a maximum depth of 35m. Ground conditions encountered found made ground (up to 2.6m), overlying slightly gravelly clays to depths of 28m. Further to this lay weathered sandstone to the base of the boreholes.
- 2.4.3 The EPS investigation identified perched groundwater at depths between 0.199-9.031, whilst the natural groundwater table was indicated to lie around 15-20m.
- 2.4.4 The superficial Devensian Till deposits are classified as a Secondary Aquifer, whilst the underlying Collyhurst Sandstone is classified as a Principle Aquifer. The site is not located within a Source Protection Zone (SPZ).
- 2.4.5 The nearest surface water feature is the Rochdale Canal, located approximately 110 m to the southeast of site.

2.5 CURRENT SITE ISSUES

- 2.5.1 Potentially significant environmental issues have been investigated within relevant distances of the site, based on the database of records supplied by Groundsure and contained in the Curtins report.
 - i.* Water discharge or pollution incidents within 250 m of the site;
 - ii.* Waste management sites within 250 m of the site;
 - iii.* Statutory authorisations within 50 m of the site;
 - iv.* Trade directory entries of possible contaminative use within 50 m of the site;

- v. Special protection or conservation areas within 50 m of the site; and
 - vi. Any other relevant issues.
- 2.5.2 Potentially significant environmental issues identified by the above searches are summarised in Table 1 below.

Table 1: Potentially significant environmental issues

ENVIRONMENTAL CATEGORY	DESCRIPTION
Water discharge or pollution incidents within 250 m	5 discharge consent are recorded 225 m to the east of site. The consents were issued to United Utilities Water Limited for sewer storm overflows. A pollution incident was recorded 134 m to the southeast in 1998. The incident was recorded as Category 3 (minor impact) and involved a fire incident.
Waste management sites within 250 m	No waste management sites were identified within 250 m (active or historic).
Statutory authorisations within 50 m	None within 50 m.
Trade directory entries of possible contaminative use within 50 m	None within 50m
Special protection or conservation areas within 50 m	None within 50m
Other relevant issues	The site lies within the River Irk Nitrate Vulnerable Zone (Quadrant ref: A13NW)

2.6 RADON GAS

- 2.6.1 The site is located within a low probability radon area where <1% of homes are estimated to be at or above the Radon Action Level. Guidance issued by the Buildings Research Establishment (BRE-211) indicates that radon protection measures would not be required within the proposed development.

2.7 PREVIOUS INVESTIGATIONS

- 2.7.1 A site investigation was produced by EPS between 27th September and 14th October 2021.
- 2.7.1.1 The EPS investigation report was made available to IDOM, and comprised the following scope of works:

- i.* 4 cable percussion boreholes (BH01-BH04) eight boreholes to a maximum depth of 35m)
 - ii.* 9 window sample boreholes (WS01A, WS01B, WS01C, WS02A, WS02B, WS03B, WS04, WS05) to a maximum depth of 6m bgl;
 - iii.* 10 machine dug trial pits (TP01-TP10) to a maximum depth of 1.60 m bgl;
- 2.7.1.2 Samples were recovered and submitted for analysis by an appropriate UKAS/MCERT accredited laboratory, and the key results of laboratory testing are summarised below:
- i.* Detectable concentrations of ACM, in the form of chrysotile fibre bundles were identified in shallow soils recovered from TP01, TP02, TP08 & WS03B.
 - ii.* Concentrations in TP01 and TP02 were less than 0.1% and concentrations in samples from TP08 and WS03b were 0.016% and 0.001% respectively.
 - iii.* No Phenols, PCB's or hexavalent chromium were detected in any of the tested samples.
 - iv.* Using HazWaste Online™ a waste classification was undertaken on both the made ground and natural soils and found both to fall within the inert waste category (code 17 05 04).
- 2.7.1.3 Six rounds of gas monitoring were undertaken at nine locations (WS01C, WS02B, WS03B, WS04, WS05, BH01, BH02, BH03, BH04). Positive flow readings were observed in several boreholes, with the highest being 1.0l/hr in WS04. Concentrations of carbon dioxide were detected to a maximum of 11.8% v/v in BH02. No methane was detected during any monitoring visit and organic vapours were <0.5ppm v/v).
- 2.7.2 Groundwater level data indicated that WS04 was dry during each monitoring round. The shallow groundwater identified in the top few meters is considered representative of perched groundwater, whilst the deeper levels identified within BH02 and BH03 are considered representative of the natural groundwater table which ranged from 15.765 - 19.832m bgl.

SECTION 3 SITE INVESTIGATION RATIONALE

3.1 INTRODUCTION

- 3.1.1 A site investigation rationale has been devised in accordance with the findings of the Phase 1 and Phase 2 investigative reports. Priority contaminants were identified as asbestos, PAH, and heavy metals.
- 3.1.2 Intrusive sampling locations were chosen on the basis of providing broad spatial coverage of the site and targeting locations not previously sampled in the previous

investigations, with a particular focus on targeting the areas beneath the former structures on site where asbestos fibres had been detected.

3.2 SITE INVESTIGATION METHODS

3.2.1 An intrusive investigation was carried out by IDOM from the 28th-29th April and the 4th May 2022 and comprised the following scope of work:

- i.* Eighteen machine-dug trial holes (MTP1 to MTP18) to a depth of 2.80 m bgl (these were primarily targeted in areas of previously identified contamination, in the vicinity of former structures);
- ii.* Chemical testing for a wide variety of contaminants including the contaminants of concern

3.2.2 Exploratory hole locations are indicated on drawing 22434-302-001 in Appendix 1. Logging of exploratory holes was undertaken by a IDOM officer. Exploratory hole logs are contained in Appendix 2.

3.2.3 In addition to the eighteen trial holes excavated, a total of 10no. slit trenches were excavated by Williams Groundworks Ltd using both vacuum extraction and hand-dug pitting.

3.2.4 Representative soil samples were taken from various depths and strata to assess the contaminative status of the site. Soil samples were submitted to an MCERTS/UKAS accredited laboratory for chemical analysis of a broad suite of potential contaminants. The results are provided in Appendix 3.

SECTION 4 GROUND CONDITIONS

4.1 SURFACE GROUND CONDITIONS

4.1.1 The site is an undeveloped parcel of land predominantly covered with soft landscaping. There are localised areas of hard standing which include asphalt, concrete and flagstone sections.

4.1.2 The site is separated by metal fencing and a small road which cuts east-west across the site. MTP01 to, MTP04, MTP17 and MTP18 were advanced in the land to the north and MTP05 to MTP16 inclusive were advanced the southern area.

4.2 SUB-SURFACE GROUND CONDITIONS

4.2.1 The encountered ground conditions were made ground overlying slightly gravelly clays to depths of up to 2.8m.

4.2.2 A summary of the ground conditions encountered is presented in Table 5, whilst a more detailed assessment of the strata is contained in the following sections of the report.

Table 5: Summary of Sub-surface Ground Conditions

STRATA	DEPTH TO TOP RANGE (m bgl)	THICKNESS RANGE (m)
Topsoil	0.0	0.1 – 0.4
Made Ground	0.0	0.2 - 1.25
Natural Clay	0.6 – 1.4	0.1 – 2.1

4.2.3 Topsoil

4.2.3.1 Topsoil was encountered at all locations. The stratum generally comprised of grass over brown slightly sandy clay with rootlets.

4.2.4 Made Ground

4.2.4.1 Made ground was encountered at each investigation location and generally comprised dark brown sandy slightly gravelly CLAY with inclusions of red brick, concrete, pottery, glass, clinker and mixed lithologies. Concrete basement slabs were also recorded in MTP05, MTP09, MTP10, MTP12 and MTP16.

4.2.4.2 Several fragments of suspected asbestos containing material were encountered in the form of bitumen pipe fragments (MTP08 at 0.65m bgl, MTP11 at 0.60m), insulation surrounding a buried boiler (MTP06 at 0.60m) and pipe insulation (MTP08 at 0.65m bgl).

A layer of ash was encountered at MTP07 (0.7 to 1.00 m bgl) and MTP10 (1.0 to 1.1 m bgl). A strong creosote odour was reported at MTP02 at 0.7m bgl and a strong hydrocarbon odour was reported at MTP06 at 0.8m bgl.

4.2.5 Natural Ground

4.2.5.1 Superficial deposits of gravelly clay was encountered at in all locations excluding MTP05 and MTP06 where concrete obstructions limited further advancement.

4.2.5.2 The natural deposits generally comprised firm to stiff mottled grey and brown slightly gravelly clay.

4.2.5.3 Groundwater/perched water was encountered at MTP06 (0.8 m bgl).

SECTION 5 ENVIRONMENTAL ASSESSMENT

5.1 SOIL QUALITY

5.1.1 A total of 19 made ground soil samples were submitted to the laboratory for chemical analysis. The laboratory chemical analysis certificates are contained in Appendix 3. The results of the analysis are summarised in Table 7.

5.1.2 An initial screening exercise has been undertaken whereby contaminant concentrations recorded in soils have been assessed against *Suitable for Use Levels*

(S4ULs) published in 2015 by LQM/CIEH¹. These precautionary screening levels are designed to be representative of minimal risk to human health in a number of land use scenarios. In this report S4ULs have been selected for a residential land use where the possibility of consumption of homegrown produce exists and assuming a soil organic matter of 2.5 %. For lead the DEFRA Category 4 Screening Level² has been used as this is based on updated toxicological data and a low risk to human health.

- 5.1.3 An additional set of phytotoxin screening levels have been adopted from 'The Code of Agricultural Practice for the Protection of Soil' Ministry of Agriculture, Fisheries and Food (MAFF), 1993, which are protective of healthy plant growth.

Table 7: Summary of Soils Chemical Analysis Results

CONTAMINANT	No of Tests	MAX (mg.kg ⁻¹)	MEAN (mg.kg ⁻¹)	SCREENING LEVEL (SL) (mg.kg ⁻¹)	No > SL*
HUMAN HEALTH RISK ASSESSMENT					
Asbestos in soil	19	2.152	-	Detected	2
pH	19	10.7	5.8	5 – 9	3
Arsenic	19	52.0	16.4	37	2
Cadmium	19	1.5	0.3	11	0
Chromium (total)	19	45.0	19.2	910	0
Hexavalent Chromium	19	18.0	3.5	6	1
Lead	19	630.0	141.1	200	4
Mercury	19	0.8	0.2	40	0
Nickel	19	47.0	18.2	130	0
Selenium	19	1.0	0.7	250	0
TPH Aliphatic >EC ₅ - EC ₆	19	0.001	0.001	78	0
TPH Aliphatic >EC ₆ - EC ₈	19	0.001	0.001	230	0
TPH Aliphatic >EC ₈ - EC ₁₀	19	0.001	0.001	65	0
TPH Aliphatic >EC ₁₀ - EC ₁₂	19	1.00	0.68	330	0
TPH Aliphatic >EC ₁₂ - EC ₁₆	19	23.00	3.11	2400	0
TPH Aliphatic >EC ₁₆ - EC ₂₁	19	400.00	27.92	92000	0
TPH Aliphatic >EC ₂₁ - EC ₃₅	19	220.00	23.00	92000	0
TPH Aromatic >EC ₅ - EC ₇	19	0.001	0.001	140	0
TPH Aromatic >EC ₇ - EC ₈	19	0.001	0.001	290	0
TPH Aromatic >EC ₈ - EC ₁₀	19	0.001	0.001	83	0
TPH Aromatic >EC ₁₀ - EC ₁₂	19	13.00	1.32	180	0
TPH Aromatic >EC ₁₂ - EC ₁₆	19	30.00	4.81	330	0

¹ Nathanail, C. P., McCaffrey, C., Gillett, A. G., Ogden, R. C. and Nathanail, J. F. 2015. *The LQM/CIEH S4ULs for Human Health Risk Assessment*. Land Quality Press, Nottingham. Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3100. All rights reserved. Including August 2015 nickel update.

² SP1010 *Development of Category 4 Screening Levels Main Report* (Dec 2013) and SP1010 *Policy Companion Document* (Mar 2014).

TPH Aromatic >EC ₁₆ - EC ₂₁	19	260.00	33.89	540	0
TPH Aromatic >EC ₂₁ - EC ₃₅	19	360.00	65.42	1500	0
Benzene	13	0.001	0.001	0.17	0
Toluene	13	0.001	0.001	290	0
Ethylbenzene	13	0.001	0.001	110	0
Xylene	13	0.002	0.002	130	0
Naphthalene	19	0.05	0.03	5.6	0
Acenaphthylene	19	0.62	0.06	420	0
Acenaphthene	19	4.60	0.53	510	0
Fluorene	19	3.50	0.45	400	0
Phenanthrene	19	31.00	3.92	220	0
Anthracene	19	8.30	0.94	5400	0
Fluoranthene	19	34.00	5.20	560	0
Pyrene	19	29.00	4.67	1200	0
Benzo(a)anthracene	19	17.00	2.66	11	2
Chrysene	19	11.00	1.99	22	0
Benzo(b)fluoranthene	19	17.00	2.74	3.3	4
Benzo(k)fluoranthene	19	4.40	0.89	93	0
Benzo(a)pyrene	19	15.00	2.39	2.7	4
Indeno(1,2,3-c,d)pyrene	19	6.40	1.17	36	0
Dibenzo(a,h)anthracene	19	2.00	0.34	0.28	5
Benzo(g,h,i)perylene	19	7.80	1.42	340	0
Phenol	19	1.0	0.7	200	0
PHYTOTOXICITY RISK ASSESSMENT					
Copper	19	130.0	44.3	200	0
Nickel	19	47.0	18.2	110	0
Zinc	19	370.0	100.9	300	0

Notes: * Number of samples exceeding screening level

nd = not detected

5.1.4 Zootoxic Metals (harmful to human health)

5.1.4.1 Several zootoxic metals are above the screening level for harmful to human health:

- i. Arsenic was detected at concentrations in excess of the screening criteria in two samples. This included samples MTP05 at 0.5 m and MTP18 at 0.3 m. Both of samples of made ground were associated with inclusions of clinker and brick; and
- ii. Hexavalent Chromium was detected at concentrations in excess of the screening criteria in one of the samples recovered from MTP09 at 1.0m. The sample was associated with former demolition material including a concrete slab.
- iii. Lead was detected at concentrations in excess of the screening criteria in four samples. This included samples from slip trench 1, MTP06, MTP12 and

MTP09. The of samples of made ground were associated with inclusions of demolition materials and brick.

5.1.5 Organic Contaminants

5.1.5.1 Several polyaromatic hydrocarbons (PAHs) compounds were recorded at concentrations above the applicable human health criteria:

- i.* Benzo(b)fluoranthene was detected at concentrations in excess of the screening criteria in four samples of made ground slit trench, slit trench 2, slit trench 5 and MTP14 at 0.4m. The majority of samples of made ground were associated with inclusions of asphalt.
- ii.* Benzo(a)pyrene was detected at concentrations in excess of the screening criteria in four samples. This included samples taken from slit trench 1, slit trench 2, slit trench 5, MTP06 and MTP14. The majority of samples of made ground were associated with inclusions of clinker, brick and asphalt.
- iii.* Benzo(a)anthracene was detected at concentrations in excess of the screening criteria in two samples. This included samples taken from slit trench 5 and MTP14 at 0.40m bgl. The majority of samples of made ground were associated with inclusions of clinker, brick and asphalt.
- iv.* Dibenzo(a,h)anthracene was detected at concentrations in excess of the screening criteria in five samples. This included samples taken from slit trench 1, slit trench 2, slit trench 5, MTP06 and MTP14. The majority of samples of made ground were associated with inclusions of clinker, brick and asphalt. The sample recovered MTP06 was also noted to have a strong hydrocarbon odour.

5.1.6 Inorganic Contaminants

5.1.6.1 Elevated pH was recorded in three samples (MTP02 at 0.7 m, MTP05 at 0.5 m and MTP12 at 0.8 m. This is considered likely to relate to concrete and brick/mortar fragments.

5.1.6.2 Asbestos was detected in two of the nine soil samples screened and in a bulk sample taken from MTP08. Asbestos was detected in sample MTP06 (0.6 m) as loose amosite at a concentration of 0.001%. Sample MTP11 (0.6 m) contained bitumen pipe at a concentration of 2.152 %. The bulk sample taken from MTP06 (0.65m) included Chrysotile pipe insulation with cellulose fibres.

5.1.6.3 It is considered that asbestos contamination is likely across the majority of the formerly developed site (following the demolition of earlier structures).

5.1.7 Summary

5.1.7.1 The Made Ground was noted to contain clinker and brick is subject to moderate contamination by lead, arsenic, pH, PAH compounds and asbestos.

5.1.7.2 Schematic drawings detailing the extent of the contamination can be found in Appendix 5.

5.2 WASTE CLASSIFICATION, OFF-SITE DISPOSAL OR RE-USE

5.2.1 Waste Considerations

5.2.1.1 The IDOM data was assessed according to the Environment Agency WM3 Guidance using HazWaste Online. One sample of made ground (MTP06 at 0.6 m) comprising high concentrations of TPH would be classified as hazardous. The HazWaste Online assessment is contained in Appendix 4.

5.2.1.2 Eleven samples of made ground (MTP01-02, MTP04-06, MTP09, MTP12, MTP14 and Slip Trench's 1, 2, 5) were analysed for a WAC suite. The results from the WAC analysis indicate the material to be suitable for disposal at an inert/ non-hazardous landfill although acceptance be to the discretion of the receiving sites. The full Waste Classification Report is included in Appendix 6.

5.2.1.3 Asbestos was detected in three samples during the IDOM investigation. Sample MTP11 (0.6m bgl) contained bitumen pipe at a concentration of 2.152 % which would be classed as hazardous waste for disposal purposes. The bulk sample taken from MTP06 (0.65m) also included Chrysotile pipe insulation with cellulose fibres. Fragments of asbestos would automatically mean a hazardous classification for waste disposal purposes.

5.2.1.4 Asbestos was also encountered in four samples during the EPS investigation. It was noted that the highest concentrations were obtained from MTP08 and WS03b and were quantified at 0.016% and 0.001% respectively.

5.2.1.5 Materials, including waste soils which are not to be retained on site, should be removed and disposed of in accordance with all relevant statutes including the *Environmental Protection Act 1990* (as amended), *The Controlled Waste Regulations 2012* (as amended), *The Waste (England and Wales) Regulations 2011* (as amended), *The Hazardous Waste (England and Wales) Regulations 2005* as amended, *The Waste Management (England and Wales) Regulations 2006*, and *The Environmental Permitting (England and Wales) Regulations 2016* (as amended).

5.2.1.6 It is a requirement of these regulations that waste sent to landfill should have been subject to measures to reduce the amount of waste, reduce harmful or hazardous properties and facilitate recycling. These requirements may be satisfied by measures such as segregation and screening of wastes to recover suitable fill and material for crushing, segregation of inert materials and putrescible wastes.

5.2.2 Re-use Considerations

5.2.2.1 As a sustainable alternative to off-site disposal, it may be possible to re-use site-won soils provided the following criteria are met:

- i.* Use of the material will not create an unacceptable risk of pollution to the environment or harm to human health;
 - ii.* The material must be chemically and geotechnically suitable without further treatment;
 - iii.* There must be certainty of use within the scheme;
 - iv.* Material should only be used in the quantity necessary for that use.
- 5.2.2.2 Provided these criteria are met, the re-use of site-won materials is unlikely to be deemed a waste activity. Production of a *Materials Management Plan* under the industry *CL:AIRE Code of Practice on the Definition of Waste* represents a robust method of demonstrating that the proposed re-use of material meets the criteria and is not liable for landfill tax.
- 5.2.2.3 A schematic drawing detailing the approximate extent and volumes of the waste classifications can be found in Appendix 5.

SECTION 6 RISK ASSESSMENT

- 6.1 The potential sources of contamination at the site and the implications with respect to development have been interpreted in accordance with the current government guidance on source-pathway-receptor risk assessment.
- 6.2 The investigations demonstrate that the former uses of the site have resulted in contamination (principally within made ground) by lead, arsenic, pH, PAH compounds and asbestos. The type and nature of contamination is generally consistent with previous phases of site investigation.
- 6.3 These materials are considered for their potential to act as sources for a number of pollutant linkages.
- 6.4 The potential impacts of contamination sources have been considered with respect to the following receptors:
- i.* The general public and present site users,
 - ii.* Residents of future development,
 - iii.* Groundwater,
 - iv.* Surface water,
 - v.* Construction workers,
 - vi.* Adjacent land, and
 - vii.* Infrastructure.

- 6.5 In each case the existence of a pollutant linkage requires a pathway by which the receptor could be exposed to the source. A qualitative assessment of risk is thus considered in the first instance with respect to the site in its current condition and is summarised in the sections below.
- 6.6 The general public and present site users
 - 6.6.1 The site is currently unused, largely surfaced with soft landscaping and hoarded off. The general public is considered to be at a low risk of exposure to the contaminants encountered.
- 6.7 Residents of future development
 - 6.7.1 Soil contamination (chemical)
 - 6.7.1.1 Contamination was encountered in soil, principally within made ground. The proposed development includes residential homes with private gardens and public space.
 - 6.7.1.2 In the absence of mitigation measures there is the potential for direct contact, accidental ingestion and the inhalation of contaminated dusts. As a result, the risk to future site users is considered to be moderate.
 - 6.7.2 Hazardous ground gas
 - 6.7.2.1 Ground gas has been identified on site with CO₂ at maximum level of 11.8% with no flow detected. It has therefore been specified within previous reports that gas protection will be required. The gas regime has been characterised as CS₂.
 - 6.7.3 Asbestos
 - 6.7.3.1 Asbestos was detected in three samples during the IDOM investigation. Sample MTP11 (0.6m bgl) contained bitumen pipe at a concentration of 2.152 % which would be classed as hazardous waste for disposal purposes. The bulk sample taken from MTP06 (0.65m) also included Chrysotile pipe insulation with cellulose fibres. The pathways that may be present for future site users may be considered broken where hardstanding confines the contaminated soils.
 - 6.7.3.2 Given the age of the former buildings at the site it is likely that asbestos would be present in these structures. Based on the widespread nature of the asbestos contamination the risk level is concluded as moderate to high.
- 6.8 Controlled waters
 - 6.8.1 Although the underlying bedrock is classified as a Principal Aquifer, the risks to controlled waters are considered to be low due to the low permeability of the cohesive superficial strata encountered.
- 6.9 Construction workers

- 6.9.1 Potentially, construction workers are initially at the greatest risk from exposure to hazardous contamination due to excavation works and during the handling of materials including imported soils. Exposure could occur due to inhalation and ingestion of dust, direct or dermal contact with soils.
- 6.9.2 Providing dust levels are kept within statutory limits, appropriate PPE is worn at all times and appropriate health and safety procedures are adhered to during the construction phase, the levels of chemical contamination recorded to date presents a moderate risk to construction workers.
- 6.9.3 The findings of the investigation would suggest that moderate quantities of asbestos are likely to be encountered. If any evidence of visually identifiable ACM is suspected and to be disturbed during the site development, it is recommended that works are postponed until a suitable assessment and control measures are put into place.
- 6.10 Adjacent land
- 6.11 No pathways have been assessed to be likely to present a risk to the adjacent land. Therefore, the risk to adjacent land is considered low.
- 6.12 Infrastructure
- 6.12.1 PAH contamination with the potential to permeate polymeric services has been identified by this investigation, however it is recommended that the utility provider is consulted with respect to their requirements for water supply pipes.
- 6.12.2 Utility companies apply strict guideline levels on use of polymeric pipes and may consider all made ground unsuitable for typical plastic pipe materials to be used.

SECTION 7 UPDATED CONCEPTUAL MODEL

- 7.1 Following completion of the supplementary phase 2 investigation the conceptual model for the site, with relation to pollutant linkages, has been updated. The revised model is presented in Table 8 below.

Table 8: Revised Conceptual Model

POSSIBLE POLLUTANT LINKAGE			RISK CHARACTERISATION
POTENTIAL SOURCES	PATHWAYS	RECEPTORS	
Heavy metals and hydrocarbons (made ground)	Contact with contaminated soil	Human health (current users)	Low risk identified Made ground is impacted by several forms of contamination. However, the site has few current site users.
	Ingestion and inhalation of contaminated soil and dust	Human health (current users)	
Heavy metals and hydrocarbons (made ground)	Contact with contaminated soil	Human health (future residents, construction workers and members of the public)	Moderate risk identified Contamination of made ground soils metals, PAH and asbestos. Mitigation measures will be required in the limited areas of soft

POSSIBLE POLLUTANT LINKAGE			RISK CHARACTERISATION
POTENTIAL SOURCES	PATHWAYS	RECEPTORS	
	Ingestion and inhalation of contaminated soil and dust	Human health (future residents, construction workers and members of the public)	landscaping. Outside of these areas buildings and hardstanding will sever potential pathways.
Asbestos (made ground and structures)	Ingestion and inhalation of contaminated soil and dust	Human health (future residents, construction workers and members of the public)	Moderate risk identified A significant number of asbestos detections (fibres and fragments) were reported across the site.
Contamination (all forms)	Vertical migration to aquifer	Controlled waters	Low risk identified Limited shallow groundwater has been encountered and a significant thickness of cohesive clay acts as an aquitard to the aquifer at depth.
Contamination (all forms)	Horizontal migration to surface water	Controlled waters	Low risk identified Considering the distance to the nearest sensitive water receptor and lack of abstraction points, this pathway is considered unlikely.
Hydrocarbons	Direct contact	Plastic water pipes	Moderate risk identified Moderate PAH contamination presents a risk to permeable services.
Hazardous hazardous/Vapours In soil	Ingress into buildings and voids	Human health (future residents, construction workers and members of the public)	Low risk identified Based on the available data supplied in the EPS report, the ground gas regime is considered to be Characteristic Situation 2 (CS2) (low risk).
Adjacent Land	Horizontal migration of groundwater/gas.	Neighbouring properties	Low risk identified The available data indicates a low risk.

SECTION 8 PRELIMINARY REMEDIATION STRATEGY

- 8.1 The identified risks at the site can be mitigated by removal of either the source, pathway or receptor. With reference to the conceptual model for the site a remediation strategy, based on source or pathway removal, has been designed.
- 8.2 It is understood the proposed development comprises two residential blocks (one of 5 storeys and one of 8 storeys), along with multiple townhouses, associated access roads and soft landscaping.
- 8.3 The investigations to date demonstrate that the former uses of the site has resulted in contamination (principally within made ground) by pH, lead, arsenic, Hexavalent Chromium, PAH compounds and asbestos (fibres and fragments).
- 8.4 It was noted that obstructions/relict concrete were encountered at several locations.
- 8.5 Remediation activities will be limited to the following:
- i. Removal of localised grossly impacted soils;

- ii. The provision of clean cover in areas of soft landscaping.
 - iii. Implementation of gas protection measures in accordance with CS2 requirements.
- 8.6 Identified Contamination
 - 8.6.1 Fibrous asbestos/fragments, PAH, heavy metals and pH were identified in elevated concentrations during the intrusive investigation of the subject site. As a result, clean cover is required in areas of soft landscaping (including private and communal gardens).
- 8.7 Gross contamination
 - 8.7.1 The site included various demolition relics including an unspecified storage tank and disused boiler.
 - 8.7.2 To date the presence organoleptic evidence of contamination in this area has been limited to strong creosote and hydrocarbon odours at MTP02 at 0.7m bgl MTP06 at 0.8m bgl. Tanks and related infrastructure should be removed in a controlled manner with method statements in place as appropriate to avoid the release of contaminated material.
 - 8.7.3 Should grossly impacted soils be encountered, they should be excavated or treated and disposed of in an appropriate manner. If free product is encountered on groundwater, it should be removed using absorbent pads or by skimming. Once the free product has been removed the excavation shall be left open for a period of 24 hours to ensure that there is no contamination rebound. If this is the case, the process shall be repeated and the pit left open for a further 24 hours.
 - 8.7.4 Any areas of gross hydrocarbon contamination identified should be treated or removed off site.
- 8.8 Clean cover
 - 8.8.1 Clean capping is required in soft landscaped areas. This activity will require the use of suitably validated materials.
 - 8.8.2 The remedial strategy requires newly formed areas of soft landscaping to comprise:
 - i. 600 mm of clean validated soil over a anti-dig barrier / membrane in private gardens and 300 mm in communal landscaping.
 - ii. Minimum of 150mm topsoil.
 - 8.8.3 Should made ground remain then a high visibility geotextile will also be required.
 - 8.8.4 Material imported for the formation of landscaped areas should be obtained from a validated source. The validation should incorporate an assessment of the provenance of the material and chemical analysis.

- 8.8.5 Once placed, the depth of placed the thickness of the clean capping shall be verified by hand-dug pit.
- 8.8.6 Validation of the chemical quality of clean cover shall be obtained at a rate of one sample per 250 m³ and a minimum of three samples.
- 8.9 General measures
- 8.9.1 Asbestos has been recorded in soils, and controls will be required during the construction phase. It will also be necessary to ensure suitable material handling controls are in place within the asbestos contaminated areas to prevent cross-contamination during the groundworks and construction process. Dust control measures are recommended during the construction phase – primarily ensuring the damping down of soils and placing crush down for haulage roads. If visible asbestos is noted at formation level, then it is recommended that it is covered or disposed of appropriately. Operatives involved in this task will require appropriate asbestos awareness training and suitable PPE/RPE. A task specific method statement will be required detailing dust suppression and appropriate materials handling.
- 8.9.2 Potential risks to construction workers have been identified and the adoption of appropriate Health and Safety procedures will ensure that risks to operatives from hazardous materials at the site are minimised. Operatives should not be allowed to eat, drink or smoke on site except in designated areas and should be required to wash all exposed skin at the end of each shift. Operatives should be informed of the potential hazards at the site and should be required to report any observations of suspect material.
- 8.9.3 Given the concentrations of asbestos, TPH and ash recorded within made ground it is possible that some soils destined for disposal will be classified as hazardous waste. Careful segregation should be employed to minimise the quantities of material to be disposed of as hazardous, including segregation of natural ground pile arisings.
- 8.9.4 It is recommended that this report is submitted to the regulators (Local Authority EHO and Planners, Environment Agency Planning Liaison and NHBC) for approval prior to commencement of the works.
- 8.9.5 Any observations of ground conditions atypical of those already described should be reported to IDOM immediately so that an assessment of appropriate action can be made.

SECTION 9 CONCLUSIONS

- 9.1 The investigations to date demonstrate that the former uses of the site has resulted in contamination (principally within made ground) by lead, arsenic, pH, PAH, TPH compounds and asbestos.
- 9.2 The adopted screening criteria protective of future users have been found to be exceeded within several samples of the made ground. The final development will require the provision of clean cover over a suitable geo-textile membrane to be installed in gardens and landscaped areas.
- 9.3 Gas monitoring indicates that gas protection measures will be required – further requirements will be set out in a remediation strategy.
- 9.4 Test results identify localised hotspots of contamination that would be classified as hazardous waste. Should waste disposal be necessary, it is recommended that excavated materials be segregated to minimise the quantities of material to be disposed of as hazardous, including segregation of natural ground pile arisings.
- 9.5 A full remediation method statement will be issued under a separate title detailing the remediation and validation requirements.
- 9.6 It is recommended that this report is submitted to the regulators (Local Authority EHO and Planners, Environment Agency Planning Liaison and NHBC) for approval prior to commencement of the works.
- 9.7 Any observations of ground conditions atypical of those already described should be reported to IDOM immediately so that an assessment of appropriate action can be made.

APPENDIX 1 Site Location Drawings
 Site Investigation Plan

APPENDIX 2

Trial Pit Logs and Photographs

APPENDIX 3

Laboratory Analysis Certificates

APPENDIX 4

HazWasteOnline Assessment

APPENDIX 5

Contaminant Summary Sketch's

IDOM

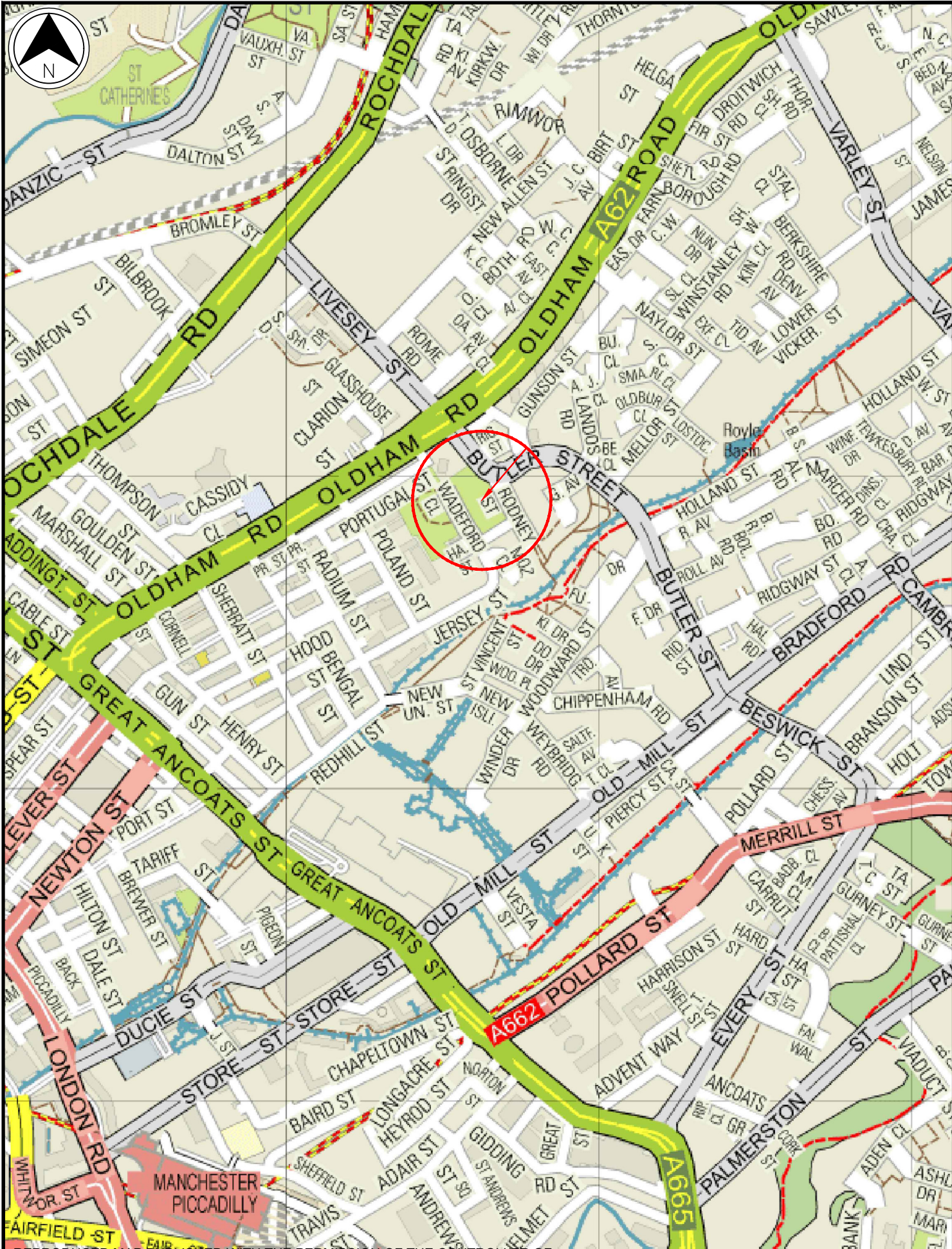
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APPENDIX 1 Site Location Drawings
 Site Investigation Plan



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Site Location Plan

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First Issue		13-05-2022	-
		FDO	LNW
ISSUE DETAILS		DWN	CHD
DWG NO.		22434-001-001	REVISION
SCALE		N.T.S	DATE
			May 2022
DRAWN		FDO	CHECKED
			LNW
			FRAME DIMS (mm)
			(A4) 250x181
			APPROVED
			LNW



Legend

Site boundary

MTPref

Merebrook trial pit with location reference

First Issue	13-05-2022		-
	FDO	LNW	LNW
	DWN	CHD	APP'D

ISSUE PURPOSE

PRELIMINARY

CLIENT

Wates Construction

PROJECT

Rodney Street Ancoats

DWG TITLE

Undertaken Trial Pit Investigation Locations

DWG NO.		REVISION
22434-304-001		-
SCALE	DATE	FRAM DIMENSIONS (mm)
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DRAWN	CHECKED	APPROVED
FDO	LNW	LNW

London

Kent

Derbyshire

Manchester

Stirling

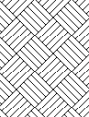
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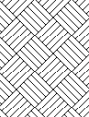
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APPENDIX 2

Trial Pit Logs and Photographs

IDOM						TRIAL PIT LOG		TrialPit No TP01 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385273.93 - 398994.75 Level: 0.00		Date 28/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX						Depth 1.50		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.50	D,J,V		0.40	-0.40		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.		
				0.60	-0.60		MADE GROUND: Dark brown sandy slightly gravelly CLAY. Gravel is sub-angular to angular fine to coarse including ceramic, red brick, glass, concrete and mixed lithologies.		
							Firm mottled brown and grey CLAY with rare cobbles of sandstone, limestone and mudstone.		
				1.50	-1.50		End of Pit at 1.500m		
							1		
							2		
							3		
							4		
							5		
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability			Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.		

IDOM						TRIAL PIT LOG		TrialPit No TP02 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385286.12 - 398998.69 Level: 0.00		Date 28/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX						Depth 2.20		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.70	D,J,V		0.40	-0.40		MADE GROUND: Grass over dark brown sandy slightly gravelly CLAY with common rootlets. Gravel is sub-angular to sub-rounded including sandstone, slate, clinker, red brick, pottery and mixed lithologies.		
				0.60	-0.60		MADE GROUND: Grass over dark brown sandy slightly gravelly CLAY with common cobbles of red brick and concrete. Gravel is sub-angular to sub-rounded including sandstone, slate, clinker, red brick, pottery and mixed lithologies.		
				0.70	-0.70		MADE GROUND: Greyish brown clayed sandy GRAVEL. Gravel is sub-rounded to angular fine to coarse including sandstone, slate, red brick, ceramic, clinker and mixed lithologies. Occasional fragments of wood and disconnected cables.		
							Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.		
							Ouder of creosote		
				2.20	-2.20		End of Pit at 2.200m		
									1
									2
									3
									4
									5
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability			Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.		

IDOM						TRIAL PIT LOG		TrialPit No TP03 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385286.12 - 398998.69 Level: 0.00		Date 28/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX						Depth 2.80		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.30	D,J,V		0.40	-0.40		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.		
				0.70	-0.70		MADE GROUND: Greyish brown clayed sandy GRAVEL. Gravel is sub-rounded to angular fine to coarse including sandstone, slate, red brick, ceramic, clinker and mixed lithologies. Occasional fragments of wood and disconnected cables.		
							Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.		
				2.80	-2.80		End of Pit at 2.800m		
						1			
						2			
						3			
						4			
						5			
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability		Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.			

IDOM						TRIAL PIT LOG		TrialPit No TP04 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385306.70 - 398968.64 Level: 0.00		Date 28/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50 0.60		Scale 1:25	
Equipment: JCB 3CX						Depth 2.20		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.30	D,J,V		0.40	-0.40		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.		
				0.50	-0.50		MADE GROUND: Light yellowish brown slightly gravelly sandy CLAY. Gravel is sub-angular fine-coarse including red brick, ceramic, glass and mixed lithologies. <i>Redundant cable and felt fragment</i>		
				0.70	-0.70		MADE GROUND: Loose sub-angular to angular GRAVEL and COBBLES of red brick. Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.		
							Cast iron pipe		
				2.20	-2.20		End of Pit at 2.200m		
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)						Stability		Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.	

IDOM						TRIAL PIT LOG		TrialPit No TP06 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385310.01 - 398948.07 Level: 0.00		Date 28/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX						Depth 1.10		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
▼	0.60	D,J,V		0.30	-0.30		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.		
	0.80	B					MADE GROUND: Loose sub-angular to angular GRAVEL and COBBLES including red brick, tile, wood, loose wire, re-bar, felt, metal and fibre glass.		
							Buried boiler covered in fibre glass material		
							Water has oily sheen and hydrocarbon ouder		
				1.10	-1.10		End of Pit at 1.100m		
							1		
							2		
							3		
							4		
							5		
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability			Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.		

Project Name: Rodney Street				Project No. 22434		Co-ords: 385322.12 - 398966.25 Level: 0.00		Date: 04/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50 0.60		Scale: 1:25	
Equipment: JCB 3CX						Depth: 2.00		Logged: ☐ LW Checked: ☐	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.50	D,J,V		0.10	-0.10		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets. MADE GROUND: Dark brown sandy slightly gravelly CLAY with common cobbles of red brick and concrete. Gravel is sub-angular to sub-rounded including sandstone, slate, clinker, red brick, pottery and mixed lithologies.		
				0.70	-0.70		MADE GROUND: Black ash material		
				1.00	-1.00		Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.		
				2.00	-2.00	End of Pit at 2.000m			
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability			Remarks		

Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

IDOM						TRIAL PIT LOG		TrialPit No TP08 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385302.82 - 398927.64 Level: 0.00		Date 29/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX						Depth 2.80		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.65	D		0.10	-0.10		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.		
				0.15	-0.15		MADE GROUND: Paving slab		
							MADE GROUND: Dark brown sandy slightly gravelly CLAY. Gravel is sub-angular to angular fine to coarse including ceramic, red brick, glass, concrete and mixed lithologies.		
							Bitumin ACM pipe		
							Disused Ceramic drain		
				1.40	-1.40		Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.		
				2.80	-2.80		End of Pit at 2.800m		
								5	
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability			Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.		

IDOM						TRIAL PIT LOG		TrialPit No TP09 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385323.73 - 398940.24 Level: 0.00		Date 29/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50 0.60		Scale 1:25	
Equipment: JCB 3CX						Depth 1.60		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	1.00	D,J,V		0.20	-0.20		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.		1
							MADE GROUND: Loose sub-angular to angular GRAVEL and COBBLES including red brick, tile, wood, loose wire, re-bar, felt and fibre glass.		
							MADE GROUND: Concrete slab containing re-bar		
							1.20	-1.20	
				1.60	-1.60		End of Pit at 1.600m		
									2
									3
									4
									5
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability			Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.		

Project Name:

Rodney Street

Project No.

22434

Co-ords: 385337.32 - 398953.23

Level: 0.00

Date

29/04/2022

Location:

Ancoats, Manchester

Dimensions (m):

1.50

Scale

1:25

Equipment:

JCB 3CX

Depth
1.60

0.60

Logged
LW

Checked

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.60	D		0.15	-0.15		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets. MADE GROUND: Concrete slab containing re-bar
				0.60	-0.60		
				1.00	-1.00		
				1.10	-1.10		MADE GROUND: Dark brown sandy slightly gravelly CLAY with common cobbles of red brick and concrete. Gravel is sub-angular to sub-rounded including sandstone, slate, clinker, red brick, pottery and mixed lithologies.
				1.40	-1.40		MADE GROUND: Black ash material
				1.60	-1.60		MADE GROUND: Loose yellowish SAND. Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone. End of Pit at 1.600m

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability

Remarks

Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Trial pit inbetween two brick walls from former structures

Project Name:	Rodney Street	Project No.	22434	Co-ords:	385311.42 - 398920.96	Date	29/04/2022
				Level:	0.00		

Location:	Ancoats, Manchester	Dimensions (m):	1.50	Scale	1:25
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Equipment:	JCB 3CX	Depth	2.60	Logged	LW	Checked	
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Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.60	D		0.30	-0.30		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.	
				1.20	-1.20		MADE GROUND: Dark brown sandy slightly gravelly CLAY with common cobbles of red brick and concrete. Gravel is sub-angular to sub-rounded including sandstone, slate, clinker, red brick, pottery and mixed lithologies.	1
				2.60	-2.60		Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.	2
							End of Pit at 2.600m	3
								4
								5

D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)	Stability	Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.
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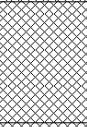
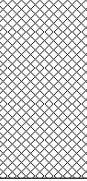
IDOM						TRIAL PIT LOG		TrialPit No TP12 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385320.15 - 398923.20 Level: 0.00		Date 04/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX						Depth 2.60		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.80	D,J,V		0.30	-0.30		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.		
				1.00	-1.00		MADE GROUND: Loose sub-angular to angular GRAVEL and COBBLES including red brick, tile, wood, loose wire, re-bar, felt and fibre glass.		
				1.10	-1.10		MADE GROUND: Concrete slab containing re-bar		
							Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.		
				2.60	-2.60		End of Pit at 2.600m		
						1			
						2			
						3			
						4			
						5			
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability		Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.			

Project Name:	Rodney Street	Project No.	22434	Co-ords: 385342.03 - 398939.23	Date
				Level: 0.00	05/04/2022

Location:	Ancoats, Manchester	Dimensions (m):	1.50	Scale
Equipment:	JCB 3CX	Depth	0.60	1:25
		1.70		Logged
				LW
				Checked

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.70	D,J,V		0.40	-0.40		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.	
				1.30	-1.30		MADE GROUND: Dark brown sandy slightly gravelly CLAY. Gravel is sub-angular to angular fine to coarse including, red brick, glass, concrete and mixed lithologies.	1
				1.70	-1.70		Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.	
							End of Pit at 1.700m	2
								3
								4
								5

D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)	Stability	Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.
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IDOM						TRIAL PIT LOG		TrialPit No TP14 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385328.01 - 398962.02 Level: 0.00		Date 06/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX						Depth 2.00		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.40	D,J,V		0.20	-0.20		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.		1
				0.60	-0.60		MADE GROUND: Dark brown sandy slightly gravelly CLAY. Gravel is sub-angular to angular fine to coarse including ceramic, red brick, glass, concrete and mixed lithologies.		
				1.20	-1.20		MADE GROUND: Loose sub-angular to angular GRAVEL and COBBLES including red brick, tile, wood and clinker.		
				2.00	-2.00		Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.		
				End of Pit at 2.000m		2			
								3	
								4	
								5	
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability			Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.		

Project Name: Rodney Street		Project No. 22434		Co-ords: 385306.23 - 398948.13		Date 07/04/2022	
Location: Ancoats, Manchester				Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX				Depth 1.60			
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.40	D,J,V		0.30	-0.30		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.
				0.60	-0.60		MADE GROUND: Dark brown sandy slightly gravelly CLAY. Gravel is sub-angular to angular fine to coarse including ceramic, red brick, glass, concrete and mixed lithologies.
				0.70	-0.70		MADE GROUND: Dark brown sandy slightly gravelly CLAY. Gravel is sub-angular to angular fine to coarse including ceramic, red brick, glass, concrete and mixed lithologies.
							Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.
				1.60	-1.60		End of Pit at 1.600m
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)			Stability		Remarks		
					Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.		

Project Name:	Rodney Street	Project No.	22434	Co-ords: 385329.03 - 398951.12	Date
				Level: 0.00	08/04/2022

Location:	Ancoats, Manchester	Dimensions (m):	1.50	Scale
				1:25

Equipment:	JCB 3CX	Depth	1.70	Logged	Checked
				LW	

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10			0.10	-0.10		TOPSOIL: Grass over dark brown sandy CLAY with common rootlets.	
	0.30	D,J,V					MADE GROUND: Loose sub-angular to angular GRAVEL and COBBLES including red brick, tile, wood, loose wire, re-bar, felt and fibre glass.	
	0.60	B						
	1.00			1.00	-1.00		MADE GROUND: Dark brown sandy slightly gravelly CLAY with common cobbles of red brick and concrete.	1
	1.10			1.10	-1.10		Gravel is sub-angular to sub-rounded including sandstone, slate, clinker, red brick, pottery and mixed lithologies.	
	1.30			1.30	-1.30		MADE GROUND: Concrete slab containing re-bar	
							Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.	
	1.70			1.70	-1.70		End of Pit at 1.700m	2
								3
								4
								5

D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)	Stability	Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.
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IDOM						TRIAL PIT LOG		TrialPit No TP18 Sheet 1 of 1	
Project Name: Rodney Street				Project No. 22434		Co-ords: 385293.19 - 398956.52 Level: 0.00		Date 28/04/2022	
Location: Ancoats, Manchester						Dimensions (m): 1.50		Scale 1:25	
Equipment: JCB 3CX						Depth 2.30		Logged LW	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.50	D,J,V		0.50	-0.50	MADE GROUND: Grass over dark brown sandy CLAY with common rootlets >8cm diameter. Large loose paving slabs	1 2 3 4 5		
				0.70	-0.70	MADE GROUND: Greyish brown clayed sandy GRAVEL. Gravel is sub-rounded to angular fine to coarse including sandstone, slate, red brick, ceramic, clinker and mixed lithologies. Occasional fragments of wood and disconnected cables. Firm mottled brown and grey CLAY with occasional gravel of sandstone, limestone and mudstone.			
				2.30	-2.30	End of Pit at 2.300m			
D = small disturbed sample (tub) J = organic sample (amber glass jar) V = volatile sample (amber glass vial) B = bulk bag sample HSV = hand shear vane (kPa) PP = pocket penetrometer (kg.cm2) PID = photoionisation detector (ppm)				Stability		Remarks Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.			



Plate 1: MTP01



Plate 2: MTP01



Plate 3: MTP02.



Plate 4: MTP02.



Plate 5: MTP03.



Plate 6: MTP03.



Plate 7: MTP04.



Plate 8: MTP04.



Plate 9: MTP05.



Plate 10: MTP05.



Plate 11: MTP06.



Plate 12: MTP06.



Plate 13: MTP06.



Plate 14: MTP07.



Plate 15: MTP07.



Plate 16: MTP08.



Plate 17: MTP08.



Plate 18: MTP09.



Plate 19: MTP09.



Plate 20: MTP10.



Plate 21: MTP10.



Plate 22: MTP11.



Plate 23: MTP11.



Plate 24: MTP12.



Plate 25: MTP12.



Plate 26: MTP12.



Plate 27: MTP13.



Plate 28: MTP13.



Plate 29: MTP14.



Plate 30: MTP14.



Plate 31: MTP15.



Plate 32: MTP15.



Plate 33: MTP16.



Plate 34: MTP16.



Plate 35: MTP17.



Plate 36: MTP17.



Plate 37: MTP18.



Plate 38: MTP18.

APPENDIX 3

Laboratory Analysis Certificates



Lucy Waddington
Merebrook
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Manchester
M2 7LR

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7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
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t: 01923 225404
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Analytical Report Number : 22-55609

Project / Site name:	Rodney Street, Ancoals	Samples received on:	03/05/2022
Your job number:	22434	Samples instructed on/ Analysis started on:	03/05/2022
Your order number:	22-2-FDO-LABS	Analysis completed by:	11/05/2022
Report Issue Number:	1	Report issued on:	11/05/2022
Samples Analysed:	1 bulk sample - 15 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

Analytical Report Number: 22-55609
Project / Site name: Rodney Street, Ancoals
Your Order No: 22-2-FDO-LABS

Lab Sample Number				2260349	2260350	2260351	2260352	2260353
Sample Reference				Slip Trench 1	Slip Trench 2	TP01	TP02	TP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.70	0.50	0.70	0.30
Date Sampled				27/04/2022	27/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	-	< 0.1	46	-
Moisture Content	%	0.01	NONE	9.6	-	14	7.2	-
Total mass of sample received	kg	0.001	NONE	0.8	-	0.8	0.8	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	EC	EC	EC	EC

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	-	8.3	9.8	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.072	-	0.062	0.36	-
Sulphide	mg/kg	1	MCERTS	22	-	6.7	16	-
Organic Matter (automated)	%	0.1	MCERTS	4	-	4.3	2	-

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	1.1	-	0.38	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	0.69	-	0.32	0.27	-
Phenanthrene	mg/kg	0.05	MCERTS	7.9	-	3.4	2.1	-
Anthracene	mg/kg	0.05	MCERTS	1.2	-	0.98	0.4	-
Fluoranthene	mg/kg	0.05	MCERTS	16	-	5.7	3.1	-
Pyrene	mg/kg	0.05	MCERTS	15	-	5.6	2.8	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	6.8	-	3.1	1.5	-
Chrysene	mg/kg	0.05	MCERTS	6.6	-	2.8	1.2	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	8.4	-	3.4	1.3	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	2.5	-	1.4	0.67	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	7.2	-	3.4	1.3	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.7	-	1.6	0.64	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.1	-	0.46	0.2	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.6	-	2.1	0.87	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	82.9	-	34.6	16.2	-
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	33	-	12	14	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	1.5	-
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	-	< 4.0	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	-	20	17	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	87	-	56	65	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	630	-	99	68	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	-	21	26	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	370	-	110	160	-

Analytical Report Number: 22-55609
Project / Site name: Rodney Street, Ancoals
Your Order No: 22-2-FDO-LABS

Lab Sample Number				2260349	2260350	2260351	2260352	2260353
Sample Reference				Slip Trench 1	Slip Trench 2	TP01	TP02	TP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.70	0.50	0.70	0.30
Date Sampled				27/04/2022	27/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

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

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35) _{EH_CU+HS_1D_AL}	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-

TPH-CWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	7.2	-	4.5	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	45	-	44	15	-
TPH-CWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	120	-	150	35	-
TPH-CWG - Aromatic (EC5 - EC35) _{EH_CU+HS_1D_AR}	mg/kg	10	MCERTS	170	-	190	50	-

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

Analytical Report Number: 22-55609
Project / Site name: Rodney Street, Ancoals
Your Order No: 22-2-FDO-LABS

Lab Sample Number				2260354	2260355	2260356	2260357	2260358
Sample Reference				TP04	TP18	TP17	TP05	TP06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.50	0.50	0.50	0.60
Date Sampled				27/04/2022	27/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	-	< 0.1	< 0.1	58	< 0.1
Moisture Content	%	0.01	NONE	-	17	15	20	17
Total mass of sample received	kg	0.001	NONE	-	0.8	0.5	0.8	0.8

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

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	7.3	7.6	10.7	9.0
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.084	1.5	1.2	0.33
Sulphide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	9.3	24
Organic Matter (automated)	%	0.1	MCERTS	-	5.8	3	1.6	3.7

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	0.21
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	0.82	< 0.05	1.5	2
Anthracene	mg/kg	0.05	MCERTS	-	0.23	< 0.05	0.32	0.56
Fluoranthene	mg/kg	0.05	MCERTS	-	1.7	< 0.05	1.7	5.3
Pyrene	mg/kg	0.05	MCERTS	-	1.6	< 0.05	1.5	4.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.85	< 0.05	1	2.5
Chrysene	mg/kg	0.05	MCERTS	-	0.86	< 0.05	0.65	2.7
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	0.73	< 0.05	1	2.5
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.65	< 0.05	0.34	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	0.89	< 0.05	0.9	2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	0.44	< 0.05	0.5	1.6
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	0.56
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.58	< 0.05	0.57	1.7

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	9.37	< 0.80	9.92	27.4
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	52	13	42	24
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	1.2
Chromium (hexavalent)	mg/kg	4	NONE	-	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	34	22	36	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	89	33	49	95
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	120	43	100	590
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	47	25	11	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	110	50	110	280

Analytical Report Number: 22-55609
Project / Site name: Rodney Street, Ancoals
Your Order No: 22-2-FDO-LABS

Lab Sample Number				2260354	2260355	2260356	2260357	2260358
Sample Reference				TP04	TP18	TP17	TP05	TP06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.50	0.50	0.50	0.60
Date Sampled				27/04/2022	27/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

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

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	14
TPH-CWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	400
TPH-CWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	220
TPH-CWG - Aliphatic (EC5 - EC35) _{EH_CU+HS_1D_AL}	mg/kg	10	MCERTS	-	< 10	< 10	< 10	630

TPH-CWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	8.7
TPH-CWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	-	< 10	< 10	13	260
TPH-CWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	-	23	< 10	22	360
TPH-CWG - Aromatic (EC5 - EC35) _{EH_CU+HS_1D_AR}	mg/kg	10	MCERTS	-	31	< 10	35	630

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

Analytical Report Number: 22-55609
Project / Site name: Rodney Street, Ancoals
Your Order No: 22-2-FDO-LABS

Lab Sample Number				2260359	2260360	2260361	2260362	2260363
Sample Reference				TP06	TP08	TP11	TP12	TP09
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.65	0.60	0.80	1.00
Date Sampled				27/04/2022	27/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	-	-	-	< 0.1	21
Moisture Content	%	0.01	NONE	-	-	-	17	19
Total mass of sample received	kg	0.001	NONE	-	-	-	0.8	0.8

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Amosite	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	2.152	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	2.15	-	-
Asbestos Analyst ID	N/A	N/A	N/A	EC	EC	EC	EC	EC

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	10.2	7.9
Total Cyanide	mg/kg	1	MCERTS	-	-	-	< 1.0	1.8
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	1.6	0.51
Sulphide	mg/kg	1	MCERTS	-	-	-	6.4	41
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	3	5.2

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	0.91	0.32
Anthracene	mg/kg	0.05	MCERTS	-	-	-	0.26	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	2.1	0.68
Pyrene	mg/kg	0.05	MCERTS	-	-	-	1.7	0.68
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	0.7	0.39
Chrysene	mg/kg	0.05	MCERTS	-	-	-	0.8	0.44
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	0.47	0.47
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	0.47	0.25
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	0.47	0.44
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	0.35	0.25
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	0.38	0.31

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	8.62	4.23
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	22	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	0.9	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	-	-	-	< 4.0	18
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	27	45
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	51	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	230	230
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	16	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	160	160

Analytical Report Number: 22-55609
Project / Site name: Rodney Street, Ancoals
Your Order No: 22-2-FDO-LABS

Lab Sample Number				2260359	2260360	2260361	2260362	2260363
Sample Reference				TP06	TP08	TP11	TP12	TP09
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.65	0.60	0.80	1.00
Date Sampled				27/04/2022	27/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

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

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	-	-	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	-	-	-	< 8.0	8.5
TPH-CWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	-	-	-	< 8.0	51
TPH-CWG - Aliphatic (EC5 - EC35) _{EH_CU+HS_1D_AL}	mg/kg	10	MCERTS	-	-	-	< 10	60

TPH-CWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	-	-	-	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	-	-	-	< 10	12
TPH-CWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	-	-	-	27	83
TPH-CWG - Aromatic (EC5 - EC35) _{EH_CU+HS_1D_AR}	mg/kg	10	MCERTS	-	-	-	33	95

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



Analytical Report Number: 22-55609
Project / Site name: Rodney Street, Ancoals
Your Order No: 22-2-FDO-LABS

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

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

Quantitative Analysis

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

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

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

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2260358	TP06	0.60	141	Loose Fibres	Amosite	< 0.001	< 0.001
2260361	TP11	0.60	182	Bitumen	Amosite	2.152	2.15

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



Analytical Report Number: 22-55609
Project / Site name: Rodney Street, Ancoals

Your Order No: 22-2-FDO-LABS

Lab Sample Number				2268753
Sample Reference				TP08
Sample Number				None Supplied
Depth (m)				0.65
Date Sampled				27/04/2022
Time Taken				None Supplied
Analytical Parameter (Bulk Analysis)	Units	Limit of detection	Accreditation Status	

Asbestos Identification	Type	N/A	ISO 17025	Chrysotile- Others (Pipe Insulation With Cellulose Fibres, Impregnated With Coal - Tar Pitch)
Asbestos Analyst ID	N/A	N/A	N/A	EC

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

Analytical Report Number : 22-55609

Project / Site name: Rodney Street, Ancoals

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2260349	Slip Trench 1	None Supplied	0.5	Brown sandy clay with gravel and vegetation.
2260351	TP01	None Supplied	0.5	Brown sandy clay with gravel and vegetation.
2260352	TP02	None Supplied	0.7	Brown clay and sand with stones and vegetation.
2260355	TP18	None Supplied	0.5	Brown clay and sand with gravel and vegetation.
2260356	TP17	None Supplied	0.5	Brown clay and sand with gravel.
2260357	TP05	None Supplied	0.5	Brown clay and sand with stones.
2260358	TP06	None Supplied	0.6	Brown clay and sand with gravel and vegetation.
2260362	TP12	None Supplied	0.8	Brown clay and sand with gravel and vegetation.
2260363	TP09	None Supplied	1	Brown clay and sand with stones.

Analytical Report Number : 22-55609

Project / Site name: Rodney Street, Ancoals

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in Bulks	Asbestos Identification in bulk material with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	W	ISO 17025
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS

Analytical Report Number : 22-55609

Project / Site name: Rodney Street, Ancoals

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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

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

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

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

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report



Analytical Report Number : 22-55609

Project / Site name: Rodney Street, Ancoals

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP17	None Supplied	S	2260356	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TP17	None Supplied	S	2260356	b	Monohydric phenols in soil	L080-PL	b
TP17	None Supplied	S	2260356	b	Speciated EPA-16 PAHs in soil	L064-PL	b
TP17	None Supplied	S	2260356	b	TPHCWG (Soil)	L088/76-PL	b

Lucy Waddington

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Analytical Report Number : 22-55613

Project / Site name:	Rodney Street, Ancoats	Samples received on:	03/05/2022
Your job number:	22434	Samples instructed on/ Analysis started on:	03/05/2022
Your order number:	22-2-FDO-LABS	Analysis completed by:	12/05/2022
Report Issue Number:	1	Report issued on:	12/05/2022
Samples Analysed:	6 10:1 WAC Samples		


Signed:

Martyna Langer
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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



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Waste Acceptance Criteria Analytical Results							
Report No:	22-55613						
				Client: MEREBROOK			
Location	Rodney Street, Ancoats						
Lab Reference (Sample Number)	2260372 / 2260373			Landfill Waste Acceptance Criteria			
Sampling Date	28/04/2022			Limits			
Sample ID	TP01			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Depth (m)	0.50						
Solid Waste Analysis							
TOC (%)**	2.5			3%	5%	6%	
Loss on Ignition (%) **	5.2			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH, ID, CU, AL	< 10			500	--	--	
Total PAH (WAC-17) (mg/kg)	37.7			100	--	--	
pH (units)**	7.9			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	3.3			--	To be evaluated	To be evaluated	
Eluate Analysis							
	10:1		10:1	Limit values for compliance leaching test			
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
Arsenic *	0.0019		0.0171	0.5	2	25	
Barium *	0.0287		0.252	20	100	300	
Cadmium *	< 0.0001		< 0.0008	0.04	1	5	
Chromium *	0.0006		0.0052	0.5	10	70	
Copper *	0.0046		0.041	2	50	100	
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2	
Molybdenum *	0.0016		0.0144	0.5	10	30	
Nickel *	0.0046		0.041	0.4	10	40	
Lead *	0.0039		0.035	0.5	10	50	
Antimony *	< 0.0017		< 0.017	0.06	0.7	5	
Selenium *	< 0.0040		< 0.040	0.1	0.5	7	
Zinc *	0.011		0.093	4	50	200	
Chloride *	0.55		4.8	800	15000	25000	
Fluoride	0.86		7.6	10	150	500	
Sulphate *	5.2		46	1000	20000	50000	
TDS*	72		630	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-	
DOC	7.11		62.5	500	800	1000	
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	86						
Moisture (%)	14						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation ** = MCERTS accredited							
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							



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Waste Acceptance Criteria Analytical Results							
Report No:	22-55613						
				Client: MERE BROOK			
Location	Rodney Street, Ancoats						
Lab Reference (Sample Number)	2260374 / 2260375			Landfill Waste Acceptance Criteria			
Sampling Date	28/04/2022			Limits			
Sample ID	TP02			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Depth (m)	0.70						
Solid Waste Analysis							
TOC (%)**	1.2			3%	5%	6%	
Loss on Ignition (%) **	2.9			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH, ID, CU, AL	< 10			500	--	--	
Total PAH (WAC-17) (mg/kg)	16.0			100	--	--	
pH (units)**	9.5			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	28			--	To be evaluated	To be evaluated	
Eluate Analysis							
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1		10:1	Limit values for compliance leaching test			
	mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
Arsenic *	0.0071		0.0626	0.5	2	25	
Barium *	0.0208		0.184	20	100	300	
Cadmium *	< 0.0001		< 0.0008	0.04	1	5	
Chromium *	0.0023		0.021	0.5	10	70	
Copper *	0.014		0.12	2	50	100	
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2	
Molybdenum *	0.0045		0.0395	0.5	10	30	
Nickel *	0.0055		0.049	0.4	10	40	
Lead *	0.0060		0.053	0.5	10	50	
Antimony *	0.012		0.11	0.06	0.7	5	
Selenium *	0.011		0.094	0.1	0.5	7	
Zinc *	0.0039		0.035	4	50	200	
Chloride *	2.1		18	800	15000	25000	
Fluoride	0.17		1.5	10	150	500	
Sulphate *	26		230	1000	20000	50000	
TDS*	75		670	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-	
DOC	13.2		117	500	800	1000	
Leach Test Information							
Stone Content (%)	46						
Sample Mass (kg)	0.80						
Dry Matter (%)	93						
Moisture (%)	7.2						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation							
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Waste Acceptance Criteria Analytical Results							
Report No:	22-55613						
				Client: MERE BROOK			
Location	Rodney Street, Ancoats						
Lab Reference (Sample Number)	2260376 / 2260377			Landfill Waste Acceptance Criteria			
Sampling Date	28/04/2022			Limits			
Sample ID	TP05			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Depth (m)	0.50						
Solid Waste Analysis							
TOC (%)**	0.9			3%	5%	6%	
Loss on Ignition (%) **	5.4			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH, ID, CU, AL	< 10			500	--	--	
Total PAH (WAC-17) (mg/kg)	10.3			100	--	--	
pH (units)**	8.0			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	5.3			--	To be evaluated	To be evaluated	
Eluate Analysis							
	10:1		10:1	Limit values for compliance leaching test			
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
Arsenic *	0.0062		0.0457	0.5	2	25	
Barium *	0.157		1.16	20	100	300	
Cadmium *	< 0.0001		< 0.0008	0.04	1	5	
Chromium *	0.0045		0.033	0.5	10	70	
Copper *	0.022		0.16	2	50	100	
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2	
Molybdenum *	0.0019		0.0139	0.5	10	30	
Nickel *	0.0044		0.033	0.4	10	40	
Lead *	0.0021		0.015	0.5	10	50	
Antimony *	< 0.0017		< 0.017	0.06	0.7	5	
Selenium *	0.0099		0.073	0.1	0.5	7	
Zinc *	0.019		0.14	4	50	200	
Chloride *	0.83		6.1	800	15000	25000	
Fluoride	0.36		2.6	10	150	500	
Sulphate *	1500		11000	1000	20000	50000	
TDS*	990		7300	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-	
DOC	3.98		29.3	500	800	1000	
Leach Test Information							
Stone Content (%)	58						
Sample Mass (kg)	0.80						
Dry Matter (%)	80						
Moisture (%)	20						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
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Waste Acceptance Criteria Analytical Results							
Report No:	22-55613						
				Client: MEREBROOK			
Location	Rodney Street, Ancoats						
Lab Reference (Sample Number)	2260378 / 2260379			Landfill Waste Acceptance Criteria			
Sampling Date	28/04/2022			Limits			
Sample ID	TP06			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Depth (m)	0.60						
Solid Waste Analysis							
TOC (%)**	2.1			3%	5%	6%	
Loss on Ignition (%) **	4.9			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH, ID, CU, AL	650			500	--	--	
Total PAH (WAC-17) (mg/kg)	28.4			100	--	--	
pH (units)**	8.4			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	8.6			--	To be evaluated	To be evaluated	
Eluate Analysis							
	10:1		10:1	Limit values for compliance leaching test			
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
Arsenic *	0.0189		0.143	0.5	2	25	
Barium *	0.0370		0.280	20	100	300	
Cadmium *	< 0.0001		< 0.0008	0.04	1	5	
Chromium *	0.0037		0.028	0.5	10	70	
Copper *	0.025		0.19	2	50	100	
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2	
Molybdenum *	0.0096		0.0729	0.5	10	30	
Nickel *	0.0056		0.042	0.4	10	40	
Lead *	0.026		0.20	0.5	10	50	
Antimony *	0.010		0.078	0.06	0.7	5	
Selenium *	0.0054		0.041	0.1	0.5	7	
Zinc *	0.017		0.13	4	50	200	
Chloride *	2.1		16	800	15000	25000	
Fluoride	0.68		5.2	10	150	500	
Sulphate *	45		340	1000	20000	50000	
TDS*	96		720	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-	
DOC	14.9		112	500	800	1000	
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	83						
Moisture (%)	17						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
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Waste Acceptance Criteria Analytical Results								
Report No:	22-55613							
					Client: MERE BROOK			
Location	Rodney Street, Ancoats							
Lab Reference (Sample Number)	2260380 / 2260381				Landfill Waste Acceptance Criteria			
					Limits			
Sampling Date	29/04/2022				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID	TP12							
Depth (m)	0.80							
Solid Waste Analysis								
TOC (%)**	1.7				3%	5%	6%	
Loss on Ignition (%) **	4.4				--	--	10%	
BTEX (µg/kg) **	< 10				6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007				1	--	--	
Mineral Oil (mg/kg) EH, ID, CU, AL	< 10				500	--	--	
Total PAH (WAC-17) (mg/kg)	9.58				100	--	--	
pH (units)**	7.9				--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	6.7				--	To be evaluated	To be evaluated	
Eluate Analysis								
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test			
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
Arsenic *	0.0033			0.0247	0.5	2	25	
Barium *	0.221			1.66	20	100	300	
Cadmium *	< 0.0001			< 0.0008	0.04	1	5	
Chromium *	0.0039			0.029	0.5	10	70	
Copper *	0.0096			0.072	2	50	100	
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2	
Molybdenum *	0.0017			0.0126	0.5	10	30	
Nickel *	0.0052			0.039	0.4	10	40	
Lead *	0.0021			0.016	0.5	10	50	
Antimony *	< 0.0017			< 0.017	0.06	0.7	5	
Selenium *	< 0.0040			< 0.040	0.1	0.5	7	
Zinc *	0.0062			0.047	4	50	200	
Chloride *	1.5			11	800	15000	25000	
Fluoride	0.23			1.7	10	150	500	
Sulphate *	1500			11000	1000	20000	50000	
TDS*	990			7400	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-	
DOC	6.05			45.6	500	800	1000	
Leach Test Information								
Stone Content (%)	< 0.1							
Sample Mass (kg)	0.80							
Dry Matter (%)	83							
Moisture (%)	17							
Results are expressed on a dry weight basis, after correction for moisture content where applicable.								
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation					** = MCERTS accredited			
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Waste Acceptance Criteria Analytical Results

Report No:	22-55613					
				Client: MERE BROOK		
Location	Rodney Street, Ancoats					
Lab Reference (Sample Number)	2260382 / 2260383			Landfill Waste Acceptance Criteria		
Sampling Date	29/04/2022			Limits		
Sample ID	TP09					
Depth (m)	1.00			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Solid Waste Analysis						
TOC (%)**	3.0			3%	5%	6%
Loss on Ignition (%) **	6.3			--	--	10%
BTEX (µg/kg) **	< 10			6000	--	--
Sum of PCBs (mg/kg) **	< 0.007			1	--	--
Mineral Oil (mg/kg) EH, ID, CU, AL	94			500	--	--
Total PAH (WAC-17) (mg/kg)	4.42			100	--	--
pH (units)**	7.8			--	>6	--
Acid Neutralisation Capacity (mmol / kg)	5.8			--	To be evaluated	To be evaluated
Eluate Analysis						
	10:1		10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0149		0.125	0.5	2	25
Barium *	0.0710		0.593	20	100	300
Cadmium *	< 0.0001		< 0.0008	0.04	1	5
Chromium *	0.0056		0.047	0.5	10	70
Copper *	0.011		0.096	2	50	100
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2
Molybdenum *	0.0186		0.156	0.5	10	30
Nickel *	0.0046		0.039	0.4	10	40
Lead *	0.024		0.20	0.5	10	50
Antimony *	< 0.0017		< 0.017	0.06	0.7	5
Selenium *	0.0049		0.041	0.1	0.5	7
Zinc *	0.016		0.13	4	50	200
Chloride *	1.7		14	800	15000	25000
Fluoride	0.47		4.0	10	150	500
Sulphate *	51		430	1000	20000	50000
TDS*	130		1100	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-
DOC	16.8		140	500	800	1000
Leach Test Information						
Stone Content (%)	21					
Sample Mass (kg)	0.80					
Dry Matter (%)	81					
Moisture (%)	19					
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)						
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Analytical Report Number : 22-55613

Project / Site name: Rodney Street, Ancoats

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2260372	TP01	None Supplied	0.5	Brown sandy clay with gravel and vegetation.
2260374	TP02	None Supplied	0.7	Brown clay and sand with stones and vegetation.
2260376	TP05	None Supplied	0.5	Brown clay and sand with stones.
2260378	TP06	None Supplied	0.6	Brown clay and sand with gravel and vegetation.
2260380	TP12	None Supplied	0.8	Brown clay and sand with gravel and vegetation.
2260382	TP09	None Supplied	1	Brown clay and sand with stones.

Analytical Report Number : 22-55613

Project / Site name: Rodney Street, Ancoats

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	MCERTS
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025

Analytical Report Number : 22-55613

Project / Site name: Rodney Street, Ancoats

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

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

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

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

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

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 22-56803

Project / Site name:	Rodney Street Ancoals	Samples received on:	09/05/2022
Your job number:	22434	Samples instructed on/ Analysis started on:	09/05/2022
Your order number:	21-2-FDO-LABS	Analysis completed by:	13/05/2022
Report Issue Number:	1	Report issued on:	13/05/2022
Samples Analysed:	4 soil samples		

Martyna Langer

Signed:

Martyna Langer
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

Analytical Report Number: 22-56803
Project / Site name: Rodney Street Ancoals
Your Order No: 21-2-FDO-LABS

Lab Sample Number				2267259	2267260	2267261	2267262
Sample Reference				Slip Trench 5	Slip Trench 6	Slip Trench 4	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.40	0.40	0.40
Date Sampled				Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	20	18	15	9.9
Total mass of sample received	kg	0.001	NONE	1.2	1.2	1.2	1.2

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA	N/A	DSA	DSA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.2	7.8	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.28	0.015	0.015	0.025
Sulphide	mg/kg	1	MCERTS	110	1.6	1	3.1
Organic Matter (automated)	%	0.1	MCERTS	6.6	2.5	3.2	4.5

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.62	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	3.4	< 0.05	< 0.05	4.6
Fluorene	mg/kg	0.05	MCERTS	3.3	< 0.05	< 0.05	3.5
Phenanthrene	mg/kg	0.05	MCERTS	23	0.76	0.71	31
Anthracene	mg/kg	0.05	MCERTS	5.5	< 0.05	< 0.05	8.3
Fluoranthene	mg/kg	0.05	MCERTS	27	0.85	0.55	34
Pyrene	mg/kg	0.05	MCERTS	25	0.83	0.51	29
Benzo(a)anthracene	mg/kg	0.05	MCERTS	17	0.46	0.22	16
Chrysene	mg/kg	0.05	MCERTS	10	0.5	0.29	11
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	17	0.49	0.22	16
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	4.4	0.22	0.17	4.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	15	0.48	0.26	13
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	6.4	0.21	< 0.05	6.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2	< 0.05	< 0.05	1.8
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	7.7	0.25	< 0.05	7.8

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	168	5.05	2.93	185
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	18	15	29
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	29	35	31	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	62	45	40	130
Lead (aqua regia extractable)	mg/kg	1	MCERTS	180	80	140	170
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	30	39	30	44
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	110	68	110

Analytical Report Number: 22-56803
 Project / Site name: Rodney Street Ancoals
 Your Order No: 21-2-FDO-LABS

Lab Sample Number	2267259	2267260	2267261	2267262
Sample Reference	Slip Trench 5	Slip Trench 6	Slip Trench 4	TP14
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.40	0.40	0.40	0.40
Date Sampled	Deviating	Deviating	Deviating	Deviating
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

Monoaromatics & Oxygenates

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

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 _{HS,1D,AL}	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 _{HS,1D,AL}	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 _{HS,1D,AL}	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 _{EH,CU,1D,AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 _{EH,CU,1D,AL}	mg/kg	2	MCERTS	23	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 _{EH,CU,1D,AL}	mg/kg	8	MCERTS	42	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 _{EH,CU,1D,AL}	mg/kg	8	MCERTS	86	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) _{EH,CU+HS,1D,AL}	mg/kg	10	MCERTS	150	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7 _{HS,1D,AR}	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 _{HS,1D,AR}	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 _{HS,1D,AR}	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 _{EH,CU,1D,AR}	mg/kg	1	MCERTS	13	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 _{EH,CU,1D,AR}	mg/kg	2	MCERTS	30	< 2.0	< 2.0	25
TPH-CWG - Aromatic >EC16 - EC21 _{EH,CU,1D,AR}	mg/kg	10	MCERTS	120	11	< 10	84
TPH-CWG - Aromatic >EC21 - EC35 _{EH,CU,1D,AR}	mg/kg	10	MCERTS	250	23	< 10	130
TPH-CWG - Aromatic (EC5 - EC35) _{EH,CU+HS,1D,AR}	mg/kg	10	MCERTS	420	34	< 10	240

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

Analytical Report Number : 22-56803

Project / Site name: Rodney Street Ancoals

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2267259	Slip Trench 5	None Supplied	0.4	Grey clay with gravel.
2267260	Slip Trench 6	None Supplied	0.4	Grey clay with gravel and vegetation.
2267261	Slip Trench 4	None Supplied	0.4	Brown clay with gravel.
2267262	TP14	None Supplied	0.4	Grey clay and sand with gravel.

Analytical Report Number : 22-56803
Project / Site name: Rodney Street Ancoals

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L0738-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 22-56803
Project / Site name: Rodney Street Ancoals

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

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

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

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

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

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report



Analytical Report Number : 22-56803
Project / Site name: Rodney Street Ancoals

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
Slip Trench 4	None Supplied	S	2267261	a	None Supplied	None Supplied	None Supplied
Slip Trench 5	None Supplied	S	2267259	a	None Supplied	None Supplied	None Supplied
Slip Trench 6	None Supplied	S	2267260	a	None Supplied	None Supplied	None Supplied
TP14	None Supplied	S	2267262	a	None Supplied	None Supplied	None Supplied

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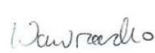
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Analytical Report Number : 22-58605

Project / Site name:	Rodney Street, Ancoats	Samples received on:	03/05/2022
Your job number:	22434	Samples instructed on/ Analysis started on:	16/05/2022
Your order number:	22-2-FDO-LABS	Analysis completed by:	23/05/2022
Report Issue Number:	1	Report issued on:	23/05/2022
Samples Analysed:	5 WAC 10:1 samples		


Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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Waste Acceptance Criteria Analytical Results							
Report No:	22-58605						
				Client: MEREbrook			
Location	Rodney Street, Ancoats						
Lab Reference (Sample Number)	2277313 / 2277314			Landfill Waste Acceptance Criteria			
Sampling Date	27/04/2022			Limits			
Sample ID	Slip Trench 1			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Depth (m)	0.50						
Solid Waste Analysis							
TOC (%)**	3.2			3%	5%	6%	
Loss on Ignition (%) **	5.8			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH, 10, CU, AL	< 10			500	--	--	
Total PAH (WAC-17) (mg/kg)	118			100	--	--	
pH (units)**	8.5			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	20			--	To be evaluated	To be evaluated	
Eluate Analysis				Limit values for compliance leaching test			
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1		10:1	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
	mg/l		mg/kg				
Arsenic *	0.0050		0.0410	0.5	2	25	
Barium *	0.0487		0.399	20	100	300	
Cadmium *	< 0.0001		< 0.0008	0.04	1	5	
Chromium *	0.0014		0.011	0.5	10	70	
Copper *	0.0039		0.032	2	50	100	
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2	
Molybdenum *	0.0031		0.0254	0.5	10	30	
Nickel *	0.0028		0.023	0.4	10	40	
Lead *	0.0029		0.023	0.5	10	50	
Antimony *	< 0.0017		< 0.017	0.06	0.7	5	
Selenium *	< 0.0040		< 0.040	0.1	0.5	7	
Zinc *	0.0041		0.033	4	50	200	
Chloride *	1.3		10	800	15000	25000	
Fluoride	0.66		5.4	10	150	500	
Sulphate *	19		150	1000	20000	50000	
TDS*	45		370	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-	
DOC	5.64		46.3	500	800	1000	
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	90						
Moisture (%)	9.6						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				* = UKAS accredited (liquid eluate analysis only)			
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited			
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.							
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							

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Waste Acceptance Criteria Analytical Results						
Report No:	22-58605					
				Client: MEREBROOK		
Location	Rodney Street, Ancoats					
Lab Reference (Sample Number)	2277315 / 2277316			Landfill Waste Acceptance Criteria		
Sampling Date	27/04/2022			Limits		
Sample ID	Slip Trench 2			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.70					
Solid Waste Analysis						
TOC (%)**	2.1			3%	5%	6%
Loss on Ignition (%) **	5.0			--	--	10%
BTEX (µg/kg) **	< 10			6000	--	--
Sum of PCBs (mg/kg) **	< 0.007			1	--	--
Mineral Oil (mg/kg) EH, IO, CU, AL	< 10			500	--	--
Total PAH (WAC-17) (mg/kg)	86.7			100	--	--
pH (units)**	8.4			--	>6	--
Acid Neutralisation Capacity (mmol / kg)	16			--	To be evaluated	To be evaluated
Eluate Analysis						
	10:1		10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0073		0.0675	0.5	2	25
Barium *	0.0272		0.250	20	100	300
Cadmium *	< 0.0001		< 0.0008	0.04	1	5
Chromium *	0.0016		0.015	0.5	10	70
Copper *	0.0024		0.022	2	50	100
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2
Molybdenum *	0.0015		0.0139	0.5	10	30
Nickel *	0.0025		0.023	0.4	10	40
Lead *	0.0013		0.012	0.5	10	50
Antimony *	< 0.0017		< 0.017	0.06	0.7	5
Selenium *	< 0.0040		< 0.040	0.1	0.5	7
Zinc *	0.0037		0.034	4	50	200
Chloride *	1.1		9.8	800	15000	25000
Fluoride	0.69		6.3	10	150	500
Sulphate *	15		130	1000	20000	50000
TDS*	42		380	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-
DOC	6.81		62.6	500	800	1000
Leach Test Information						
Stone Content (%)	26					
Sample Mass (kg)	0.50					
Dry Matter (%)	86					
Moisture (%)	14					
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)						
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation ** = MCERTS accredited						
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.						

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Waste Acceptance Criteria Analytical Results							
Report No:	22-58605						
				Client: MEREBROOK			
Location	Rodney Street, Ancoats						
Lab Reference (Sample Number)	2277317 / 2277318			Landfill Waste Acceptance Criteria			
Sampling Date	04/05/2022			Limits			
Sample ID	TP14			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Depth (m)	0.40						
Solid Waste Analysis							
TOC (%)**	3.9			3%	5%	6%	
Loss on Ignition (%) **	10.4			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH, 10, CU, AL	< 10			500	--	--	
Total PAH (WAC-17) (mg/kg)	47.6			100	--	--	
pH (units)**	8.2			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	2.5			--	To be evaluated	To be evaluated	
Eluate Analysis							
	10:1		10:1	Limit values for compliance leaching test			
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
Arsenic *	< 0.0010		< 0.0100	0.5	2	25	
Barium *	0.0067		0.0540	20	100	300	
Cadmium *	< 0.0001		< 0.0008	0.04	1	5	
Chromium *	0.0005		0.0043	0.5	10	70	
Copper *	0.0010		0.0079	2	50	100	
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2	
Molybdenum *	0.0007		0.0060	0.5	10	30	
Nickel *	0.0022		0.017	0.4	10	40	
Lead *	0.0020		0.016	0.5	10	50	
Antimony *	< 0.0017		< 0.017	0.06	0.7	5	
Selenium *	< 0.0040		< 0.040	0.1	0.5	7	
Zinc *	0.0046		0.037	4	50	200	
Chloride *	1.1		9.0	800	15000	25000	
Fluoride	0.70		5.6	10	150	500	
Sulphate *	14		110	1000	20000	50000	
TDS*	20		160	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-	
DOC	6.53		52.3	500	800	1000	
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	90						
Moisture (%)	9.9						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation ** = MCERTS accredited							
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							

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Waste Acceptance Criteria Analytical Results								
Report No:		22-58605						
					Client: MEREbrook			
Location		Rodney Street, Ancoats						
Lab Reference (Sample Number)		2277319 / 2277320			Landfill Waste Acceptance Criteria			
					Limits			
Sampling Date		04/05/2022			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID		Slip Trench 5						
Depth (m)		0.40						
Solid Waste Analysis								
TOC (%)**	2.3				3%	5%	6%	
Loss on Ignition (%) **	4.1				--	--	10%	
BTEX (µg/kg) **	< 10				6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007				1	--	--	
Mineral Oil (mg/kg) EH, 10, CU, AL	< 10				500	--	--	
Total PAH (WAC-17) (mg/kg)	8.24				100	--	--	
pH (units)**	8.3				--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	4.3				--	To be evaluated	To be evaluated	
Eluate Analysis		10:1		10:1	Limit values for compliance leaching test			
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)		mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
Arsenic *	0.0030			0.0247	0.5	2	25	
Barium *	0.0082			0.0688	20	100	300	
Cadmium *	< 0.0001			< 0.0008	0.04	1	5	
Chromium *	0.0008			0.0065	0.5	10	70	
Copper *	0.0016			0.014	2	50	100	
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2	
Molybdenum *	0.0012			0.0101	0.5	10	30	
Nickel *	0.0033			0.027	0.4	10	40	
Lead *	0.0032			0.027	0.5	10	50	
Antimony *	0.0039			0.032	0.06	0.7	5	
Selenium *	< 0.0040			< 0.040	0.1	0.5	7	
Zinc *	0.0023			0.020	4	50	200	
Chloride *	0.91			7.6	800	15000	25000	
Fluoride	0.63			5.3	10	150	500	
Sulphate *	12			99	1000	20000	50000	
TDS*	29			250	4000	60000	100000	
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-	
DOC	6.47			54.1	500	800	1000	
Leach Test Information								
Stone Content (%)	< 0.1							
Sample Mass (kg)	1.2							
Dry Matter (%)	82							
Moisture (%)	18							
Results are expressed on a dry weight basis, after correction for moisture content where applicable.								
					* = UKAS accredited (liquid eluate analysis only)			
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation					** = MCERTS accredited			
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.								
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.								

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Waste Acceptance Criteria Analytical Results							
Report No:		22-58605					
					Client: MEREBROOK		
Location		Rodney Street, Ancoats					
Lab Reference (Sample Number)		2277321 / 2277322			Landfill Waste Acceptance Criteria		
Sampling Date		28/04/2022			Limits		
Sample ID		TP04			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)		0.30					
Solid Waste Analysis							
TOC (%)**	1.0				3%	5%	6%
Loss on Ignition (%) **	2.1				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH, 10, CU, AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	76.3				100	--	--
pH (units)**	8.3				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	8.0				--	To be evaluated	To be evaluated
Eluate Analysis							
	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0049			0.0417	0.5	2	25
Barium *	0.0163			0.139	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0007			0.0062	0.5	10	70
Copper *	0.0032			0.027	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0051			0.0438	0.5	10	30
Nickel *	0.0029			0.025	0.4	10	40
Lead *	0.0044			0.038	0.5	10	50
Antimony *	0.0073			0.063	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0018			0.015	4	50	200
Chloride *	1.1			9.8	800	15000	25000
Fluoride	0.31			2.7	10	150	500
Sulphate *	13			110	1000	20000	50000
TDS*	44			380	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	7.11			60.9	500	800	1000
Leach Test Information							
Stone Content (%)	44						
Sample Mass (kg)	0.50						
Dry Matter (%)	94						
Moisture (%)	6.0						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation ** = MCERTS accredited							
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							

Analytical Report Number : 22-58605

Project / Site name: Rodney Street, Ancoats

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2277313	Slip Trench 1	None Supplied	0.5	Brown sandy clay with gravel and vegetation.
2277315	Slip Trench 2	None Supplied	0.7	Brown loam with vegetation and stones.
2277317	TP14	None Supplied	0.4	Grey clay and sand with gravel.
2277319	Slip Trench 5	None Supplied	0.4	Grey clay with gravel and vegetation.
2277321	TP04	None Supplied	0.3	Brown loam and sand with vegetation and stones.

Analytical Report Number : 22-58605

Project / Site name: Rodney Street, Ancoats

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance"	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	MCERTS
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025

Analytical Report Number : 22-58605

Project / Site name: Rodney Street, Ancoats

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

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

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

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

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

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report



Analytical Report Number : 22-58605

Project / Site name: Rodney Street, Ancoats

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
Slip Trench 1	None Supplied	S	2277313	c	BTEX in soil (Monoaromatics)	L073B-PL	c
Slip Trench 1	None Supplied	S	2277313	c	Total BTEX in soil (Poland)	L073-PL	c
Slip Trench 2	None Supplied	S	2277315	c	BTEX in soil (Monoaromatics)	L073B-PL	c
Slip Trench 2	None Supplied	S	2277315	c	Total BTEX in soil (Poland)	L073-PL	c
TP04	None Supplied	S	2277321	c	BTEX in soil (Monoaromatics)	L073B-PL	c
TP04	None Supplied	S	2277321	c	Total BTEX in soil (Poland)	L073-PL	c

APPENDIX 4

HazWasteOnline Assessment

Waste Classification Report

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

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



YJC5F-G3EQ7-M97GL

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

Job name

Rodney Street 22434

Description/Comments

Project

Site

Classified by

Name: **Keith Paramor**
 Date: **26 May 2022 13:10 GMT**
 Telephone: **01773 829988**

Company: **Idom Merebrook Ltd**
Cromford Mills, Mill Lane
Matlock
DE4 3RQ

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

HazWasteOnline™ Certification:

Course
 Hazardous Waste Classification
 Most recent 3 year Refresher

Date
 26 Mar 2015
 02 Aug 2022 *

* training course booked

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	Slip Trench 1[2]		Non Hazardous		2
2	TP01[2]		Non Hazardous		5
3	TP02[2]		Non Hazardous		8
4	TP18[2]		Non Hazardous		11
5	TP17[2]		Non Hazardous		14
6	TP05[2]		Non Hazardous		16
7	TP06[2]		Hazardous	HP 3(i), HP 7, HP 11	19
8	TP12[2]		Non Hazardous		22
9	TP09[2]		Non Hazardous		25
10	Slip Trench 5[2]		Non Hazardous		28
11	Slip Trench 6[2]		Non Hazardous		31
12	Slip Trench 4[2]		Non Hazardous		34
13	TP14[2]		Non Hazardous		36

Related documents

#	Name	Description
1	Example waste stream template for contaminated soils	waste stream template used to create this Job

Report

Created by: Keith Paramor

Created date: 26 May 2022 13:10 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	39
Appendix B: Rationale for selection of metal species	40
Appendix C: Version	41

Classification of sample: Slip Trench 1[2]

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

Sample details

Sample name:	LoW Code:
Slip Trench 1[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
9.6% (no correction)	

Hazard properties

None identified

Determinands

Moisture content: **9.6% No Moisture Correction applied (MC)**

#	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									
1	arsenic { arsenic trioxide }				33	mg/kg	1.32	43.571	mg/kg	0.00436 %		
	033-003-00-0	215-481-4	1327-53-3									
2	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				24	mg/kg	1.462	35.077	mg/kg	0.00351 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				87	mg/kg	1.126	97.952	mg/kg	0.0098 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	630	mg/kg		630	mg/kg	0.063 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				26	mg/kg	2.637	68.554	mg/kg	0.00686 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				370	mg/kg	2.469	913.64	mg/kg	0.0914 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				180	mg/kg		180	mg/kg	0.018 %		
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	pH		PH		8.3 pH		8.3 pH	8.3 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	acenaphthene	201-469-6	83-32-9		1.1 mg/kg		1.1 mg/kg	0.00011 %		
22	fluorene	201-695-5	86-73-7		0.69 mg/kg		0.69 mg/kg	0.000069 %		
23	phenanthrene	201-581-5	85-01-8		7.9 mg/kg		7.9 mg/kg	0.00079 %		
24	anthracene	204-371-1	120-12-7		1.2 mg/kg		1.2 mg/kg	0.00012 %		
25	fluoranthene	205-912-4	206-44-0		16 mg/kg		16 mg/kg	0.0016 %		
26	pyrene	204-927-3	129-00-0		15 mg/kg		15 mg/kg	0.0015 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		6.8 mg/kg		6.8 mg/kg	0.00068 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		6.6 mg/kg		6.6 mg/kg	0.00066 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		8.4 mg/kg		8.4 mg/kg	0.00084 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		2.5 mg/kg		2.5 mg/kg	0.00025 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		7.2 mg/kg		7.2 mg/kg	0.00072 %		
32	indeno[123-cd]pyrene	205-893-2	193-39-5		3.7 mg/kg		3.7 mg/kg	0.00037 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		1.1 mg/kg		1.1 mg/kg	0.00011 %		
34	benzo[ghi]perylene	205-883-8	191-24-2		4.6 mg/kg		4.6 mg/kg	0.00046 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.207 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.018%)

Classification of sample: TP01[2]

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

Sample details

Sample name:	LoW Code:
TP01[2]	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
14% (no correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	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							
1	arsenic { arsenic trioxide }				12 mg/kg	1.32	15.844 mg/kg	0.00158 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				20 mg/kg	1.462	29.231 mg/kg	0.00292 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4 mg/kg	2.27	<9.08 mg/kg	<0.000908 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				56 mg/kg	1.126	63.05 mg/kg	0.0063 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	99 mg/kg		99 mg/kg	0.0099 %		
	082-001-00-6									
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel sulfate }				21 mg/kg	2.637	55.37 mg/kg	0.00554 %		
	028-009-00-5	232-104-9	7786-81-4							
9	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc sulphate }				110 mg/kg	2.469	271.623 mg/kg	0.0272 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
11	TPH (C6 to C40) petroleum group				200 mg/kg		200 mg/kg	0.02 %		
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	 pH PH				8.3 pH		8.3 pH	8.3 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	acenaphthylene 205-917-1	208-96-8			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	acenaphthene 201-469-6	83-32-9			0.38 mg/kg		0.38 mg/kg	0.000038 %		
22	fluorene 201-695-5	86-73-7			0.32 mg/kg		0.32 mg/kg	0.000032 %		
23	phenanthrene 201-581-5	85-01-8			3.4 mg/kg		3.4 mg/kg	0.00034 %		
24	anthracene 204-371-1	120-12-7			0.98 mg/kg		0.98 mg/kg	0.000098 %		
25	fluoranthene 205-912-4	206-44-0			5.7 mg/kg		5.7 mg/kg	0.00057 %		
26	pyrene 204-927-3	129-00-0			5.6 mg/kg		5.6 mg/kg	0.00056 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		3.1 mg/kg		3.1 mg/kg	0.00031 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		2.8 mg/kg		2.8 mg/kg	0.00028 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		3.4 mg/kg		3.4 mg/kg	0.00034 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		1.4 mg/kg		1.4 mg/kg	0.00014 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		3.4 mg/kg		3.4 mg/kg	0.00034 %		
32	indeno[123-cd]pyrene 205-893-2	193-39-5			1.6 mg/kg		1.6 mg/kg	0.00016 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		0.46 mg/kg		0.46 mg/kg	0.000046 %		
34	benzo[ghi]perylene 205-883-8	191-24-2			2.1 mg/kg		2.1 mg/kg	0.00021 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0784 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.02%)

Classification of sample: TP02[2]

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

Sample details

Sample name:	LoW Code:
TP02[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
7.2% (no correction)	

Hazard properties

None identified

Determinands

Moisture content: 7.2% No Moisture Correction applied (MC)

#	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									
1	arsenic { arsenic trioxide }				14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
	033-003-00-0	215-481-4	1327-53-3									
2	cadmium { cadmium oxide }				1.5	mg/kg	1.142	1.713	mg/kg	0.000171 %		
	048-002-00-0	215-146-2	1306-19-0									
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				17	mg/kg	1.462	24.846	mg/kg	0.00248 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				65	mg/kg	1.126	73.183	mg/kg	0.00732 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	68	mg/kg		68	mg/kg	0.0068 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				26	mg/kg	2.637	68.554	mg/kg	0.00686 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				160	mg/kg	2.469	395.087	mg/kg	0.0395 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				60	mg/kg		60	mg/kg	0.006 %		
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	 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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	 pH PH				9.8 pH		9.8 pH	9.8 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	 acenaphthylene 205-917-1	208-96-8			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	 acenaphthene 201-469-6	83-32-9			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	 fluorene 201-695-5	86-73-7			0.27 mg/kg		0.27 mg/kg	0.000027 %		
23	 phenanthrene 201-581-5	85-01-8			2.1 mg/kg		2.1 mg/kg	0.00021 %		
24	 anthracene 204-371-1	120-12-7			0.4 mg/kg		0.4 mg/kg	0.00004 %		
25	 fluoranthene 205-912-4	206-44-0			3.1 mg/kg		3.1 mg/kg	0.00031 %		
26	 pyrene 204-927-3	129-00-0			2.8 mg/kg		2.8 mg/kg	0.00028 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		1.5 mg/kg		1.5 mg/kg	0.00015 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		1.2 mg/kg		1.2 mg/kg	0.00012 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		1.3 mg/kg		1.3 mg/kg	0.00013 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.67 mg/kg		0.67 mg/kg	0.000067 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		1.3 mg/kg		1.3 mg/kg	0.00013 %		
32	 indeno[123-cd]pyrene 205-893-2	193-39-5			0.64 mg/kg		0.64 mg/kg	0.000064 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		0.2 mg/kg		0.2 mg/kg	0.00002 %		
34	 benzo[ghi]perylene 205-883-8	191-24-2			0.87 mg/kg		0.87 mg/kg	0.000087 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0741 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.006%)

Classification of sample: TP18[2]

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

Sample details

Sample name:	LoW Code:
TP18[2]	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
17% (no correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% No Moisture Correction applied (MC)

#	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							
1	arsenic { arsenic trioxide }				52 mg/kg	1.32	68.657 mg/kg	0.00687 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				34 mg/kg	1.462	49.693 mg/kg	0.00497 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4 mg/kg	2.27	<9.08 mg/kg	<0.000908 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				89 mg/kg	1.126	100.204 mg/kg	0.01 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	120 mg/kg		120 mg/kg	0.012 %		
	082-001-00-6									
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel sulfate }				47 mg/kg	2.637	123.924 mg/kg	0.0124 %		
	028-009-00-5	232-104-9	7786-81-4							
9	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc sulphate }				110 mg/kg	2.469	271.623 mg/kg	0.0272 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
11	TPH (C6 to C40) petroleum group				41 mg/kg		41 mg/kg	0.0041 %		
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	 pH PH				7.3 pH		7.3 pH	7.3 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	 acenaphthylene 205-917-1	208-96-8			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	 acenaphthene 201-469-6	83-32-9			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	 fluorene 201-695-5	86-73-7			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	 phenanthrene 201-581-5	85-01-8			0.82 mg/kg		0.82 mg/kg	0.000082 %		
24	 anthracene 204-371-1	120-12-7			0.23 mg/kg		0.23 mg/kg	0.000023 %		
25	 fluoranthene 205-912-4	206-44-0			1.7 mg/kg		1.7 mg/kg	0.00017 %		
26	 pyrene 204-927-3	129-00-0			1.6 mg/kg		1.6 mg/kg	0.00016 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.85 mg/kg		0.85 mg/kg	0.000085 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		0.86 mg/kg		0.86 mg/kg	0.000086 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.73 mg/kg		0.73 mg/kg	0.000073 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.65 mg/kg		0.65 mg/kg	0.000065 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.89 mg/kg		0.89 mg/kg	0.000089 %		
32	 indeno[123-cd]pyrene 205-893-2	193-39-5			0.44 mg/kg		0.44 mg/kg	0.000044 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
34	 benzo[ghi]perylene 205-883-8	191-24-2			0.58 mg/kg		0.58 mg/kg	0.000058 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.08 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0041%)

Classification of sample: TP17[2]

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

Sample details

Sample name:	LoW Code:
TP17[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15% (no correction)	

Hazard properties

None identified

Determinands

Moisture content: **15% No Moisture Correction applied (MC)**

#	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									
1	arsenic { arsenic trioxide }				13	mg/kg	1.32	17.164	mg/kg	0.00172 %		
	033-003-00-0	215-481-4	1327-53-3									
2	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				22	mg/kg	1.462	32.154	mg/kg	0.00322 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				33	mg/kg	1.126	37.154	mg/kg	0.00372 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	43	mg/kg		43	mg/kg	0.0043 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				25	mg/kg	2.637	65.917	mg/kg	0.00659 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				50	mg/kg	2.469	123.465	mg/kg	0.0123 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				<20	mg/kg		<20	mg/kg	<0.002 %		<LOD
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	pH		PH		7.6 pH		7.6 pH	7.6 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	phenanthrene	201-581-5	85-01-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
25	fluoranthene	205-912-4	206-44-0		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
26	pyrene	204-927-3	129-00-0		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
28	chrysene 601-048-00-0	205-923-4	218-01-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
32	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
34	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0355 %		

Key

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

Classification of sample: TP05[2]

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

Sample details

Sample name:	LoW Code:
TP05[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
20% (no correction)	

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#	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									
1	arsenic { arsenic trioxide }				42	mg/kg	1.32	55.454	mg/kg	0.00555 %		
	033-003-00-0	215-481-4	1327-53-3									
2	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				36	mg/kg	1.462	52.616	mg/kg	0.00526 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				49	mg/kg	1.126	55.169	mg/kg	0.00552 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	100	mg/kg		100	mg/kg	0.01 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				11	mg/kg	2.637	29.004	mg/kg	0.0029 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				110	mg/kg	2.469	271.623	mg/kg	0.0272 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				45	mg/kg		45	mg/kg	0.0045 %		
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	pH		PH		10.7 pH		10.7 pH	10.7 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	phenanthrene	201-581-5	85-01-8		1.5 mg/kg		1.5 mg/kg	0.00015 %		
24	anthracene	204-371-1	120-12-7		0.32 mg/kg		0.32 mg/kg	0.000032 %		
25	fluoranthene	205-912-4	206-44-0		1.7 mg/kg		1.7 mg/kg	0.00017 %		
26	pyrene	204-927-3	129-00-0		1.5 mg/kg		1.5 mg/kg	0.00015 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		1 mg/kg		1 mg/kg	0.0001 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		0.65 mg/kg		0.65 mg/kg	0.000065 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		1 mg/kg		1 mg/kg	0.0001 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.34 mg/kg		0.34 mg/kg	0.000034 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.9 mg/kg		0.9 mg/kg	0.00009 %		
32	indeno[123-cd]pyrene	205-893-2	193-39-5		0.5 mg/kg		0.5 mg/kg	0.00005 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
34	benzo[ghi]perylene	205-883-8	191-24-2		0.57 mg/kg		0.57 mg/kg	0.000057 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0634 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

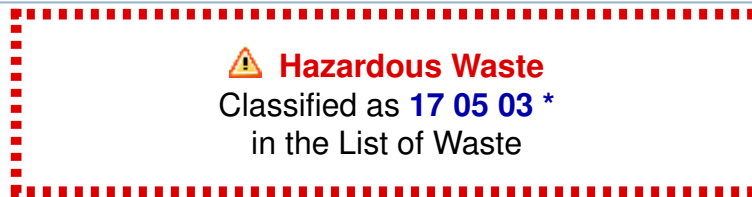
Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0045%)

Classification of sample: TP06[2]



Sample details

Sample name:	LoW Code:
TP06[2]	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
17%	Entry:
(no correction)	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

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 hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.126%)

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.126%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.126%)

Determinands

Moisture content: **17%** No Moisture Correction applied (MC)

#	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							
1	arsenic { arsenic trioxide }				24 mg/kg	1.32	31.688 mg/kg	0.00317 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium oxide }				1.2 mg/kg	1.142	1.371 mg/kg	0.000137 %		
	048-002-00-0	215-146-2	1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				25 mg/kg	1.462	36.539 mg/kg	0.00365 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4 mg/kg	2.27	<9.08 mg/kg	<0.000908 %		<LOD
	024-017-00-8									

#	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									
5	copper { dicopper oxide; copper (I) oxide }				95	mg/kg	1.126	106.959	mg/kg	0.0107 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	590	mg/kg		590	mg/kg	0.059 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				17	mg/kg	2.637	44.824	mg/kg	0.00448 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				280	mg/kg	2.469	691.403	mg/kg	0.0691 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				1260	mg/kg		1260	mg/kg	0.126 %		
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
16	xylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<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]									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	pH				9	pH		9	pH	9pH		
			PH									
19	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
20	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
21	acenaphthene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
		201-469-6	83-32-9									
22	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
23	phenanthrene				2	mg/kg		2	mg/kg	0.0002 %		
		201-581-5	85-01-8									
24	anthracene				0.56	mg/kg		0.56	mg/kg	0.000056 %		
		204-371-1	120-12-7									
25	fluoranthene				5.3	mg/kg		5.3	mg/kg	0.00053 %		
		205-912-4	206-44-0									
26	pyrene				4.5	mg/kg		4.5	mg/kg	0.00045 %		
		204-927-3	129-00-0									
27	benzo[a]anthracene				2.5	mg/kg		2.5	mg/kg	0.00025 %		
	601-033-00-9	200-280-6	56-55-3									
28	chrysene				2.7	mg/kg		2.7	mg/kg	0.00027 %		
	601-048-00-0	205-923-4	218-01-9									
29	benzo[b]fluoranthene				2.5	mg/kg		2.5	mg/kg	0.00025 %		
	601-034-00-4	205-911-9	205-99-2									
30	benzo[k]fluoranthene				1.3	mg/kg		1.3	mg/kg	0.00013 %		
	601-036-00-5	205-916-6	207-08-9									

#	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							
31	benzo[a]pyrene; benzo[def]chrysene				2 mg/kg		2 mg/kg	0.0002 %		
	601-032-00-3	200-028-5	50-32-8							
32	indeno[123-cd]pyrene				1.6 mg/kg		1.6 mg/kg	0.00016 %		
		205-893-2	193-39-5							
33	dibenz[a,h]anthracene				0.56 mg/kg		0.56 mg/kg	0.000056 %		
	601-041-00-2	200-181-8	53-70-3							
34	benzo[ghi]perylene				1.7 mg/kg		1.7 mg/kg	0.00017 %		
		205-883-8	191-24-2							
35	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
Total:								0.281 %		

Key

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

Classification of sample: TP12[2]

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

Sample details

Sample name:	LoW Code:
TP12[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
17% (no correction)	

Hazard properties

None identified

Determinands

Moisture content: 17% No Moisture Correction applied (MC)

#	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									
1	arsenic { arsenic trioxide }				22	mg/kg	1.32	29.047	mg/kg	0.0029 %		
	033-003-00-0	215-481-4	1327-53-3									
2	cadmium { cadmium oxide }				0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
	048-002-00-0	215-146-2	1306-19-0									
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				27	mg/kg	1.462	39.462	mg/kg	0.00395 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				51	mg/kg	1.126	57.42	mg/kg	0.00574 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	230	mg/kg		230	mg/kg	0.023 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				16	mg/kg	2.637	42.187	mg/kg	0.00422 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				160	mg/kg	2.469	395.087	mg/kg	0.0395 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				43	mg/kg		43	mg/kg	0.0043 %		
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	 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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	 pH		PH		10.2 pH		10.2 pH	10.2 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	 acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	 acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	 fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	 phenanthrene	201-581-5	85-01-8		0.91 mg/kg		0.91 mg/kg	0.000091 %		
24	 anthracene	204-371-1	120-12-7		0.26 mg/kg		0.26 mg/kg	0.000026 %		
25	 fluoranthene	205-912-4	206-44-0		2.1 mg/kg		2.1 mg/kg	0.00021 %		
26	 pyrene	204-927-3	129-00-0		1.7 mg/kg		1.7 mg/kg	0.00017 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.7 mg/kg		0.7 mg/kg	0.00007 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		0.8 mg/kg		0.8 mg/kg	0.00008 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.47 mg/kg		0.47 mg/kg	0.000047 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.47 mg/kg		0.47 mg/kg	0.000047 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.47 mg/kg		0.47 mg/kg	0.000047 %		
32	 indeno[123-cd]pyrene	205-893-2	193-39-5		0.35 mg/kg		0.35 mg/kg	0.000035 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
34	 benzo[ghi]perylene	205-883-8	191-24-2		0.38 mg/kg		0.38 mg/kg	0.000038 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0861 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0043%)

Classification of sample: TP09[2]

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

Sample details

Sample name:	LoW Code:
TP09[2]	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
19% (no correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% No Moisture Correction applied (MC)

#	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							
1	arsenic { arsenic trioxide }				19 mg/kg	1.32	25.086 mg/kg	0.00251 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				45 mg/kg	1.462	65.77 mg/kg	0.00658 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				18 mg/kg	2.27	40.86 mg/kg	0.00409 %		
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				39 mg/kg	1.126	43.91 mg/kg	0.00439 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	230 mg/kg		230 mg/kg	0.023 %		
	082-001-00-6									
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel sulfate }				14 mg/kg	2.637	36.914 mg/kg	0.00369 %		
	028-009-00-5	232-104-9	7786-81-4							
9	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc sulphate }				160 mg/kg	2.469	395.087 mg/kg	0.0395 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
11	TPH (C6 to C40) petroleum group				155 mg/kg		155 mg/kg	0.0155 %		
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
17	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				1.8 mg/kg	1.884	3.391 mg/kg	0.000339 %			
18	 pH PH				7.9 pH		7.9 pH	7.9 pH			
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	acenaphthylene 205-917-1	208-96-8			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	acenaphthene 201-469-6	83-32-9			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	fluorene 201-695-5	86-73-7			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
23	phenanthrene 201-581-5	85-01-8			0.32 mg/kg		0.32 mg/kg	0.000032 %			
24	anthracene 204-371-1	120-12-7			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	fluoranthene 205-912-4	206-44-0			0.68 mg/kg		0.68 mg/kg	0.000068 %			
26	pyrene 204-927-3	129-00-0			0.68 mg/kg		0.68 mg/kg	0.000068 %			
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.39 mg/kg		0.39 mg/kg	0.000039 %			
28	chrysene 601-048-00-0	205-923-4	218-01-9		0.44 mg/kg		0.44 mg/kg	0.000044 %			
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.47 mg/kg		0.47 mg/kg	0.000047 %			
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.25 mg/kg		0.25 mg/kg	0.000025 %			
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.44 mg/kg		0.44 mg/kg	0.000044 %			
32	indeno[123-cd]pyrene 205-893-2	193-39-5			0.25 mg/kg		0.25 mg/kg	0.000025 %			
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
34	benzo[ghi]perylene 205-883-8	191-24-2			0.31 mg/kg		0.31 mg/kg	0.000031 %			
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
Total:									0.1 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0155%)

Classification of sample: Slip Trench 5[2]

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

Sample details

Sample name:	LoW Code:
Slip Trench 5[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
20% (no correction)	

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#	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									
1	arsenic { arsenic trioxide }				18	mg/kg	1.32	23.766	mg/kg	0.00238 %		
	033-003-00-0	215-481-4	1327-53-3									
2	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				29	mg/kg	1.462	42.385	mg/kg	0.00424 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				62	mg/kg	1.126	69.805	mg/kg	0.00698 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	180	mg/kg		180	mg/kg	0.018 %		
	082-001-00-6											
7	mercury { mercury dichloride }				0.8	mg/kg	1.353	1.083	mg/kg	0.000108 %		
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				30	mg/kg	2.637	79.101	mg/kg	0.00791 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				120	mg/kg	2.469	296.316	mg/kg	0.0296 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				570	mg/kg		570	mg/kg	0.057 %		
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	 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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	 pH PH				8 pH		8 pH	8pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	 acenaphthylene 205-917-1	208-96-8			0.62 mg/kg		0.62 mg/kg	0.000062 %		
21	 acenaphthene 201-469-6	83-32-9			3.4 mg/kg		3.4 mg/kg	0.00034 %		
22	 fluorene 201-695-5	86-73-7			3.3 mg/kg		3.3 mg/kg	0.00033 %		
23	 phenanthrene 201-581-5	85-01-8			23 mg/kg		23 mg/kg	0.0023 %		
24	 anthracene 204-371-1	120-12-7			5.5 mg/kg		5.5 mg/kg	0.00055 %		
25	 fluoranthene 205-912-4	206-44-0			27 mg/kg		27 mg/kg	0.0027 %		
26	 pyrene 204-927-3	129-00-0			25 mg/kg		25 mg/kg	0.0025 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		17 mg/kg		17 mg/kg	0.0017 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		10 mg/kg		10 mg/kg	0.001 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		17 mg/kg		17 mg/kg	0.0017 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		4.4 mg/kg		4.4 mg/kg	0.00044 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		15 mg/kg		15 mg/kg	0.0015 %		
32	 indeno[123-cd]pyrene 205-893-2	193-39-5			6.4 mg/kg		6.4 mg/kg	0.00064 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		2 mg/kg		2 mg/kg	0.0002 %		
34	 benzo[ghi]perylene 205-883-8	191-24-2			7.7 mg/kg		7.7 mg/kg	0.00077 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.144 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

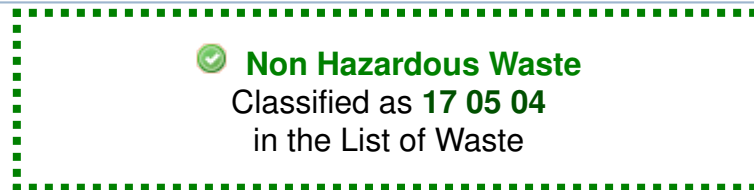
Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.057%)

Classification of sample: Slip Trench 6[2]



Sample details

Sample name:	LoW Code:
Slip Trench 6[2]	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
18%	Entry:
(no correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% No Moisture Correction applied (MC)

#	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							
1	arsenic { arsenic trioxide }				18 mg/kg	1.32	23.766 mg/kg	0.00238 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				35 mg/kg	1.462	51.154 mg/kg	0.00512 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4 mg/kg	2.27	<9.08 mg/kg	<0.000908 %		<LOD
	024-017-00-8									
5	copper { dicopper oxide; copper (I) oxide }				45 mg/kg	1.126	50.665 mg/kg	0.00507 %		
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	80 mg/kg		80 mg/kg	0.008 %		
	082-001-00-6									
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel sulfate }				39 mg/kg	2.637	102.831 mg/kg	0.0103 %		
	028-009-00-5	232-104-9	7786-81-4							
9	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc sulphate }				110 mg/kg	2.469	271.623 mg/kg	0.0272 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
11	TPH (C6 to C40) petroleum group				44 mg/kg		44 mg/kg	0.0044 %		
			TPH							
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
13	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
14	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	pH PH				8.2 pH		8.2 pH	8.2 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	acenaphthylene 205-917-1	208-96-8			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	acenaphthene 201-469-6	83-32-9			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene 201-695-5	86-73-7			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	phenanthrene 201-581-5	85-01-8			0.76 mg/kg		0.76 mg/kg	0.000076 %		
24	anthracene 204-371-1	120-12-7			<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
25	fluoranthene 205-912-4	206-44-0			0.85 mg/kg		0.85 mg/kg	0.000085 %		
26	pyrene 204-927-3	129-00-0			0.83 mg/kg		0.83 mg/kg	0.000083 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.46 mg/kg		0.46 mg/kg	0.000046 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		0.5 mg/kg		0.5 mg/kg	0.00005 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.49 mg/kg		0.49 mg/kg	0.000049 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.22 mg/kg		0.22 mg/kg	0.000022 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.48 mg/kg		0.48 mg/kg	0.000048 %		
32	indeno[123-cd]pyrene 205-893-2	193-39-5			0.21 mg/kg		0.21 mg/kg	0.000021 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
34	benzo[ghi]perylene 205-883-8	191-24-2			0.25 mg/kg		0.25 mg/kg	0.000025 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0645 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0044%)

Classification of sample: Slip Trench 4[2]

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

Sample details

Sample name:	LoW Code:
Slip Trench 4[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15% (no correction)	

Hazard properties

None identified

Determinands

Moisture content: **15% No Moisture Correction applied (MC)**

#	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									
1	arsenic { arsenic trioxide }				15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
	033-003-00-0	215-481-4	1327-53-3									
2	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				31	mg/kg	1.462	45.308	mg/kg	0.00453 %		
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				40	mg/kg	1.126	45.036	mg/kg	0.0045 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	140	mg/kg		140	mg/kg	0.014 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				30	mg/kg	2.637	79.101	mg/kg	0.00791 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				68	mg/kg	2.469	167.912	mg/kg	0.0168 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				<20	mg/kg		<20	mg/kg	<0.002 %		<LOD
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	pH		PH		7.8 pH		7.8 pH	7.8 pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	phenanthrene	201-581-5	85-01-8		0.71 mg/kg		0.71 mg/kg	0.000071 %		
24	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
25	fluoranthene	205-912-4	206-44-0		0.55 mg/kg		0.55 mg/kg	0.000055 %		
26	pyrene	204-927-3	129-00-0		0.51 mg/kg		0.51 mg/kg	0.000051 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.22 mg/kg		0.22 mg/kg	0.000022 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		0.29 mg/kg		0.29 mg/kg	0.000029 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.22 mg/kg		0.22 mg/kg	0.000022 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.17 mg/kg		0.17 mg/kg	0.000017 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.26 mg/kg		0.26 mg/kg	0.000026 %		
32	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
34	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0536 %		

Key

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

Classification of sample: TP14[2]

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

Sample details

Sample name:	LoW Code:
TP14[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
9.9% (no correction)	

Hazard properties

None identified

Determinands

Moisture content: 9.9% No Moisture Correction applied (MC)

#	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									
1	arsenic { arsenic trioxide }				29	mg/kg	1.32	38.289	mg/kg	0.00383 %		
	033-003-00-0	215-481-4	1327-53-3									
2	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				<4	mg/kg	1.462	<5.846	mg/kg	<0.000585 %		<LOD
		215-160-9	1308-38-9									
4	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<4	mg/kg	2.27	<9.08	mg/kg	<0.000908 %		<LOD
	024-017-00-8											
5	copper { dicopper oxide; copper (I) oxide }				130	mg/kg	1.126	146.365	mg/kg	0.0146 %		
	029-002-00-X	215-270-7	1317-39-1									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	170	mg/kg		170	mg/kg	0.017 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel sulfate }				44	mg/kg	2.637	116.014	mg/kg	0.0116 %		
	028-009-00-5	232-104-9	7786-81-4									
9	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
10	zinc { zinc sulphate }				110	mg/kg	2.469	271.623	mg/kg	0.0272 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	TPH (C6 to C40) petroleum group				250	mg/kg		250	mg/kg	0.025 %		
			TPH									
12	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
13	benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									

#	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	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]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
17	 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				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
18	 pH		PH		8 pH		8 pH	8pH		
19	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	 acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	 acenaphthene	201-469-6	83-32-9		4.6 mg/kg		4.6 mg/kg	0.00046 %		
22	 fluorene	201-695-5	86-73-7		3.5 mg/kg		3.5 mg/kg	0.00035 %		
23	 phenanthrene	201-581-5	85-01-8		31 mg/kg		31 mg/kg	0.0031 %		
24	 anthracene	204-371-1	120-12-7		8.3 mg/kg		8.3 mg/kg	0.00083 %		
25	 fluoranthene	205-912-4	206-44-0		34 mg/kg		34 mg/kg	0.0034 %		
26	 pyrene	204-927-3	129-00-0		29 mg/kg		29 mg/kg	0.0029 %		
27	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		16 mg/kg		16 mg/kg	0.0016 %		
28	chrysene 601-048-00-0	205-923-4	218-01-9		11 mg/kg		11 mg/kg	0.0011 %		
29	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		16 mg/kg		16 mg/kg	0.0016 %		
30	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		4.4 mg/kg		4.4 mg/kg	0.00044 %		
31	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		13 mg/kg		13 mg/kg	0.0013 %		
32	 indeno[123-cd]pyrene	205-893-2	193-39-5		6.4 mg/kg		6.4 mg/kg	0.00064 %		
33	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		1.8 mg/kg		1.8 mg/kg	0.00018 %		
34	 benzo[ghi]perylene	205-883-8	191-24-2		7.8 mg/kg		7.8 mg/kg	0.00078 %		
35	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.12 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because no free phase present. Unlikely to be HP3 liquid or gaseous flammable. Next lowest threshold applied

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.025%)

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 (worst case)**

GB MCL index number: 082-001-00-6

Description/Comments: Worst Case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers lead compounds from smelting industries, flue dust and similar to be Carcinogenic category 1A

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 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html (worst case lead compounds). Review date 29/09/2015

■ **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

■ **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

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

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

■ **pH** (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

■ **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

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

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

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass (edit as required)

chromium in chromium(VI) compounds {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case species based on hazard statements/molecular weight (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worst case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead compounds with the exception of those specified elsewhere in this Annex (worst case)}

chromate undetected or of insufficient quantity

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel sulfate}

chromate undetected or of insufficient quantity. CN/HCN not present next worse case form used

selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

zinc {zinc sulphate}

no chromate detected. SO4 form next most likely

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}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2022.145.5156.9713 (25 May 2022)

HazWasteOnline Database: 2022.145.5156.9713 (25 May 2022)

This classification utilises the following guidance and legislation:

WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021

CLP Regulation - Regulation 1272/2008/EC of 16 December 2008

1st ATP - Regulation 790/2009/EC of 10 August 2009

2nd ATP - Regulation 286/2011/EC of 10 March 2011

3rd ATP - Regulation 618/2012/EU of 10 July 2012

4th ATP - Regulation 487/2013/EU of 8 May 2013

Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013

5th ATP - Regulation 944/2013/EU of 2 October 2013

6th ATP - Regulation 605/2014/EU of 5 June 2014

WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014

Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014

7th ATP - Regulation 2015/1221/EU of 24 July 2015

8th ATP - Regulation (EU) 2016/918 of 19 May 2016

9th ATP - Regulation (EU) 2016/1179 of 19 July 2016

10th ATP - Regulation (EU) 2017/776 of 4 May 2017

HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017

13th ATP - Regulation (EU) 2018/1480 of 4 October 2018

14th ATP - Regulation (EU) 2020/217 of 4 October 2019

15th ATP - Regulation (EU) 2020/1182 of 19 May 2020

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)

Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020

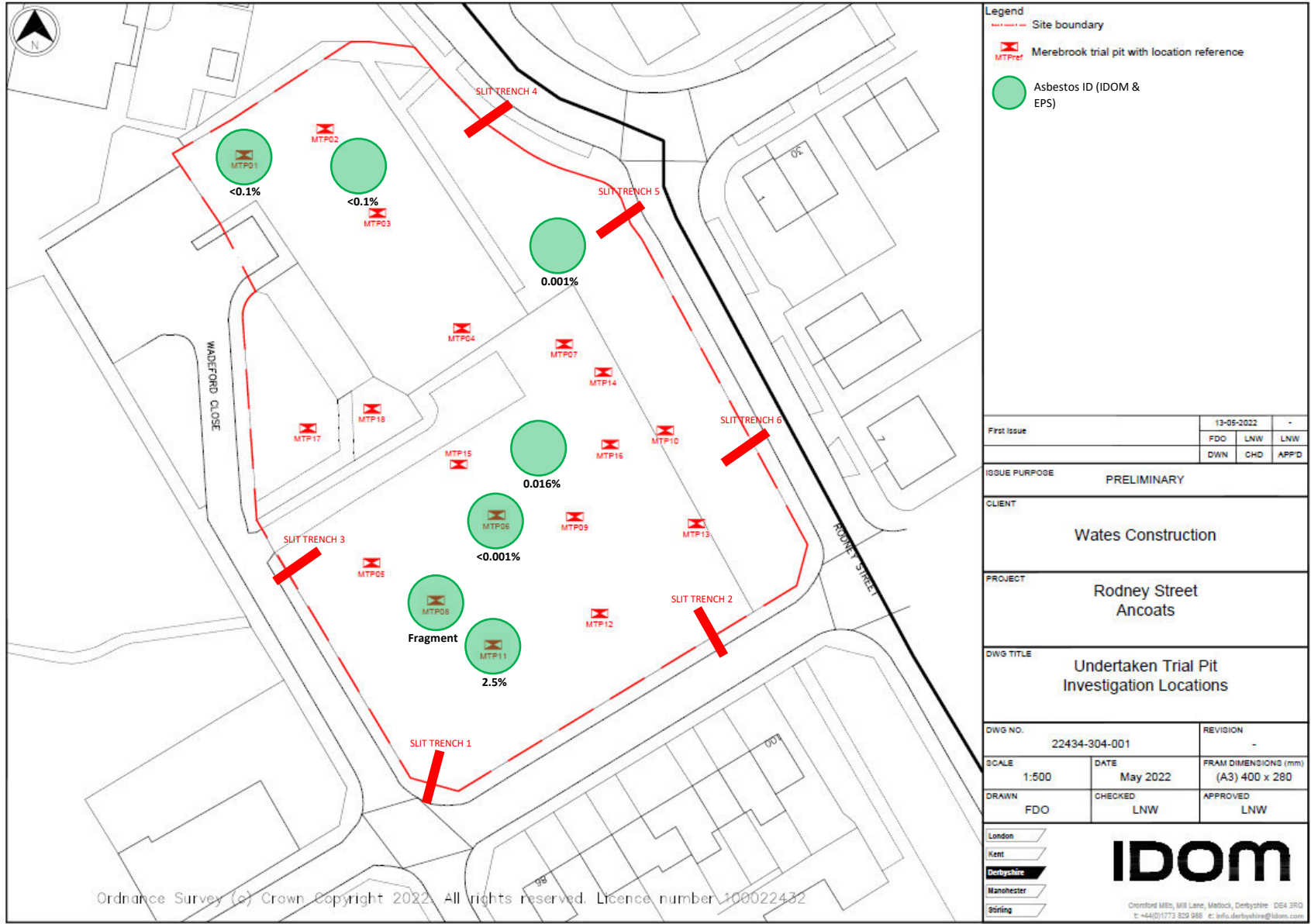
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK:

2020 No. 1540 of 16th December 2020

GB MCL List - version 1.1 of 09 June 2021

APPENDIX 5

Contaminant Summary Sketch's





Legend

- Site boundary
- Merebrook trial pit with location reference
- Soil Contamination (Human health)

First Issue	13-06-2022	-
	FDO	LNW
	DWN	CHD
		APP'D

ISSUE PURPOSE: PRELIMINARY

CLIENT: Wates Construction

PROJECT: Rodney Street Ancoats

DWG TITLE: Undertaken Trial Pit Investigation Locations

DWG NO.	22434-304-001	REVISION	-
SCALE	1:500	DATE	May 2022
		FRAME DIMENSIONS (mm)	(A3) 400 x 280
DRAWN	FDO	CHECKED	LNW
		APPROVED	LNW

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Kent

Derbyshire

Manchester

Stirling

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Legend

Site boundary

Merebrook trial pit with location reference

Hazardous Waste

Approximate
Volume; 362m³

Stable non-reactive

Approximate
Volume; 260m³

First Issue	13-06-2022	-
	FDO	LNW
	DWN	CHD
		APFD
ISSUE PURPOSE	PRELIMINARY	
CLIENT	Wates Construction	
PROJECT	Rodney Street Ancoats	
DWG TITLE	Undertaken Trial Pit Investigation Locations	
DWG NO.	22434-304-001	REVISION -
SCALE 1:500	DATE May 2022	FRAM DIMENSIONS (mm) (A3) 400 x 280
DRAWN FDO	CHECKED LNW	APPROVED LNW

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