COLLIS PRIMARY SCHOOL PHASE 2, TEDDINGTON

FACTUAL AND INTERPRETATIVE REPORT ON GROUND INVESTIGATION

Report No H8061-18

July 2018

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1 INTRODUCTION

In May 2018 SOCOTEC UK Limited was commissioned by Extraspace Solutions (ES) to carry out a ground investigation at Collis Primary School Phase 2, Teddington. The investigation was required to obtain geotechnical and geoenvironmental information for a proposed new school building.

The scope of the investigation was specified by SOCOTEC and comprised cable percussion and dynamic windowless sampled boreholes, hand excavated trial pits, in situ testing and laboratory testing. The investigation was performed in accordance with the contract specification, and the general requirements of BS 5930:2015, BS EN 1997-2 (2007), BS EN ISO 22475-1 (2006) and other relevant related standards identified below. The fieldwork took place between 29 May and 1 June 2018.

This report presents the factual records of the fieldwork and laboratory testing.

A previous ground investigation had been carried out by ESG (Report No E6081-16 in March 2017). The data presented in the ESG report has been interpreted by Mott MacDonald and their discussion is presented within report Priority School Building Programme 2, Collis Primary School, Ground Investigation Report (dated April 2017). A copy of both reports were made available to SOCOTEC at the outset of the current investigation.

2 SITE SETTING

2.1 Location and Description

Collis Primary School is located in Teddington, Middlesex, approximately 2 km north west of the centre of Kingston upon Thames, at National Grid reference TQ 165 705, see Site Location Plan in Appendix A.

The site is generally level and roughly triangular in shape measuring 45 m by 30 m at its widest points. The site surface comprises predominantly hard standing and is utilised as a playground. The eastern part of the site comprises a grassed area used as a playing field.

The site is bounded to the south and west by existing school buildings, to the north by residential dwellings and to the east by the school playing fields.

The River Thames is approximately 1 km east of the site.

2.2 Published Geology and Previous Ground Investigations

2.2.1 Published Geological Information

The published geological information for the site, British Geological Survey (BGS) Sheet 270 (1998) and the BGS Geology of Britain Viewer (2018) indicate it to be underlain by superficial deposits comprising of the Kempton Park Gravel Member of Quaternary age. This is shown to comprise sands and gravels.

The underlying bedrock geology is shown to be the London Clay Formation of Palaeogene age. This is shown to comprise silty and sandy clays.

2.2.2 Previous Investigations

SOCOTEC previously undertook a ground investigation at Collis Primary School in November 2016, and the subsequent Factual Report on Ground Investigation, Report Number E6081-16, was issued in March 2017 (ESG, 2017).

The geology encountered within the previous ground investigation is summarised in Table 1 below.

TABLE 1 : SUMMARY OF GROUND CONDITIONS ENCOUNTERED DURING PREVIOUS INVESITGATION

STRATUM	DEPTH (m below GL)	NATURE OF MATERIAL
Made Ground	Encountered between 0.00 m and 1.20 m.	Predominantly dark orangish brown gravelly silty fine to medium SAND. Gravel is angular to rounded fine to coarse of brick, concrete, quartzite and flint.
Kempton Park Gravel Member	Encountered between 1.20 m and 5.00 m.	Predominantly medium dense to very dense orangish brown sandy slightly silty angular to rounded fine to coarse GRAVEL of flint with low cobble content. Sand is fine to coarse. Cobbles are angular to rounded of flint.
London Clay Formation	Encountered between 5.00 m and 20.00 m.	Predominately stiff to very stiff locally fissured greyish brown silty CLAY.

3 FIELDWORK

The current phase of fieldwork was carried out in general accordance with BS 5930:2015, BS EN 1997-2 (2007) and BS EN ISO 22475-1 (2006).

The exploratory hole and in situ test locations were selected by SOCOTEC. The locations were set out from local features. The co-ordinates and reduced levels were surveyed by SOCOTEC to National Grid and Ordnance Datum. The exploratory hole and in situ test locations are shown on the Site Plan in Appendix A.

3.1 Exploratory Holes

The exploratory holes are listed in the following table.

TABLE 2 : SUMMARY OF EXPLORATORY HOLES

TYPE	QUANTITY	MAXIMUM DEPTH (m)	REMARKS
Cable Percussion Boring	2	15.00	CP101 and CP102
Dynamic Windowless Sampling	8	3.45	WS101 to WS108
Hand Excavated Trial Pits	2	1.20	HDP101 and HDP102

The exploratory hole logs are presented in Appendix B. These provide information including the equipment and methods used, samples taken, tests carried out, water observations and descriptions of the strata encountered. Explanation of the terms and abbreviations used on the logs is given in the Key to Exploratory Hole Records in Appendix B, together with other explanatory information. The logging of soil is in accordance with BS EN ISO 14688-1+A1 (2013) for soils and, as amplified by BS 5930:2015.

Photographs of the dynamic windowless samples and trial pits are presented in Appendix G.

On completion of the fieldwork geotechnical samples were transported to the Bridgend office of SOCOTEC for temporary retention, with those required for testing being transferred to the laboratory at Doncaster. Geoenvironmental samples were transported from site directly to the laboratory at Bretby (Burton-on-Trent).

3.2 Groundwater and Gas Monitoring

Instrumentation installed in the exploratory holes for groundwater and gas monitoring are shown on the logs and summarised in Appendix C. Records of monitoring carried out by SOCOTEC during and after the fieldwork period are presented in Appendix C.

3.3 In Situ Testing

In situ testing was carried out in accordance with the relevant standards as tabulated below. The testing is summarised in the following table and the results are presented in Appendix D unless noted otherwise. Calibration certificates where appropriate are included with the results in the appendix.

TABLE 3 : SUMMARY OF IN SITU TESTING

TYPE	QUANTITY	REMARKS
Standard Penetration Test	33	BS EN ISO 22476-3 (2011). Results presented on logs as uncorrected N values in Appendix B
Dynamic Cone Penetrometer Testing (TRL method)	8	TRRL-WS101 to TRRL-WS108 Design Manual for Roads and Bridges: Volume 7, Section 3, Part 2, HD29/08 (2008)

4 LABORATORY TESTING

4.1 Geotechnical Testing

Geotechnical laboratory testing was scheduled by SOCOTEC and was carried out in accordance with BS 1377 (1990) and BS EN ISO 17892 (2014) Part 1 unless otherwise stated. The testing is summarised below and the results are presented in Appendix E.

- Water Content Determination
- Atterberg Limit Determination
- Particle Size Distribution (PSD) Analysis
- pH and Water Soluble Sulphate Content of Soils Magnesium, Chloride, Nitrate, Acid Soluble Sulphate and Total Sulphur Test methods are BS 1377 or others recognised in BRE Special Digest 1 (2005); they are indicated on the results report sheets in Appendix E.
- Unconsolidated Undrained Triaxial Compression Testing

4.2 Geoenvironmental Testing

Geoenvironmental laboratory testing was scheduled by SOCOTEC on the soil samples recovered during the fieldwork, and water samples taken by SOCOTEC from the installations. The testing was carried out by the laboratory at Burton on Trent. The results are presented in Appendix F.

5 GROUND CONDITIONS AND GROUNDWATER

5.1 Strata Encountered

Descriptions of the strata encountered are given on the exploratory hole records. The downward succession encountered is broadly uniform across the site and is summarised below.

TABLE 4 : SUMMARY OF GROUND CONDITIONS

STRATUM ENCOUNTERED	RANGE OF THICKNESSES (m)	REMARKS
Made Ground	0.25 – 1.4	Encountered within all exploratory holes. Base note proven within WS104, HDP101 and HDP102.
Kempton Park Gravel Member	1.72 – 5.25	Encountered within CP101, CP102, WS101 to WS103 and WS105 to WS108. Base note proven within WS101 to WS103 and WS105 to WS108.
London Clay Formation	4.40 - 9.30	Encountered within CP101 and CP102. Base not proven.

5.2 Made Ground

The Made Ground is described both as predominantly granular materials. Granular Made Ground was encountered within all exploratory hole locations and predominantly comprises a sandy slightly clayey subangular to subrounded fine to coarse gravel of concrete, limestone, brick, flint and occasionally macadam. Cobbles were encountered within CP101, CP102 and WS102.

Cohesive Made Ground was encountered within HDP101 an HDP102 from ground level to 0.60 m depth and comprised soft dark brown slightly gravely sandy silt. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of flint and brick.

Within CP101 between 0.18 m to 0.45 m a layer of black, sandy, angular to subrounded fine to coarse gravel of macadam, clinker and limestone was encountered. The sand comprised fine to coarse ash.

One Particle Size Distribution (PSD) was completed on the Made Ground and indicated the material to be coarse grained, comprising 11 % cobbles and boulders, 54 % gravel, 29 % sand, and 5 % silt and clay.

5.3 Kempton Park Gravel Member

Kempton Park Gravel Member was encountered within all exploratory holes locations which penetrated the base of the Made Ground, to a maximum depth of 6.00 m.

The Kempton Park Gravel Member is coarse grained and generally described as a sandy, slightly clayey, subangular to subrounded fine to coarse gravel of flint, or a gravelly, slightly clayey fine to coarse sand.

A localised, thin stratum of cohesive material was encountered within WS103 and comprised sandy, gravelly clay. Sand is fine to coarse. Gravel is subangular to subrounded, fine to coarse of flint.

Atterberg limits tests carried out on one sample of the cohesive strata of the Kempton Park Gravel Member indicated a plasticity index value of 9 %. A plot of this result, shown on Figure A3 in Appendix A, indicates that the material may be classified as clay of low plasticity.

Six PSD Analyses carried out in the granular Kempton Park Gravel Member show it to be coarse grained material with between 18 % and 82 % gravel, 17 % and 75 % sand and 1% and 15 % silt and clay.

Twenty five SPTs were carried out in the Kempton Park Gravel Formation at depths of between 1.20 m and 5.00 m depth (see Figure A4). Seventeen SPTs carried out between 1.20 m and 2.00 m depth gave SPT N-values of between 10 and 50. Eight SPTs carried out between 3.00 m and 5.00 m gave N-values of between 17 and 50.

5.4 London Clay Formation

The London Clay Formation was encountered below the Kempton Park Gravel Member within borehole CP101 and CP102 to a maximum depth of 15.00 m. The base of the stratum was not proven.

The London Clay Formation is described as stiff and very stiff slightly sandy silty clay. Sand is fine.

Atterberg limits tests carried out on one sample recovered from the London Clay Formation indicated a plasticity index value of 34 %. A plot of this result, shown on Figure A3, indicates that the material may be classified as clay of high plasticity.

Unconsolidated Undrained Triaxial Compression Testing was undertaken on one undisturbed sample of the London Clay Formation. This indicated an undrained shear strength value of 136 kPa.

Five SPTs were carried out in the London Clay Formation a depths of between 6.50 m and 12.50 m depth. The SPTs gave N-values of between 22 and 31.

5.5 Groundwater

The following groundwater strikes were encountered during drilling. All groundwater strikes occurred within the Kempton Park Gravel Member.

TABLE 5 : GROUNDWATER ENCOUNTERED DURING DRILLING

LOCATION	Depth of Strike (m)	REMARKS
CP101	3.20	Rose to 2.80 m after 20 minutes
CP102	3.40	Rose to 2.90 m after 20 minutes
CP102	6.00	Rose to 5.00 m after 20 minutes
WS102	3.00	No change in water level observed
WS103	3.00	No change in water level observed
WS107	3.30	Rose to 2.90 m after 20 minutes

It should be noted that these observations do not necessarily indicate equilibrium conditions.

Three rounds of groundwater monitoring were completed following the fieldwork period between 21 June and 6 July 2018. During these visits groundwater was encountered within the Kempton Park Gravel Member at depths of between 2.75 m and 4.85 m below ground level. It will be appreciated that seasonal fluctuations in groundwater level occur. Other effects such as investigation and constructional excavation may also change groundwater levels.

6 PROPOSED WORKS

As discussed in Section 1, it is proposed to construct a new building at the school site to expand the school. The proposed structure is a two storey building and whilst design drawings and proposed loadings are not available at the time of writing this report, it is considered the structure is likely to be lightly loaded.

The structure is being built adjacent to the existing school and is located in an area of hardstanding and soft landscaping, therefore it is not considered that landscaping works will form part of the proposed development.

7 GEOTECHNICAL ENGINEERING ASSESSMENT

7.1 Foundations

The findings of the investigation indicate that the area of the proposed school buildings are underlain by a variable thickness of Made Ground overlying the Kempton Park Gravel Member, which in turn overlies the London Clay Formation. The base of the London Clay Formation was not proven in the boreholes which had a maximum depth of 15.00 m.

Given the above ground conditions, and the assumed relatively light structural loads of the proposed new building, it is considered that conventional pad or strip foundations would be appropriate for the proposed new buildings.

Due to the variable nature of the Made Ground these materials should not be used for foundation purposes. Therefore, the pad or strip foundations should extend through the Made Ground in all areas, to be based within the underlying granular materials of the Kempton Park Gravel Member. It is recommended that foundations be based 0.30 m below the top of the Kempton Park Gravel Member, adopting a minimum depth of 1.00 m. Based on the findings of the investigation, the top of the Kempton Park Gravel Member is present at depths of up to approximately 1.40 m below ground level, and under such circumstances a foundation depth of 1.70 m would be recommended. Should a greater thickness of Made Ground be discovered locally, meaning that the Kempton Park Gravel Member is deeper than has been encountered in the investigation, then foundation depths should be increased accordingly.

For pad foundations up to 2 m wide an approximate safe bearing pressure of 150 kPa should be achievable at a depth of 1.20 m.. This should restrict likely settlement to within approximately 25 mm.

However, Owing to the potential for soil variability the formation levels would need to be inspected, with any soft or loose spots excavated and replaced with suitable compacted granular fill or lean-mix concrete.

7.2 Floor Slabs

As the Made Ground over substantial parts of the site area is relatively thick (in excess of 0.60 m), it is recommended that suspended floor slabs be adopted. Alternatively, consideration could be given to the removal of the Made Ground, replacing it with selected, well compacted granular fill.

7.3 Excavations

Excavation of the materials for shallow foundations should generally be within the scope of conventional backhoe excavators. The materials in foundation excavations should be exposed for as little time as is practical in order to minimise the risk of disturbance or collapse. Foundations should therefore be completed as soon as possible after excavation (i.e. during the same day). If old foundations obstructions are present, such as the shallow depth concrete encountered in WS104, these may require additional breaking out with pneumatic tools. Should old foundations or other obstructions coincide with the proposed location of the new footings these should be removed to avoid creating “hard” spots which could result in local differential settlement. All new foundations should be based at a greater depth than any former foundations.

Available groundwater information indicates that shallow excavations open for a short period of time are unlikely to be subject to substantial groundwater ingress (Section 5.5 reports the shallowest recorded standing water level of 2.75 m). However, groundwater levels may be higher at the time of construction, and if foundation excavations encounter groundwater ingress it should be removed immediately from all excavations.

It should be noted that side stability of foundation excavations may be relatively poor, requiring suitable support (or being cut to an appropriate batter). Similarly, should man entry be required in any excavations they should be made safe by appropriately supporting the excavations walls, or cutting them to a suitable batter.

7.4 Pavements

Pavement design is based on the recommendations given in the Highways Agency Interim Advice Note 73/06 (2009) which requires an assessment of the subgrade stiffness based on CBR values. The design CBR is based on a consideration of the soil description and the long-term and short term CBR. Table 5.1 of Advice Note 73/06 provides estimated values for long-term CBR depending on soil type, particularly for clay subgrades, where moisture and plasticity are significant issues. Assessment is provided of pavements at grade.

The near surface material comprises cohesive and granular Made Ground over the granular Kempton Park Gravel Member. The material is generally described as sandy gravel which is locally slightly clayey.

Eight in situ Dynamic Cone Penetration (DCP) tests carried out from ground level gave approximate CBR values predominantly between 4.5 % and 80%, occasionally over 100%, between ground level and a depth of 0.85 m. Elevated CBR readings may be due to the local presence of gravel and cobbles preventing the probe penetrating fully.

Based on these results it is recommended that a CBR value of 4.5% be adopted for preliminary design purposes.

However, these CBR values should be taken as a preliminary indication only, and once layouts and formation levels have been finalised the subgrade should be tested on site before construction starts. It is also important that the formation is proof rolled and any soft spots excavated and replaced with suitable compacted granular fill. Subsurface drainage will be required to control free water from pavements.

7.5 Chemical Considerations for Buried Concrete

Chemical testing for the design of subsurface concrete was carried out on five samples of Kempton Park Gravel Member between 0.50 m and 1.60 m. Potential for pyrite within the materials is considered negligible. The site is considered a brownfield location and mobile groundwater conditions have been assumed.

The samples were tested for the measurement of water soluble sulphate and pH. The results of the testing indicated values of between <10 mg/l and 594 mg/l for water soluble sulphate and pH

values of between 7.8 and 8.8, indicating the ground to be slightly alkaline in nature. Based on these results the characteristic soluble sulphate value (derived from the average of the two highest measured values) is 347.5 mg/l and the characteristic value for pH (derived from the average of the two lowest measured values) is 7.9. Following BRE Digest 1 (2005) the assessed Design Sulphate Class is DS-1.

Based on a Design Sulphate Class of DS-1, and assuming a mobile groundwater regime and a characteristic pH value of 7.9, the Aggressive Chemical Environment for Concrete Class is AC-1.

8 GEOENVIRONMENTAL ASSESSMENT

8.1 Summary of Conceptual Site Model

A Phase 1 Desk Study is not available for the site. The following sources of information have been used to identify the likely contaminants, their sources and their spatial distribution across the site with respect to the current assessment:

- ESG : Factual report on ground investigation, E6081-16, March 2017 (undertaken on behalf of Mott MacDonald, MM).
- Mott MacDonald : Priority School Building Programme 2, Collis Primary School, Ground investigation Report, dated April 2017.
- Environment Agency website

A further phase of intrusive investigation was carried out by SOCOTEC during May and June 2018.

From the information provided to SOCOTEC it is understood that the proposed works will involve the construction of a new two storey building adjacent to the existing school development.

8.1.1 Site History (On Site/Off Site)

Historical maps were reviewed during the production of the MM 2017 report. The information from this review has been used to inform the summary of potential sources below, but has not been reproduced in full here. Please refer to the MM 2017 report for full details of the site history.

8.1.2 Hydrogeology

The information obtained from the Environment Agency (EA) website has been used to provide a basic description of the hydrogeology of the site.

- Superficial : Principal Aquifer (Kempton Park Gravel Formation)
- Bedrock : Unproductive (London Clay Formation).

Principal Aquifers are defined by the EA as:

"Layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer."

Unproductive Aquifers are defined by the EA as:

"These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow."

In addition, the available information indicates that:

- There are no licensed groundwater abstractions located within 1 km of the site.
- The site is not within a source protection zone (SPZ)

No information is available regarding groundwater flow within the site boundaries.

8.1.3 Hydrology

The closest surface water feature to the site is the River Thames, located 600 m north of the site at its closest point.

The site is located within a surface water nitrate vulnerable zone.

8.1.4 Summary of Potential Sources

The site is an active primary school, with associated boiler house and historical evidence of Made Ground being present across the site which may be a source of contamination that would have the potential to pose a risk to the future site users, controlled waters and other receptors.

The contaminants associated with the above mentioned source, as derived using R&D Publication 66: 2008, Guidance for Safe Development of Housing on Land Affected by Contamination (NHBC, EA and CIEH) and through experience of industrial land, are detailed in Table 6.

TABLE 6: POTENTIAL CONTAMINANTS ASSOCIATED WITH THE SITE – ON AND OFF-SITE SOURCES

Description	**Metals, semi-metals, non-metals, inorganic chemicals and others**	**Organic chemicals**
Boiler house / Plant Rooms (On Site)	Range of metals and inorganics; Asbestos	Oil/Fuel hydrocarbons, PCBs, chlorinated aliphatic and aromatic hydrocarbons potentially present.
Made Ground (Associated with the previous school development) (On Site)	Range of metals and inorganics; asbestos and pH (away from neutral) potentially present.	Range of organics potentially present
Contemporary Industrial Land Use including railway line (Off Site)	Range of metals and inorganics potentially present	Range of organics potentially present
Historical Gas Works (Off site)	Range of metals and inorganics potentially present	Range of organics potentially present
Electricity substation (adjacent to site)	Potentially asbestos	PCBs, hydrocarbons

8.1.5 Potential Pathways and Receptors

To develop a further understanding of the potential risks posed by contaminants to human receptors, the pathways through which contaminants may impact sensitive receptors need to be identified. SOCOTEC understands that the proposed works will comprise the demolition and subsequent construction of a two storey school building. It has been assumed that there will be no garden areas where vegetables will be grown and therefore, for the purposes of this risk assessment, an end use of 'residential without the consumption of homegrown produce' has been used to assess the potential pathways and receptors of any contamination present on site. Should homegrown produce be produced onsite for consumption then it should be noted that this risk assessment may not be valid. The Contaminated Land Exposure Assessment (CLEA) model developed by the Environment Agency details potential exposure pathways for assessing risks to human health in a residential setting as follows:

- Direct soil and dust ingestion.
- Inhalation of indoor and outdoor soil derived dust
- Inhalation of indoor and outdoor soil vapours.
- Dermal contact with contaminated soil, and soil derived dust.

It is considered that the potential pathways with respect to controlled waters will include:

- Leaching and downward migration through topsoil, Made Ground and superficial deposits towards groundwater within the underlying geology.
- Lateral migration of groundwater through superficial deposits towards off site surface water such as River Thames.
- Lateral migration by means of man-made pathways (i.e. services including drains found at the wider site) off site surface water such as River Thames..

The proposed end use of residential without plant uptake has been used to develop an understanding of the likely sensitive human receptors as this is considered most appropriate for a school site. It is envisaged that the potential receptors of any contamination present on site are:

- Current site users – critical receptor, female child.
- Construction workers – critical receptor, female adult.
- Future site users – critical receptor, female child.
- Adjacent site users – critical receptor, female child

Information obtained from the Environment Agency website has been used to develop an understanding of the likely sensitive controlled waters receptors. The potential controlled waters receptors of any contamination present on site are considered to be:

- Principal aquifer associated with the Kempton Park Gravel Formation underlying the site.

8.1.6 Potential Significant Pollutant Linkages Considered

The relevant pollutant linkages based on the potential sources, pathways and receptors outlined above are summarised in the Table 7.

TABLE 7 : POTENTIAL CONTAMINANTS ASSOCIATED WITH THE SITE – ON AND OFF-SITE SOURCES

SOURCE	PATHWAY	RECEPTOR
Contaminated soils and / or groundwater associated with the sources detailed in Table 6 above.	• Soil and dust ingestion • Dermal contact • Inhalation of soil dust (indoors and outdoors) • Inhalation of soil vapours (indoors and outdoors)	• Construction and maintenance workers (female adult) • Current and future site users (female child) • Immediately adjacent residents (female child)

SOURCE	PATHWAY	RECEPTOR
	• Leaching and downward migration • Migration via groundwater	• Principal Aquifer
Ground Gases	• Migration of ground gases in the subsurface into enclosed spaces within site buildings	• Future site users • Site buildings

8.2 Human Health Risk Assessment

Laboratory analysis data from twelve samples collected during the site investigation undertaken by SOCOTEC on behalf of MM plus laboratory analysis data from twenty two additional samples obtained during the recent supplementary site investigation has been used for this assessment

8.2.1 Technical Approach

In accordance with Environment Agency guidance CLR 11, *Model Procedures for the Management of Land Contamination*, (EA, 2004), human health risk assessment follows a tiered approach. The first tier comprises a Preliminary Risk Assessment, which was completed in section 8.1 of this report. Further tiers include Generic Quantitative Risk Assessment (GQRA) and Detailed Quantitative Risk Assessment (DQRA), which use data derived from the ground investigation undertaken previously to assess risks to identified receptors. The assessment included in this report comprises a GQRA, which is undertaken by comparing soil contaminant concentrations with conservative Generic Assessment Criteria (GAC).

Generic Assessment Criteria (GAC) for various land use and exposure scenarios have been selected from the following sources:

- CL:AIRE Category 4 Screening Levels (C4SL);
- LQM Suitable for Use Levels (S4UL)[1]; and
- CL:AIRE/EIC/AGS GAC

The GAC have been derived using the Environment Agency Contaminated Land Exposure Assessment (CLEA) model, for a range of land uses and exposure scenarios, including:

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- Residential with the consumption of homegrown produce;
- Residential without the consumption of homegrown produce;
- Commercial;
- Allotments;
- Public Open Space near residential housing (POS_{resi}); and
- Public Open Space public park scenario (POS_{park})

There are no GAC specific to school sites and therefore for the current assessment, the 'Residential without the consumption of homegrown produce GAC' are considered to be the most appropriate selection given that it is considered very unlikely produce will be grown onsite for consumption. The use of these GACs is considered a conservative approach to use in the comparison of measured site soil contaminant concentrations.

Provisional C4SL values for a total of six priority substances (arsenic, benzene, benzo(a)pyrene, cadmium, hexavalent chromium and lead) were produced by CL:AIRE, and published in December 2013. A policy companion document was published by DEFRA in March 2014, which confirmed the final C4SL for these determinands. A further tranche of C4SLs are in preparation and expected sometime in 2016 or 2017.

The final C4SL values are considered to represent 'relevant technical tools', as per paragraph 4.21(c) of the Contaminated Land Part IIA Statutory Guidance. Their purpose is to identify land that falls within Category 4 (Human Health) as defined by the Statutory Guidance, i.e. land that is definitely not Contaminated Land as defined by the Part IIA legislation.

It should be noted that the C4SLs have been derived using toxicological criteria that are presented as posing a 'low level of toxicological concern'. This is in comparison with previous Soil Guidelines Values (SGVs) and LQM GAC, which were derived using toxicological criteria that represent a 'minimal risk' to human health.

The LQM Suitable for Use Levels (S4ULs) have been derived in accordance with the changes in exposure modelling presented within the C4SL framework, whilst still using a set of toxicological criteria that are set within the 'minimal risk' range. The S4ULs were published to offer a set of collated information on the toxicity and transport properties for a number of common contaminants, and should be seen as suitable for use in planning and change of use assessments, as well as Part IIA assessments.

The CL:AIRE/EIC/AGS Generic Assessment Criteria were published in December 2009. Assessment criteria were produced using the CLEA model for a total of 35 No. less common contaminants, in accordance with the CLEA guidance. The GAC were intended to compliment the SGVs produced by the Environment Agency, and the LQM GAC that were current at the time. These have been used in the assessment for contaminants where S4ULs and C4SLs are not available.

The SOCOTEC approach to human health risk assessment in planning and development risk assessments is to use the various assessment criteria in the following order of preference: S4UL > EIC GAC > C4SLs. Note that for some contaminants this will not be possible, for example lead has a C4SL but not an S4UL or a EIC GAC.

Where contaminants fail the initial screen against S4UL or EIC GAC, a further assessment may be possible by screening against C4SLs. Where this is undertaken it should be clearly understood that the C4SLs represent 'low risk' rather than 'minimal risk' GAC.

8.2.2 Summary of Exceedances

For the purposes of this assessment, it has been assumed that there will be no areas of the school where fruit or vegetables will be grown and therefore the soil analysis data has been screened against the GAC (assuming 1 % soil organic matter where relevant) for a residential without home grown produce land use scenario, as described above. Should an area be designated for the growing of fruit or vegetable, this risk assessment should be revisited; alternatively, growing of produce should be done within a suitable depth of clean soils or raised beds. The maximum contaminant concentrations are summarised along with the relevant GAC in Table 8 below.

TABLE 8: COMPARISON OF MAXIMUM MEASURED CONCENTRATIONS WITH RESIDENTIAL WITHOUT HOME GROWN PRODUCE GACs

Determinand	**Maximum Measured Concentration (mg/kg)**	**Generic Assessment Criterion (GAC) (mg/kg)**	**No. of results exceeding GAC (no. of tests in brackets)**
Metals & semi- metals			
Arsenic	19.7	40	0(30)
Boron	2	11000	0(30)
Cadmium	0.58	85	0(30)
Chromium III	35.4	910	0(30)
Chromium (hexavalent)	0.4	6	0(30)
Copper	51.4	7100	0(30)
Lead[1]	789.6	310	**2(30)**

Determinand	Maximum Measured Concentration (mg/kg)	Generic Assessment Criterion (GAC) (mg/kg)	No. of results exceeding GAC (no. of tests in brackets)
Mercury[2]	0.84	56	0(30)
Nickel	31.6	180	0(30)
Selenium	0.6	430	0(30)
Zinc	260.8	40000	0(30)
Poly Aromatic Hydrocarbons (PAHs)			
Acenaphthene	45.4	3000	0(30)
Acenaphthylene	5.04	2900	0(30)
Anthracene	146	31000	0(30)
Benzo(a)anthracene	318	11	**3(30)**
Benzo(a)pyrene	271	3.2	**3(30)**
Benzo(b)fluoranthene	397	3.9	**5(30)**
Benzo(g,h,i)perylene	146	360	0(30)
Benzo(k)fluoranthene	146	110	**1(30)**
Chrysene	356	30	**2(30)**
Dibenzo(a,h)anthracene	40	0.31	**6(30)**
Fluoranthene	899	1500	0(30)
Fluorene	60	2800	0(30)
Indeno(1,2,3,c,d)pyrene	207	45	**1(30)**
Naphthalene	6.69	2.3	**1(30)**
Phenanthrene	644	1300	0(30)
Pyrene	612	3700	0(30)
Total Petroleum Hydrocarbons and BTEX			
TPH – >C08-C10[4]	4.16	27	0(25)
TPH – >C10-C12[4]	10.4	130	0(25)
TPH – >C12-C16[4]	163	1100	0(25)
TPH – >C16-C21[4]	613	1900	0(25)
TPH –>C21-C35[4]	1130	1900	0(25)
Benzene	<0.01	0.38	0(30)
Ethylbenzene	<0.02	83	0(30)
Toluene	<0.06	880	0(30)
M and p xylene	<0.046	79	0(30)
O-xylene	<0.02	88	0(30)
Other Compounds (including VOCs and SVOCs recorded over the LOD)			
Asbestos	NAIIS[5]	presence of asbestos	0(29)
Cyanide (free)	1.5	22	0(29)
Phenol Index[6]	<0.6	750	0(29)

[1]C4SL
[2]GAC for Inorganic Mercury used
[3]Most conservative aliphatic/aromatic carbon band GAC used (Aliphatic C08-C10)
[4]Most conservative aliphatic/aromatic GAC used
[5]No Asbestos Identified in Sample (NAIIS)
[6]GAC for Phenol used

As shown in Table 8, the majority of contaminants have not exceeded their respective GACs, however the following exceedances were observed:

TABLE 9: LIST OF EXCEEDANCES ABOVE GACs

Sample	**Determinands**
CP101 @ 0.30 m	Lead, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Chrysene, Dibenzo(ah)anthracene, Naphthalene
WS103 @ 0.30 m	Lead
WS107 @ 0.30 m	Dibenzo(ah)anthracene
BH1 @ 0.20 m	Benzo(b)flouranthene, Dibenzo(ah)anthracene
BH3 @ 0.20 m	Benzo(b)flouranthene, Dibenzo(ah)anthracene
IP2 @ 0.10 m	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(ah)anthracene
IP2 @ 0.30 m	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Benzo(k)fluoranthene, Chrysene, Dibenzo(ah)anthracene, Indeno(123-cd)pyrene

It is therefore considered that there is a potential risk to current and future site users given the levels of contamination encountered. However, given the proposed development it is considered likely that the contaminated soils will be located either below a structure or below a hard landscaped area. Where this is the case the source-pathway-receptor linkage would be cut and the risk to future site users would be eliminated. Alternatively, if areas of soft landscaping are proposed, a cover system could be developed to mitigate against the risk to the future site users. In the event that soft landscaped areas are extensive, it is recommended that statistical analysis is undertaken in order to further assess the likely risk to the identified receptors, and this may mitigate the requirements for a cover system. It should be noted that “the development” refers to the project to build a new school building and to demolish existing buildings and does not extend to the existing playing fields to the north and east of this development. It is understood the playing fields will be retained and assessment of the playing fields is outside the scope of this investigation.

There are no formal published screening limits to assess the risks to construction workers from contamination in soils; however a qualitative assessment of the potential risks is presented below.

Based on the chemical analysis results presented above, it is considered that the concentrations of contaminants in the soil across the majority of the site are such that they are unlikely to pose a hazard to construction and/or maintenance workers, providing standard health and safety precautions are adopted when working with the soils.

In order to mitigate against the risks from contaminated soils precautions to prevent direct contact with soil should be taken and standard site hygiene procedures should be implemented rigorously, such as providing adequate hand and face washing facilities. Eating, drinking and smoking should be prohibited in working areas to prevent inadvertent ingestion of soil. In prolonged dry conditions, precautions to prevent the release of dust particles (such as damping down) should be implemented to reduce the risks of dust inhalation. In addition, no asbestos was identified in any of the samples tested therefore indicating the risk of exposure from asbestos in dust is very low risk.

8.3 Controlled Water Risk Assessment Screening

8.3.1 Technical Approach

The assessment of risks to controlled waters follows guidance provided by the EA (2006) and DEFRA in the Contaminated Land (England) Regulations 2006 (SI 2006/1380) and consolidated regulations.

As discussed above, the site is located on a Primary Aquifer (superficial deposits).

There are no groundwater abstraction licences within 1 km of the site, and the site is not within a source protection zone (SPZ)

The site is located within a surface water nitrate vulnerable zone.

The closest surface water feature is the River Thames which is located 600 from the site. Given the distance from the site, it is considered unlikely the site will be able to impact the River Thames.

Based on the above, for the current assessment the target concentrations (Ct) have therefore been based on the UK Drinking Water Standards, supplemented by the WHO drinking water standard where appropriate.

8.3.2 Controlled Waters Risk Assessment Screening – Leachate

Ten soil samples collected during the previous and additional site investigations were submitted for analysis of laboratory produced leachate for inorganic contaminants. Leachate testing of organic substances is not considered a viable test due to the potential loss of volatile organics during the leachate generation process but, given the generally low concentrations of organic chemicals indicated by the soil analysis, the risk to controlled waters from organic chemicals is considered to

be low. The leachate concentrations for inorganic substances are compared to their respective target concentrations (Ct) in Table 10.

TABLE 10: COMPARISON OF SOIL LEACHABLE CONCENTRATIONS WITH TARGET CONCENTRATIONS

Contaminants of Concern	Maximum Leachate Concentration (mg/l)	Ct (mg/l)	Results greater than Ct?	No. of Results Exceeding DWS (No. of tests in brackets)
Arsenic	0.015	0.01	Y	**1 (10)**
Boron	0.13	0.001	Y	**10 (10)**
Cadmium	0.0002	0.003	N	0 (10)
Chromium	0.029	0.05	N	0 (10)
Copper	0.076	0.002	Y	**1 (10)**
Lead	0.075	0.01	Y	**1 (10)**
Mercury	0.0004	0.001	N	0 (10)
Nickel	0.011	0.02	N	0 (10)
Selenium	0.005	0.04	N	0 (10)
Barium	0.17	0.0007	Y	**3 (3)**
Cyanide (Total)	0.029	0.05	Y	**1 (10)**
Fluoride	0.9	0.0015	Y	**3 (3)**
Antimony	0.0006	0.005	Y	**1 (3)**

From Table 10, it can be seen eight of the potential contaminants of concern exceeded their relevant target concentrations (Ct).

In general it should be noted that the use of leachate data for controlled waters risk assessment is overly conservative as the extraction process within the lab is more vigorous than would be experienced within the ground as the result of natural processes. It is noted that the concentrations of contaminants within the soil are generally low.

Groundwater was encountered between 3.20 m and 3.40 m during the second phase of investigation which is located within the Kempton Park Gravel. Therefore, given the permeable nature of the strata underlying the Made Ground, it is considered that there is potential for leachable contaminants to have an impact on the groundwater. However, given the very low levels of leachate derived in the laboratory, it is considered that any leachate would have a minimal impact on the water quality of the underlying groundwater.

8.3.3 Controlled Waters Risk Assessment Screening – Groundwater

Four groundwater samples collected during the previous and additional site investigations were submitted for analysis. The maximum concentrations for each determinant are compared to their respective target concentrations (Ct) in Table 11.

TABLE 11: COMPARISON OF GROUNDWATER CONCENTRATIONS WITH TARGET CONCENTRATIONS

Contaminants of Concern	**Maximum Concentration (mg/l)**	**Ct (mg/l)**	**Results greater than Ct?**	**No. of Results Exceeding DWS (No. of tests in brackets)**
Arsenic	0.017	0.01	**Y**	**1 (4)**
Boron	0.74	0.001	Y	**4 (4)**
Cadmium	0.0003	0.005	N	0 (4)
Chromium (III)	0.02	0.05	N	0 (4)
Copper	0.069	0.002	**Y**	**3 (4)**
Lead	0.018	0.01	**Y**	**1 (4)**
Mercury	<0.0001	0.001	N	0 (4)
Nickel	0.026	0.02	**Y**	**1 (4)**
Selenium	0.003	0.01	N	0 (4)
Cyanide (Total)	<0.02	0.05	N	0 (4)
Total PAH	0.00135	0.0001	N	0 (4)
Benzene	<5.0	0.001	**Y**	**4 (4) 4 due to LOD**
Toluene	<5.0	0.7	**Y**	**4 (4) 4 due to LOD**
Xylene (m/p)	<5.0	0.5	**Y**	**4 (4) 4 due to LOD**
Xylene (o)	<10.0	0.5	**Y**	**4 (4) 4 due to LOD**
Ethylbenzene	<5.0	0.3	**Y**	**4 (4) 4 due to LOD**
Benzo(a)pyrene	<0.000014	0.00001	N	0 (4)

From Table 11, it can be seen ten of the potential contaminants of concern exceeded their relevant target concentrations (Ct). For benzene, toluene, xylenes, ethylbenzene and benzo(a)pyrene all the of exceedances observed are the result of the level of detection (LOD) achieved by the testing laboratory.

Exceedances above the Ct were observed for arsenic, copper, lead and nickel. Comparison against the leachate data shows a potential correlation between the exceedances for copper suggesting there is potentially a pathway from the soils to the groundwater via leaching for these determinands. In contrast, there is no correlation between the leachate data and groundwater data for lead, nickel and zinc, therefore suggesting that theses determinands could be exhibiting elevated levels above the Ct due to an alternative source of contamination.

However, the exceedances observed above the Ct are slight and that there are no groundwater abstraction points or source protection zones in the vicinity of the site, the risk to the identified groundwater receptor is considered low. In addition, given the proposed building and surrounding hardstanding areas, the likely hood of infiltration will be further reduced, therefore further reducing the risk to the identified groundwater receptors.

8.4 Indicative Waste Classification

8.4.1 Introduction

In accordance with Environment Agency (EA) technical guidance document WM3, *Waste Classification: Guidance on the classification and assessment of waste (1st Edition 2015)* (EA, 2015) and associated references, the number of samples required to adequately characterise waste soil is dependent upon the volume of waste to be disposed of.

At this stage it is unknown how much material will be required to be removed from the site, and as such only an indicative waste classification can be provided by SOCOTEC at this time. Once accurate volumes of any material destined to leave the site as waste are known, further sampling, analysis and assessment may be necessary.

8.4.2 Samples

The sample laboratory descriptions are provided in Table 12 below.

Table 12: Summary of Soil Laboratory Testing

Sample ID	**Description**
CP101 ES 3 0.30	Brown Made Ground
CP101 ES 5 0.80	Made Ground
CP102 ES 2 0.50	Made Ground
CP102 ES 3 1.00	Brown Made Ground
HDP101 ES 2 0.30	Made Ground
HDP101 ES 4 0.80	Sand Silt Stone
HDP102 ES 1 0.20	Stone Silt
HDP102 ES 2 1.00	Brown Stone Silt
WS101 ES 2 0.30	Made Ground
WS101 ES 4 1.00	Brown Stone Silt
WS101 ES 5 1.20	Sand Silt Stone
WS102 ES 2 0.30	Brown Made Ground

WS102 ES 3 0.80	Made Ground
WS103 ES 2 0.30	Brown Made Ground
WS103 ES 4 0.80	Stone Silt
WS105 ES 2 0.30	Brown Stone Silt
WS105 ES 4 0.70	Sand Silt
WS106 ES 2 0.20	Brown Gravel Silt
WS106 ES 4 0.80	Brown Gravel Sand
WS107 ES 1 0.30	Brown Made Ground
WS108 ES 1 0.40	Brown Made Ground
WS108 ES 2 0.90	Brown Gravel Sand

8.4.3 Laboratory Analysis

A suite of chemical analysis for the samples was scheduled by SOCOTEC and included a range of parameters to allow the material to be characterised for waste disposal purposes.

The scheduled laboratory suite of analysis is detailed in Table 13 and the results are presented in the appended laboratory test reports, presented in Appendix F.

Table 13: Summary of Laboratory Testing

Determinants	**No. of Samples**
Metals and semi-metals (Boron, Arsenic, Cadmium, Chromium, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium and Zinc)	22
Cyanide (free)	22
pH	22
Moisture content	22
Total Petroleum Hydrocarbons (TPH) by GCFID	22
16 Polycyclic Aromatic Hydrocarbons (PAH)s by GCMS	22
Asbestos ID	22

8.4.4 Indicative Waste Classification Assessment

The HazWasteOnline toolkit was used to undertake a Hazard Assessment Screen, to determine whether the sampled material should be considered as either hazardous or non-hazardous waste, based on the chosen suite of analysis. The classification process was undertaken in accordance with technical guidance document WM3, *Guidance on the classification and assessment of waste (1st edition 2015)*.

The HazWasteOnline classification has been undertaken on a sample by sample basis for each determinand from the twenty two samples analysed on the assumption that the waste would be disposed of in its present form and without any pre-treatment.

No asbestos was detected in any sample.
The HazWasteOnline report is presented in Appendix F. The waste classification summary report indicates a waste classification of hazardous waste for sample CP101 ES 3 0.30. This is due to the TPH analysis results, giving hazard properties HP 7: Carcinogenic and HP 11: Mutagenic. All other samples are indicated as non-hazardous.

Based on the analysis results and the HazWasteOnline assessment as described above, the List of Waste code for the sample CP101 ES 3 0.30 is considered to be '**17 05 03 * (Soil and stones containing hazardous substances)** which is a hazardous waste. The List of Waste code for all other samples is considered to be **17 05 04 (Soil and stones other than those mentioned in 17 05 03)** which is a non-hazardous waste.

Materials classified as hazardous may be disposed of at a hazardous landfill facility subject to satisfying the Hazardous Waste Acceptance Criteria (WAC) thresholds. To date no WAC testing of the soils in CP101 ES 3 0.30 m has been undertaken.

Materials classified as non-hazardous may be disposed of at a non-hazardous landfill facility or potentially (subject to meeting inert landfill Waste Accceptance Criteira (WAC) thresholds) an inert landfill site..

All wastes removed from site should be consigned, transported and disposed of in full accordance with all relevant UK legislation.

9 GAS AND VAPOURS

The ground investigation has identified a potential source of gas in respect of the Made Ground present at the site. The gases that typically pose a potential hazard include carbon dioxide (which is an asphyxiant) and methane (which is an asphyxiant and also potentially explosive). Oxygen depletion is often observed a consequence of the presence of these gases. Three post field work gas and groundwater monitoring visits were carried between 29 May and 6 July 2018 to monitor gas and groundwater levels within the installed standpipes. The readings obtained during the monitoring visits carried out are presented in Appendix C.

For the assessment of sites, in terms of the potential for ground gas to present a hazard, the risk based methodology detailed in CIRIA Report C665 (2007) is used. This is primarily based on the method of characterising a site as proposed by Wilson and Card (1999). The method is predominantly centred on a conceptual model which relates possible sources of gas to likely receptors via potential pathways.

The results indicate variable gas conditions, with the majority of the readings being either very low or below the detection limits in terms of gas concentrations. Carbon dioxide concentrations of up to 5.4% were recorded along with methane concentrations below the detection limits (<0.1 %) and Hydrogen Sulphide Concentrations of up to 1.3ppm, with oxygen concentrations ranging between 16.1% and 20.8%. Gas flow rates of up to 0.1 l/h were recorded during the gas monitoring visits which were undertaken at barometric pressures ranging between 1015 and 1020 mb. It should be noted that readings at times of low atmospheric were not possible during the planned monitoring visits.

The gas screening value is defined as a product of the gas concentration and gas flow, the worst case scenario being established from the highest of each (BS 8485:2015). For a maximum carbon dioxide value of 5.4%, and adopting a gas flow value of 0.1 l/h (ie the highest flow recorded), the gas screening value would be 0.0054 l/h which is within the range of Characteristic Situation 1 and is regarded as 'Very Low Risk'. Based on the above findings, no protective measures against methane or carbon dioxide are likely to be required at this site.

Based on information contained in BRE Report BR 211 (2007) less than 1% of homes in the area are affected by radon gas therefore no radon protection measures should be required at this site.

REFERENCES

BGS England and Wales Sheet 270: 1998 South London. 1:50000 geological map (solid and drift) British Geological Survey.

BGS Geology of Britain Viewer : 2018. www.bgs.ac.uk. British Geological Survey.

BRE Special Digest 1 : 2005 : Concrete in aggressive ground. Building Research Establishment.

BS 1377 : 1990 : Methods of test for soils for civil engineering purposes. British Standards Institution.

BS 5930 : 2015 : Code of practice for ground investigations. British Standards Institution.

BS EN 1997-2 : 2007 : Eurocode 7 - Geotechnical design - Part 2 Ground investigation and testing. British Standards Institution.

BS EN ISO 14688-1:2002+A1 : 2013 : Geotechnical investigation and testing - Identification and classification of soil - Part 1 Identification and description. British Standards Institution.

BS EN ISO 14688-2:2004+A1 : 2013 : Geotechnical investigation and testing - Identification and classification of soil - Part 2 Principles for a classification. British Standards Institution.

BS EN ISO 17892-1, Geotechnical investigation and testing – Laboratory Testing of soil – Determination of water content.

BS EN ISO 22475-1 : 2006 : Geotechnical investigation and testing – Sampling methods and groundwater measurements - Part 1 Technical principles for execution. British Standards Institution.

BS EN ISO 22476-3:2005+A1 : 2011 : Geotechnical investigation and testing - Field testing - Part 3 Standard penetration test. British Standards Institution.

Design Manual for Roads and Bridges: Volume 7, Section 3, Part 2, HD29/08 (2008). Transport Research Laboratory (TRL).

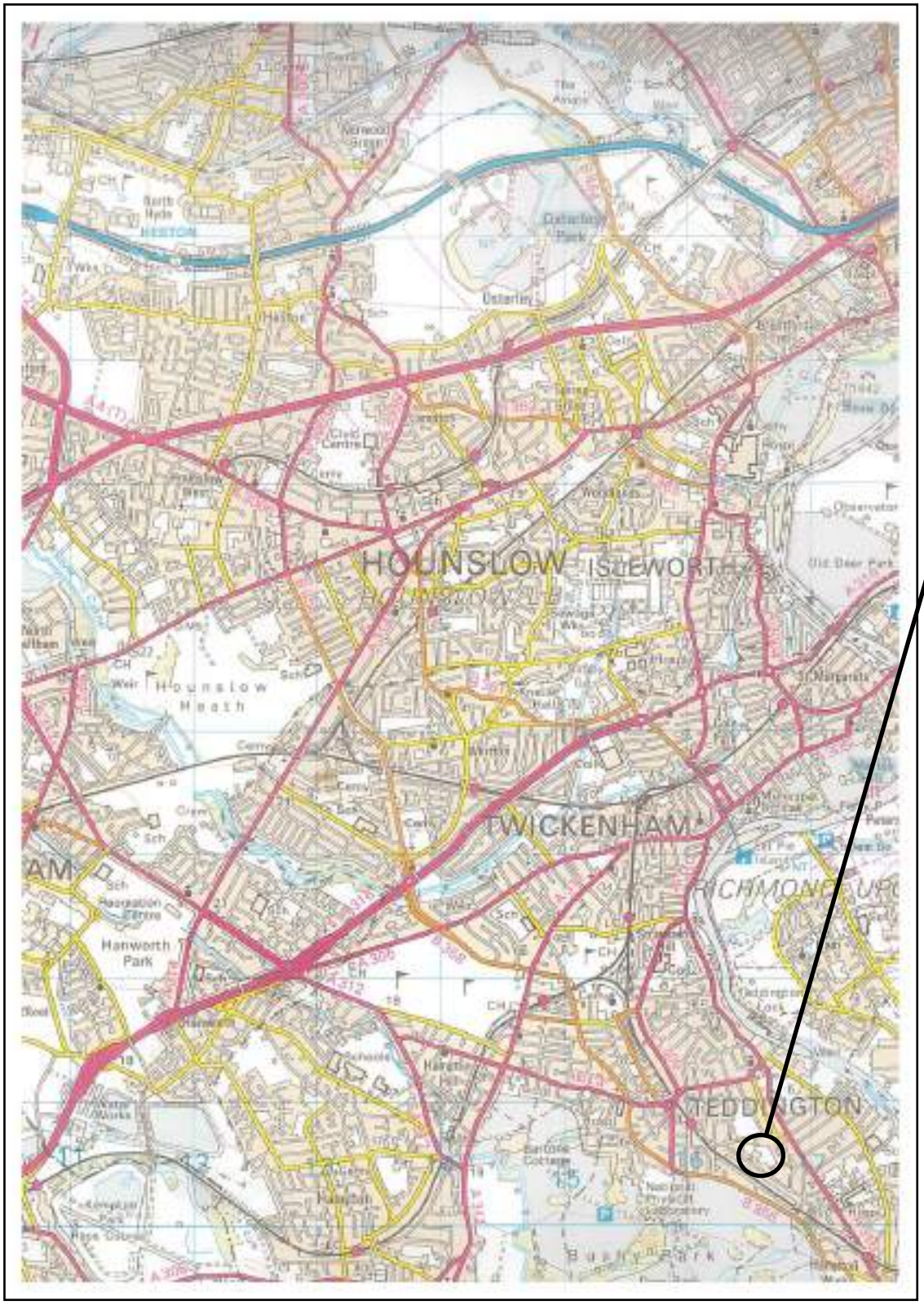
Environment Agency: 2006 : Remedial Targets Methodology Hydrogeological Risk Assessment for Contaminated Land.

APPENDIX A

FIGURES AND DRAWINGS

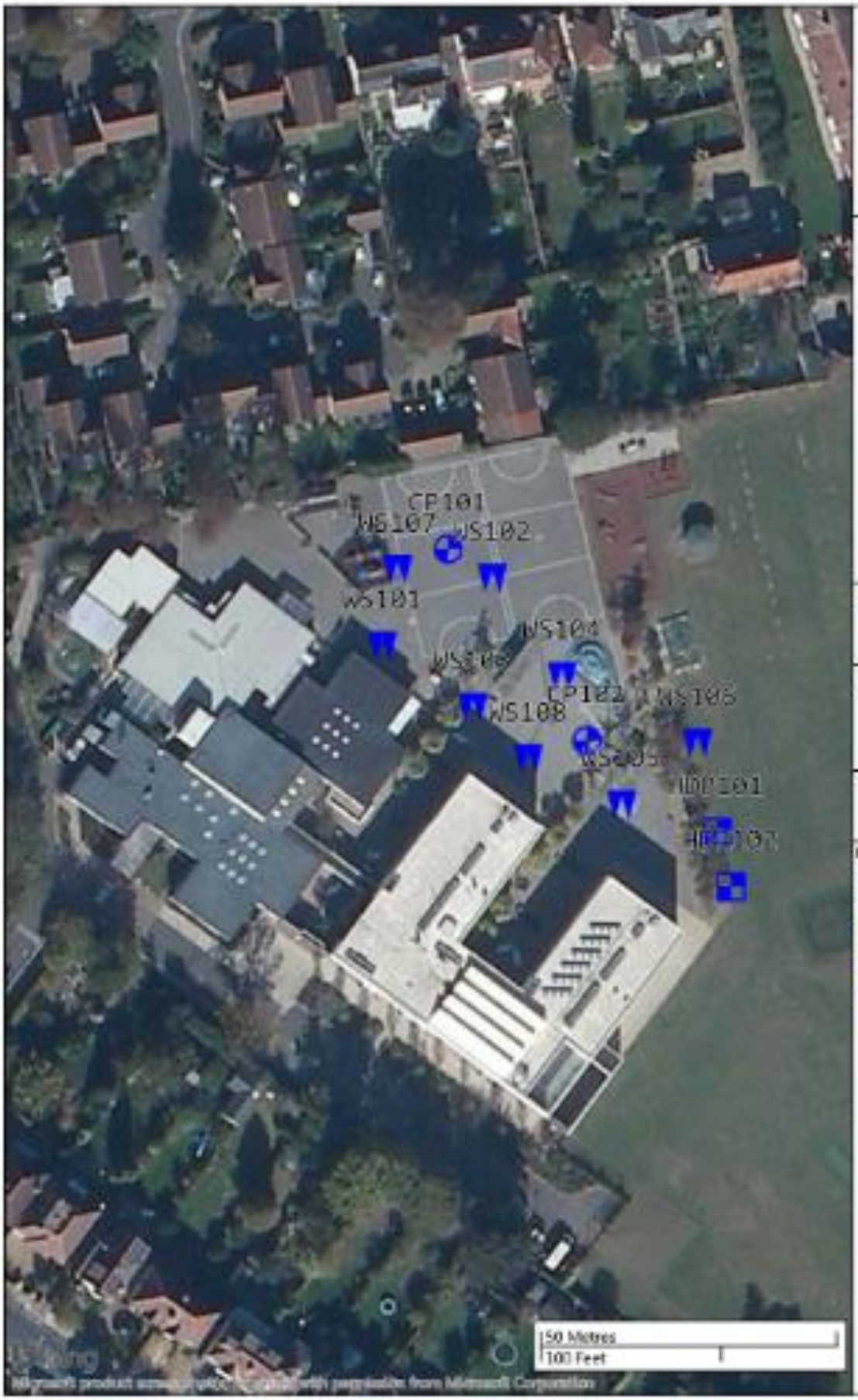
Site Location Plan

SOCOTEC



Notes: Scale 1:50 000	**Project** Collis Primary School Phase 2 GI **Project No.** H8061-18 **Carried out for** Extraspace Solutions	**Figure** **A1**

SOCOTEC



Notes:

Scale:	Sheet Size:
1:1000	A4

Surveyed By:

Surveyed Date:

Key:

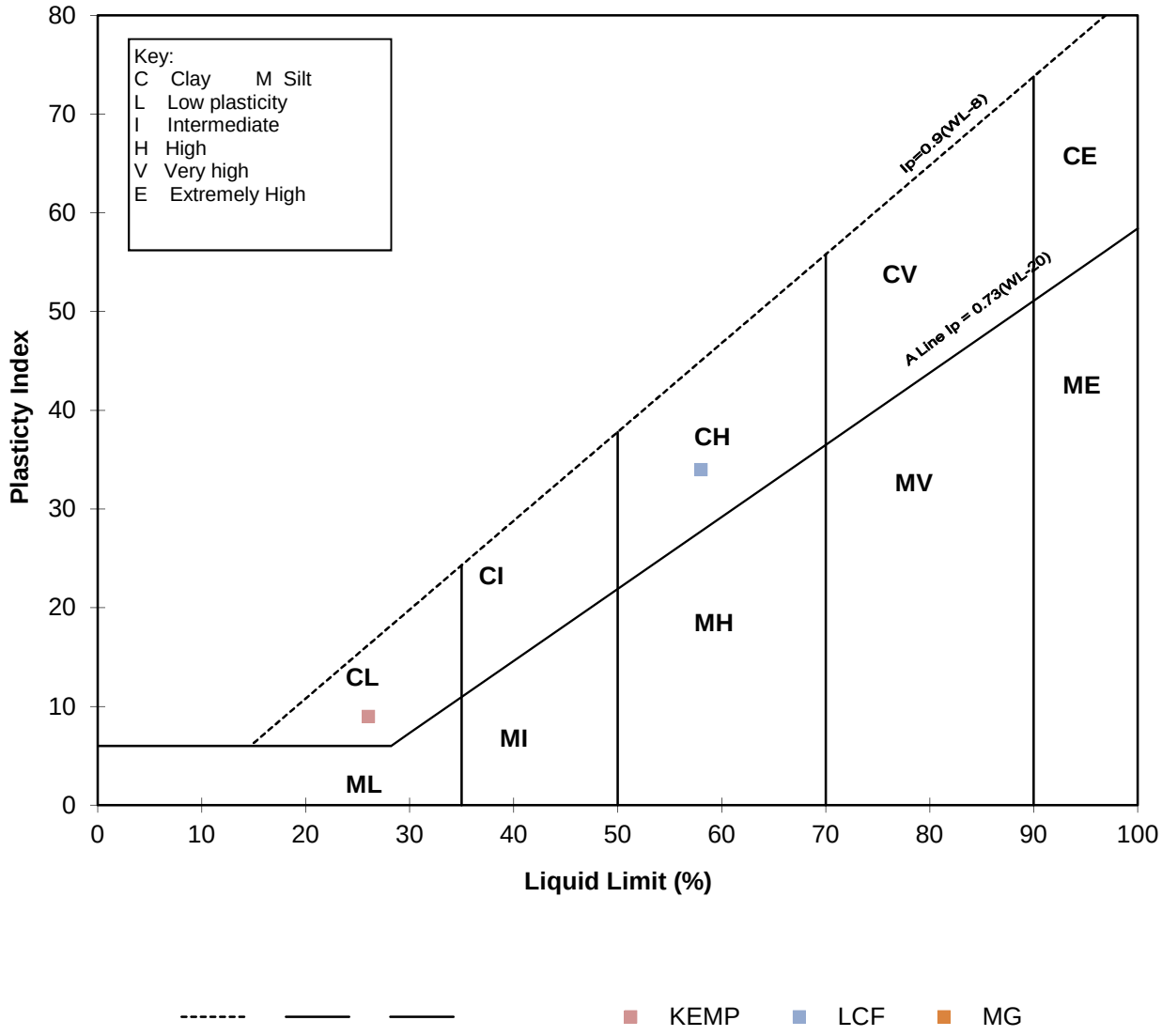
Legend Key

- Locations By Type - CP
- Locations By Type - TP
- Locations By Type - WS

	Project: Celtic Primary School Phase 2 GI Project No.: HB081.2.6 Carried out for: Entrapace Solutions	Figure:

Plasticity Chart

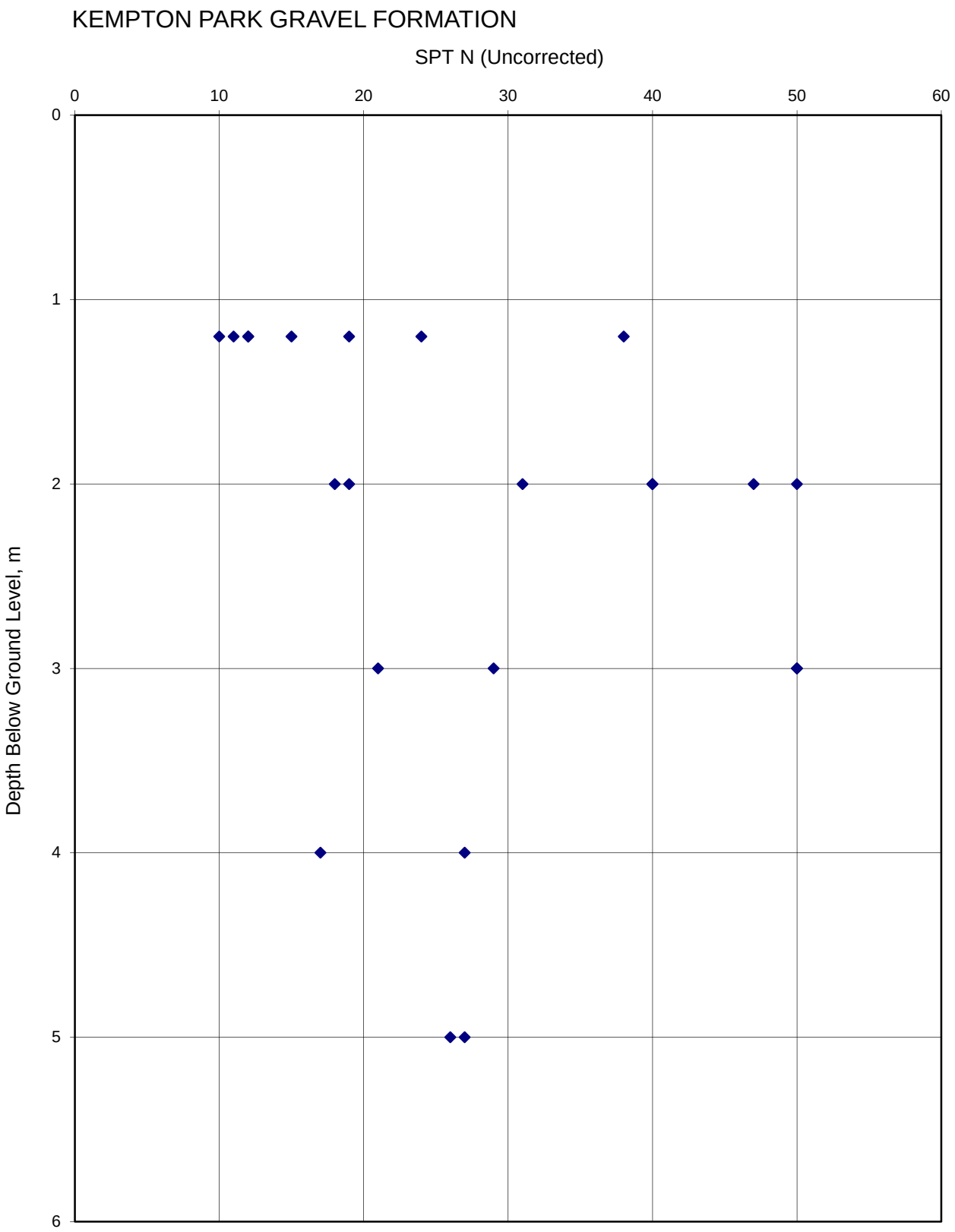
SOCOTEC



Notes:	Project	Collis Primary School Phase 2 GI	Figure
	Project No.	H8061-18	A3
	Carried out for	Extraspace Solutions	Sheet 1 of 1

SPT N Depth Profile

SOCOTEC



Notes:	Project	Collis Primary School Phase 2 GI	Sheet
	Project No.	H8061-18	A4
	Carried out for	Extraspace Solutions	Sheet 1 of 1

APPENDIX B

EXPLORATORY HOLE RECORDS

Key to Exploratory Hole Records	Key
SPT Hammer Energy Ratio Report	SPT Hammer Reference AR1710 and RGI 08
Borehole Logs	CP101 and CP102
Window Sampler Hole Logs	WS101 to WS108
Hand Dug Trial Pits	HDP101 and HDP102

Key to Exploratory Hole Records

SOCOTEC

SAMPLES

Undisturbed

U	Driven tube sample	nominally 100 mm diameter and full recovery unless otherwise stated
UT	Driven thin wall tube sample	
TW	Pushed thin wall tube sample	
P	Pushed piston sample	
L	Liner sample from dynamic (windowless) sampling. Full recovery unless otherwise stated	
CBR	CBR mould sample	
BLK	Block sample	
C / CS	Core sample (from rotary core) taken for laboratory testing.	
AMAL	Amalgamated sample	

Disturbed

D	Small sample
B	Bulk sample

Other

W	Water sample
G	Gas sample
	Environmental chemistry samples (in more than one container where appropriate)
ES	Soil sample
EW	Water sample

Comments

Sample reference numbers are assigned to every sample taken. A sample reference of 'NR' indicates that, while an attempt was made to take a tube sample, there was no recovery.

Samples taken from borehole installations (ie water or gas) after hole construction are not shown on the exploratory hole logs.

Specimens for point load testing undertaken on site (or other non-lab location) are not shown on the log.

IN SITU TESTS

SPT S or SPT C — Standard Penetration Test, open shoe (S) or solid cone (C)

The Standard Penetration Test is defined in BS EN ISO 22476-3:2005+A1:2011.
The incremental blow counts are given in the Field Records column; each increment is 75 mm unless stated otherwise and any penetration under self-weight in mm (SW) is noted. Where the full 300 mm test drive is achieved the total number of blows for the test drive is presented as N = ** in the Test column. Where the test drive blows reach 50 the total blow count beyond the seating drive is given (without the N = prefix).

IV	*in situ* vane shear strength, peak (p) and remoulded (r)
HV	Hand vane shear strength, peak (p) and remoulded (r)
PP	Pocket penetrometer test, converted to shear strength
KFH, KRH, KPI	Permeability tests (KFH = falling head, KRH = rising head; KPI = packer inflow); results provided in Field Records column (one value per stage for packer tests)

DRILLING RECORDS

The mechanical indices (TCR/SCR/RQD & If) are defined in BS 5930:2015

TCR	Total Core Recovery, %
SCR	Solid Core Recovery, %
RQD	Rock Quality Designation, %
If	Fracture spacing, mm. Minimum, typical and maximum spacing measurements are presented.
NI	The term non-intact (NI) is used where the core is fragmented.
NA	Used where a measurement is not applicable (eg. If, SCR and RQD in non-rock materials).

Flush returns, estimated percentage with colour where relevant, are given in the Records column

CRF	Core recovered (length in m) in the following run
AZCL	Assessed zone of core loss

GROUNDWATER

▼	Groundwater entry
▽	Depth to groundwater after standing period

Key to Exploratory Hole Records

INSTALLATION

Details of standpipe/piezometer installations are given on the Record. Legend column shows installed instrument depths including slotted pipe section or tip depth, response zone filter material type and layers of backfill.

Standpipe/ piezometer

The type of instrument installed is indicated by a code in the Legend column at the depth of the response zone:

SP	Standpipe
SPIE	Standpipe piezometer
PPIE	Pneumatic piezometer
EPIE	Electronic piezometer

Inclinometer or Slip Indicator

The installation of vertical profiling instruments is indicated on the Record. The base of tubing is shown in the Legend column.

The type of instrument installed is indicated by a code in the Legend column at the base of the tubing:

ICE	Biaxial inclinometer
ICM	Inclinometer tubing for use with probe
SLIP	Slip indicator

Settlement Points or Pressure Cells

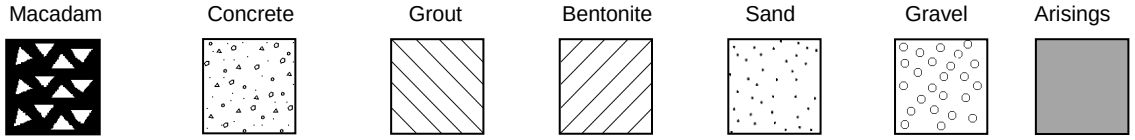
The installation of single point instruments is indicated on the Record. The location of the measuring device is shown in the Legend column.

The type of instrument installed is indicated by a code in the Legend column:

ESET	Electronic settlement cell/gauge
ETM	Magnetic extensometer settlement point
EPCE	Electronic embedment pressure cell
PPCE	Electronic push in pressure cell

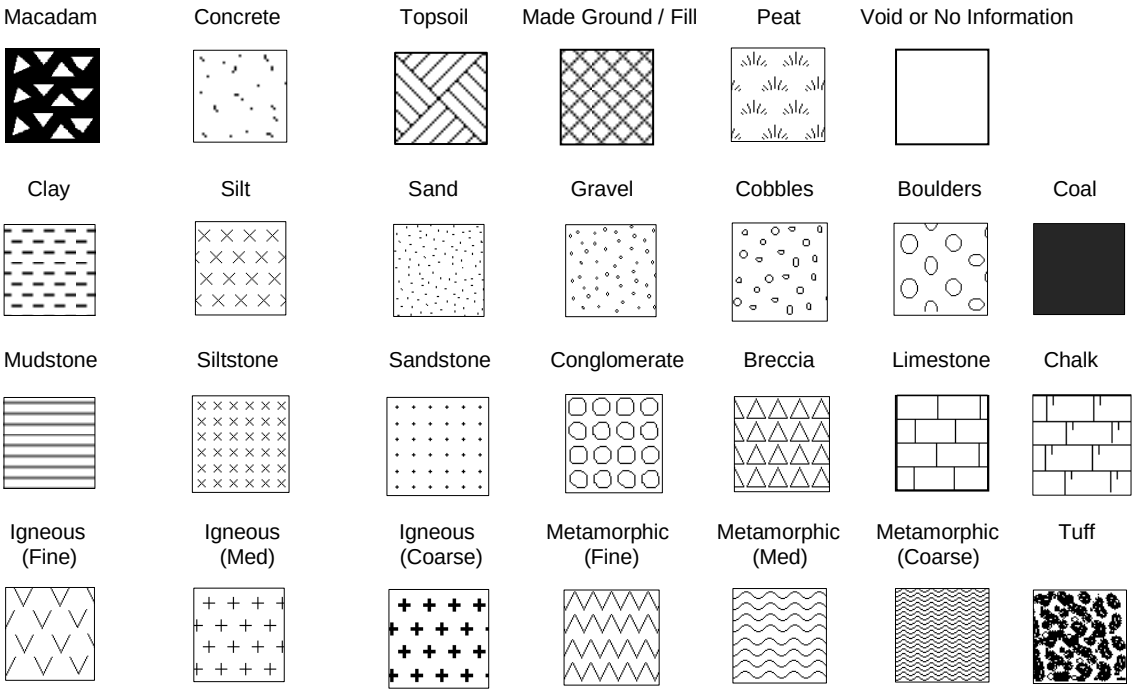
INSTALLATION / BACKFILL LEGENDS

A legend describing the installation is shown in the rightmost column. Legend symbols used to describe the backfill materials are indicated below.



STRATUM LEGENDS

The legend symbols used for graphical representation of soils, rocks and other materials on the borehole logs are shown below. For soils with significant proportions of secondary soil types, a combination of two or more symbols may be used.



Notes:

See report text for full references of standards.

Updated October 2017

Project	**Collis Primary School**
Project No.	**H8061-18**
Carried out for	**Extraspace Solutions**

Key

Key to Exploratory Hole Records

SOCOTEC

NOTES

1 Soils and rocks are described in accordance with BS EN ISO 14688-1:2002+A1:2013 and 14689-1:2003 respectively as amplified by BS 5930:2015.

2 For fine soils, consistency determined during description is reported for those strata where undisturbed samples are available. Where the logger considers that the sample may not be representative of the condition in situ, for whatever reason, the reported consistency is given in brackets. The reliability of the sample is indicated by Probably or Possibly as appropriate. Hence (Probably firm) indicates the logger is reasonably confident of the assessment, but (Possibly firm) means less certainty. Where the samples available are too disturbed to allow a reasonable assessment of the in situ condition, no consistency is given.

3 Evidence of the occurrence of very coarse particles (cobbles and boulders) is presented on the logs. However, because of their size in relation to the exploratory hole these records may not be fully representative of their size and frequency in the ground mass.

4 The declination of bedding and joints is given with respect to the normal to the core axis. Thus in a vertical borehole this will be the dip.

5 The assessment of SCR, RQD and Fracture Spacing excludes artificial fractures.

6 Observations of discernible groundwater entries during the advancement of the exploratory hole are given at the foot of the log and in the Legend column. The absence of a recorded groundwater entry should not, however, be interpreted as a groundwater level below the base of the borehole. Under certain conditions groundwater entry may not be observed, for instance, drilling with water flush or overwater, or boring at a rate faster than water can accumulate in the borehole. Similarly, where water entry observations do exist, groundwater may also be present at higher elevations in the ground than where recorded in the borehole. In addition, where appropriate, water levels in the hole at the time of recovering individual samples or carrying out in situ tests and at shift changes are given in the Records column.

7 The borehole logs present the results of Standard Penetration Tests recorded in the field without correction or interpretation. However, in certain ground conditions (eg high hydraulic head or where very coarse particles are present) some judgement may be necessary in considering whether the results are representative of in situ mass conditions.

REFERENCES

1 BS EN ISO 14688-1:2002+A1 : 2013 : Geotechnical investigation and testing - Identification and classification of soil. Part 1 Identification and description. British Standards Institution

2 BS EN ISO 14689-1 : 2003 : Geotechnical investigation and testing - Identification and classification of rock. Part 1 Identification and description. British Standards Institution

3 BS EN ISO 22476-3:2005+A1 : 2011 : Geotechnical investigation and testing - Field testing. Part 3 Standard penetration test. British Standards Institution

4 BS 5930 : 2015 : Code of practice for ground investigations. British Standards Institution

Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling uk ltd
6-8 victory parkway
victory road
Derby
DE24 8ZF

Hammer Ref:	AR1710
Test Date:	17/08/2017
Report Date:	21/08/2017
File Name:	AR1710.spt
Test Operator:	TP

Instrumented Rod Data

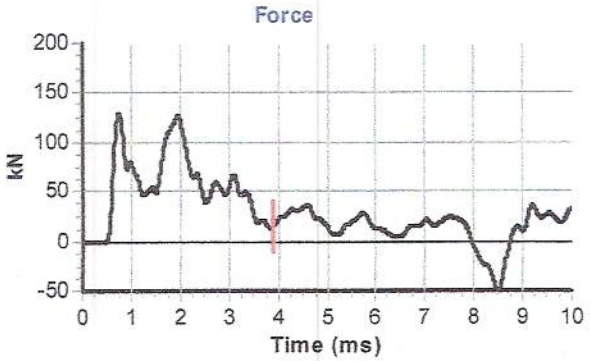
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.9
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	6455
Accelerometer No.2:	6457

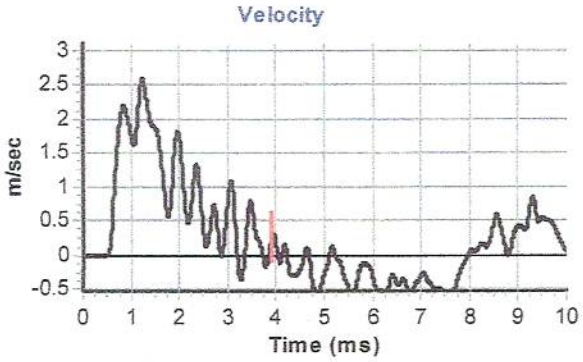
Hammer Information

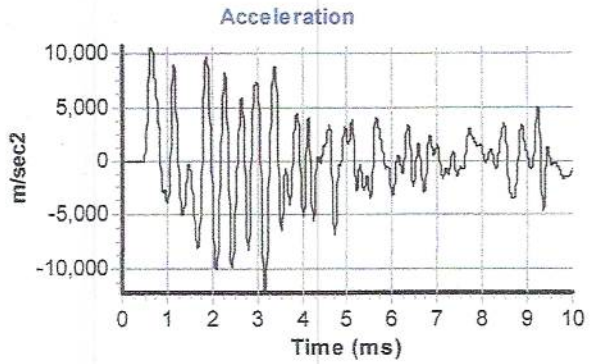
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
String Length L (m):	15.0

Comments / Location

Boreholes solutions hammer tested at Dynamic samplings yard.



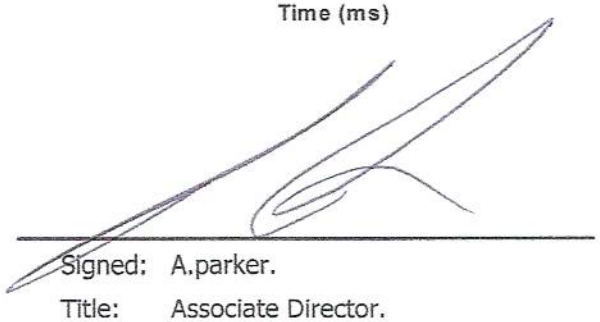




Calculations

Area of Rod A (mm2):	1021
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	290

Energy Ratio E_r (%): **61**



Signed: A.parker.

Title: Associate Director.

The recommended calibration interval is 12 months

www.equipegroup.com
info@equipegroup.com
+44 (0)1295 670990

Report of Thorough Examination of Lifting Plant and Equipment

This report complies with the requirements of the Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 and Provision and Use of Work Equipment Regulations 1998 (PUWER)

Name and address of employer for whom the examination was being carried out:
RGI
37 Longfield Road
Sydenham Industrial Est
Leamington Spa
CV31 1 XB

Report Number: DAT604 13/01

Address at which the examination was carried out:
The Paddocks
Home Farm Offices,
The Upton Estate
Banbury
OX15 6HU

Date of Examination: 13/04/2018

Reason for Examination: 12 Monthly

Due Date of Next Examination: 12/04/2019

Unique ID No.	110RP-87 (RGI 08)
Description	Premier 110 RP
Details of Test / Inspection	13/04/2018
Safe to Use?	YES
S.W.L	N/A
Status	Pass

I hereby certify that the equipment described in this record was examined or tested and thoroughly examined in accordance with the appropriate provisions and has been found to be free from any defect likely to affect safety and that the particulars are correct.

Name and address of the employer authenticating this report:
Equipe Group
Home Farm Offices
The Upton Estate
Banbury
Oxfordshire
OX15 6HU

Name of the competent person making this report:

Keith Spires
(LEEA Cert No 349-27-7-3)

Borehole Log

SOCOTEC

Drilled	TF	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.57 mOD
Logged	NK	30/05/2018	Dando 4000 Cable Percussive Rig Hand excavated inspection pit from 0.00m to 1.20m. Cable percussive boring from 1.20m to 15.00m.	1.20	15.00	150	5.80	**Coordinates (m)**	E 516582.03
Checked	JE	**End**						**National Grid**	N 170623.36
Approved	AP	30/05/2018							

Samples and Tests

Depth	Type & No.	Records	Date Casing	Time Water
0.15	D 1		30/05/18	0600
0.20 - 0.40	B 2			Dry
0.30	ES 3			
0.50	D			
0.50 - 1.00	B 4			
0.80	ES 5			
1.20 - 1.65	SPTS	N=11 (2,3/2,2,4,3)		Dry
1.20 - 1.65	D 6			
1.50 - 2.00	B 7			
2.00 - 2.45	SPTC	N=19 (4,5/6,4,4,5)	2.00	1.70
2.00 - 2.45	D 8			
2.50 - 3.00	B 9			
3.00 - 3.45	SPTC	N=21 (6,5/4,7,4,6)	3.00	2.60
3.00 - 3.45	D 10			
3.50 - 4.00	B 11			
4.00 - 4.45	SPTC	N=17 (3,2/4,4,4,5)	4.00	2.80
4.00 - 4.45	D 12			
4.50 - 5.00	B 13			
5.00 - 5.45	SPTC	N=26 (1,3/3,7,9,7)	5.00	3.00
5.00 - 5.45	D 14			
5.50 - 6.00	B 15			
6.50 - 6.95	SPTS	N=22 (1,3/5,7,5,5)	5.80	5.80
6.50 - 6.95	D 16			
7.00 - 7.50	B 17			
8.00 - 8.45	UT 18	71 blows 100% rec	5.80	7.50
8.45	D 19			
8.50 - 9.00	B 20			
9.50 - 9.95	SPTS	N=31 (7,7/8,6,8,9)	5.80	Wet
9.50 - 9.95	D 21			

Strata Description

Main	Detail	Depth, Level (Thickness)	Legend	Backfill
MACADAM. (MADE GROUND)		0.10 (0.10) +8.47		
Black sandy angular to subrounded fine to coarse GRAVEL of macadam, clinker and limestone. Sand is fine to coarse of ash. (MADE GROUND)		0.18 (0.08) +8.39		
		(0.27)		
Brown sandy slightly clayey subangular to subrounded fine to coarse GRAVEL of brick, limestone, flint and slag with low cobble content. Sand is fine to coarse. Cobbles are subangular of brick. (MADE GROUND)		0.45 +8.12		
		(1.05)		
Medium dense from 1.2 brown gravelly slightly clayey fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL FORMATION)		1.50 +7.07		
Medium dense brown sandy subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL FORMATION)		(1.00)		
Brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL FORMATION)		2.50 +6.07		
		(0.50)		
Medium dense brown sandy subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL FORMATION)		3.00 +5.57		
		(2.70)		
Very stiff thinly laminated dark grey slightly sandy silty CLAY. Sand is fine. (LONDON CLAY FORMATION)		5.70 +2.87		

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)
1	3.20	Rose to 2.80 m after 20 minutes.	

Depth Related Remarks

Depths (m)	Remarks
1.20 - 15.00	SPT Hammer ID: AR1710 Energy Ratio: 61.00%
1.20 - 4.00	Water added to assist drilling.

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:09

Project	**Collis Primary School Phase 2 GI**
Project No.	**H8061-18**
Carried out for	**Extraspace Solutions**

Borehole

CP101

Sheet 1 of 2

Borehole Log

SOCOTEC

Drilled	TF	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.57 mOD
Logged	NK	30/05/2018	Dando 4000 Cable Percussive Rig Hand excavated inspection pit from 0.00m to 1.20m. Cable percussive boring from 1.20m to 15.00m.	1.20	15.00	150	5.80	**Coordinates (m)**	E 516582.03
Checked	JE	**End**						**National Grid**	N 170623.36
Approved	AP	30/05/2018							

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Time Casing / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
10.00 - 10.50	B 22			Very stiff thinly laminated dark grey slightly sandy silty CLAY. Sand is fine. (LONDON CLAY FORMATION)		(9.30)		
11.00 - 11.45	UT 23	82 blows 77% rec	8.50 / 10.70					
11.45	D 24							
11.50 - 12.00	B 25							
12.50 - 12.95	SPTS	N=28 (1,3/6,6,7,9)	5.80 / 12.30					
12.50 - 12.95	D 26							
13.00 - 13.50	B 27							
14.00 - 14.45	UT 28	90 blows 66% rec	5.80 / 13.80					
14.45	D 29							
14.50 - 15.00	B 30							
			30/05/18 / 1700 5.80 / Wet					
				END OF EXPLORATORY HOLE		15.00 -6.43		

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)

Depth Related Remarks

Depths (m)	Remarks

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:09

Project Collis Primary School Phase 2 Gi

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole CP101

Borehole Log

SOCOTEC

Drilled	TF	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.49 mOD
Logged	NK	31/05/2018	Dando 4000 Cable Percussive Rig Hand excavated inspection pit from 0.00m to 1.20m. Cable percussive boring from 1.20m to 10.40m.	1.20	10.40	150	6.50	**Coordinates (m)**	E 516606.31
Checked	JE	**End**						**National Grid**	N 170591.33
Approved	AP	31/05/2018							

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Casing	Time / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			31/05/18	0800 Dry	MACADAM. (MADE GROUND)		0.10 (0.10) +8.39		
					Red subangular COBBLES of brick with some SAND and GRAVEL. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of brick and concrete. (MADE GROUND)		(0.30)		
0.50	ES 2						0.40 +8.09		
0.50	D								
0.50 - 1.00	B 1				Brown sandy subangular to subrounded fine to coarse GRAVEL of brick and concrete with high cobble content. Sand is fine to coarse. Cobbles are subangular of brick and concrete. (MADE GROUND)		(1.00)		
1.00	ES 3								
1.20 - 1.65	SPTC	N=34 (10,8/8,9,9,8)	1.20	Dry					
1.20 - 1.65	D 6								
1.50 - 2.00	B 7						1.40 +7.09		
					Dense becoming medium dense from 2.0 m brown sandy subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL MEMBER)				
2.00 - 2.45	SPTC	N=31 (6,8/8,7,8,8)	2.00	1.70					
2.00 - 2.45	D 8								
2.50 - 3.00	B 9					2.50-3.00 Locally very sandy.			
3.00 - 3.45	SPTC	N=29 (6,9/7,7,9,6)	3.00	2.60					
3.00 - 3.45	D 10								
3.50 - 4.00	B 11								
							(4.60)		
4.00 - 4.45	SPTC	N=27 (6,5/5,9,6,7)	4.00	3.00					
4.00 - 4.45	D 12								
4.50 - 5.00	B 13								
5.00 - 5.45	SPTC	N=27 (4,6/8,7,5,7)	5.00	4.00					
5.00 - 5.45	D 14								
5.50 - 6.00	B 15								
					Stiff dark grey thinly laminated slightly sandy silty CLAY. Sand is fine to coarse. (LONDON CLAY FORMATION)		6.00 +2.49		
6.50 - 6.95	UT 16	73 blows 88% rec	6.10	5.70					
6.95	D 17								
7.00 - 7.50	B 18								
8.00 - 8.45	SPTS	N=25 (5,4/6,5,7,7)	6.30	5.00					
8.00 - 8.45	D 19						(4.40)		
8.50 - 9.00	B 20								
9.50 - 9.95	UT 23	100 blows No Recovery	6.50	5.00					
9.50 - 9.95	B 21								
9.95 - 10.40	SPTS	N=27 (6,7/8,5,8,6)	6.50	5.00					
9.95 - 10.40	D 22								

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)
1	3.40	Rose to 2.90 m after 20 minutes.	
2	6.00	Rose to 5.00 m after 20 minutes.	

Depth Related Remarks

Depths (m)	Remarks
1.20 - 10.40	SPT Hammer ID: AR1710 Energy Ratio: 61.00%
1.50 - 5.00	Water added to assist drilling.

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:09

Project	**Collis Primary School Phase 2 GI**
Project No.	**H8061-18**
Carried out for	**Extraspace Solutions**

Borehole

CP102

Borehole Log

SOCOTEC

Drilled	TF	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.49 mOD
Logged	NK	31/05/2018	Dando 4000 Cable Percussive Rig Hand excavated inspection pit from 0.00m to 1.20m. Cable percussive boring from 1.20m to 10.40m.	1.20	10.40	150	6.50	**Coordinates (m)**	E 516606.31
Checked	JE	**End**						**National Grid**	N 170591.33
Approved	AP	31/05/2018							

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Time Casing / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			31/05/18 1700 6.50 Wet	Stiff dark grey thinly laminated slightly sandy silty CLAY. Sand is fine to coarse. (LONDON CLAY FORMATION)				
				END OF EXPLORATORY HOLE		10.40 -1.91		

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)

Depth Related Remarks

Depths (m)	Remarks

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:09

Project Collis Primary School Phase 2 Gi

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

CP102

Sheet 2 of 2

Borehole Log

SOCOTEC

Drilled	ES	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.53 mOD
Logged	NK	31/05/2018	Premier Compact 110RP Tracked Dynamic Windowless Sampling Rig.	1.20	2.00	77		**Coordinates (m)**	E 516571.25
Checked	AGJ	**End**	Hand excavated inspection pit from 0.00m to 1.20m. Dynamic windowless sampling from 1.20m to 3.31m.	2.00	3.00	67		**National Grid**	N 170606.65
Approved	AP	31/05/2018	Refusal at 3.31m.	3.00	3.31	45			

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Time Casing	Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			31/05/18	0800	MACADAM. (MADE GROUND)		0.10 (0.10) +8.43		
0.20 - 0.80	B 1			Dry	Dark brown sandy slightly clayey subangular to subrounded fine to coarse GRAVEL of concrete, limestone and flint. Sand is fine to coarse. (MADE GROUND)		(0.80)		
0.30	ES 2								
0.90 - 1.10	B 3				Dark brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint and concrete. (MADE GROUND)		0.90 (0.20) +7.63		
1.00	ES 4						1.10 (0.50) +7.43		
1.20 - 1.65	SPTS	N=19 (3,3/4,4,6,5)	0.00	Dry	Medium dense brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL MEMBER)		1.60 (1.40) +6.93		
1.20	ES 5								
1.20 - 1.60	B 6								
1.20 - 2.00	L	100% rec, diameter 77mm							
1.60	D								
1.60 - 3.00	B 7								
2.00 - 2.45	SPTS	N=40 (3,4/7,9,11,13)	0.00	Dry	Dense brown very sandy slightly clayey subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL MEMBER)				
2.00 - 3.00	L	100% rec, diameter 67mm							
3.00 - 3.31	SPTC	50 (19,6 for 30mm/18,19,13 for 55mm)	0.00	Dry	Hole progressed by SPT.		3.00 (0.31) +5.53		
			31/05/18	1800					
				Dry			3.31 +5.22		
					END OF EXPLORATORY HOLE				

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)

Depth Related Remarks

Depths (m)	Remarks
0.00 - 3.31	No groundwater encountered.
1.20 - 3.31	SPT Hammer ID: 110RP-87 Energy Ratio: 85.65%

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:10

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

WS101

Sheet 1 of 1

Borehole Log

SOCOTEC

Drilled	ES	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.60 mOD
Logged	NK	31/05/2018	Premier Compact 110RP Tracked Dynamic Windowless Sampling Rig.	1.20	2.00	101		**Coordinates (m)**	E 516589.57
Checked	AGJ	**End**	Hand excavated inspection pit from 0.00m to 1.20m. Dynamic windowless sampling from 1.20m to 3.45m.	2.00	3.00	87		**National Grid**	N 170618.60
Approved	AP	31/05/2018	Refusal at 3.45m.	3.00	3.45	45			

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Casing	Time / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			31/05/18	0800	MACADAM. (MADE GROUND)		0.10 (0.10) +8.50		
0.20 - 0.60	B 1			Dry	Brown sandy angular to subrounded fine to coarse GRAVEL of brick, concrete, limestone and flint with medium cobble content. Sand is fine to coarse. Cobbles are subangular of brick. (MADE GROUND)		(0.60)		
0.30	ES 2						0.70 +7.90		
0.80	ES 3				Dark brown gravelly slightly clayey fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of brick and flint. (MADE GROUND)		(0.20)		
0.90 - 1.20	B 4						0.90 +7.70		
1.10	ES 5								
1.20 - 1.65	SPTS	N=12 (1,1/2,2,3,5)	0.00	Dry	Medium dense becoming very dense from 3.0 m brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL MEMBER)		(0.85)		
1.20 - 1.75	B 7								
1.20 - 2.00	L	100% rec, diameter 101mm							
1.75 - 3.00	B 8						1.75 +6.85		
2.00 - 2.45	SPTS	N=47 (7,8/8,8,19,12)	0.00	Dry	Dense becoming very dense from 3.00m brown sandy slightly clayey subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL MEMBER)				
2.00 - 3.00	L	100% rec, diameter 87mm					(1.70)		
3.00 - 3.45	SPTS	N=50 (8,11/13,13,12,12)	0.00	Wet					1
3.00 - 3.45	D 6								
			31/05/18	1800					
				3.15					
					END OF EXPLORATORY HOLE		3.45 +5.15		

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)
1	3.00		

Depth Related Remarks

Depths (m)	Remarks
1.20 - 3.45	SPT Hammer ID: 110RP-87 Energy Ratio: 85.65%

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:10

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

WS102

Sheet 1 of 1

Borehole Log

SOCOTEC

Drilled	ES	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.43 mOD
Logged	NK	31/05/2018	Premier Compact 110RP Tracked Dynamic Windowless Sampling Rig.	1.20	2.00	84		**Coordinates (m)**	E 516586.77
Checked	AGJ/JE	**End**	Hand excavated inspection pit from 0.00m to 1.20m. Dynamic windowless sampling from 1.20m to 3.45m.	2.00	3.00	77		**National Grid**	N 170596.57
Approved	AP	31/05/2018	Refusal at 3.45m.	3.00	3.45	45			

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Casing	Time / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			31/05/18	0700	MACADAM . (MADE GROUND)		0.10 (0.10) +8.33		
0.20 - 0.50	B 1			Dry	Dark brown sandy subangular to subrounded fine to coarse GRAVEL of brick, concrete, limestone and macadam. Sand is fine to coarse. (MADE GROUND)		(0.40)		
0.30	ES 2						0.50 +7.93		
0.50 - 1.00	B 3				Medium dense from 1.2 m brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL MEMBER)				
0.80	ES 4								
1.20 - 1.65	SPTS	N=10 (1,1/2,2,2,4)	0.00	Dry			(1.65)		
1.20	D								
1.20 - 2.15	B 5								
1.20 - 2.00	L	100% rec, diameter 87mm							
2.00 - 2.45	SPTS	N=18 (2,1/1,2,6,9)	0.00	Dry					
2.00 - 3.00	L	100% rec, diameter 77mm							
2.15 - 2.45	D 6				Soft greyish brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL MEMBER)		2.15 +6.28		
							(0.30)		
2.45 - 3.00	B 7				Brown sandy subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL MEMBER)		2.45 +5.98		
							(0.55)		
3.00 - 3.45	SPTC	N=50 (10,10/12,12,13,13)	0.00	Wet	Hole progressed by SPT.		3.00 +5.43		1
			31/05/18	1000			(0.45)		
				3.07			3.45 +4.98		
					END OF EXPLORATORY HOLE				

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)
1	3.00		

Depth Related Remarks

Depths (m)	Remarks
1.20 - 3.45	SPT Hammer ID: 110RP-87 Energy Ratio: 85.65%

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:10

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

WS103

Sheet 1 of 1

Borehole Log

SOCOTEC

Drilled	ES	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.55 mOD
Logged	NK	01/06/2018	Hand excavated inspection pit from 0.00m to 0.25m.					**Coordinates (m)**	E 516601.93
Checked	AGJ/JE	**End**	Hole terminated at 0.25m due to concrete obstruction preventing further progress.					**National Grid**	N 170602.17
Approved	AP	01/06/2018							

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Casing	Time / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			01/06/18	0900	MACADAM. (MADE GROUND)		0.10 (0.10) +8.45		
			01/06/18	Dry	CONCRETE. (MADE GROUND)		0.25 (0.15) +8.30		
				0700	END OF EXPLORATORY HOLE				
				Dry					

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)

Depth Related Remarks

Depths (m)	Remarks
0.00 - 0.25	No groundwater encountered.

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:10

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

WS104

Sheet 1 of 1

Borehole Log

SOCOTEC

Drilled	ES	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.43 mOD
Logged	NK	01/06/2018	Premier Compact 110RP Tracked Dynamic Windowless Sampling Rig.	1.20	2.00	101		**Coordinates (m)**	E 516612.54
Checked	AGJ/JE	**End**	Hand excavated inspection pit from 0.00m to 1.20m. Dynamic windowless sampling from 1.20m to 2.38m.	2.00	2.38	45		**National Grid**	N 170580.59
Approved	AP	01/06/2018	Refusal at 2.38m.						

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Casing	Time / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			01/06/18	0900 Dry	MACADAM. (MADE GROUND)		0.10 (0.10) +8.33		
0.20 - 0.50 0.30	B 1 ES 2				Brown and grey sandy angular to subrounded fine to coarse GRAVEL of limestone, concrete, brick and flint. Sand is fine to coarse. (MADE GROUND)		(0.45)		
0.60 - 1.00 0.70	B 3 ES 4				Dense from 1.2 m brown slightly gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL MEMBER)		0.55 +7.88		
1.20 - 1.65 1.20 - 1.55 1.20 - 2.00 1.55 - 2.00	SPTS B 6 L B 7	N=38 (2,5/8,8,9,13) 100% rec, diameter 101mm	0.00	Dry			(1.00)		
					Dense becoming very dense from 2.0 m brown sandy subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL MEMBER)		1.55 +6.88		
2.00 - 2.38 2.00 - 2.38	SPTS D 5	51 (5,11/12,14,25 for 75mm)	0.00 01/06/18	Dry 1200 Dry			(0.83)		
					END OF EXPLORATORY HOLE		2.38 +6.05		

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)

Depth Related Remarks

Depths (m)	Remarks
1.20 - 2.38	SPT Hammer ID: 110RP-87 Energy Ratio: 85.65%

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:11

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

WS105

Sheet 1 of 1

Borehole Log

SOCOTEC

Drilled	ES	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.60 mOD
Logged	NK	01/06/2018	Premier Compact 110RP Tracked Dynamic Windowless Sampling Rig Hand excavated inspection pit from 0.00m to 1.20m. Dynamic windowless sampling from 1.20m to 2.42m. Refusal at 2.42m.	1.20	2.00	101		**Coordinates (m)**	E 516625.28
Checked	AGJ/JE	**End**						**National Grid**	N 170591.30
Approved	AP	01/06/2018							

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date Casing	Time Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
0.00 - 0.50	B 1		01/06/18	1000	Soft dark brown sandy gravelly SILT. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of flint and brick. (MADE GROUND)		(0.70)		
0.20	ES 2			Dry			0.70 +7.90		
0.80	ES 4				Medium dense brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL MEMBER)				
0.80	D								
0.80 - 1.20	B 3								
1.20 - 1.65	SPTS	N=15 (2,3/2,2,4,7)	0.00	Dry			(1.10)		
1.20 - 1.80	B 6								
1.20 - 2.00	L	100% rec, diameter 101mm							
1.80 - 2.00	B 7						1.80 +6.80		
2.00 - 2.42	SPTS	50 (3,9/15,13,15,7 for 50mm)	0.00	Dry	Very dense brown sandy subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL MEMBER)				
2.00 - 2.42	D 5		01/06/18	1300 Dry			(0.62)		
					END OF EXPLORATORY HOLE		2.42 +6.18		

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)

Depth Related Remarks

Depths (m)	Remarks
0.00 - 2.42	No groundwater encountered.
1.20 - 2.42	SPT Hammer ID: 110RP-87 Energy Ratio: 85.65%

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:11

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

WS106

Sheet 1 of 1

Borehole Log

SOCOTEC

Drilled	ES	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.50 mOD
Logged	NK	31/05/2018	Premier Compact 110RP Tracked Dynamic Windowless Sampling Rig	1.20	2.00	67		**Coordinates (m)**	E 516573.51
Checked	AGJ/JE	**End**	Hand excavated inspection pit from 0.00m to 1.20m. Dynamic windowless sampling from 1.20m to 3.45m.	2.00	3.00	57		**National Grid**	N 170619.68
Approved	AP	31/05/2018	Refusal at 3.45m.	3.00	3.45	45			

Samples and Tests

Strata Description

Depth	Type & No.	Records	Date / Casing	Time / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			31/05/18	1300 Dry	MACADAM. (MADE GROUND)		0.10 (0.10) +8.40		
0.30	ES 1				Dark brown sandy slightly clayey subangular to subrounded fine to coarse GRAVEL of concrete, limestone and brick. Sand is fine to coarse. (MADE GROUND)		(0.35) 0.45 +8.05		
0.60	ES 2				Medium dense from 1.2 m brown gravelly slightly clayey fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL MEMBER)		(1.32)		
1.20 - 1.65 1.20 - 1.77 1.20 - 2.00	SPTS B 4 L	N=12 (1,1/1,1,5,5) 87% rec, diameter 67mm	0.00	Dry					
1.77 - 3.00	B 5						1.77 +6.73		
2.00 - 2.45 2.00 - 3.00	SPTS L	N=40 (1,1/6,9,11,14) 90% rec, diameter 57mm	0.00	Dry	Dense becoming very dense from 3.00m brown sandy subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL MEMBER)		(1.68)		
3.00 - 3.45 3.00 - 3.45	SPTS D 3	N=50 (9,11/13,12,13,12)	0.00	Wet				1	
			31/05/18	1600 2.90				1	
					END OF EXPLORATORY HOLE		3.45 +5.05		

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)
1	3.30	Rose to 2.90 m after 20 minutes.	

Depth Related Remarks

Depths (m)	Remarks
1.20 - 3.45	SPT Hammer ID: 110RP-87 Energy Ratio: 85.65%

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:11

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

WS107

Sheet 1 of 1

Borehole Log

SOCOTEC

Drilled	ES	**Start**	**Equipment, Methods and Remarks**	**Depth from (m)**	**to (m)**	**Diameter (mm)**	**Casing Depth (m)**	**Ground Level**	8.47 mOD
Logged	NK	01/06/2018	Premier Compact 110RP Tracked Window Sampling Rig Hand excavated inspection pit from 0.00m to 1.20m. Dynamic windowless sampling from 1.20m to 2.45m. Refusal at 2.45m.	1.20 2.00	2.00 2.45	101 45		**Coordinates (m)**	E 516596.43
Checked	AGJ/JE	**End**						**National Grid**	N 170587.98
Approved	AP	01/06/2018							

Samples and Tests

Depth	Type & No.	Records	Date / Time Casing / Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
			01/06/18 1300 Dry	MACADAM. (MADE GROUND)		0.10 (0.10) +8.37		
0.40	ES 1			Dark brown sandy subangular to subrounded fine to coarse GRAVEL of concrete, flint and brick. Sand is fine to coarse. (MADE GROUND)		(0.50)		
0.90	ES 2			Medium dense from 1.2 m brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (KEMPTON PARK GRAVEL MEMBER)		0.60 +7.87		
1.20 - 1.65 1.20 - 1.57 1.20 - 2.00 1.57 - 2.00	SPTS B 4 L B 5	N=24 (1,1/6,7,6,5) 100% rec, diameter 101mm	0.00 Dry			(0.97)		
2.00 - 2.45 2.00 - 2.45	SPTS D 3	N=50 (3,9/13,12,11,14)	0.00 Dry 01/06/18 1700 Dry	Medium dense becoming very dense from 2.0 m brown sandy subangular to subrounded fine to coarse GRAVEL of flint. Sand is fine to coarse. (KEMPTON PARK GRAVEL MEMBER)		1.57 +6.90 (0.88)		
				END OF EXPLORATORY HOLE		2.45 +6.02		

Groundwater Entries

No.	Depth Strike (m)	Remarks	Depth Sealed (m)

Depth Related Remarks

Depths (m)	Remarks
0.00 - 2.45	No groundwater encountered.
1.20 - 2.45	SPT Hammer ID: 110RP-87 Energy Ratio: 85.65%

Hard Boring

Depths (m)	Duration (mins)	Tools used

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:50

20/07/2018 13:08:12

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Borehole

WS108

Sheet 1 of 1

Trial Pit Log

SOCOTEC

Logged NK **Checked** JE **Approved** AP	**Start** 31/05/2018 **End** 31/05/2018	**Equipment, Methods and Remarks** Hand excavated trial pit from 0.00m to 1.20m	**Dimension and Orientation** Width 0.30 m Length 0.30 m A / D / B / C 0 (Deg)	**Ground Level** 8.57 mOD **Coordinates (m)** E 516628.91 **National Grid** N 170576.21	

Samples and Tests

Strata Description

Depth	Type & No.	Records	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
0.00 - 0.50	B1		Soft dark brown slightly gravelly sandy SILT. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of flint and brick. (MADE GROUND)		(0.60)		
0.30	ES2						
0.60 - 1.20	B3		Brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (MADE GROUND)		0.60 +7.97		
0.80	ES4				(0.60)		
			END OF EXPLORATORY HOLE		1.20 +7.37		

Groundwater Entries

No.	Depth Strike (m)	Remarks

Remarks

Depth (m)	Remarks
0.00 - 1.20	No groundwater encountered.

Stability Stable

Shoring None

Weather Sunny

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:25

20/07/2018 13:08:12

AGS

Project **Collis Primary School Phase 2 GI**

Project No. **H8061-18**

Carried out for **Extraspace Solutions**

Trial Pit

HDP101

Sheet 1 of 1

Trial Pit Log

SOCOTEC

Logged NK **Checked** JE **Approved** AP	**Start** 31/05/2018 **End** 31/05/2018	**Equipment, Methods and Remarks** Hand excavated trial pit from 0.00m to 1.20m.	**Dimension and Orientation** Width 0.30 m Length 0.30 m A D B C 0 (Deg)	**Ground Level** 8.53 mOD **Coordinates (m)** E 516631.50 **National Grid** N 170566.75	

Samples and Tests

Strata Description

Depth	Type & No.	Records	Main	Detail	Depth, Level (Thickness)	Legend	Backfill
0.20	ES1		Soft dark brown slightly gravelly sandy SILT. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of flint and brick. (MADE GROUND)		(0.60)		
1.00	ES2		Brown gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse of flint. (MADE GROUND)		0.60 +7.93 (0.60)		
			END OF EXPLORATORY HOLE		1.20 +7.33		

Groundwater Entries

No.	Depth Strike (m)	Remarks

Remarks

Depth (m)	Remarks
0.00 - 1.20	No groundwater encountered.

Stability Stable
Shoring None
Weather Sunny

Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column.

Scale 1:25

20/07/2018 13:08:12

Project **Collis Primary School Phase 2 GI**

Project No. **H8061-18**

Carried out for **Extraspace Solutions**

Trial Pit

HDP102

Sheet 1 of 1

APPENDIX C

INSTRUMENTATION AND MONITORING

Installation Details

Instrument Reference	Instrument Type (See Notes)	Installation Date, dd/mm/yyyy	Pipe Diameter, mm	Instrument Base, mbgl	Response Zone Range, mbgl	Pipe Top Details	Headworks	Remarks
BH1 (1)	SP	10/11/2016	50	5.00	1.00 to 5.00	Gas tap	Flush cover	
BH3 (1)	SP	08/11/2016	50	20.00	5.00 to 20.00	Gas tap	Flush cover	
BH6 (1)	SP	03/11/2016	50	6.00	1.00 to 6.00	Gas tap	Flush cover	
CP101 (1)	SP	30/05/2018	50	5.00	2.00 to 5.00	Gas tap	Flush cover	
CP102 (1)	SP	31/05/2018	50	10.40	6.00 to 10.40	Gas tap	Flush cover	
CP102 (2)	SP	31/05/2018	50	5.00	3.00 to 5.00	Gas tap	Flush cover	

Notes: Type: SP - Standpipe, SPIE - Standpipe Piezometer, HPIE - Hydraulic Piezometer, PPIE - Pneumatic Piezometer, EPIE - Vibrating Wire Piezometer, PWEL - Pumping Well

Groundwater Monitoring

SOCOTEC

Instrument Reference	Instrument Type	Instrument Base, mbgl	Date Time dd/mm/yyyy hh:mm:ss	Groundwater depth, mbgl	Comments
BH1 (1)	SP	5.00	29/05/2018 12:00:00	2.80	
BH1 (1)	SP	5.00	30/05/2018 12:00:00	2.80	
BH1 (1)	SP	5.00	31/05/2018 12:00:00	2.80	
BH1 (1)	SP	5.00	01/06/2018 12:00:00	2.80	
BH3 (1)	SP	20.00	29/05/2018 12:05:00	2.60	
BH3 (1)	SP	20.00	30/05/2018 12:05:00	2.60	
BH3 (1)	SP	20.00	31/05/2018 12:05:00	2.60	
BH3 (1)	SP	20.00	01/06/2018 12:10:00	2.60	
BH3 (1)	SP	20.00	21/06/2018 15:30:00	2.60	
BH3 (1)	SP	20.00	29/06/2018 11:30:00	3.03	
BH3 (1)	SP	20.00	06/07/2018 11:50:00	3.77	
BH6 (1)	SP	6.00	29/05/2018 12:10:00	2.54	
BH6 (1)	SP	6.00	30/05/2018 12:10:00	2.54	
BH6 (1)	SP	6.00	31/05/2018 12:10:00	2.54	
BH6 (1)	SP	6.00	01/06/2018 12:15:00	2.54	
BH6 (1)	SP	6.00	21/06/2018 17:00:00	2.70	
BH6 (1)	SP	6.00	29/06/2018 11:20:00	2.75	
BH6 (1)	SP	6.00	06/07/2018 12:00:00	3.02	
CP101 (1)	SP	5.00	31/05/2018 12:15:00	2.97	
CP101 (1)	SP	5.00	01/06/2018 12:20:00	2.98	
CP101 (1)	SP	5.00	21/06/2018 16:00:00	3.10	
CP101 (1)	SP	5.00	29/06/2018 11:55:00	3.57	
CP101 (1)	SP	5.00	06/07/2018 11:20:00	3.19	
CP102 (1)	SP	10.40	01/06/2018 12:25:00	2.48	
CP102 (1)	SP	10.40	21/06/2018 16:30:00	4.85	
CP102 (1)	SP	10.40	29/06/2018 11:40:00	3.25	
CP102 (1)	SP	10.40	06/07/2018 11:30:00	2.96	
CP102 (2)	SP	5.00	01/06/2018 12:30:00	2.54	
CP102 (2)	SP	5.00	21/06/2018 16:40:00	4.81	
CP102 (2)	SP	5.00	29/06/2018 11:45:00	2.92	
CP102 (2)	SP	5.00	06/07/2018 11:40:00	2.98	

Notes: Type: SP - Standpipe, SPIE - Standpipe Piezometer, HPIE - Hydraulic Piezometer, PPIE - Pneumatic Piezometer, EPIE - Vibrating Wire Piezometer, PWEL - Pumping Well

AGS

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Table C2

Gas Monitoring

							Gas Concentrations				
Instrument Reference	Instrument Base, mbgl	Date Time dd/mm/yyyy hh:mm:ss	Air Temperature, oC	Barometric Pressure, mbar	Gas Differential Pressure, Pa	Gas Flow Rate, l/hr	Carbon Dioxide, %vol	Hydrogen Sulphide, ppm	Methane, %LEL	Oxygen, %vol	Methane, %vol
BH1 (1)	5.00	29/05/2018 12:00:00	15.0	1016	NR	NR	5.4	0.0	0.0	16.1	0.0
BH3 (1)	20.00	29/05/2018 12:05:00	15.0	1015	NR	NR	0.2	0.0	0.0	21.3	0.0
BH3 (1)	20.00	21/06/2018 15:30:00	21.0	1026	0.0	0.0	0.0	0.0	0.0	20.2	0.0
BH3 (1)	20.00	29/06/2018 11:30:00	23.0	1022	0.0	0.0	0.0	0.0	0.0	20.8	0.0
BH3 (1)	20.00	06/07/2018 11:50:00	28.0	1021	0.1	0.0	0.0	0.0	0.0	20.8	0.0
BH6 (1)	6.00	29/05/2018 12:10:00	15.0	1016	NR	NR	6.7	0.0	0.0	15.6	0.0
BH6 (1)	6.00	21/06/2018 17:00:00	21.0	NR	NR	NR	NR	NR	NR	NR	NR
BH6 (1)	6.00	29/06/2018 11:20:00	21.0	NR	NR	NR	NR	NR	NR	NR	NR
BH6 (1)	6.00	06/07/2018 12:00:00	28.0	1021	0.4	0.0	0.0	0.0	0.0	20.8	0.0
CP101 (1)	5.00	21/06/2018 16:00:00	21.0	1026	0.0	0.0	0.0	0.0	0.0	20.5	0.0
CP101 (1)	5.00	29/06/2018 11:55:00	24.0	1022	0.3	0.1	0.8	1.3	0.0	19.9	0.0
CP101 (1)	5.00	06/07/2018 11:20:00	28.0	1020	0.0	0.0	0.1	1.1	0.0	20.7	0.0
CP102 (1)	10.40	21/06/2018 16:30:00	21.0	1026	0.0	0.1	0.0	0.0	0.0	20.2	0.0
CP102 (1)	10.40	29/06/2018 11:40:00	23.0	1022	0.3	0.0	0.0	1.0	0.0	20.3	0.0
CP102 (1)	10.40	06/07/2018 11:30:00	28.0	1020	0.2	0.1	0.0	1.1	0.0	20.5	0.0
CP102 (2)	5.00	21/06/2018 16:40:00	21.0	1026	-0.1	0.1	0.0	0.0	0.0	20.3	0.0
CP102 (2)	5.00	29/06/2018 11:45:00	24.0	1021	-2.3	-1.1	0.5	1.1	0.0	19.6	0.0
CP102 (2)	5.00	06/07/2018 11:40:00	28.0	1020	-6.1	-2.6	0.6	0.0	0.0	18.9	0.0

Notes: ND - not detected / NR - Not recorded

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Table C3

Pagewidth

7

2

APPENDIX D

IN SITU TESTING

Dynamic Cone Penetrometer Test Records with CBR Calculation	TRRL-WS101 to TRRL-WS108

Dynamic Cone Penetrometer Test

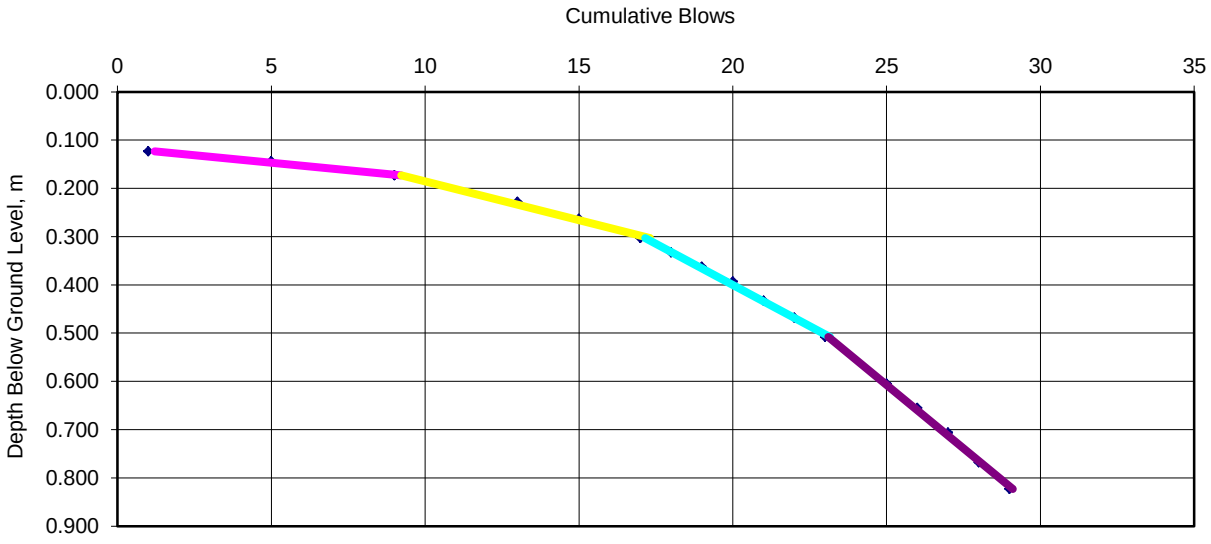
SOCOTEC

Date of Test: 31/05/2018 Test Depth: 0.100 mBGL

Method: TRRL Probe from 0.123 m to 0.823 m.

Remarks:

Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows
0.123	1								
0.144	5								
0.173	9								
0.228	13								
0.263	15								
0.303	17								
0.333	18								
0.363	19								
0.393	20								
0.433	21								
0.468	22								
0.508	23								
0.605	25								
0.655	26								
0.706	27								
0.768	28								
0.823	29								



CBR Values

Top, mBGL	Base, mBGL	CBR, %[1]
0.12	0.17	43
0.17	0.30	16
0.30	0.51	7.2
0.51	0.82	4.5

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Hole
TRRL-WS101

Dynamic Cone Penetrometer Test

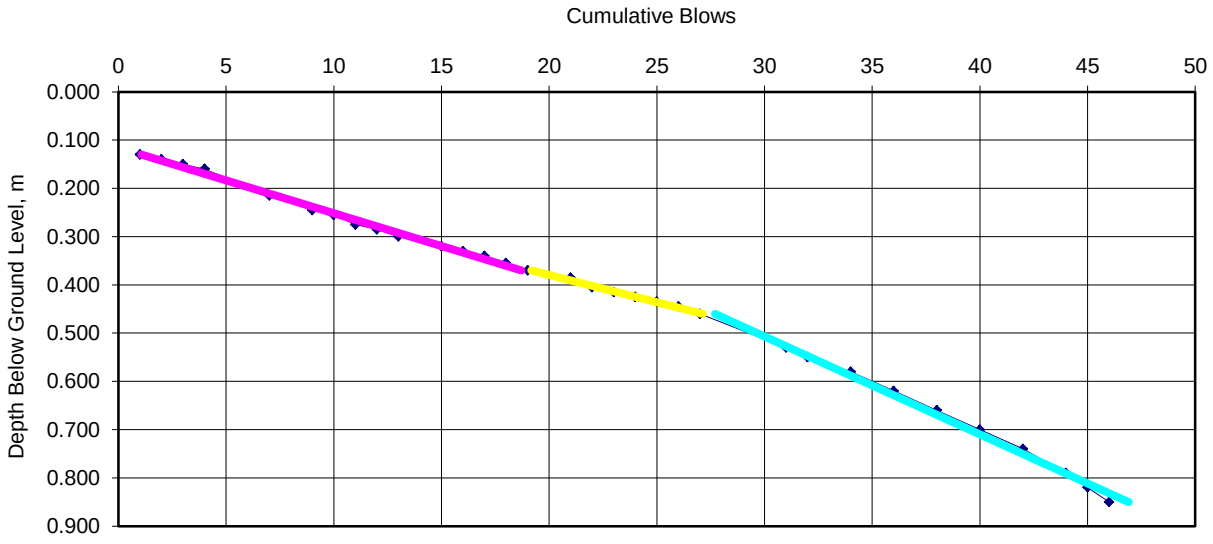
SOCOTEC

Date of Test: 31/05/2018 Test Depth: 0.100 mBGL

Method: TRRL Probe from 0.130 m to 0.850 m.

Remarks:

Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows
0.130	1	0.660	38						
0.140	2	0.700	40						
0.150	3	0.740	42						
0.160	4	0.790	44						
0.215	7	0.820	45						
0.245	9	0.850	46						
0.255	10								
0.275	11								
0.285	12								
0.300	13								
0.320	15								
0.330	16								
0.340	17								
0.355	18								
0.370	19								
0.385	21								
0.405	22								
0.415	23								
0.425	24								
0.435	25								
0.445	26								
0.460	27								
0.530	31								
0.550	32								
0.580	34								
0.620	36								



CBR Values

Top, mBGL	Base, mBGL	CBR, %[1]
0.13	0.37	19
0.37	0.46	23
0.46	0.85	12

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Hole

TRRL-WS102

Dynamic Cone Penetrometer Test

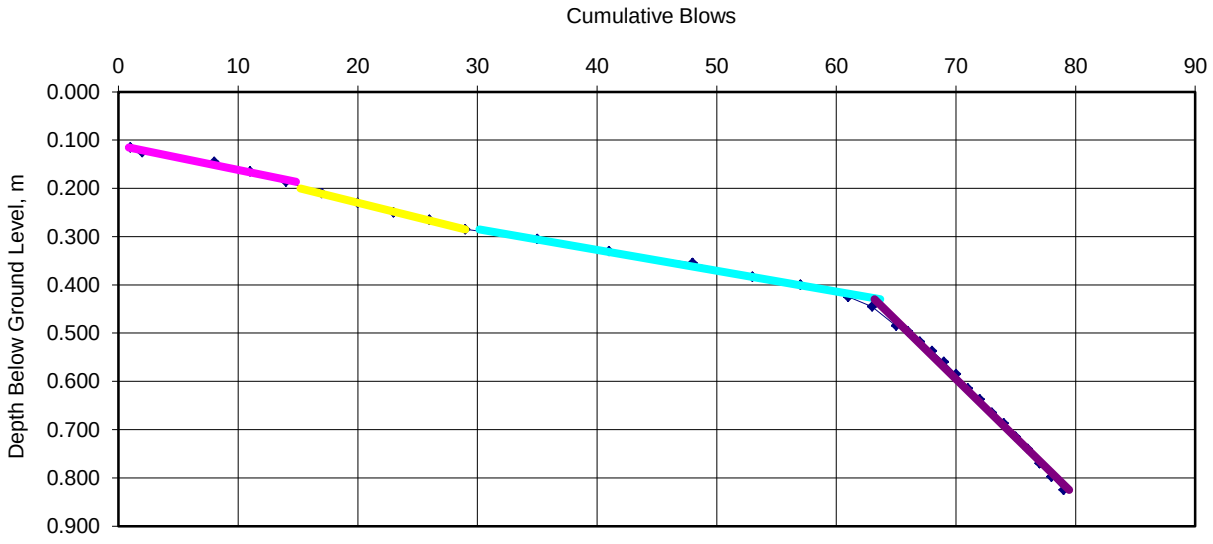
SOCOTEC

Date of Test: 31/05/2018 Test Depth: 0.100 mBGL

Method: TRRL Probe from 0.115 m to 0.825 m.

Remarks:

Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows
0.115	1	0.687	74						
0.125	2	0.715	75						
0.145	8	0.740	76						
0.165	11	0.770	77						
0.186	14	0.798	78						
0.210	17	0.825	79						
0.230	20								
0.250	23								
0.265	26								
0.285	29								
0.305	35								
0.330	41								
0.355	48								
0.383	53								
0.400	57								
0.425	61								
0.445	63								
0.485	65								
0.497	66								
0.518	67								
0.537	68								
0.560	69								
0.585	70								
0.615	71								
0.637	72								
0.665	73								



CBR Values

Top, mBGL	Base, mBGL	CBR, %[1]
0.12	0.19	54
0.20	0.29	44
0.29	0.43	64
0.43	0.83	10

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Hole
TRRL-WS103

Dynamic Cone Penetrometer Test

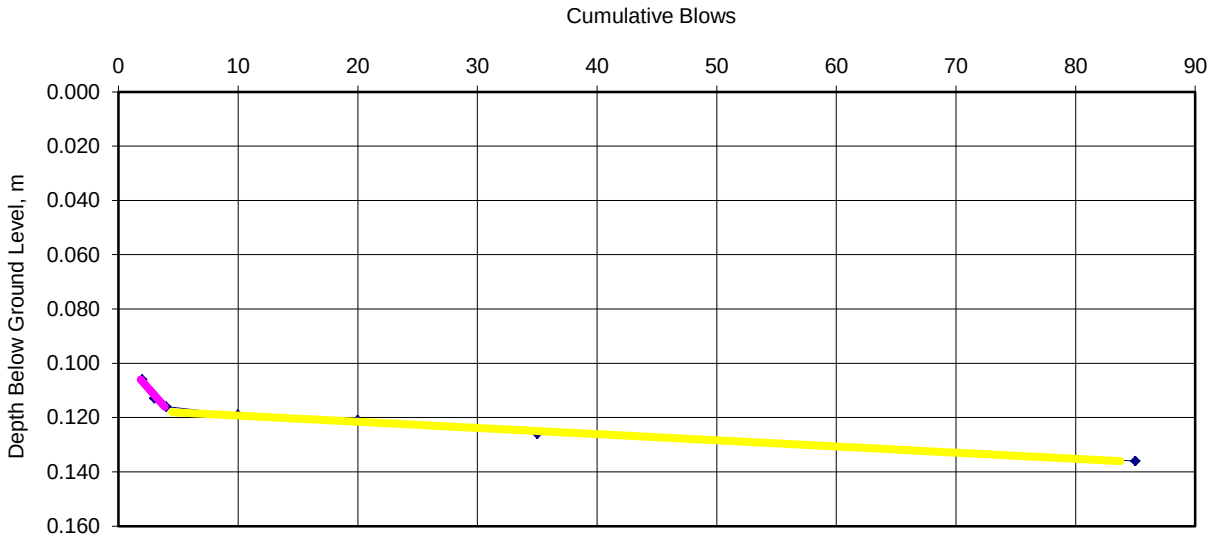
SOCOTEC

Date of Test: 01/06/2018 Test Depth: 0.100 mBGL

Method: TRRL Probe from 0.106 m to 0.136 m.

Remarks:

Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows
0.106	2								
0.113	3								
0.116	4								
0.119	10								
0.121	20								
0.126	35								
0.136	85								



CBR Values

Top, mBGL	Base, mBGL	CBR, %[1]
0.11	0.12	55
0.12	0.14	1400

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Hole **TRRL-WS104**

Dynamic Cone Penetrometer Test

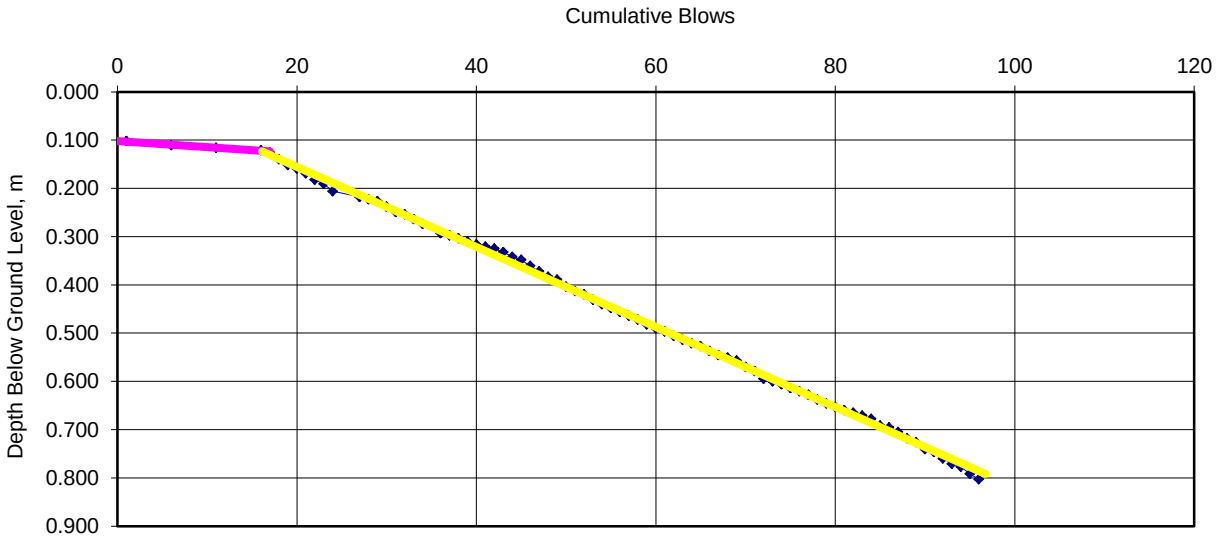
SOCOTEC

Date of Test: 01/06/2018 Test Depth: 0.100 mBGL

Method: TRRL Probe from 0.102 m to 0.803 m.

Remarks:

Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows
0.102	1	0.325	42	0.551	68	0.777	94		
0.111	6	0.332	43	0.557	69	0.792	95		
0.116	11	0.342	44	0.570	70	0.803	96		
0.121	16	0.348	45	0.579	71				
0.126	17	0.361	46	0.595	72				
0.140	18	0.372	47	0.600	73				
0.152	19	0.383	48	0.606	74				
0.159	20	0.389	49	0.614	75				
0.169	21	0.404	50	0.621	76				
0.182	22	0.413	51	0.628	77				
0.191	23	0.420	52	0.638	78				
0.206	24	0.431	53	0.646	79				
0.218	27	0.440	54	0.653	80				
0.223	28	0.448	55	0.660	81				
0.227	29	0.456	56	0.665	82				
0.238	30	0.464	57	0.671	83				
0.249	31	0.472	58	0.678	84				
0.254	32	0.482	59	0.692	85				
0.264	33	0.490	60	0.696	86				
0.274	34	0.497	61	0.705	87				
0.293	36	0.506	62	0.718	88				
0.298	37	0.514	63	0.726	89				
0.304	38	0.521	64	0.741	90				
0.310	39	0.527	65	0.747	91				
0.316	40	0.537	66	0.760	92				
0.321	41	0.546	67	0.771	93				



CBR Values

Top, mBGL	Base, mBGL	CBR, %[1]
0.10	0.12	240
0.12	0.79	32

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Hole
TRRL-WS105

Dynamic Cone Penetrometer Test

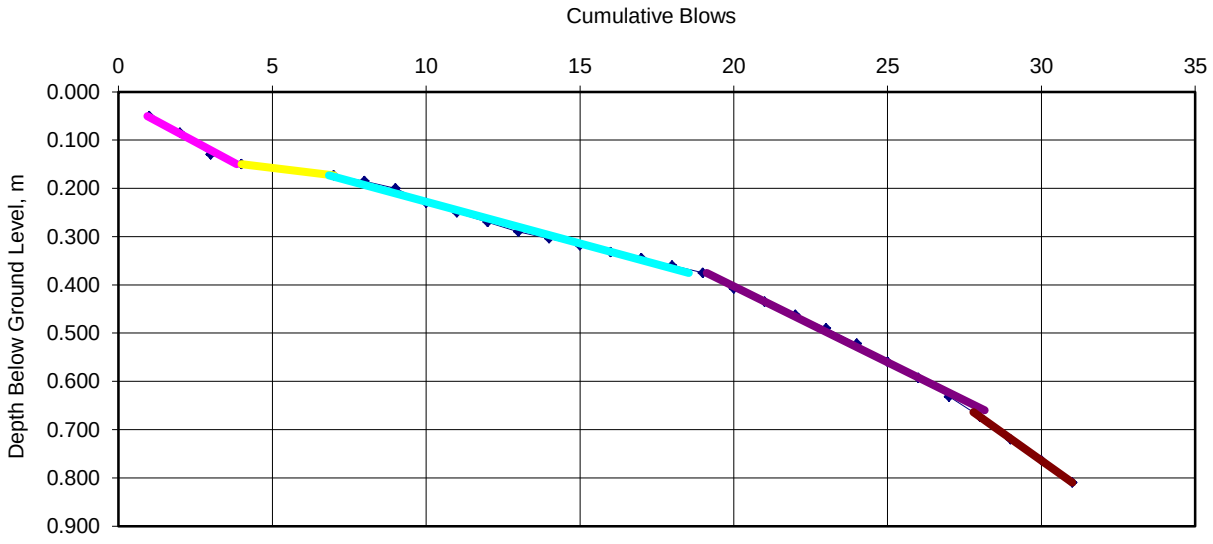
SOCOTEC

Date of Test: 01/06/2018 Test Depth: 0.000 mBGL

Method: TRRL Probe from 0.050 m to 0.810 m.

Remarks:

Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows
0.050	1	0.720	29						
0.085	2	0.763	30						
0.130	3	0.810	31						
0.150	4								
0.173	7								
0.185	8								
0.200	9								
0.230	10								
0.250	11								
0.270	12								
0.290	13								
0.304	14								
0.318	15								
0.332	16								
0.345	17								
0.360	18								
0.375	19								
0.408	20								
0.435	21								
0.462	22								
0.490	23								
0.522	24								
0.560	25								
0.593	26								
0.632	27								
0.673	28								



CBR Values

Top, mBGL	Base, mBGL	CBR, %[1]
0.05	0.15	7.1
0.15	0.17	35
0.17	0.38	14
0.38	0.66	7.8
0.66	0.81	5.3

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Hole

TRRL-WS106

Dynamic Cone Penetrometer Test

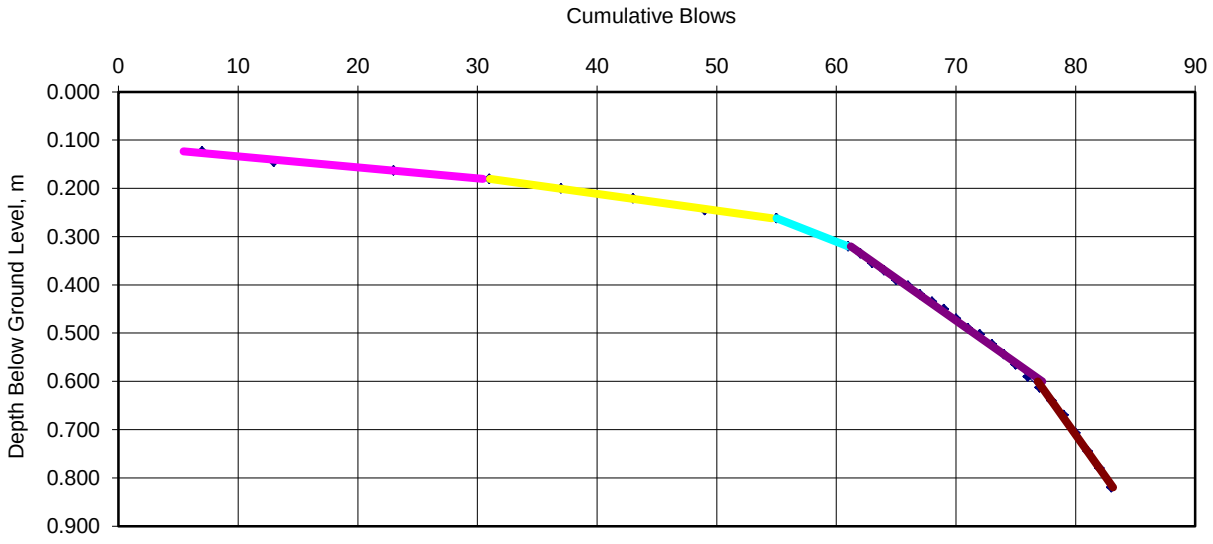
SOCOTEC

Date of Test: 31/05/2018 Test Depth: 0.100 mBGL

Method: TRRL Probe from 0.123 m to 0.820 m.

Remarks:

Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows
0.123	7	0.670	79						
0.145	13	0.707	80						
0.163	23	0.745	81						
0.180	31	0.780	82						
0.200	37	0.820	83						
0.221	43								
0.245	49								
0.262	55								
0.320	61								
0.335	62								
0.355	63								
0.370	64								
0.390	65								
0.402	66								
0.420	67								
0.435	68								
0.450	69								
0.470	70								
0.490	71								
0.503	72								
0.523	73								
0.544	74								
0.565	75								
0.590	76								
0.613	77								
0.640	78								



CBR Values

Top, mBGL	Base, mBGL	CBR, %[1]
0.12	0.18	120
0.18	0.26	80
0.26	0.32	27
0.32	0.60	14
0.60	0.82	7

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Hole
TRRL-WS107

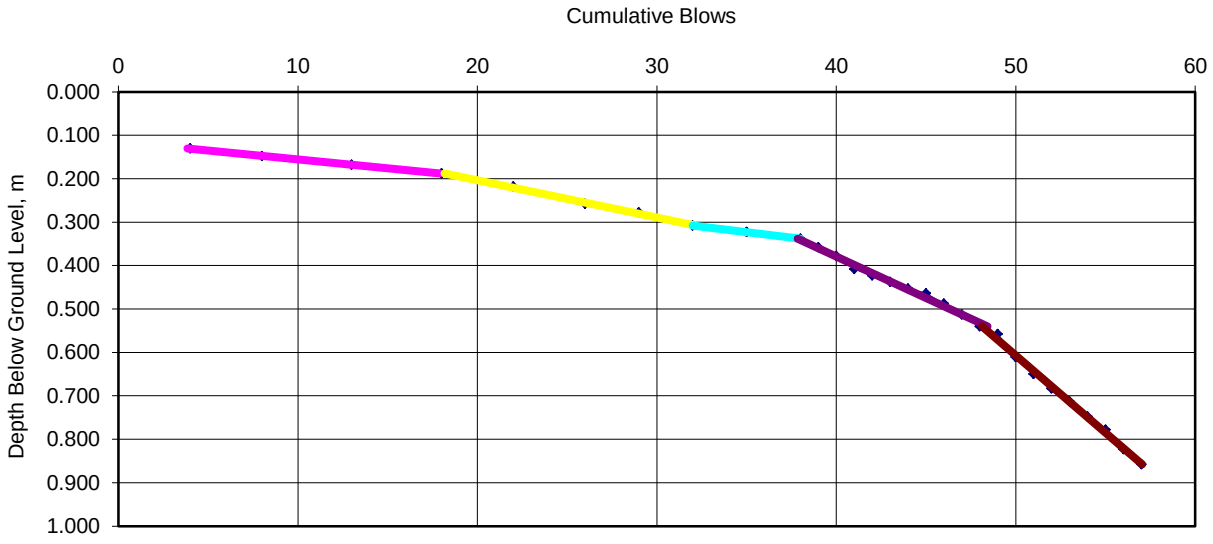
Dynamic Cone Penetrometer Test

Date of Test: 01/06/2018 Test Depth: 0.100 mBGL

Method: TRRL Probe from 0.130 m to 0.858 m.

Remarks:

Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows	Depth, mBGL	Cumulative Blows
0.130	4	0.778	55						
0.148	8	0.823	56						
0.168	13	0.858	57						
0.188	18								
0.218	22								
0.258	26								
0.278	29								
0.308	32								
0.323	35								
0.338	38								
0.358	39								
0.378	40								
0.408	41								
0.423	42								
0.438	43								
0.453	44								
0.464	45								
0.488	46								
0.513	47								
0.540	48								
0.558	49								
0.611	50								
0.650	51								
0.683	52								
0.713	53								
0.748	54								



CBR Values

Top, mBGL	Base, mBGL	CBR, %[1]
0.13	0.19	67
0.19	0.31	31
0.31	0.34	55
0.34	0.54	13
0.54	0.86	6.9

Notes:

Calculated using DMRB Vol 7, Section 3, Part 2, HD29/08 (2008)

Project Collis Primary School Phase 2 GI

Project No. H8061-18

Carried out for Extraspace Solutions

Hole **TRRL-WS108**

APPENDIX E

GEOTECHNICAL LABORATORY TEST RESULTS

INDEX PROPERTIES - SUMMARY OF RESULTS

Hole No.	Sample No.	Depth (m) from	Depth (m) to	type	Soil Description	ρ Mg/m3	ρ_d Mg/m3	w %	< 425 µm sieve %	W_L %	W_P %	I_P	ρ_s Mg/m3	Remarks
CP102	16	6.50	6.95	UT	Stiff brownish grey slightly sandy silty CLAY.			25	100	58 a	24	34		
WS103	6	2.15	2.45	D	Brownish grey slightly gravelly sandy CLAY.			12	81	26 a	17	9		

General notes: All above tests carried out to BS1377 : 1990 unless annotated otherwise. See Remarks for further details

Key : p bulk density, linear; *pd* dry density; *w* moisture content; * test carried out to BS EN ISO 17892-1 2014

WL Liquid limit; a 4 point cone test; b 1 point cone test

WP Plastic limit; NP non - plastic; IP Plasticity Index

<425um preparation; n from natural soil; s sieved specimen

ps particle density; -g = gas jar; -p = small pyknometer

QA Ref
SLR 1
Rev 2.91
Mar 17

SOCOTEC

Project No H8061-18

Project Name Collis Primary School

Figure

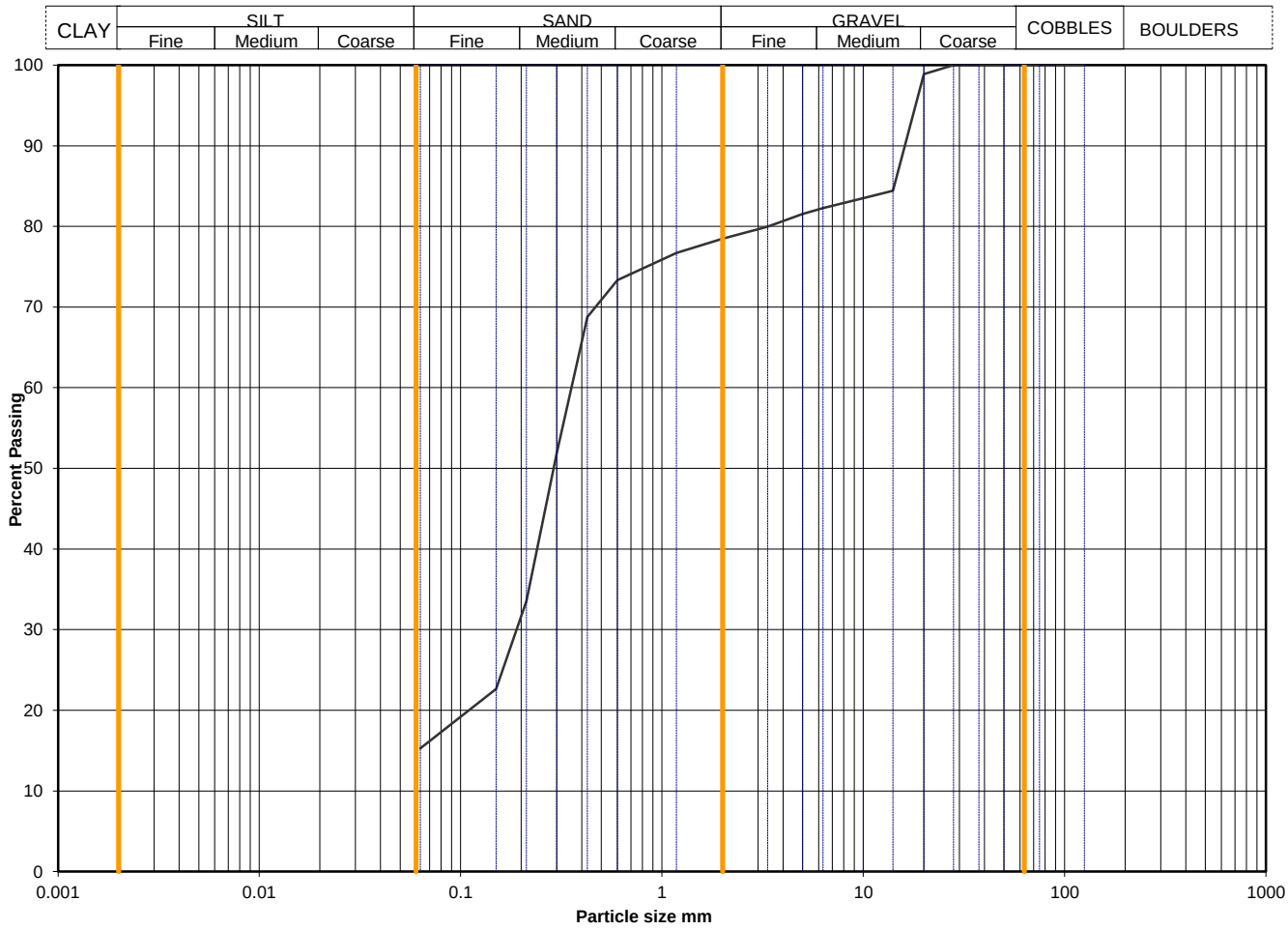
INDX

Printed: 09/07/2018 15:57

Particle Size Distribution Analysis

Sample Details:	SAMPLE ID:
	H8061-1820180607110129

Hole No	CP101
Sample Depth (m BGL)	0.50 - 1.00
Sample Type and No	B4
Specimen Ref	



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	99		
14	84		
10	83		
6.3	82		
5.0	82		
3.35	80		
2.00	78		
1.18	77		
0.600	73		
0.425	69		
0.300	52	Dry mass of sample, kg	
0.212	34		
0.150	23	8.1	
0.063	15		

Soil description	Brown slightly gravelly very sandy CLAY.		
Preparation / Pretreatment	Sieve: natural material		
Remarks			
Sample Proportions		Whole	*<60mm
	Cobbles / boulders	0	0
	Gravel	22	22
	Sand	63	63
*<60mm values to aid description only	Silt	silt+clay =	
	Clay	15	15

Uniformity Coefficient	**D60 / D10**	Not applicable

Test Method	BS 1377 : Part 2 : 1990	
	Sieving	9.2 wet sieve
	Sedimentation	none

QA Ref
SLR 2,9
Rev 2.10
Oct 16

UKAS TESTING
1157

SOCOTEC

Project No H8061-18

Project Name Collis Primary School

Figure

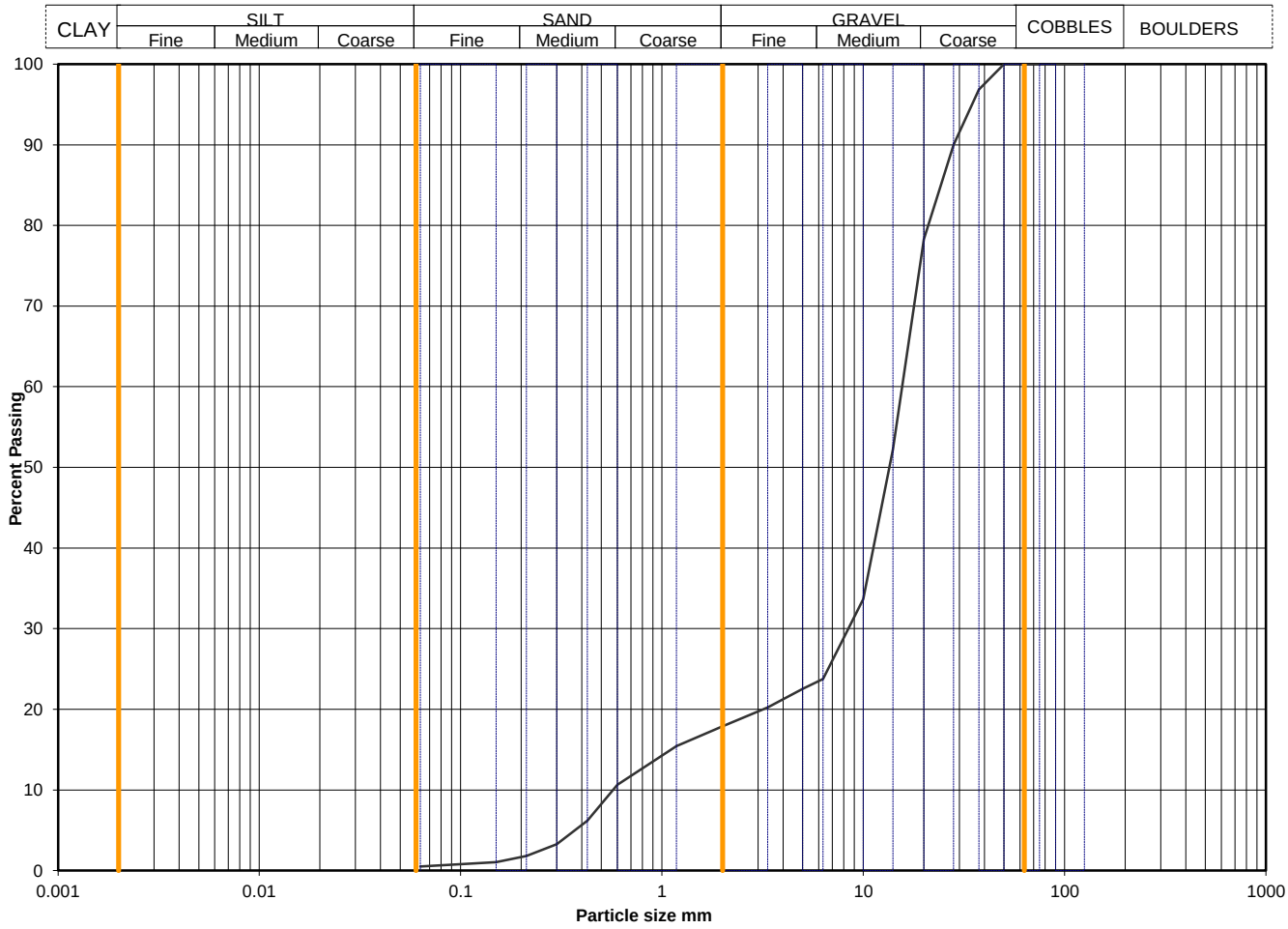
PSD

Printed: 09/07/2018 15:58

Particle Size Distribution Analysis

Sample Details:	SAMPLE ID:
	H8061-1820180607110243

Hole No	CP101
Sample Depth (m BGL)	4.50 - 5.00
Sample Type and No	B13
Specimen Ref	



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	97		
28	90		
20	78		
14	52		
10	34		
6.3	24		
5.0	23		
3.35	20		
2.00	18		
1.18	15		
0.600	11		
0.425	6		
0.300	3	Dry mass of sample, kg	
0.212	2		
0.150	1	16.7	
0.063	1		

Soil description	Brown very sandy GRAVEL.		
Preparation / Pretreatment	Sieve: pre dried,		
Remarks			
Sample Proportions		Whole	*<60mm
	Cobbles / boulders	0	0
	Gravel	82	82
	Sand	17	17
*<60mm values to aid description only	Silt	silt+clay =	
	Clay	1	1

Uniformity Coefficient	**D60 / D10**	27

Test Method	BS 1377 : Part 2 : 1990	
	Sieving	9.2 wet sieve
	Sedimentation	none

QA Ref
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Project Name Collis Primary School

Figure

PSD

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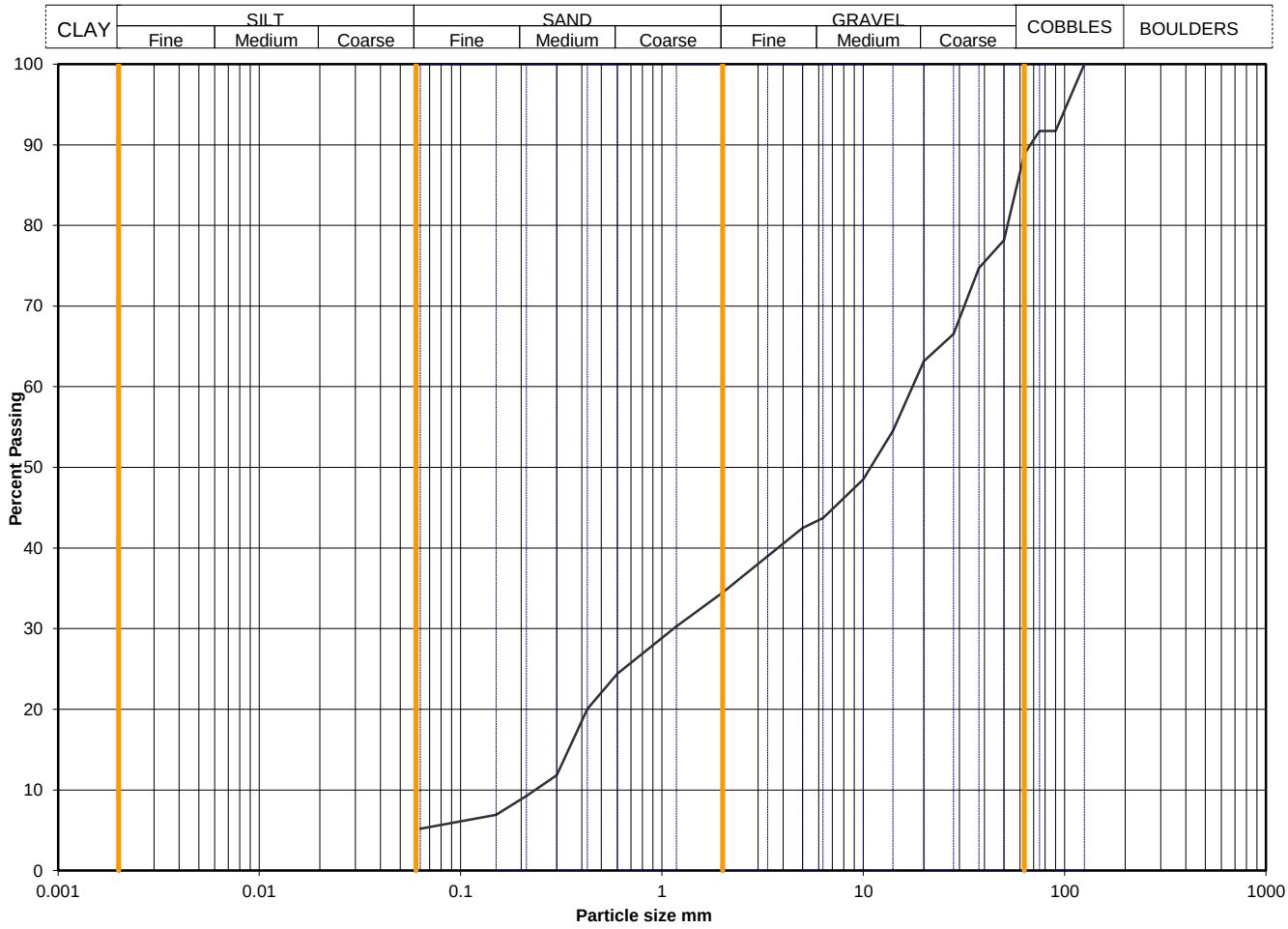
Particle Size Distribution Analysis

Sample Details:	SAMPLE ID:
	H8061-1820180607115655

Hole No	CP102
Sample Depth (m BGL)	0.50 - 1.00
Sample Type and No	B1
Specimen Ref	



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	92		
75	92		
63	89		
50	78		
37.5	75		
28	67		
20	63		
14	55		
10	48		
6.3	44		
5.0	43		
3.35	39		
2.00	34		
1.18	30		
0.600	24		
0.425	20		
0.300	12	Dry mass of sample, kg	
0.212	9	13.5	
0.150	7		
0.063	5		

Soil description	Brown very sandy silty GRAVEL with one cobble.		
Preparation / Pretreatment	Sieve: natural material		
Remarks			
Sample Proportions		Whole	*<60mm
	Cobbles / boulders	11	0
	Gravel	54	61
	Sand	29	33
*<60mm values to aid description only	Silt	silt+clay =	
	Clay	5	6

Uniformity Coefficient	**D60 / D10**	75

Test Method	BS 1377 : Part 2 : 1990	
	Sieving	9.2 wet sieve
	Sedimentation	none

QA Ref
SLR 2,9
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Project No H8061-18

Project Name Collis Primary School

Figure

PSD

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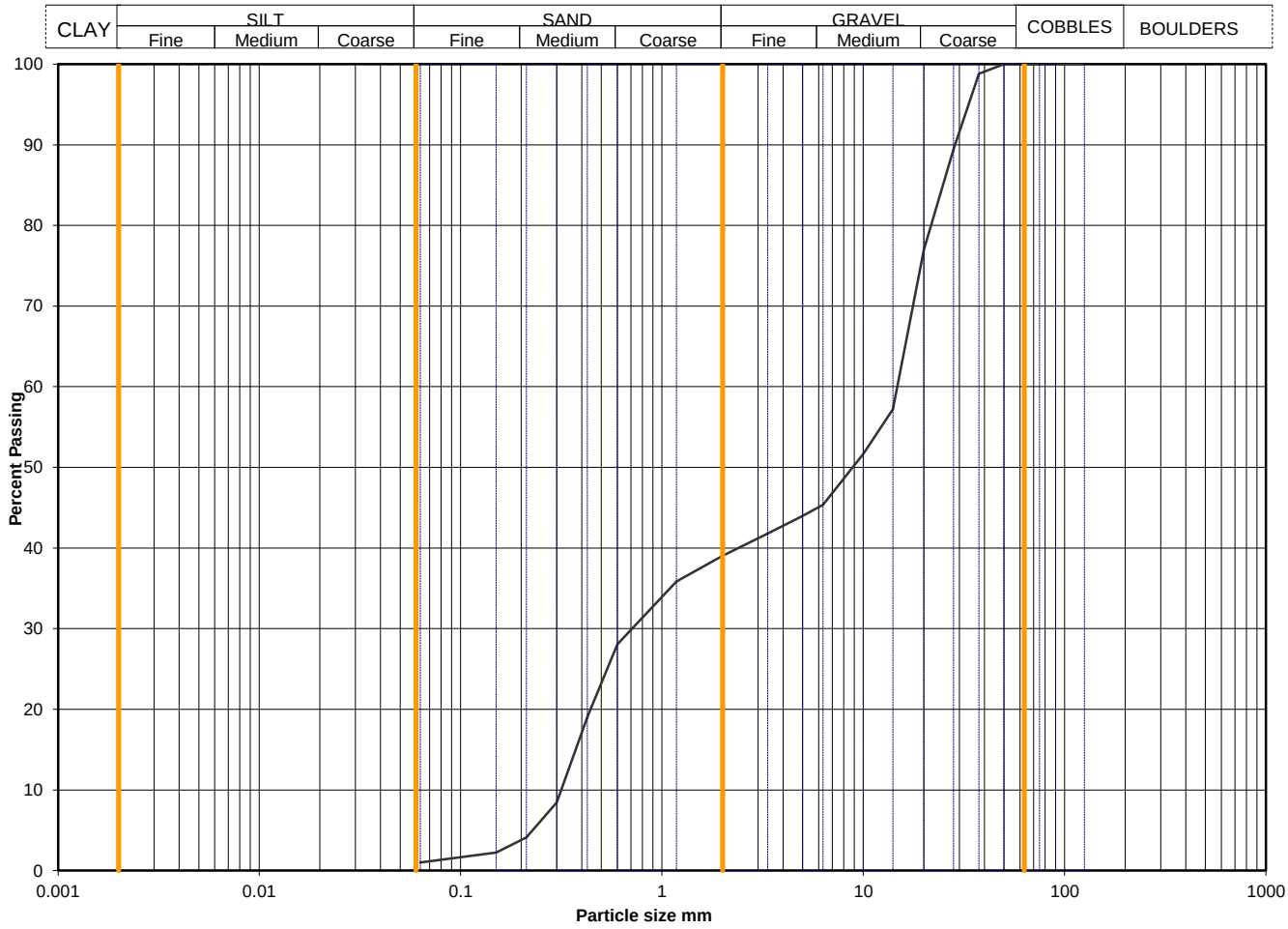
Particle Size Distribution Analysis

Sample Details:	SAMPLE ID:
	H8061-1820180607120025

Hole No	CP102
Sample Depth (m BGL)	2.50 - 3.00
Sample Type and No	B9
Specimen Ref	



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	99		
28	89		
20	77		
14	57		
10	52		
6.3	45		
5.0	44		
3.35	42		
2.00	39		
1.18	36		
0.600	28		
0.425	19		
0.300	8	Dry mass of sample, kg	
0.212	4		
0.150	2	19.4	
0.063	1		

Soil description	Brown very sandy GRAVEL.		
Preparation / Pretreatment	Sieve: pre dried,		
Remarks			
Sample Proportions		Whole	*<60mm
	Cobbles / boulders	0	0
	Gravel	61	61
	Sand	38	38
*<60mm values to aid description only	Silt	silt+clay =	
	Clay	1	1

Uniformity Coefficient	**D60 / D10**	47

Test Method	BS 1377 : Part 2 : 1990	
	Sieving	9.2 wet sieve
	Sedimentation	none

QA Ref
SLR 2,9
Rev 2.10
Oct 16

UKAS TESTING
1157

SOCOTEC

Project No H8061-18

Project Name Collis Primary School

Figure

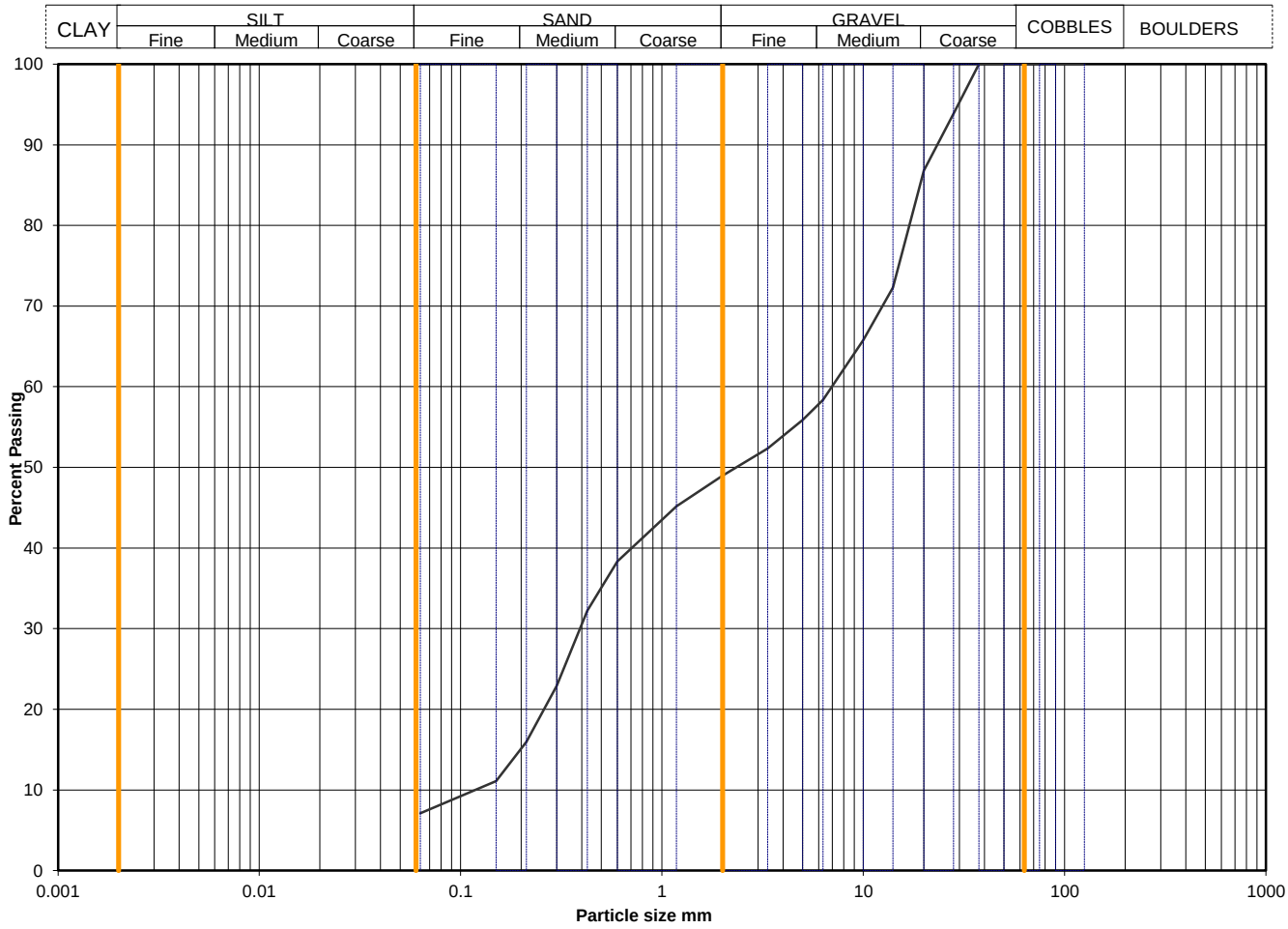
PSD

Printed: 09/07/2018 15:58

Particle Size Distribution Analysis

Sample Details:	SAMPLE ID:
	H8061-1820180604042809

Hole No	WS101
Sample Depth (m BGL)	1.60 - 3.00
Sample Type and No	B7
Specimen Ref	



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	94		
20	87		
14	72		
10	66		
6.3	58		
5.0	56		
3.35	52		
2.00	49		
1.18	45		
0.600	38		
0.425	32		
0.300	23	Dry mass of sample, kg	
0.212	16	6.4	
0.150	11		
0.063	7		

Soil description	Brown very sandy silty GRAVEL.		
Preparation / Pretreatment	Sieve: natural material		
Remarks			
Sample Proportions		Whole	*<60mm
	Cobbles / boulders	0	0
	Gravel	51	51
	Sand	42	42
*<60mm values to aid description only	Silt	silt+clay =	
	Clay	7	7

Uniformity Coefficient	**D60 / D10**	59

Test Method	BS 1377 : Part 2 : 1990	
	Sieving	9.2 wet sieve
	Sedimentation	none

QA Ref
SLR 2,9
Rev 2.10
Oct 16

UKAS TESTING
1157

SOCOTEC

Project No H8061-18

Project Name Collis Primary School

Figure

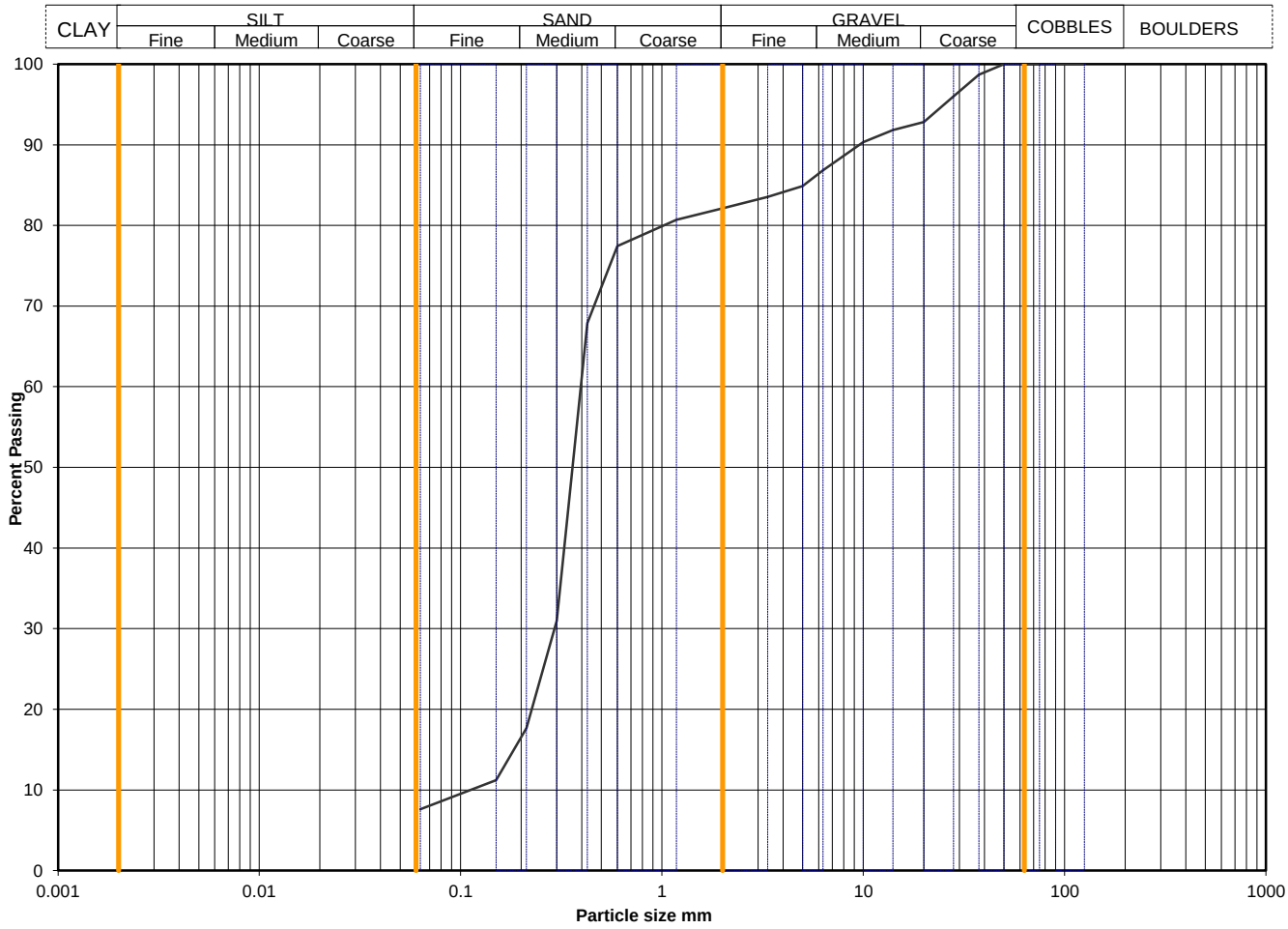
PSD

Printed: 09/07/2018 15:58

Particle Size Distribution Analysis

Sample Details:	SAMPLE ID:
	H8061-1820180606104209

Hole No	WS103
Sample Depth (m BGL)	1.20 - 2.15
Sample Type and No	B5
Specimen Ref	



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	99		
28	96		
20	93		
14	92		
10	90		
6.3	87		
5.0	85		
3.35	84		
2.00	82		
1.18	81		
0.600	77		
0.425	68		
0.300	31	Dry mass of sample, kg	
0.212	18	7.3	
0.150	11		
0.063	8		

Soil description	Brown gravelly clayey SAND.		
Preparation / Pretreatment	Sieve: natural material		
Remarks			
Sample Proportions		Whole	*<60mm
	Cobbles / boulders	0	0
	Gravel	18	18
	Sand	75	75
*<60mm values to aid description only	Silt	silt+clay =	
	Clay	8	8

Uniformity Coefficient	**D60 / D10**	4

Test Method	BS 1377 : Part 2 : 1990	
	Sieving	9.2 wet sieve
	Sedimentation	none

QA Ref
SLR 2,9
Rev 2.10
Oct 16

UKAS TESTING
1157

SOCOTEC

Project No H8061-18

Project Name Collis Primary School

Figure

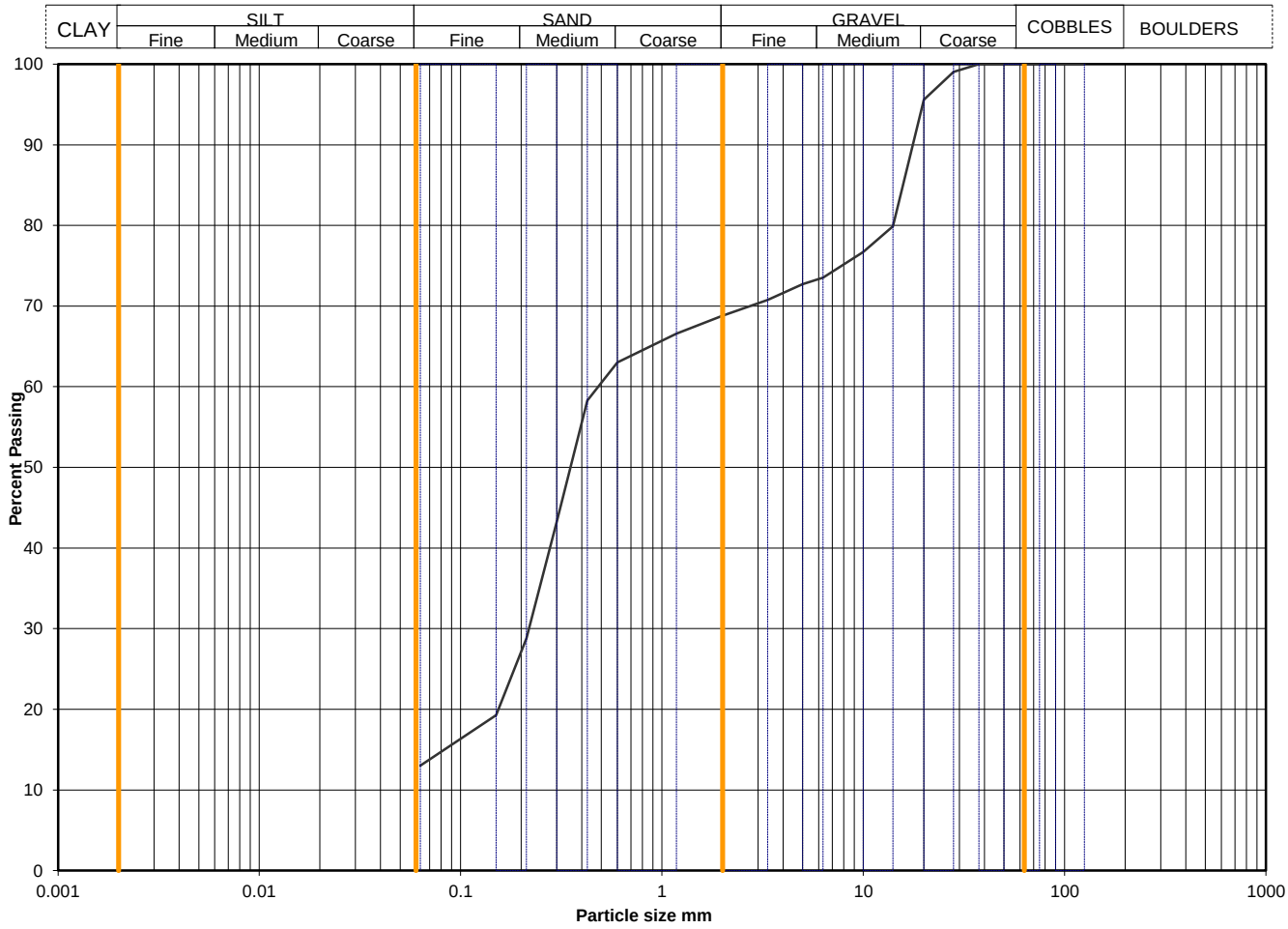
PSD

Printed: 09/07/2018 15:58

Particle Size Distribution Analysis

Sample Details:	SAMPLE ID:
	H8061-1820180606113304

Hole No	WS106
Sample Depth (m BGL)	0.80 - 1.20
Sample Type and No	B3
Specimen Ref	



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	99		
20	96		
14	80		
10	77		
6.3	74		
5.0	73		
3.35	71		
2.00	69		
1.18	67		
0.600	63		
0.425	58		
0.300	43	Dry mass of sample, kg	
0.212	29	9.0	
0.150	19		
0.063	13		

Soil description	Brown very gravelly silty SAND.
Preparation / Pretreatment	Sieve: natural material
Remarks	

Sample Proportions		Whole	*<60mm
	Cobbles / boulders	0	0
	Gravel	31	31
	Sand	56	56
*<60mm values to aid description only	Silt	silt+clay =	
	Clay	13	13

Uniformity Coefficient	D60 / D10	Not applicable

Test Method	BS 1377 : Part 2 : 1990	
	Sieving	9.2 wet sieve
	Sedimentation	none

QA Ref
SLR 2,9
Rev 2.10
Oct 16

UKAS TESTING
1157

SOCOTEC

Project No H8061-18

Project Name Collis Primary School

Figure
PSD

Printed: 09/07/2018 15:58

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TESTS WITHOUT MEASUREMENT OF PORE PRESSURE - SUMMARY OF RESULTS

Hole No.	Sample				Soil Description	Density		*w*	Test type	Dia.	ó3	At failure / end of stage				Membrane Thickness	Remarks
	No.	Depth (m) from	Depth (m) to	type		bulk Mg/m3	dry Mg/m3	%		mm	kPa	Axial strain %	ó1 - ó3 kPa	*CU* kPa	MODE	mm	
CP102	16	6.50	6.95	UT	Stiff brownish grey slightly sandy silty CLAY.	2.02	1.62	25	UU	102.5	130	18.6	272	136	C	0.4	

General notes: Tests carried out in accordance with BS1377: Part 7: 1990, clause 8 for single stage, clause 9 for multistage tests. Specimens nominally 2:1 height diameter ratio and tested at a rate of strain of 2%/minute, unless annotated otherwise. Latex rubber membrane used and membrane correction applied in accordance with BS1377-7 8.5.1.4 unless stated.

Legend						
	UU - single stage test (may be in sets of specimens)	ó3	cell pressure	Mode of failure	P	plastic
	UUM - multistage test on a single specimen	ó1 - ó3	deviator stress		B	brittle
	suffix R - remoulded or recompacted	*CU*	undrained shear strength		C	compound

QA Ref
SLR 2
Rev 2.7
Apr 15

UKAS TESTING
1157

SOCOTEC

Project No H8061-18

Project Name Collis Primary School

Figure

UUSUM

Printed: 09/07/2018 16:00

TEST REPORT

UKAS TESTING
1252

Report No. EFS/186930 (Ver. 1)

SOCOTEC UK Bridgend
Unit 15
Crosby Yard
Wildmill
Bridgend
Mid Glamorgan
CF31 1JZ

Site: H8061-18 Collis Primary School

The 5 samples described in this report were registered for analysis by SOCOTEC UK Limited on 20-Jun-2018. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 02-Jul-2018

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited.
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:

On behalf of
SOCOTEC UK Lim
Tim Barnes Operations Director
Energy & Waste Services

Date of Issue: 02-Jul-2018

Tests marked '^' have been subcontracted to another laboratory.
Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected.
SOCOTEC UK Limited accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :			mg/kg	mg/l	%	pH Units												
Method Codes :			ICPACIDS	ICPWSS	TSBRE1	WSLM50												
Method Reporting Limits :			20	10	0.005													
UKAS Accredited :			Yes	Yes	No	No												
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**SO4-- (acid sol)**	**SO4-- (H2O sol) mg/l**	**Total Sulphur.**	**pH (BS1377)**												
1910204	CP101 D 0.50		440	101	0.041	7.8												
1910205	CP102 D 0.50		1770	594	0.079	8.8												
1910206	WS101 D 1.60		117	23	0.024	8.0												
1910207	WS103 D 1.20		119	35	0.021	8.0												
1910208	WS106 D 0.80		140	<10	0.023	8.0												

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Client Name	**SOCOTEC UK Bridgend**
Contact	Adam Putt

H8061-18 Collis Primary School

Sample Analysis

Date Printed	**02-Jul-2018**
Report Number	**EFS/186930**
Table Number	**1**

Where individual results are flagged see report notes for status.

SOCOTEC UK Ltd Environmental Chemistry
Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No S186930

Consignment No S75579
Date Logged 20-Jun-2018
In-House Report Due 27-Jun-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	MethodID	CustServ	Dep.Opt			ICPACIDS	ICPBRE	ICPWSS	KONECL	KoneNO3	TSBRE1	WSLM50
		Sampled	REPORT A	DO Cl if pH<5.5	DO Mg if SO4(W)>3000	DO NO3 if pH<5.5	SO4-- (acid sol)	Magnesium (BRE)	SO4-- (H2O sol) mg/l	Chloride:(2:1)	Nitrate (BRE 2:1): mg/l	Total Sulphur.	pH (BS1377)
							✓		✓				
CL/1910204	CP101 0.50-1.00	D	D	D	D	D	D	D	D	D	D	D	D
CL/1910205	CP102 0.50-1.00	D	D				D	D	D	D	D	D	D
CL/1910206	WS101 1.60-3.00	D	D				D	D	D	D	D	D	D
CL/1910207	WS103 1.20-2.15	D	D				D	D	D	D	D	D	D
CL/1910208	WS106 0.80-1.20	D	D				D	D	D	D	D	D	D

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	ICPACIDS	Oven Dried @ < 35°C	Determination of Total Sulphate in soil samples by Hydrochloric Acid extraction followed by ICPOES detection
Soil	ICPWSS	Oven Dried @ < 35°C	Determination of Water Soluble Sulphate in soil samples by water extraction followed by ICPOES detection
Soil	TSBRE1	Oven Dried @ < 35°C	Determination of Total Carbon and/or Total Sulphur in solid samples by high temperature combustion/infrared detection
Soil	WSLM50	Oven Dried @ < 35°C	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.

Where individual results are flagged see report notes for status.

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
TR Denotes Tremolite
AC Denotes Actinolite
AN Denotes Anthophylite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
N.F No Flow
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : SOCOTEC UK Bridgend

Site : H8061-18 Collis Primary School

Report Number : S18_6930

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1910204	CP101 D 0.50	SILT
CL/1910205	CP102 D 0.50	MADE GROUND
CL/1910206	WS101 D 1.60	SAND
CL/1910207	WS103 D 1.20	SAND
CL/1910208	WS106 D 0.80	SAND

APPENDIX F
GEOENVIRONMENTAL LABORATORY TEST RESULTS AND HAZWASTE ONLINE OUTPUT SHEET

Soil Sample Analysis Test Reports	EFS/186743 and EFS/188736
Leachate Sample Analysis Reports	EXR/264540
Water Sample Analysis Reports	EXR/265076
Hazwaste Online Output	4VPYL-K3TJ5-2NNRD

TEST REPORT

UKAS TESTING
1252

Report No. EFS/186743 (Ver. 1)

SOCOTEC UK Bridgend
Unit 15
Crosby Yard
Wildmill
Bridgend
Mid Glamorgan
CF31 1JZ

Site: H8061-18 Collis Primary School

The 17 samples described in this report were registered for analysis by SOCOTEC UK Limited on 14-Jun-2018. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 27-Jun-2018

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited.
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:

On behalf of
SOCOTEC UK Lim
Tim Barnes Operations Director
Energy & Waste Services

Date of Issue: 27-Jun-2018

Tests marked '^' have been subcontracted to another laboratory.
Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected.
SOCOTEC UK Limited accepts no responsibility for any sampling not carried out by our personnel.

			Units :	%	%	% M/M	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			Method Codes :	CEN Leachate	CEN Leachate	FOCS	GROHSA	ICPBOR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	KONECR	PAHMSUS
			Method Reporting Limits :			0.04	0.2	0.5	0.3	0.1	0.5	0.5	0.5	0.1	0.5	0.5	3	0.1	0.08
			UKAS Accredited :	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
LAB ID Number CL/	Client Sample Description	Sample Date		Fraction of non-crushable material %	Fraction of sample above 4 mm %	S.O.M. % (Calc)	GRO (C6-C8)	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Chromium vi:	Acenaphthene
1909178	CP101 ES 3 0.30	31-May-18		0.0	65.8	6.84	<0.2	1.5	19.3	0.58	24.4	51.4	789.6	0.84	20.2	<0.5	260.8	<0.1	1.71
1909179	CP101 ES 5 0.80	31-May-18				1.24	<0.2	1	15.4	<0.1	21.9	19.9	92.2	0.26	13.7	<0.5	61.6	<0.1	< 0.08
1909180	CP102 ES 2 0.50	31-May-18				0.60	<0.2	1.1	7.8	0.13	14.5	14.7	33.7	<0.1	11.8	<0.5	40	<0.1	< 0.08
1909181	CP102 ES 3 1.00	31-May-18		0.0	53.2	0.48	<0.2	1.4	7.4	0.16	12.2	13.5	26.1	<0.1	11.1	<0.5	37.8	<0.1	< 0.08
1909182	HDP101 ES 2 0.30	31-May-18				2.43	<0.2	1	12.3	0.12	16.7	30.7	89	0.31	13.1	<0.5	83.5	<0.1	< 0.08
1909183	HDP101 ES 4 0.80	31-May-18				0.38	<0.2	0.9	14.4	<0.1	17.5	10.4	14.4	<0.1	13.8	<0.5	29.7	<0.1	< 0.08
1909184	HDP102 ES 1 0.20	31-May-18				2.71	<0.2	0.9	15.2	0.21	19	33.4	113.2	0.66	15.1	<0.5	91.9	<0.1	< 0.08
1909185	HDP102 ES 2 1.00	31-May-18		0.0	10.0	0.43	<0.2	0.7	15.1	<0.1	20.4	11.8	17.4	<0.1	16	<0.5	31.6	<0.1	< 0.08
1909186	WS101 ES 2 0.30	31-May-18				0.85	<0.2	1	16.2	0.51	14.4	14.3	53.4	0.1	16.6	<0.5	117.9	<0.1	< 0.08
1909187	WS101 ES 4 1.00	31-May-18		0.0	0.0	3.17	<0.2	1.1	15.5	0.12	18	29.4	141	0.57	13.6	<0.5	87.2	<0.1	< 0.08
1909188	WS101 ES 5 1.20	31-May-18				0.43	<0.2	0.6	15.9	<0.1	19.5	12.1	22	<0.1	16.8	<0.5	37.2	<0.1	< 0.08
1909189	WS102 ES 2 0.30	31-May-18		0.0	44.7	3.53	<0.2	1	17	0.24	23	43	299	0.32	18.7	<0.5	151.4	<0.1	< 0.08
1909190	WS102 ES 3 0.80	31-May-18				2.83	<0.2	1.2	15.2	0.18	19.6	30.6	266.7	0.63	14.5	<0.5	103.6	<0.1	< 0.08
1909191	WS103 ES 2 0.30	31-May-18		0.0	5.5	2.62	<0.2	1.3	4.5	<0.1	4.6	7.8	393.1	<0.1	5.9	<0.5	16.7	<0.1	< 0.08
1909192	WS103 ES 4 0.80	31-May-18				0.83	<0.2	0.6	12.8	<0.1	17.3	14.8	35.5	0.11	13.2	<0.5	39	<0.1	< 0.08
1909193	WS105 ES 2 0.30	01-Jun-18		0.0	43.9	2.55	<0.2	1.6	12.5	0.33	19.1	47.7	174	0.26	17.5	<0.5	129.6	<0.1	< 0.08
1909194	WS105 ES 4 0.70	01-Jun-18				0.48	<0.2	0.8	15.8	<0.1	20.2	11.6	19.1	<0.1	16	<0.5	38.1	<0.1	< 0.08

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Client Name SOCOTEC UK Bridgend

Contact Adam Putt

H8061-18 Collis Primary School

Sample Analysis

Date Printed	27-Jun-2018
Report Number	EFS/186743
Table Number	1

Where individual results are flagged see report notes for status.

Units :			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Codes :			PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS
Method Reporting Limits :			0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	1.28
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Acenaphthylene**	**Anthracene**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b)fluoranthene**	**Benzo(ghi)perylene**	**Benzo(k)fluoranthene**	**Chrysene**	**Dibenzo(ah)anthracene**	**Fluoranthene**	**Fluorene**	**Indeno(123-cd)pyrene**	**Naphthalene**	**Phenanthrene**	**Pyrene**	**Total PAH (Sum of USEPA 16)**
1909178	CP101 ES 3 0.30	31-May-18	5.04	45.9	65.8	41.9	55.8	18.4	22.7	57.1	5.47	175	2.68	23.8	6.69	202	128	859
1909179	CP101 ES 5 0.80	31-May-18	0.12	0.64	2.43	2.13	2.50	0.99	1.24	2.60	0.25	5.22	< 0.08	1.05	< 0.08	1.15	4.20	< 24.8
1909180	CP102 ES 2 0.50	31-May-18	< 0.08	< 0.08	0.23	0.22	0.24	0.18	0.17	0.21	< 0.08	0.26	< 0.08	0.15	< 0.08	0.13	0.28	< 2.55
1909181	CP102 ES 3 1.00	31-May-18	< 0.08	< 0.08	0.28	0.29	0.31	0.24	0.18	0.24	< 0.08	0.31	< 0.08	0.20	< 0.08	0.11	0.33	< 2.98
1909182	HDP101 ES 2 0.30	31-May-18	< 0.08	< 0.08	0.24	0.41	0.44	0.36	0.27	0.35	< 0.08	0.50	< 0.08	0.28	< 0.08	0.14	0.53	< 3.98
1909183	HDP101 ES 4 0.80	31-May-18	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 1.28
1909184	HDP102 ES 1 0.20	31-May-18	0.11	0.11	0.55	0.76	0.92	0.64	0.60	0.81	0.10	1.46	< 0.08	0.55	< 0.08	0.34	1.36	< 8.56
1909185	HDP102 ES 2 1.00	31-May-18	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 1.28
1909186	WS101 ES 2 0.30	31-May-18	< 0.08	< 0.08	< 0.08	0.09	0.09	0.09	< 0.08	0.10	< 0.08	0.16	< 0.08	< 0.08	< 0.08	< 0.08	0.16	< 1.47
1909187	WS101 ES 4 1.00	31-May-18	0.20	0.36	1.73	1.71	1.96	1.20	1.15	1.93	0.19	3.80	< 0.08	1.06	< 0.08	1.25	3.40	< 20.2
1909188	WS101 ES 5 1.20	31-May-18	< 0.08	< 0.08	0.09	0.09	0.10	< 0.08	< 0.08	0.11	< 0.08	0.19	< 0.08	< 0.08	< 0.08	< 0.08	0.19	< 1.56
1909189	WS102 ES 2 0.30	31-May-18	< 0.08	0.20	0.57	0.73	0.99	0.64	0.61	0.93	0.10	1.75	< 0.08	0.54	< 0.08	0.52	1.47	< 9.37
1909190	WS102 ES 3 0.80	31-May-18	0.11	0.26	0.79	0.95	1.19	0.70	0.69	1.17	0.13	2.48	< 0.08	0.61	< 0.08	0.72	2.12	< 12.2
1909191	WS103 ES 2 0.30	31-May-18	< 0.08	0.44	1.62	2.04	2.96	1.61	1.50	2.39	0.26	5.50	< 0.08	1.43	< 0.08	1.40	4.34	< 25.8
1909192	WS103 ES 4 0.80	31-May-18	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	0.10	< 0.08	< 0.08	< 0.08	< 0.08	0.09	< 1.31
1909193	WS105 ES 2 0.30	01-Jun-18	< 0.08	0.13	0.57	0.52	0.64	0.47	0.39	0.56	< 0.08	1.04	< 0.08	0.38	< 0.08	0.31	0.96	< 6.37
1909194	WS105 ES 4 0.70	01-Jun-18	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 1.28

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Client Name	**SOCOTEC UK Bridgend**
Contact	Adam Putt

H8061-18 Collis Primary School

Sample Analysis

Date Printed	**27-Jun-2018**
Report Number	**EFS/186743**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			pH Units	mg/kg	mg/kg		%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Method Codes :			PHSOIL	SFAPI	SFAPI	Sub020	TMSS	TPHFIDUS	TPHFIDUS	TPHFIDUS	TPHFIDUS	TPHFIDUS	TPHFIDUS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS
Method Reporting Limits :				0.5	0.5		0.1	2	2	2	4.38	2	10	1	1	1	1	1
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**pH units (AR)**	**Cyanide(Free) (AR)**	**Phenol Index.(AR)**	**^Asbestos ID (Stage 1)**	**Tot.Moisture @ 105C**	**TPH Band (>C10-C12)**	**TPH Band (>C12-C16)**	**TPH Band (>C16-C21)**	**TPH Band (>C21-C35)**	**TPH Band (>C8-C10)**	**TPH by GCFID (AR)**	**1,1,1,2-Tetrachloroethane**	**1,1,1-Trichloroethane**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**
1909178	CP101 ES 3 0.30	31-May-18	8.3	1.5	<0.5	NADIS	16.3	10.4	163	613*	1130*	4.16	1960	< 1.0*	< 1.0*	< 1.0	< 1.0	< 1.0
1909179	CP101 ES 5 0.80	31-May-18	8.2	<0.5	<0.5	NADIS	9.3	< 2.00	2.01	10.1*	63.2*	2.78	86.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909180	CP102 ES 2 0.50	31-May-18	8.8	<0.5	<0.5	NADIS	6.2	< 2.00	< 2.00	4.85*	36.8*	2.82	54.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909181	CP102 ES 3 1.00	31-May-18	8.7	<0.5	<0.5	NADIS	6.1	< 2.00	3.41	13.6*	148*	3.29	208	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909182	HDP101 ES 2 0.30	31-May-18	8.7	<0.5	<0.5	NADIS	9.7	< 2.00	< 2.00	5.72*	104*	3.40	160	< 1.0*	< 1.0*	< 1.0	< 1.0	< 1.0
1909183	HDP101 ES 4 0.80	31-May-18	8.6	<0.5	<0.5	NADIS	7.0	< 2.00	< 2.00	< 2.00*	12.2*	3.04	24.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909184	HDP102 ES 1 0.20	31-May-18	8.5	<0.5	<0.5	NADIS	11.2	< 2.00	< 2.00	5.10*	47.7*	2.85	69.3	< 1.0*	< 1.0*	< 1.0	< 1.0	< 1.0
1909185	HDP102 ES 2 1.00	31-May-18	8.5	<0.5	<0.5	NADIS	7.6	< 2.00	< 2.00	< 2.00*	7.57*	2.93	17.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909186	WS101 ES 2 0.30	31-May-18	8.4	<0.5	<0.5	NADIS	5.5	< 2.00	< 2.00	< 2.00*	11.7*	3.38	21.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909187	WS101 ES 4 1.00	31-May-18	7.9	<0.5	<0.5	NADIS	8.4	< 2.00	2.56	10.6*	60.1*	3.02	82.2	< 1.0*	< 1.0*	< 1.0	< 1.0	< 1.0
1909188	WS101 ES 5 1.20	31-May-18	7.9	<0.5	<0.5	NADIS	7.2	< 2.00	< 2.00	< 2.00*	12.6*	3.03	21.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909189	WS102 ES 2 0.30	31-May-18	8.4	<0.5	<0.5	NADIS	15.0	< 2.00	< 2.00	6.29*	37.8*	2.38	53.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909190	WS102 ES 3 0.80	31-May-18	8.5	<0.5	<0.5	NADIS	12.6	< 2.00	< 2.00	7.20*	41.0*	3.03	57.0	< 1.0*	< 1.0*	< 1.0	< 1.0	< 1.0
1909191	WS103 ES 2 0.30	31-May-18	8.8	<0.5	<0.5	NADIS	8.6	< 2.00	< 2.00	8.99*	67.5*	2.78	87.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909192	WS103 ES 4 0.80	31-May-18	8.2	<0.5	<0.5	NADIS	5.6	< 2.00	< 2.00	< 2.00*	8.26*	3.04	15.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909193	WS105 ES 2 0.30	01-Jun-18	8.7	<0.5	<0.5	NADIS	8.9	< 2.00	< 2.00	8.72*	70.9*	3.08	98.6	< 1.0*	< 1.0*	< 1.0	< 1.0	< 1.0
1909194	WS105 ES 4 0.70	01-Jun-18	8.4	<0.5	<0.5	NADIS	6.2	< 2.00	< 2.00	< 2.00*	8.58*	2.85	15.9	< 1.0*	< 1.0*	< 1.0	< 1.0	< 1.0

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Contact Adam Putt

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Sample Analysis

Date Printed	**27-Jun-2018**
Report Number	**EFS/186743**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Method Codes :			VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS
Method Reporting Limits :			1	1	3	1	3	1	1	1	1	1	1	1	1	1	1	1
UKAS Accredited :			Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**1,1-Dichloroethene**	**1,1-Dichloropropene**	**1,2,3-Trichlorobenzene**	**1,2,3-Trichloropropane**	**1,2,4-Trichlorobenzene**	**1,2,4-Trimethylbenzene**	**1,2-Dibromo-3-chloropropane**	**1,2-Dibromoethane**	**1,2-Dichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**1,3,5-Trimethylbenzene**	**1,3-Dichlorobenzene**	**1,3-Dichloropropane**	**1,4-Dichlorobenzene**	**2,2-Dichloropropane**
1909178	CP101 ES 3 0.30	31-May-18	< 1.0	< 1.0*	< 3.0*	< 1.0	< 3.0	< 1.0*	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909179	CP101 ES 5 0.80	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909180	CP102 ES 2 0.50	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909181	CP102 ES 3 1.00	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909182	HDP101 ES 2 0.30	31-May-18	< 1.0	< 1.0*	< 3.0*	< 1.0	< 3.0	< 1.0*	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909183	HDP101 ES 4 0.80	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909184	HDP102 ES 1 0.20	31-May-18	< 1.0	< 1.0*	< 3.0*	< 1.0	< 3.0	< 1.0*	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909185	HDP102 ES 2 1.00	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909186	WS101 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909187	WS101 ES 4 1.00	31-May-18	< 1.0	< 1.0*	< 3.0*	< 1.0	< 3.0	1.0*	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909188	WS101 ES 5 1.20	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909189	WS102 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909190	WS102 ES 3 0.80	31-May-18	< 1.0	< 1.0*	< 3.0*	< 1.0	< 3.0	< 1.0*	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909191	WS103 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909192	WS103 ES 4 0.80	31-May-18	< 1.0	< 1.0	< 3.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909193	WS105 ES 2 0.30	01-Jun-18	< 1.0	< 1.0*	< 3.0*	< 1.0	< 3.0	< 1.0*	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1909194	WS105 ES 4 0.70	01-Jun-18	< 1.0	< 1.0*	< 3.0*	< 1.0	< 3.0	< 1.0*	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Sample Analysis

Date Printed	**27-Jun-2018**
Report Number	**EFS/186743**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Method Codes :			VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS
Method Reporting Limits :			1	1	1	1	1	1	1	1	1	1	2	1	3	5	1	1
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**2-Chlorotoluene**	**4-Chlorotoluene**	**Benzene**	**Bromobenzene**	**Bromochloromethane**	**Bromodichloromethane**	**Bromoform**	**Bromomethane**	**Carbon Tetrachloride**	**Chlorobenzene**	**Chloroethane**	**Chloroform**	**Chloromethane**	**cis 1,2-Dichloroethene**	**cis 1,3-Dichloropropene**	**Dibromochloromethane**
1909178	CP101 ES 3 0.30	31-May-18	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 2.0	< 1.0*	< 3.0	< 5.0	< 1.0	< 1.0*
1909179	CP101 ES 5 0.80	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909180	CP102 ES 2 0.50	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909181	CP102 ES 3 1.00	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909182	HDP101 ES 2 0.30	31-May-18	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 2.0	< 1.0*	< 3.0	< 5.0	< 1.0	< 1.0*
1909183	HDP101 ES 4 0.80	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909184	HDP102 ES 1 0.20	31-May-18	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 2.0	< 1.0*	< 3.0	< 5.0	< 1.0	< 1.0*
1909185	HDP102 ES 2 1.00	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909186	WS101 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909187	WS101 ES 4 1.00	31-May-18	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 2.0	< 1.0*	< 3.0	< 5.0	< 1.0	< 1.0*
1909188	WS101 ES 5 1.20	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909189	WS102 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909190	WS102 ES 3 0.80	31-May-18	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 2.0	< 1.0*	< 3.0	< 5.0	< 1.0	< 1.0*
1909191	WS103 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909192	WS103 ES 4 0.80	31-May-18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 3.0	< 5.0	< 1.0	< 1.0
1909193	WS105 ES 2 0.30	01-Jun-18	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 2.0	< 1.0*	< 3.0	< 5.0	< 1.0	< 1.0*
1909194	WS105 ES 4 0.70	01-Jun-18	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 2.0	< 1.0*	< 3.0	< 5.0	< 1.0	< 1.0*

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Client Name	**SOCOTEC UK Bridgend**
Contact	Adam Putt

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Sample Analysis

Date Printed	**27-Jun-2018**
Report Number	**EFS/186743**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Method Codes :			VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS
Method Reporting Limits :			1	1	2	2	1	4	1	5	1	2	1	1	1	1	1	3
UKAS Accredited :			Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Dibromomethane**	**Dichlorodifluoromethane**	**Ethylbenzene**	**Hexachlorobutadiene**	**iso-Propylbenzene**	**m and p-Xylene**	**MTBE**	**Naphthalene**	**n-Butylbenzene**	**o-Xylene**	**p-Isopropyltoluene**	**Propylbenzene**	**sec-Butylbenzene**	**Styrene**	**tert-Butylbenzene**	**Tetrachloroethene**
1909178	CP101 ES 3 0.30	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	36.0*	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.0
1909179	CP101 ES 5 0.80	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909180	CP102 ES 2 0.50	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909181	CP102 ES 3 1.00	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909182	HDP101 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0*	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909183	HDP101 ES 4 0.80	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909184	HDP102 ES 1 0.20	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0*	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909185	HDP102 ES 2 1.00	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909186	WS101 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909187	WS101 ES 4 1.00	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0*	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909188	WS101 ES 5 1.20	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909189	WS102 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909190	WS102 ES 3 0.80	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0*	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.0
1909191	WS103 ES 2 0.30	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909192	WS103 ES 4 0.80	31-May-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
1909193	WS105 ES 2 0.30	01-Jun-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0*	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.0
1909194	WS105 ES 4 0.70	01-Jun-18	< 1.0	< 1.0	< 2.0	< 2.0	< 1.0	< 4.0	< 1.0	< 5.0*	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0

SOCOTEC

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Client Name	**SOCOTEC UK Bridgend**
Contact	Adam Putt

H8061-18 Collis Primary School

Sample Analysis

Date Printed	**27-Jun-2018**
Report Number	**EFS/186743**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	% M/M									
Method Codes :			VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	WSLM59									
Method Reporting Limits :			5	1	1	1	1	1	0.02									
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes									
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Toluene**	**trans 1,2-Dichloroethene**	**trans 1,3-Dichloropropene**	**Trichloroethene**	**Trichlorofluoromethane**	**Vinyl Chloride**	**Total Organic Carbon**									
1909178	CP101 ES 3 0.30	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.97									
1909179	CP101 ES 5 0.80	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.72									
1909180	CP102 ES 2 0.50	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.35									
1909181	CP102 ES 3 1.00	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.28									
1909182	HDP101 ES 2 0.30	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.41									
1909183	HDP101 ES 4 0.80	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.22									
1909184	HDP102 ES 1 0.20	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.57									
1909185	HDP102 ES 2 1.00	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.25									
1909186	WS101 ES 2 0.30	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.49									
1909187	WS101 ES 4 1.00	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.84									
1909188	WS101 ES 5 1.20	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.25									
1909189	WS102 ES 2 0.30	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.05									
1909190	WS102 ES 3 0.80	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.64									
1909191	WS103 ES 2 0.30	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.52									
1909192	WS103 ES 4 0.80	31-May-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.48									
1909193	WS105 ES 2 0.30	01-Jun-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.48									
1909194	WS105 ES 4 0.70	01-Jun-18	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.28									

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Contact Adam Putt

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Sample Analysis

Date Printed	**27-Jun-2018**
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Where individual results are flagged see report notes for status.

IOM

WORKING FOR A HEALTHIER FUTURE

CERTIFICATE OF ANALYSIS

ANALYSIS REQUESTED BY: SOCOTEC UK Ltd
Environmental Chemistry
PO Box 100
Burton upon Trent
Staffordshire
DE15 0XD

CONTRACT NO: 58764-8

PROJECT NO: 610

DATE OF ISSUE: 26.06.18

DATE SAMPLES RECEIVED: 20.06.18

DATE SAMPLES ANALYSED: 25.06.18

SAMPLE DESCRIPTION: Seventeen soil/loose aggregate samples.

ANALYSIS REQUESTED: Qualitative analysis of samples for determination of presence/type of asbestos.

METHODS:

Our method involves initial examination of entire samples followed by detailed analysis of representative sub-samples. The sub-samples are analysed qualitatively for asbestos by polarised light and dispersion staining as described by the Health and Safety Executive in HSG 248.

RESULTS:

Initial Screening

No asbestos was detected in any of the soil samples by stereo-binocular and polarised light microscopy.

A summary of the results is given in Table 1.

www.iom-world.org

Registered Address: Research Avenue North, Riccarton, Edinburgh, EH14 4AP, United Kingdom
Tel: 0131 449 8000 Fax: 0131 449 8084 Email: iom@iom-world.org

UKAS TESTING
0374

CONTRACT NO: 58764-8
PROJECT NO: 610
DATE OF ISSUE: 26.06.18

RESULTS: (cont.)

Table 1: Qualitative Results

SOCOTEC Job I.D: S186743

IOM sample number	Client sample number	ACM type detected	PLM result
S57069	S1909178 CP101 0.30	-	No Asbestos Detected
S57070	S1909179 CP101 0.80	-	No Asbestos Detected
S57071	S1909180 CP102 0.50	-	No Asbestos Detected
S57072	S1909181 CP102 1.00	-	No Asbestos Detected
S57073	S1909182 HDP101 0.30	-	No Asbestos Detected
S57074	S1909183 HDP101 0.80	-	No Asbestos Detected
S57075	S1909184 HDP102 0.20	-	No Asbestos Detected
S57076	S1909185 HDP102 1.00	-	No Asbestos Detected
S57077	S1909186 WS101 0.30	-	No Asbestos Detected
S57078	S1909187 WS101 1.00	-	No Asbestos Detected
S57079	S1909188 WS101 1.20	-	No Asbestos Detected
S57080	S1909189 WS102 0.30	-	No Asbestos Detected
S57081	S1909190 WS102 0.80	-	No Asbestos Detected
S57082	S1909191 WS103 0.30	-	No Asbestos Detected
S57083	S1909192 WS103 0.80	-	No Asbestos Detected
S57084	S1909193 WS105 0.30	-	No Asbestos Detected
S57085	S1909194 WS105 0.70	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

COMMENTS:

IOM Consulting cannot accept responsibility for samples that have been incorrectly collected or despatched by external clients.

Any opinions and interpretations expressed herein are outwith the scope of our UKAS accreditation.

AUTHORISED BY: .....
D Third
Scientific Technician

Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No S186743

Consignment No S75398
Date Logged 14-Jun-2018
In-House Report Due 21-Jun-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	MethodID	CEN Leachate			CustServ	FOCS	GROHSA	ICPBOR	ICPMSS								KONECR	PAHMSUS	PHSOIL	SFAPI		Sub020	TMSS	TPHFIDUS	
		Sampled	CEN Leac(P)C	Fraction of non-crushable material %	Fraction of sample above 4 mm %	REPORT A	S.O.M. % (Calc)	GRO (C6-C8)	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Chromium vi:	PAH (16) by GCMS	pH units (AR)	Cyanide(Free) (AR)	Phenol Index.(AR)	^Asbestos ID (Stage 1)	Tot.Moisture @ 105C	TPH by GCFID (AR)	TPH Carbon Banding.
								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
CL/1909178	CP101 0.30	31/05/18						E													E	E	E				
CL/1909179	CP101 0.80	31/05/18						E													E	E	E				
CL/1909180	CP102 0.50	31/05/18						E													E	E	E				
CL/1909181	CP102 1.00	31/05/18						E													E	E	E				
CL/1909182	HDP101 0.30	31/05/18						E													E	E	E				
CL/1909183	HDP101 0.80	31/05/18						E													E	E	E				
CL/1909184	HDP102 0.20	31/05/18						E													E	E	E				
CL/1909185	HDP102 1.00	31/05/18						E													E	E	E				
CL/1909186	WS101 0.30	31/05/18						E													E	E	E				
CL/1909187	WS101 1.00	31/05/18						E													E	E	E				
CL/1909188	WS101 1.20	31/05/18						E													E	E	E				
CL/1909189	WS102 0.30	31/05/18						E													E	E	E				
CL/1909190	WS102 0.80	31/05/18						E													E	E	E				
CL/1909191	WS103 0.30	31/05/18						E													E	E	E				
CL/1909192	WS103 0.80	31/05/18						E													E	E	E				

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No S186743

Consignment No S75398
Date Logged 14-Jun-2018
In-House Report Due 21-Jun-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	Sampled	VOC HSA-GCMS	Total Organic Carbon
MethodID			VOCHSAS	WSLM59
			✓	✓
CL/1909178	CP101 0.30	31/05/18	E	
CL/1909179	CP101 0.80	31/05/18	E	
CL/1909180	CP102 0.50	31/05/18	E	
CL/1909181	CP102 1.00	31/05/18	E	
CL/1909182	HDP101 0.30	31/05/18	E	
CL/1909183	HDP101 0.80	31/05/18	E	
CL/1909184	HDP102 0.20	31/05/18	E	
CL/1909185	HDP102 1.00	31/05/18	E	
CL/1909186	WS101 0.30	31/05/18	E	
CL/1909187	WS101 1.00	31/05/18	E	
CL/1909188	WS101 1.20	31/05/18	E	
CL/1909189	WS102 0.30	31/05/18	E	
CL/1909190	WS102 0.80	31/05/18	E	
CL/1909191	WS103 0.30	31/05/18	E	
CL/1909192	WS103 0.80	31/05/18	E	

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

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Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

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Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No S186743

Consignment No S75398
Date Logged 14-Jun-2018
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Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	MethodID	CEN Leachate			CustServ	FOCS	GROHSA	ICPBOR	ICPMSS								KONECR	PAHMSUS	PHSOIL	SFAPI		Sub020	TMSS	TPHFIDUS	
		Sampled	CEN Leac(P)C	Fraction of non-crushable material %	Fraction of sample above 4 mm %	REPORT A	S.O.M. % (Calc)	GRO (C6-C8)	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Chromium vi:	PAH (16) by GCMS	pH units (AR)	Cyanide(Free) (AR)	Phenol Index.(AR)	^Asbestos ID (Stage 1)	Tot.Moisture @ 105C	TPH by GCFID (AR)	TPH Carbon Banding.
			✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
CL/1909193	WS105 0.30	01/06/18						E													E	E	E				
CL/1909194	WS105 0.70	01/06/18						E													E	E	E				

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

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F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

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Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No S186743

Consignment No S75398
Date Logged 14-Jun-2018
In-House Report Due 21-Jun-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	MethodID	VOCHSAS	WSLM59
		Sampled	VOC HSA-GCMS	Total Organic Carbon
			✓	✓
CL/1909193	WS105 0.30	01/06/18	E	
CL/1909194	WS105 0.70	01/06/18	E	

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
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E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Additional Report Notes

Method Code	Sample ID	The following information should be taken into consideration when using the data contained within this report
TPHFIDUS	CL1909178 TO CL1909194	The Primary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. However the remaining data gives the Laboratory confidence that the test has performed satisfactorily and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation, where applicable, from the affected analytes (C16-C21 and C21-C35). These circumstances should be taken into consideration when utilising the data.
VOCHSAS	CL1909178 TO CL1909194	The Primary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. However the remaining data gives the Laboratory confidence that the test has performed satisfactorily and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation, where applicable, from the affected analytes (1,1,1,2-Tetrachloroethane, 1,2,3-Trichlorobenzene, 2-Chlorotoluene, Bromochloromethane, Chlorobenzene, Chloroform, Naphthalene) . These circumstances should be taken into consideration when utilising the data.
VOCHSAS	CL1909178 TO CL1909194	The Secondary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. However the remaining data gives the Laboratory confidence that the test has performed satisfactorily (including the Primary Process Control) and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation , where applicable, from the affected analytes (1,2-Dichloropropene, 1,2-Dibromethane, Dibromochloromethane, 1,1,1-Trichloroethane, 1,1-Dichloropropene, 1,2,4-Trimethylbenzene) . These circumstances should be taken into consideration when utilising the data.
VOCHSAS	CL1909178, CL1909182, CL1909184, CL1909187, CL1909190, CL1909193	Due to matrix interference, the Internal Standard recovery for this Test is below the required QMS specification. This has been confirmed by repeating the analysis. All other Laboratory Process Controls meet the requirements of the QMS unless otherwise stated. These circumstances should be taken into consideration when utilising the data.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	CEN Leachate	As Received	Determination of Oversize and Inert Material Content prior to leaching sample
Soil	FOCS	Oven Dried @ < 35°C	Calculation of Soil Organic Matter content from Organic Carbon content of soil samples
Soil	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID
Soil	ICPBOR	Oven Dried @ < 35°C	Determination of Boron in soil samples by hot water extraction followed by ICPOES detection
Soil	ICPMSS	Oven Dried @ < 35°C	Determination of Metals in Marine Sediments and Soil samples by aqua regia digestion followed by ICPMS detection
Soil	KONECR	Oven Dried @ < 35°C	Determination of Chromium vi in soil samples by water extraction followed by colorimetric detection
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Soil	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis (% based upon wet weight)
Soil	TPHFIDUS	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection.
Soil	VOCHSAS	As Received	Determination of Volatile Organic Compounds (VOC) by Headspace GCMS
Soil	WSLM59	Oven Dried @ < 35°C	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Where individual results are flagged see report notes for status.

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile **TR** Denotes Tremolite
CR Denotes Crocidolite **AC** Denotes Actinolite
AM Denotes Amosite **AN** Denotes Anthophylite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined **N.Det** Not detected
N.F No Flow
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : SOCOTEC UK Bridgend

Site : H8061-18 Collis Primary School

Report Number : S18_6743

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1909178	CP101 ES 3 0.30	Brown MADE GROUND
CL/1909179	CP101 ES 5 0.80	MADE GROUND
CL/1909180	CP102 ES 2 0.50	MADE GROUND
CL/1909181	CP102 ES 3 1.00	Brown MADE GROUND
CL/1909182	HDP101 ES 2 0.30	MADE GROUND
CL/1909183	HDP101 ES 4 0.80	Sand SILT Stone
CL/1909184	HDP102 ES 1 0.20	Stone SILT
CL/1909185	HDP102 ES 2 1.00	Brown Stone SILT
CL/1909186	WS101 ES 2 0.30	MADE GROUND
CL/1909187	WS101 ES 4 1.00	Brown Stone SILT
CL/1909188	WS101 ES 5 1.20	Sand SILT Stone
CL/1909189	WS102 ES 2 0.30	Brown MADE GROUND
CL/1909190	WS102 ES 3 0.80	MADE GROUND
CL/1909191	WS103 ES 2 0.30	Brown MADE GROUND
CL/1909192	WS103 ES 4 0.80	Stone SILT
CL/1909193	WS105 ES 2 0.30	Brown Stone SILT
CL/1909194	WS105 ES 4 0.70	Sand SILT

TEST REPORT

1252

Report No. EFS/186836M (Ver. 1)

SOCOTEC UK Bridgend
Unit 15
Crosby Yard
Wildmill
Bridgend
Mid Glamorgan
CF31 1JZ

Site: H8061-18 Collis Primary School

The 5 samples described in this report were registered for analysis by SOCOTEC UK Limited on 16-Jun-2018. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 03-Jul-2018

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS or MCERTS accredited. Any opinions or interpretations expressed herein are outside the scope of any UKAS accreditation held by SOCOTEC UK Limited.

The following tables are contained in this report:

On behalf of
SOCOTEC UK Lim
Tim Barnes Operations Director
Energy & Waste Services

Date of Issue: 03-Jul-2018

Accreditation Codes: **N** (Not Accredited), **U** (UKAS), **UM** (UKAS & MCERTS)
Tests marked '^' have been subcontracted to another laboratory.
(NVM) - denotes the sample matrix is dissimilar to matrices upon which the MCERTS validation was based, and is therefore not accredited for MCERTS.
All results are reported on a dry weight basis at 105°C unless otherwise stated. (except QC samples)
SOCOTEC UK Limited accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

			Units :	%	%	% M/M	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			Method Codes :	CEN Leachate	CEN Leachate	FOCS	GROHSA	ICPBOR	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	ICPMSS	KONECR	PAHMSUS
			Method Reporting Limits :			0.04	0.2	0.5	0.3	0.2	1.2	1.6	0.7	0.5	2	0.5	16	0.1	0.08
			Accreditation Code:	N	N	N	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	N	UM
LAB ID Number CL/	Client Sample Description	Sample Date		Fraction of non-crushable material %	Fraction of sample above 4 mm %	S.O.M. % (Calc)	GRO (C6-C8)	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Chromium vi:	Acenaphthene
1909640	WS106 ES 2 0.20	01-Jun-18		0.0	16.6	3.35	<0.2	1.1	14.5	0.22	18.5	32.9	119.5	0.6	14.6	<0.5	92.3	<0.1	<0.09
1909641	WS106 ES 4 0.80	01-Jun-18				0.74	<0.2	0.8	15.2	<0.2	17.6	12.7	30.4	<0.50	14.6	<0.5	42.5	<0.1	<0.09
1909642	WS107 ES 1 0.30	31-May-18		0.0	22.0	3.69	<0.2	0.8	16.3	<0.20	18.2	35.5	135.3	0.5	14.5	<0.5	87.2	<0.1	<0.09
1909643	WS108 ES 1 0.40	01-Jun-18		0.0	7.0	1.98	<0.2	1.9	14.0	<0.20	18.6	25.8	90.7	<0.5	14.4	<0.5	73.1	<0.1	<0.09
1909644	WS108 ES 2 0.90	01-Jun-18				0.50	<0.2	0.7	12.6	<0.2	15.5	13	22.6	<0.50	12.0	<0.5	35.0	<0.1	<0.09

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Contact Adam Putt

H8061-18 Collis Primary School

Sample Analysis

Date Printed	03-Jul-2018
Report Number	EFS/186836M
Table Number	1

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Results corrected to dry weight at 105°C where appropriate, in accordance with the MCERTS standard.

Units :			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Codes :			PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS	PAHMSUS
Method Reporting Limits :			0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	1.28
Accreditation Code:			U	U	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	U
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Acenaphthylene**	**Anthracene**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b)fluoranthene**	**Benzo(ghi)perylene**	**Benzo(k)fluoranthene**	**Chrysene**	**Dibenzo(ah)anthracene**	**Fluoranthene**	**Fluorene**	**Indeno(123-cd)pyrene**	**Naphthalene**	**Phenanthrene**	**Pyrene**	**Total PAH (Sum of USEPA 16)**
1909640	WS106 ES 2 0.20	01-Jun-18	0.10	0.10	0.38	0.48	0.68	0.43	0.22	0.48	0.10	0.66	<0.09	0.40	<0.09	0.24	0.47	<4.98
1909641	WS106 ES 4 0.80	01-Jun-18	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<1.38
1909642	WS107 ES 1 0.30	31-May-18	0.47	0.61	2.26	2.02	2.87	1.47	1.12	2.43	0.37	5.15	0.13	1.38	<0.09	2.57	3.56	<26.6
1909643	WS108 ES 1 0.40	01-Jun-18	0.15	0.20	0.70	0.70	0.93	0.57	0.30	0.75	0.14	1.42	<0.09	0.52	<0.09	0.92	0.94	<8.52
1909644	WS108 ES 2 0.90	01-Jun-18	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<1.38

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Sample Analysis

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Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105°C where appropriate, in accordance with the MCERTS standard.

Units :			pH Units	mg/kg	mg/kg		%	mg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Method Codes :			PHSOIL	SFAPI	SFAPI	Sub020	TMSS	TPHFIDUS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS
Method Reporting Limits :				0.5	0.5		0.1	10	1	1	1	1	1	1	1	3	1	3
Accreditation Code:			UM	UM	U	U	U	UM	UM	UM	N	UM	UM	U	UM	UM	UM	N
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**pH units (AR)**	**Cyanide(Free) (AR)**	**Phenol Index.(AR)**	**^Asbestos ID (Stage 1)**	**Tot.Moisture @ 105C**	**TPH by GCFID (AR)**	**1,1,1,2-Tetrachloroethane**	**1,1,1-Trichloroethane**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,1-Dichloropropene**	**1,2,3-Trichlorobenzene**	**1,2,3-Trichloropropane**	**1,2,4-Trichlorobenzene**
1909640	WS106 ES 2 0.20	01-Jun-18	8.2	<0.5	<0.5	NADIS	8.0	69.7	<1.1*	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1*	<3.3*	<1.1	<3.3
1909641	WS106 ES 4 0.80	01-Jun-18	8.4	<0.5	<0.5	NADIS	7.0	19.4	<1.1*	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1*	<3.2*	<1.1	<3.2
1909642	WS107 ES 1 0.30	31-May-18	8.8	<0.6	<0.6	NADIS	12.4	123	<1.1*	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1*	<3.4*	<1.1	<3.4
1909643	WS108 ES 1 0.40	01-Jun-18	8.2	<0.5	<0.5	NADIS	8.9	78.3	<1.1*	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1*	<3.3*	<1.1	<3.3
1909644	WS108 ES 2 0.90	01-Jun-18	8.2	<0.5	<0.5	NADIS	7.0	20.3	<1.1*	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1*	<3.2*	<1.1	<3.2

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Results corrected to dry weight at 105°C where appropriate, in accordance with the MCERTS standard.

			Units :	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
			Method Codes :	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS
			Method Reporting Limits :	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			Accreditation Code:	UM	N	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM
LAB ID Number CL/	Client Sample Description	Sample Date		1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	Benzene	Bromobenzene	Bromochloromethane
1909640	WS106 ES 2 0.20	01-Jun-18		<1.1*	<1.1	<1.1*	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1*
1909641	WS106 ES 4 0.80	01-Jun-18		<1.1*	<1.1	<1.1*	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1*
1909642	WS107 ES 1 0.30	31-May-18		<1.1*	<1.1	<1.1*	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1*
1909643	WS108 ES 1 0.40	01-Jun-18		<1.1*	<1.1	<1.1*	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1*
1909644	WS108 ES 2 0.90	01-Jun-18		<1.1*	<1.1	<1.1*	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1*	<1.1	<1.1	<1.1	<1.1*

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Results corrected to dry weight at 105°C where appropriate, in accordance with the MCERTS standard.

			Units :	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
			Method Codes :	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS
			Method Reporting Limits :	1	1	1	1	1	2	1	3	5	1	1	1	1	2	2	1
			Accreditation Code:	UM	UM	UM	UM	UM	UM	UM	U	UM	UM	UM	UM	N	UM	N	UM
LAB ID Number CL/	Client Sample Description	Sample Date		Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis 1,2-Dichloroethene	cis 1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	iso-Propylbenzene
1909640	WS106 ES 2 0.20	01-Jun-18		<1.1	<1.1	<1.1	<1.1	<1.1*	<2.2	<1.1*	<3.3	<5.4	<1.1	<1.1*	<1.1	<1.1	<2.2	<2.2	<1.1
1909641	WS106 ES 4 0.80	01-Jun-18		<1.1	<1.1	<1.1	<1.1	<1.1*	<2.2	<1.1*	<3.2	<5.4	<1.1	<1.1*	<1.1	<1.1	<2.2	<2.2	<1.1
1909642	WS107 ES 1 0.30	31-May-18		<1.1	<1.1	<1.1	<1.1	<1.1*	<2.3	<1.1*	<3.4	<5.7	<1.1	<1.1*	<1.1	<1.1	<2.3	<2.3	<1.1
1909643	WS108 ES 1 0.40	01-Jun-18		<1.1	<1.1	<1.1	<1.1	<1.1*	<2.2	<1.1*	<3.3	<5.5	<1.1	<1.1*	<1.1	<1.1	<2.2	<2.2	<1.1
1909644	WS108 ES 2 0.90	01-Jun-18		<1.1	<1.1	<1.1	<1.1	<1.1*	<2.2	<1.1*	<3.2	<5.4	<1.1	<1.1*	<1.1	<1.1	<2.2	<2.2	<1.1

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Sample Analysis

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Results corrected to dry weight at 105°C where appropriate, in accordance with the MCERTS standard.

Units :			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Method Codes :			VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS	VOCHSAS
Method Reporting Limits :			4	1	5	1	2	1	1	1	1	1	3	5	1	1	1	1
Accreditation Code:			UM	UM	UM	U	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**m and p-Xylene**	**MTBE**	**Naphthalene**	**n-Butylbenzene**	**o-Xylene**	**p-Isopropyltoluene**	**Propylbenzene**	**sec-Butylbenzene**	**Styrene**	**tert-Butylbenzene**	**Tetrachloroethene**	**Toluene**	**trans 1,2-Dichloroethene**	**trans 1,3-Dichloropropene**	**Trichloroethene**	**Trichlorofluoromethane**
1909640	WS106 ES 2 0.20	01-Jun-18	<4.3	<1.1	<5.4*	<1.1	<2.2	<1.1	<1.1	<1.1	<1.1	<1.1	3.3	<5.4	<1.1	<1.1	<1.1	<1.1
1909641	WS106 ES 4 0.80	01-Jun-18	<4.3	<1.1	<5.4*	<1.1	<2.2	<1.1	<1.1	<1.1	<1.1	<1.1	<3.2	<5.4	<1.1	<1.1	<1.1	<1.1
1909642	WS107 ES 1 0.30	31-May-18	<4.6	<1.1	21.7*	<1.1	<2.3	<1.1	<1.1	<1.1	<1.1	<1.1	<3.4	<5.7	<1.1	<1.1	<1.1	<1.1
1909643	WS108 ES 1 0.40	01-Jun-18	<4.4	<1.1	<5.5*	<1.1	<2.2	<1.1	<1.1	<1.1	<1.1	<1.1	<3.3	<5.5	<1.1	<1.1	<1.1	<1.1
1909644	WS108 ES 2 0.90	01-Jun-18	<4.3	<1.1	<5.4*	<1.1	<2.2	<1.1	<1.1	<1.1	<1.1	<1.1	<3.2	<5.4	<1.1	<1.1	<1.1	<1.1

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Sample Analysis

Date Printed	**03-Jul-2018**
Report Number	**EFS/186836M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105°C where appropriate, in accordance with the MCERTS standard.

Units :			µg/kg	% M/M														
Method Codes :			VOCHSAS	WSLM59														
Method Reporting Limits :			1	0.02														
Accreditation Code:			UM	N														
LAB ID Number CL/	**Client Sample Description**	**Sample Date**	**Vinyl Chloride**	**Total Organic Carbon**														
1909640	WS106 ES 2 0.20	01-Jun-18	<1.1	1.95														
1909641	WS106 ES 4 0.80	01-Jun-18	<1.1	0.43														
1909642	WS107 ES 1 0.30	31-May-18	<1.1	2.14														
1909643	WS108 ES 1 0.40	01-Jun-18	<1.1	1.14														
1909644	WS108 ES 2 0.90	01-Jun-18	<1.1	0.29														

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Client Name	**SOCOTEC UK Bridgend**
Contact	Adam Putt

H8061-18 Collis Primary School

Sample Analysis

Date Printed	**03-Jul-2018**
Report Number	**EFS/186836M**
Table Number	**1**

Where individual results are flagged see report notes for status.
Results corrected to dry weight at 105°C where appropriate, in accordance with the MCERTS standard.

IOM

WORKING FOR A HEALTHIER FUTURE

CERTIFICATE OF ANALYSIS

ANALYSIS REQUESTED BY: SOCOTEC UK Ltd
Environmental Chemistry
PO Box 100
Burton upon Trent
Staffordshire
DE15 0XD

CONTRACT NO: 58794-2

PROJECT NO: 610

DATE OF ISSUE: 03.07.18

DATE SAMPLES RECEIVED: 22.06.18

DATE SAMPLES ANALYSED: 28.06.18

SAMPLE DESCRIPTION: Five soil/loose aggregate samples.

ANALYSIS REQUESTED: Qualitative analysis of samples for determination of presence/type of asbestos.

METHODS:

Our method involves initial examination of entire samples followed by detailed analysis of representative sub-samples. The sub-samples are analysed qualitatively for asbestos by polarised light and dispersion staining as described by the Health and Safety Executive in HSG 248.

RESULTS:

Initial Screening

No asbestos was detected in any of the soil samples by stereo-binocular and polarised light microscopy.

A summary of the results is given in Table 1.

www.iom-world.org

Registered Address: Research Avenue North, Riccarton, Edinburgh, EH14 4AP, United Kingdom
Tel: 0131 449 8000 Fax: 0131 449 8084 Email: iom@iom-world.org

UKAS TESTING
0374

CONTRACT NO: 58794-2
PROJECT NO: 610
DATE OF ISSUE: 03.07.18

RESULTS: (cont.)

Table 1: Qualitative Results

SOCOTEC Job I.D: S186836

IOM sample number	Client sample number	ACM type detected	PLM result
S57227	S1909640 WS106 0.20	-	No Asbestos Detected
S57228	S1909641 WS106 0.80	-	No Asbestos Detected
S57229	S1909642 WS107 0.30	-	No Asbestos Detected
S57230	S1909643 WS108 0.40	-	No Asbestos Detected
S57231	S1909644 WS108 0.90	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

COMMENTS:

IOM Consulting cannot accept responsibility for samples that have been incorrectly collected or despatched by external clients.

Any opinions and interpretations expressed herein are outwith the scope of our UKAS accreditation.

K. Parsons-Hewes

AUTHORISED BY: .....

K Parsons-Hewes
Senior Scientific Technician

SOCOTEC UK Ltd Environmental Chemistry
Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No S186836M

Consignment No S75398
Date Logged 16-Jun-2018
In-House Report Due 22-Jun-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	MethodID	CEN Leachate			CustServ	FOCS	GROHSA	ICPBOR	ICPMSS								KONECR	MCertS	PAHMSUS	PHSOIL	SFAPI		Sub020	TMSS	TPHFIDUS
		Sampled	CEN Leac(P)C	Fraction of non-crushable material %	Fraction of sample above 4 mm %	REPORT A	S.O.M. % (Calc)	GRO (C6-C8)	Boron (H20 Soluble)	Arsenic (MS)	Cadmium (MS)	Chromium (MS)	Copper (MS)	Lead (MS)	Mercury (MS)	Nickel (MS)	Selenium (MS)	Zinc (MS)	Chromium vi:	MCertS Analysis	PAH (16) by GCMS	pH units (AR)	Cyanide(Free) (AR)	Phenol Index.(AR)	^Asbestos ID (Stage 1)	Tot.Moisture @ 105C	TPH by GCFID (AR)
								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
CL/1909640	WS106 0.20	01/06/18						E													E	E	E	E			E
CL/1909641	WS106 0.80	01/06/18						E													E	E	E	E			E
CL/1909642	WS107 0.30	31/05/18						E													E	E	E	E			E
CL/1909643	WS108 0.40	31/05/18						E													E	E	E	E			E
CL/1909644	WS108 0.90	01/06/18						E													E	E	E	E			E

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key

A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key

	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No S186836M

Consignment No S75398
Date Logged 16-Jun-2018
In-House Report Due 22-Jun-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	MethodID	VOCHSAS	WSLM59
		Sampled	VOC HSA-GCMS	Total Organic Carbon
			✓	✓
CL/1909640	WS106 0.20	01/06/18	E	E
CL/1909641	WS106 0.80	01/06/18	E	E
CL/1909642	WS107 0.30	31/05/18	E	E
CL/1909643	WS108 0.40	31/05/18	E	E
CL/1909644	WS108 0.90	01/06/18	E	E

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

Where individual results are flagged see report notes for status.
The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Report Number : EFS/186836

Additional Report Notes

Method Code	Sample ID	The following information should be taken into consideration when using the data contained within this report
VOCHSAS	CL1909640 to CL1909644	The Primary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. However the remaining data gives the Laboratory confidence that the test has performed satisfactorily and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation, where applicable, from the affected analytes (1,1,1,2-Tetrachloroethane, 1,2,3-Trichlorobenzene, 2-Chlorotoluene, Bromochloromethane, Chlorobenzene, Chloroform, Naphthalene) . These circumstances should be taken into consideration when utilising the data.
VOCHSAS	CL1909640 to CL1909644	The Secondary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. However the remaining data gives the Laboratory confidence that the test has performed satisfactorily (including the Primary Process Control) and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation , where applicable, from the affected analytes (1,2-Dichloropropene, 1,2-Dibromethane, Dibromochloromethane, 1,1,1-Trichloroethane, 1,1-Dichloropropene, 1,2,4-Trimethylbenzene) . These circumstances should be taken into consideration when utilising the data.
VOCHSAS	CL1909640, CL1909642, CL1909643	Due to matrix interference, the Internal Standard recovery for this Test is below the required QMS specification. This has been confirmed by historic data. All other Laboratory Process Controls meet the requirements of the QMS unless otherwise stated. These circumstances should be taken into consideration when utilising the data.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Soil	CEN Leachate	As Received	Determination of Oversize and Inert Material Content prior to leaching sample
Soil	FOCS	Oven Dried @ < 35°C	Calculation of Soil Organic Matter content from Organic Carbon content of soil samples
Soil	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace GCFID
Soil	ICPBOR	Oven Dried @ < 35°C	Determination of Boron in soil samples by hot water extraction followed by ICPOES detection
Soil	ICPMSS	Oven Dried @ < 35°C	Determination of Metals in Marine Sediments and Soil samples by aqua regia digestion followed by ICPMS detection
Soil	KONECR	Oven Dried @ < 35°C	Determination of Chromium vi in soil samples by water extraction followed by colorimetric detection
Soil	PAHMSUS	As Received	Determination of Polycyclic Aromatic Hydrocarbons (PAH) by hexane/acetone extraction followed by GCMS detection
Soil	PHSOIL	As Received	Determination of pH of 2.5:1 deionised water to soil extracts using pH probe.
Soil	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Soil	SubCon*	*	Contact Laboratory for details of the methodology used by the sub-contractor.
Soil	TMSS	As Received	Determination of the Total Moisture content at 105ºC by loss on oven drying gravimetric analysis (% based upon wet weight)
Soil	TPHFIDUS	As Received	Determination of hexane/acetone extractable Hydrocarbons in soil with GCFID detection.
Soil	VOCHSAS	As Received	Determination of Volatile Organic Compounds (VOC) by Headspace GCMS
Soil	WSLM59	Oven Dried @ < 35°C	Determination of Organic Carbon in soil using sulphurous Acid digestion followed by high temperature combustion and IR detection

Where individual results are flagged see report notes for status.

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile **TR** Denotes Tremolite
CR Denotes Crocidolite **AC** Denotes Actinolite
AM Denotes Amosite **AN** Denotes Anthophylite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined **N.Det** Not detected
N.F No Flow
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : SOCOTEC UK Bridgend

Site : H8061-18 Collis Primary School

Report Number : S18_6836

Note: major constituent in upper case

Lab ID Number	Client ID	Description
CL/1909640	WS106 ES 2 0.20	Brown Gravel SILT
CL/1909641	WS106 ES 4 0.80	Brown Gravel SAND
CL/1909642	WS107 ES 1 0.30	Brown MADE GROUND
CL/1909643	WS108 ES 1 0.40	Brown MADE GROUND
CL/1909644	WS108 ES 2 0.90	Brown Gravel SAND

TEST REPORT

1252

Report No. EXR/264540 (Ver. 1)

SOCOTEC UK Bridgend
Unit 15
Crosby Yard
Wildmill
Bridgend
Mid Glamorgan
CF31 1JZ

Site: H8061-18 Collis Primary School

The 7 samples described in this report were registered for analysis by SOCOTEC UK Limited on 14-Jun-2018. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 22-Jun-2018

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited.
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:

On behalf of
SOCOTEC UK Lim
Tim Barnes
Operations Director
Energy & Waste Services

Date of Issue: 22-Jun-2018

Tests marked '^' have been subcontracted to another laboratory.
Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected.
SOCOTEC UK Limited accepts no responsibility for any sampling not carried out by our personnel.

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pH units		
Method Codes :			ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	KONENS	SFAPI	WSLM13	WSLM3		
Method Reporting Limits :			0.001	0.0001	0.001	0.001	0.001	0.0001	0.001	0.001	0.002	0.01	0.003	0.02	0.2			
UKAS Accredited :			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes		
LAB ID Number EX/	**Client Sample Description**	**Sample Date**	**Arsenic as As (Dissolved)**	**Cadmium as Cd (Dissolved)**	**Chromium as Cr (Dissolved)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Mercury as Hg (Dissolved)**	**Nickel as Ni (Dissolved)**	**Selenium as Se (Dissolved)**	**Zinc as Zn (Dissolved)**	**Boron as B (Dissolved) a**	**Chromium VI as Cr**	**Cyanide (Free) as CN**	**Dissolved Organic Carbon w**	**pH units w**		
1894366	CP101 ES 3 0.30	14-Jun-18	0.014	<0.0001	0.01	0.076	0.002	<0.0001	0.004	0.005	0.003	0.05	0.004	0.12	14	9.8		
1894367	CP102 ES 3 1.00	14-Jun-18	0.005	<0.0001	0.029	0.008	<0.001	<0.0001	<0.001	0.001	0.003	0.08	0.029	<0.02	2.2	10.4		
1894368	HDP102 ES 2 1.00	14-Jun-18	0.007	<0.0001	<0.001	0.002	<0.001	<0.0001	<0.001	<0.001	0.011	0.03	<0.003	<0.02	6.1	9.3		
1894369	WS101 ES 4 1.00	14-Jun-18	0.012	<0.0001	0.001	0.018	0.002	<0.0001	0.011	0.002	0.073	0.13	<0.003	<0.02	16	8.4		
1894370	WS102 ES 2 0.30	14-Jun-18	0.007	<0.0001	0.014	0.019	<0.001	<0.0001	0.001	0.002	0.003	0.06	0.015	<0.02	4.5	10.2		
1894371	WS103 ES 2 0.30	14-Jun-18	0.014	<0.0001	0.001	0.003	0.003	<0.0001	<0.001	<0.001	0.005	0.06	<0.003	<0.02	2.2	9.1		
1894372	WS105 ES 2 0.30	14-Jun-18	0.012	<0.0001	0.002	0.009	0.001	<0.0001	<0.001	0.001	0.004	0.09	<0.003	<0.02	4.0	8.6		

SOCOTEC

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Tel +44 (0) 1283 554400

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Client Name	**SOCOTEC UK Bridgend**
Contact	Adam Putt

H8061-18 Collis Primary School

CEN Leachate 10:1

Date Printed	**22-Jun-2018**
Report Number	**EXR/264540**
Table Number	**1**

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No W264540

Consignment No S75398
Date Logged 14-Jun-2018
In-House Report Due 21-Jun-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	Matrix Type	Sampled	CUSTSERV	ICPMSW									ICPWATVAR	KONENS	LeachPrep	SFAPI	WSLM13	WSLM3
		MethodID		Report A (CEN)C	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Boron as B (Dissolved) VAR	Chromium VI. as Cr (Kone)	Leachate Prep	Cyanide (Free) as CN SFA	Dissolved Organic Carbon	pH units
					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓
EX/1894366	CP101 0.30	Laboratory Produced Leachate	14/06/18																
EX/1894367	CP102 1.00	Laboratory Produced Leachate	14/06/18																
EX/1894368	HDP102 1.00	Laboratory Produced Leachate	14/06/18																
EX/1894369	WS101 1.00	Laboratory Produced Leachate	14/06/18																
EX/1894370	WS102 0.30	Laboratory Produced Leachate	14/06/18																
EX/1894371	WS103 0.30	Laboratory Produced Leachate	14/06/18																
EX/1894372	WS105 0.30	Laboratory Produced Leachate	14/06/18																

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.
Where individual results are flagged see report notes for status.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and non-dispersive IR detection
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
TR Denotes Tremolite
AC Denotes Actinolite
AN Denotes Anthophylite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
N.F No Flow
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : SOCOTEC UK Bridgend
Site : H8061-18 Collis Primary School
Report Number : W26_4540

Lab ID Number	Client ID	Description
EX/1894366	CP101 ES 3 0.30	Laboratory Produced Leachate
EX/1894367	CP102 ES 3 1.00	Laboratory Produced Leachate
EX/1894368	HDP102 ES 2 1.00	Laboratory Produced Leachate
EX/1894369	WS101 ES 4 1.00	Laboratory Produced Leachate
EX/1894370	WS102 ES 2 0.30	Laboratory Produced Leachate
EX/1894371	WS103 ES 2 0.30	Laboratory Produced Leachate
EX/1894372	WS105 ES 2 0.30	Laboratory Produced Leachate

TEST REPORT

Report No. EXR/265076 (Ver. 1)

SOCOTEC UK Bridgend
Unit 15
Crosby Yard
Wildmill
Bridgend
Mid Glamorgan
CF31 1JZ

Site: H8061-18 Collis Primary School

The 3 samples described in this report were registered for analysis by SOCOTEC UK Limited on 23-Jun-2018. This report supersedes any versions previously issued by the laboratory.
The analysis was completed by: 11-Jul-2018

The following tables are contained in this report:

On behalf of
SOCOTEC UK Lim
Tim Barnes Operations Director
Energy & Waste Services

Date of Issue: 11-Jul-2018

Tests marked '^' have been subcontracted to another laboratory.
Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected.
SOCOTEC UK Limited accepts no responsibility for any sampling not carried out by our personnel.

Units :			µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Method Codes :			BTEXHSA	BTEXHSA	BTEXHSA	BTEXHSA	BTEXHSA	BTEXHSA	GROHSA	GROHSA	GROHSA	GROHSA	GROHSA	GROHSA	GROHSA	GROHSA	GROHSA	ICPMSW
Method Reporting Limits :			5	5	10	5	5	15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.001
LAB ID Number EXR	**Client Sample Description**	**Sample Date**	**Benzene**	**Ethyl Benzene**	**m/p Xylenes**	**o Xylene**	**Toluene**	**Xylenes**	**GRO >C5->C6**	**GRO >C5->C6 Aliphatic**	**GRO >C6->C7**	**GRO >C6->C7 Aliphatic**	**GRO >C7->C8**	**GRO >C7->C8 Aliphatic**	**GRO >C8->C10**	**GRO >C8->C10 Aliphatic**	**GRO-HSA o**	**Arsenic as As (Dissolved)**
1896745	CP103 D W	21-Jun-18	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 15.0	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	<0.001
1896746	BH06 D W	21-Jun-18	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 15.0	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.001
1896747	CP102 D W	21-Jun-18	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 15.0	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.017

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Client Name SOCOTEC UK Bridgend

Contact Adam Putt

H8061-18 Collis Primary School

Sample Analysis

Date Printed	**11-Jul-2018**
Report Number	**EXR/265076**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Method Codes :			ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPMSW	ICPWATVAR	ICPWATVAR	KONENS	PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW
Method Reporting Limits :			0.0001	0.001	0.001	0.001	0.0001	0.001	0.001	0.002	0.01	3	0.003	0.01	0.01	0.01	0.01	0.01
LAB ID Number EX/	**Client Sample Description**	**Sample Date**	**Cadmium as Cd (Dissolved)**	**Chromium as Cr (Dissolved)**	**Copper as Cu (Dissolved)**	**Lead as Pb (Dissolved)**	**Mercury as Hg (Dissolved)**	**Nickel as Ni (Dissolved)**	**Selenium as Se (Dissolved)**	**Zinc as Zn (Dissolved)**	**Boron as B (Dissolved) a**	**Total Sulphur as SO4 (Dissolved) a**	**Chromium VI as Cr**	**Acenaphthene**	**Acenaphthylene**	**Anthracene**	**Benzo(a)anthracene**	**Benzo(b)fluoranthene**
1896745	CP103 D W	21-Jun-18	<0.0001	0.002	0.004	<0.001	<0.0001	0.01	<0.001	0.008	0.59	51	0.020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1896746	BH06 D W	21-Jun-18	<0.0001	0.001	0.008	<0.001	<0.0001	0.007	0.003	0.069	0.37	192	<0.003	< 0.01	< 0.01	< 0.01	< 0.01	0.01
1896747	CP102 D W	21-Jun-18	0.0003	0.018	0.069	0.018	<0.0001	0.026	0.002	0.2	0.74	167	<0.003	0.04	< 0.01	0.07	0.03	0.02

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Sample Analysis

Date Printed	**11-Jul-2018**
Report Number	**EXR/265076**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	mg/	mg/l	mg/l	mg/l
Method Codes :			PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW	PAHMSW	SFAPI	SFAPI	TPHFID-Si	TPHFID-Si
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.17	0.02	0.05	0.01	0.01
LAB ID Number EX/	**Client Sample Description**	**Sample Date**	**Benzo(ghi)perylene**	**Benzo(k)fluoranthene**	**Benzo-a-Pyrene**	**Chrysene**	**Dibenzo(a,h)anthracene**	**Fluoranthene**	**Fluorene**	**Indeno(1,2,3-cd)pyrene**	**Naphthalene**	**Phenanthrene**	**Pyrene**	**Total PAH (Sum of USEPA 16)**	**Cyanide (Free) as CN**	**Phenol Index as C6H5OH**	**TPH Ali Band >C10-C12**	**TPH Ali Band >C12-C16**
1896745	CP103 D W	21-Jun-18	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.17	<0.02	<0.05	< 0.010	< 0.010*
1896746	BH06 D W	21-Jun-18	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.02	0.02	< 0.18	<0.02	<0.05	< 0.010	< 0.010*
1896747	CP102 D W	21-Jun-18	< 0.01	< 0.01	< 0.01	0.03	< 0.01	0.29	0.07	< 0.01	0.13	0.44	0.17	< 1.35	<0.02	<0.05	< 0.010	< 0.010*

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Contact	Adam Putt

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Sample Analysis

Date Printed	**11-Jul-2018**
Report Number	**EXR/265076**
Table Number	**1**

Where individual results are flagged see report notes for status.

Units :			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pH units		
Method Codes :			TPHFID-Si	TPHFID-Si	TPHFID-Si	TPHFID-Si	TPHFID-Si	TPHFID-Si	TPHFID-Si	TPHFID-Si	TPHFID-Si	TPHFID-Si	WSLM11	WSLM13	WSLM20	WSLM3		
Method Reporting Limits :			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5	0.2	1			
LAB ID Number EX/	**Client Sample Description**	**Sample Date**	**TPH Ali Band >C16-C21**	**TPH Ali Band >C21-C35**	**TPH Ali Band >C8-C10**	**TPH Ali Band >C8-C40**	**TPH Aro Band >C10-C12**	**TPH Aro Band >C12-C16**	**TPH Aro Band >C16-C21**	**TPH Aro Band >C21-C35**	**TPH Aro Band >C8-C10**	**TPH Aro Band >C8-C40**	**Chemical Oxygen Demand (Settled)**	**Total Organic Carbon w**	**Biochemical Oxygen Demand w**	**pH units w**		
1896745	CP103 D W	21-Jun-18	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.014	8	2.5	<2.9	8.1		
1896746	BH06 D W	21-Jun-18	< 0.010	0.024	< 0.010	0.040	< 0.010	< 0.010	< 0.010	0.016	< 0.010	0.021	9	4.0	<2.9	8.1		
1896747	CP102 D W	21-Jun-18	< 0.010	< 0.010	< 0.010	0.015	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.015	16	5.1	4.9	7.9		

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Sample Analysis

Date Printed	**11-Jul-2018**
Report Number	**EXR/265076**
Table Number	**1**

Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No W265076

Consignment No W139447
Date Logged 23-Jun-2018
In-House Report Due 02-Jul-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	Matrix Type	Sampled	MethodID	CUSTSERV	GROHSA	ICPMSW									ICPWATVAR		KONENS	PAHMSW	SFAPI		TPHFID-Si
					Report A	GRO-HSA GCFID (AA)	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Arsenic as As MS (Dissolved)	Mercury as Hg MS (Dissolved)	Selenium as Se MS (Dissolved)	Total Sulphur as SO4 (Diss) VAR	Boron as B (Dissolved) VAR	Chromium VI. as Cr (Kone)	PAH GC-MS (16)	Cyanide (Free) as CN SFA	Phenol Index SFA	TPH by GC(Si)
							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EX/1896745	CP103	Unclassified	21/06/18			EF														EF	EF	
EX/1896746	BH06	Unclassified	21/06/18			EF														EF	EF	
EX/1896747	CP102	Unclassified	21/06/18			EF														EF	EF	

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.
Where individual results are flagged see report notes for status.

Analytical and Deviating Sample Overview

Customer SOCOTEC UK Bridgend
Site H8061-18 Collis Primary School
Report No W265076

Consignment No W139447
Date Logged 23-Jun-2018
In-House Report Due 02-Jul-2018

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	Matrix Type	Sampled	MethodID	WSLM11	WSLM13	WSLM20	WSLM3
					Chemical Oxygen Demand (Settled)	Total Organic Carbon	Biochemical Oxygen Demand	pH units
					✓	✓	✓	✓
EX/1896745	CP103	Unclassified	21/06/18				E	
EX/1896746	BH06	Unclassified	21/06/18				E	
EX/1896747	CP102	Unclassified	21/06/18				E	

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time

Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
	No analysis scheduled
^	Analysis Subcontracted - **Note: due date may vary**

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.
Where individual results are flagged see report notes for status.

Additional Report Notes

Method Code	Sample ID	The following information should be taken into consideration when using the data contained within this report
WSLM20	EX/1896745-EX/1896747	The BOD results for all samples on this job were associated with a Quality Control batch failure so as a result the UKAS accreditation has been removed. The results have been provided for information purposes because the labile nature of the samples mean that repeat analysis could not be undertaken. The AQC was lower than the target value for the test so as such your sample results may have been affected in the same way.
WSLM20	EX/1896745 EX/1896746	Based on the sample history/appearance/smell, a dilution was applied prior to testing. Unfortunately the result is below our lower range for this sample volume, therefore the detection limit has been raised.
TPHFID-Si	EX1896745 TO EX1896747	The Secondary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. However the remaining data gives the Laboratory confidence that the test has performed satisfactorily (including the Primary Process Control) and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation , where applicable, from the affected analytes (Banding C12-C16 on the Aliphatic fraction) . These circumstances should be taken into consideration when utilising the data.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	BTEXHSA	As Received	Benzene, Toluene, Ethylbenzene, & Xylenes by headspace extraction GCFID quantitation
Water	GROHSA	As Received	Determination of Total Gasoline Range Organics Hydrocarbons (GRO) by Headspace FID
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PAHMSW	As Received	Determination of PolyAromatic Hydrocarbons in water by pentane extraction GCMS quantitation
Water	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Water	TPHFID-Si	As Received	Determination of speciated pentane extractable hydrocarbons in water by GCFID
Water	WSLM11	As Received	Acid Dichromate oxidation of the sample followed by colorimetric analysis.
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and non-dispersive IR detection
Water	WSLM20	As Received	Determination of Biological Oxygen Demand using 5 day incubation and dissolved oxygen probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Where individual results are flagged see report notes for status.

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,
- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
  All results on MCERTS reports are reported on a 105ºC dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,
- Results are expressed as mg/kg
- SG is expressed as g/cm^3@ 15^{o}C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile
CR Denotes Crocidolite
AM Denotes Amosite
TR Denotes Tremolite
AC Denotes Actinolite
AN Denotes Anthophylite
NAIIS No Asbestos Identified in Sample
NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.
$$ Unable to analyse due to the nature of the sample
¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols. This may have resulted in deterioration of the sample(s) during transit to the laboratory. Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling
¥ Results for guidance only due to possible interference
& Blank corrected result
I.S Insufficient sample to complete requested analysis
I.S(g) Insufficient sample to re-analyse, results for guidance only
Intf Unable to analyse due to interferences
N.D Not determined
N.Det Not detected
N.F No Flow
NS Information Not Supplied
Req Analysis requested, see attached sheets for results
Þ Raised detection limit due to nature of the sample
***** All accreditation has been removed by the laboratory for this result
‡ MCERTS accreditation has been removed for this result
§ accreditation has been removed for this result as it is a non-accredited matrix

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : SOCOTEC UK Bridgend
Site : H8061-18 Collis Primary School
Report Number : W26_5076

Lab ID Number	Client ID	Description
EX/1896745	CP103 D W	Unclassified
EX/1896746	BH06 D W	Unclassified
EX/1896747	CP102 D W	Unclassified

Waste Classification Report

4VPYL-K3TJ5-2NNRD

Job name

H8061-18 Collis Primary School

Description/Comments

Project

H8061-18

Site

Collis Primary School

Waste Stream Template

H8061-18 Collis Primary School

Classified by

Name:
Tom Lee
Date:
19 Jul 2018 08:34 GMT
Telephone:
01302 723456

Company:
SOCOTEC UK Limited
Askern Road
Carcroft
Doncaster
DN6 8DG

Report

Created by: Tom Lee
Created date: 19 Jul 2018 08:34 GMT

Job summary

Classification of sample: CP101 ES 3 0.30

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:	LoW Code:	
CP101 ES 3 0.30	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

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.: 0.196%)

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.: 0.196%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1		boron { boron tribromide }				1.5	mg/kg	23.173	34.759	mg/kg	0.00348 %		
		005-003-00-0	233-657-9	10294-33-4									
2		arsenic { arsenic trioxide }				19.3	mg/kg	1.32	25.482	mg/kg	0.00255 %		
		033-003-00-0	215-481-4	1327-53-3									
3		cadmium { cadmium sulfate }				0.58	mg/kg	1.855	1.076	mg/kg	0.000108 %		
		048-009-00-9	233-331-6	10124-36-4									
4		chromium(III) oxide				24.4	mg/kg		24.4	mg/kg	0.00244 %		
			215-160-9	1308-38-9									
5		copper { copper dihydroxide; copper(II) hydroxide }				51.4	mg/kg	1.535	78.912	mg/kg	0.00789 %		
		029-021-00-3	243-815-9	20427-59-2									
6		lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	789.6	mg/kg		789.6	mg/kg	0.079 %		
		082-001-00-6											
7		mercury { mercury }				0.84	mg/kg		0.84	mg/kg	0.000084 %		
		080-001-00-0	231-106-7	7439-97-6									
8		nickel { nickel dihydroxide }				20.2	mg/kg	1.579	31.906	mg/kg	0.00319 %		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
9		selenium { selenium }				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
		034-001-00-2	231-957-4	7782-49-2									
10		zinc { zinc chromate }				260.8	mg/kg	2.774	723.497	mg/kg	0.0723 %		
		024-007-00-3											
11		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.1	mg/kg	1.923	<0.192	mg/kg	<0.0000192 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
12		acenaphthene				1.71	mg/kg		1.71	mg/kg	0.000171 %		
			201-469-6	83-32-9									
13		acenaphthylene				5.04	mg/kg		5.04	mg/kg	0.000504 %		
			205-917-1	208-96-8									
14		anthracene				45.9	mg/kg		45.9	mg/kg	0.00459 %		
			204-371-1	120-12-7									
15		benzo[a]anthracene				65.8	mg/kg		65.8	mg/kg	0.00658 %		
		601-033-00-9	200-280-6	56-55-3									
16		benzo[a]pyrene; benzo[def]chrysene				41.9	mg/kg		41.9	mg/kg	0.00419 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				55.8	mg/kg		55.8	mg/kg	0.00558 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				18.4	mg/kg		18.4	mg/kg	0.00184 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				22.7	mg/kg		22.7	mg/kg	0.00227 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				57.1	mg/kg		57.1	mg/kg	0.00571 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				175	mg/kg		175	mg/kg	0.0175 %		
			205-912-4	206-44-0									
22		fluorene				2.68	mg/kg		2.68	mg/kg	0.000268 %		
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				23.8	mg/kg		23.8	mg/kg	0.00238 %		
			205-893-2	193-39-5									
24		naphthalene				6.69	mg/kg		6.69	mg/kg	0.000669 %		
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				202	mg/kg		202	mg/kg	0.0202 %		
			201-581-5	85-01-8									
26		pyrene				128	mg/kg		128	mg/kg	0.0128 %		
			204-927-3	129-00-0									
27		PAHs (total)				859	mg/kg		859	mg/kg	0.0859 %		
28		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
29		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 }				1.5	mg/kg	1.884	2.826	mg/kg	0.000283 %		
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				1960	mg/kg		1960	mg/kg	0.196 %		
				TPH									
										Total:	0.539 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
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 product present

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.196%)

Classification of sample: CP101 ES 5 0.80

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

Sample details

Sample Name:
CP101 ES 5 0.80

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1 mg/kg	23.173	23.173 mg/kg	0.00232 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.4 mg/kg	1.32	20.333 mg/kg	0.00203 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.1 mg/kg	1.855	<0.185 mg/kg	<0.0000185 %		<**LOD**
4	chromium(III) oxide		215-160-9	1308-38-9		21.9 mg/kg		21.9 mg/kg	0.00219 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		19.9 mg/kg	1.535	30.551 mg/kg	0.00306 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	92.2 mg/kg		92.2 mg/kg	0.00922 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.26 mg/kg		0.26 mg/kg	0.000026 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		13.7 mg/kg	1.579	21.639 mg/kg	0.00216 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				61.6 mg/kg	2.774	170.887 mg/kg	0.0171 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		0.12 mg/kg		0.12 mg/kg	0.000012 %		
14	anthracene		204-371-1	120-12-7		0.64 mg/kg		0.64 mg/kg	0.000064 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		2.43 mg/kg		2.43 mg/kg	0.000243 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				2.13	mg/kg		2.13	mg/kg	0.000213 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				2.5	mg/kg		2.5	mg/kg	0.00025 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.99	mg/kg		0.99	mg/kg	0.000099 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				1.24	mg/kg		1.24	mg/kg	0.000124 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				2.6	mg/kg		2.6	mg/kg	0.00026 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				5.22	mg/kg		5.22	mg/kg	0.000522 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				1.05	mg/kg		1.05	mg/kg	0.000105 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				1.15	mg/kg		1.15	mg/kg	0.000115 %		
			201-581-5	85-01-8									
26		pyrene				4.2	mg/kg		4.2	mg/kg	0.00042 %		
			204-927-3	129-00-0									
27		PAHs (total)				<24.8	mg/kg		<24.8	mg/kg	<0.00248 %		<**LOD**
28		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				86.4	mg/kg		86.4	mg/kg	0.00864 %		
				TPH									
										Total:	0.0518 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00864%)

Classification of sample: CP102 ES 2 0.50

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

Sample details

Sample Name:
CP102 ES 2 0.50

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.1 mg/kg	23.173	25.49 mg/kg	0.00255 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.8 mg/kg	1.32	10.299 mg/kg	0.00103 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.13 mg/kg	1.855	0.241 mg/kg	0.0000241 %		
4	chromium(III) oxide		215-160-9	1308-38-9		14.5 mg/kg		14.5 mg/kg	0.00145 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		14.7 mg/kg	1.535	22.568 mg/kg	0.00226 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	33.7 mg/kg		33.7 mg/kg	0.00337 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		11.8 mg/kg	1.579	18.638 mg/kg	0.00186 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				40 mg/kg	2.774	110.966 mg/kg	0.0111 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.23 mg/kg		0.23 mg/kg	0.000023 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.18	mg/kg		0.18	mg/kg	0.000018 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				0.26	mg/kg		0.26	mg/kg	0.000026 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.15	mg/kg		0.15	mg/kg	0.000015 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
			201-581-5	85-01-8									
26		pyrene				0.28	mg/kg		0.28	mg/kg	0.000028 %		
			204-927-3	129-00-0									
27		PAHs (total)				<2.55	mg/kg		<2.55	mg/kg	<0.000255 %		<**LOD**
28		pH				8.8	pH		8.8	pH	8.8 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				54.9	mg/kg		54.9	mg/kg	0.00549 %		
				TPH									
										Total:	0.0298 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00549%)

Classification of sample: CP102 ES 3 1.00

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

Sample details

Sample Name:
CP102 ES 3 1.00

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.4 mg/kg	23.173	32.442 mg/kg	0.00324 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.4 mg/kg	1.32	9.77 mg/kg	0.000977 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.16 mg/kg	1.855	0.297 mg/kg	0.0000297 %		
4	chromium(III) oxide		215-160-9	1308-38-9		12.2 mg/kg		12.2 mg/kg	0.00122 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		13.5 mg/kg	1.535	20.726 mg/kg	0.00207 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	26.1 mg/kg		26.1 mg/kg	0.00261 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		11.1 mg/kg	1.579	17.532 mg/kg	0.00175 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				37.8 mg/kg	2.774	104.863 mg/kg	0.0105 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.28 mg/kg		0.28 mg/kg	0.000028 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.29	mg/kg		0.29	mg/kg	0.000029 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.31	mg/kg		0.31	mg/kg	0.000031 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.18	mg/kg		0.18	mg/kg	0.000018 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				0.31	mg/kg		0.31	mg/kg	0.000031 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
			201-581-5	85-01-8									
26		pyrene				0.33	mg/kg		0.33	mg/kg	0.000033 %		
			204-927-3	129-00-0									
27		PAHs (total)				<2.98	mg/kg		<2.98	mg/kg	<0.000298 %		<**LOD**
28		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				208	mg/kg		208	mg/kg	0.0208 %		
				TPH									
										Total:	0.044 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0208%)

Classification of sample: HDP101 ES 2 0.30

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

Sample details

Sample Name:
HDP101 ES 2 0.30

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1 mg/kg	23.173	23.173 mg/kg	0.00232 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.3 mg/kg	1.32	16.24 mg/kg	0.00162 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.12 mg/kg	1.855	0.223 mg/kg	0.0000223 %		
4	chromium(III) oxide		215-160-9	1308-38-9		16.7 mg/kg		16.7 mg/kg	0.00167 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		30.7 mg/kg	1.535	47.132 mg/kg	0.00471 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	89 mg/kg		89 mg/kg	0.0089 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.31 mg/kg		0.31 mg/kg	0.000031 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		13.1 mg/kg	1.579	20.691 mg/kg	0.00207 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				83.5 mg/kg	2.774	231.641 mg/kg	0.0232 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
14	anthracene		204-371-1	120-12-7		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.24 mg/kg		0.24 mg/kg	0.000024 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.41	mg/kg		0.41	mg/kg	0.000041 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.44	mg/kg		0.44	mg/kg	0.000044 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.27	mg/kg		0.27	mg/kg	0.000027 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.35	mg/kg		0.35	mg/kg	0.000035 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.28	mg/kg		0.28	mg/kg	0.000028 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.14	mg/kg		0.14	mg/kg	0.000014 %		
			201-581-5	85-01-8									
26		pyrene				0.53	mg/kg		0.53	mg/kg	0.000053 %		
			204-927-3	129-00-0									
27		PAHs (total)				<3.98	mg/kg		<3.98	mg/kg	<0.000398 %		<**LOD**
28		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				160	mg/kg		160	mg/kg	0.016 %		
				TPH									
										Total:	0.0615 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.016%)

Classification of sample: HDP101 ES 4 0.80

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

Sample details

Sample Name:
HDP101 ES 4 0.80

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.9	mg/kg	23.173	20.856	mg/kg	0.00209 %		
2		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.4	mg/kg	1.32	19.013	mg/kg	0.0019 %		
3		cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.1	mg/kg	1.855	<0.185	mg/kg	<0.0000185 %		<**LOD**
4		chromium(III) oxide		215-160-9	1308-38-9		17.5	mg/kg		17.5	mg/kg	0.00175 %		
5		copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		10.4	mg/kg	1.535	15.967	mg/kg	0.0016 %		
6		lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	14.4	mg/kg		14.4	mg/kg	0.00144 %		
7		mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
8		nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		13.8	mg/kg	1.579	21.797	mg/kg	0.00218 %		
9		selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<**LOD**
10		zinc { zinc chromate }	024-007-00-3				29.7	mg/kg	2.774	82.392	mg/kg	0.00824 %		
11		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1	mg/kg	1.923	<0.192	mg/kg	<0.0000192 %		<**LOD**
12		acenaphthene		201-469-6	83-32-9		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
13		acenaphthylene		205-917-1	208-96-8		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
14		anthracene		204-371-1	120-12-7		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
15		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			201-581-5	85-01-8									
26		pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			204-927-3	129-00-0									
27		PAHs (total)				<1.28	mg/kg		<1.28	mg/kg	<0.000128 %		<LOD
28		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				24.9	mg/kg		24.9	mg/kg	0.00249 %		
				TPH									
										Total:	0.0221 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00249%)

Classification of sample: HDP102 ES 1 0.20

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

Sample details

Sample Name:
HDP102 ES 1 0.20

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.9 mg/kg	23.173	20.856 mg/kg	0.00209 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.2 mg/kg	1.32	20.069 mg/kg	0.00201 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.21 mg/kg	1.855	0.389 mg/kg	0.0000389 %		
4	chromium(III) oxide		215-160-9	1308-38-9		19 mg/kg		19 mg/kg	0.0019 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		33.4 mg/kg	1.535	51.277 mg/kg	0.00513 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	113.2 mg/kg		113.2 mg/kg	0.0113 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.66 mg/kg		0.66 mg/kg	0.000066 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		15.1 mg/kg	1.579	23.85 mg/kg	0.00239 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				91.9 mg/kg	2.774	254.944 mg/kg	0.0255 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		0.11 mg/kg		0.11 mg/kg	0.000011 %		
14	anthracene		204-371-1	120-12-7		0.11 mg/kg		0.11 mg/kg	0.000011 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.55 mg/kg		0.55 mg/kg	0.000055 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.92	mg/kg		0.92	mg/kg	0.000092 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.64	mg/kg		0.64	mg/kg	0.000064 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.6	mg/kg		0.6	mg/kg	0.00006 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.81	mg/kg		0.81	mg/kg	0.000081 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				1.46	mg/kg		1.46	mg/kg	0.000146 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.55	mg/kg		0.55	mg/kg	0.000055 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
			201-581-5	85-01-8									
26		pyrene				1.36	mg/kg		1.36	mg/kg	0.000136 %		
			204-927-3	129-00-0									
27		PAHs (total)				<8.56	mg/kg		<8.56	mg/kg	<0.000856 %		<**LOD**
28		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				69.3	mg/kg		69.3	mg/kg	0.00693 %		
				TPH									
										Total:	0.0592 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00693%)

Classification of sample: HDP102 ES 2 1.00

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

Sample details

Sample Name:
HDP102 ES 2 1.00

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.7 mg/kg	23.173	16.221 mg/kg	0.00162 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.1 mg/kg	1.32	19.937 mg/kg	0.00199 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.1 mg/kg	1.855	<0.185 mg/kg	<0.0000185 %		<**LOD**
4	chromium(III) oxide		215-160-9	1308-38-9		20.4 mg/kg		20.4 mg/kg	0.00204 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		11.8 mg/kg	1.535	18.116 mg/kg	0.00181 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	17.4 mg/kg		17.4 mg/kg	0.00174 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		16 mg/kg	1.579	25.272 mg/kg	0.00253 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				31.6 mg/kg	2.774	87.663 mg/kg	0.00877 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
14	anthracene		204-371-1	120-12-7		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			201-581-5	85-01-8									
26		pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			204-927-3	129-00-0									
27		PAHs (total)				<1.28	mg/kg		<1.28	mg/kg	<0.000128 %		<LOD
28		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				17.4	mg/kg		17.4	mg/kg	0.00174 %		
				TPH									
										Total:	0.0227 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00174%)

Classification of sample: WS101 ES 2 0.30

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

Sample details

Sample Name:
WS101 ES 2 0.30

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1 mg/kg	23.173	23.173 mg/kg	0.00232 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16.2 mg/kg	1.32	21.389 mg/kg	0.00214 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.51 mg/kg	1.855	0.946 mg/kg	0.0000946 %		
4	chromium(III) oxide		215-160-9	1308-38-9		14.4 mg/kg		14.4 mg/kg	0.00144 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		14.3 mg/kg	1.535	21.954 mg/kg	0.0022 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	53.4 mg/kg		53.4 mg/kg	0.00534 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.1 mg/kg		0.1 mg/kg	0.00001 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		16.6 mg/kg	1.579	26.22 mg/kg	0.00262 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				117.9 mg/kg	2.774	327.072 mg/kg	0.0327 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
14	anthracene		204-371-1	120-12-7		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				0.16	mg/kg		0.16	mg/kg	0.000016 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		**<LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		**<LOD**
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		**<LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		**<LOD**
			201-581-5	85-01-8									
26		pyrene				0.16	mg/kg		0.16	mg/kg	0.000016 %		
			204-927-3	129-00-0									
27		PAHs (total)				<1.47	mg/kg		<1.47	mg/kg	<0.000147 %		**<LOD**
28		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		**<LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				21.5	mg/kg		21.5	mg/kg	0.00215 %		
				TPH									
										Total:	0.0515 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00215%)

Classification of sample: WS101 ES 4 1.00

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

Sample details

Sample Name:
WS101 ES 4 1.00

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.1 mg/kg	23.173	25.49 mg/kg	0.00255 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.5 mg/kg	1.32	20.465 mg/kg	0.00205 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.12 mg/kg	1.855	0.223 mg/kg	0.0000223 %		
4	chromium(III) oxide		215-160-9	1308-38-9		18 mg/kg		18 mg/kg	0.0018 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		29.4 mg/kg	1.535	45.136 mg/kg	0.00451 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	141 mg/kg		141 mg/kg	0.0141 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.57 mg/kg		0.57 mg/kg	0.000057 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		13.6 mg/kg	1.579	21.481 mg/kg	0.00215 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				87.2 mg/kg	2.774	241.906 mg/kg	0.0242 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		0.2 mg/kg		0.2 mg/kg	0.00002 %		
14	anthracene		204-371-1	120-12-7		0.36 mg/kg		0.36 mg/kg	0.000036 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.73 mg/kg		1.73 mg/kg	0.000173 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				1.71	mg/kg		1.71	mg/kg	0.000171 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				1.96	mg/kg		1.96	mg/kg	0.000196 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				1.15	mg/kg		1.15	mg/kg	0.000115 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				1.93	mg/kg		1.93	mg/kg	0.000193 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				3.8	mg/kg		3.8	mg/kg	0.00038 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				1.06	mg/kg		1.06	mg/kg	0.000106 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				1.25	mg/kg		1.25	mg/kg	0.000125 %		
			201-581-5	85-01-8									
26		pyrene				3.4	mg/kg		3.4	mg/kg	0.00034 %		
			204-927-3	129-00-0									
27		PAHs (total)				<20.2	mg/kg		<20.2	mg/kg	<0.00202 %		<**LOD**
28		pH				7.9	pH		7.9	pH	7.9 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				82.2	mg/kg		82.2	mg/kg	0.00822 %		
				TPH									
										Total:	0.0638 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00822%)

Classification of sample: WS101 ES 5 1.20

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

Sample details

Sample Name:
WS101 ES 5 1.20

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.6 mg/kg	23.173	13.904 mg/kg	0.00139 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.9 mg/kg	1.32	20.993 mg/kg	0.0021 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.1 mg/kg	1.855	<0.185 mg/kg	<0.0000185 %		<LOD
4	chromium(III) oxide		215-160-9	1308-38-9		19.5 mg/kg		19.5 mg/kg	0.00195 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		12.1 mg/kg	1.535	18.576 mg/kg	0.00186 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	22 mg/kg		22 mg/kg	0.0022 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		16.8 mg/kg	1.579	26.536 mg/kg	0.00265 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				37.2 mg/kg	2.774	103.198 mg/kg	0.0103 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.09 mg/kg		0.09 mg/kg	0.000009 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-581-5	85-01-8									
26		pyrene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
			204-927-3	129-00-0									
27		PAHs (total)				<1.56	mg/kg		<1.56	mg/kg	<0.000156 %		<**LOD**
28		pH				7.9	pH		7.9	pH	7.9 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				21.3	mg/kg		21.3	mg/kg	0.00213 %		
				TPH									
										Total:	0.0251 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00213%)

Classification of sample: WS102 ES 2 0.30

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

Sample details

Sample Name:
WS102 ES 2 0.30

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1 mg/kg	23.173	23.173 mg/kg	0.00232 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17 mg/kg	1.32	22.446 mg/kg	0.00224 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.24 mg/kg	1.855	0.445 mg/kg	0.0000445 %		
4	chromium(III) oxide		215-160-9	1308-38-9		23 mg/kg		23 mg/kg	0.0023 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		43 mg/kg	1.535	66.016 mg/kg	0.0066 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	299 mg/kg		299 mg/kg	0.0299 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.32 mg/kg		0.32 mg/kg	0.000032 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		18.7 mg/kg	1.579	29.537 mg/kg	0.00295 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				151.4 mg/kg	2.774	420.006 mg/kg	0.042 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
14	anthracene		204-371-1	120-12-7		0.2 mg/kg		0.2 mg/kg	0.00002 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.57 mg/kg		0.57 mg/kg	0.000057 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.73	mg/kg		0.73	mg/kg	0.000073 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.99	mg/kg		0.99	mg/kg	0.000099 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.64	mg/kg		0.64	mg/kg	0.000064 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.61	mg/kg		0.61	mg/kg	0.000061 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.93	mg/kg		0.93	mg/kg	0.000093 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				1.75	mg/kg		1.75	mg/kg	0.000175 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		**<LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.54	mg/kg		0.54	mg/kg	0.000054 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		**<LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.52	mg/kg		0.52	mg/kg	0.000052 %		
			201-581-5	85-01-8									
26		pyrene				1.47	mg/kg		1.47	mg/kg	0.000147 %		
			204-927-3	129-00-0									
27		PAHs (total)				<9.37	mg/kg		<9.37	mg/kg	<0.000937 %		**<LOD**
28		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		**<LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				53.1	mg/kg		53.1	mg/kg	0.00531 %		
				TPH									
										Total:	0.0957 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00531%)

Classification of sample: WS102 ES 3 0.80

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

Sample details

Sample Name:
WS102 ES 3 0.80

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.2 mg/kg	23.173	27.808 mg/kg	0.00278 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.2 mg/kg	1.32	20.069 mg/kg	0.00201 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.18 mg/kg	1.855	0.334 mg/kg	0.0000334 %		
4	chromium(III) oxide		215-160-9	1308-38-9		19.6 mg/kg		19.6 mg/kg	0.00196 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		30.6 mg/kg	1.535	46.979 mg/kg	0.0047 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	266.7 mg/kg		266.7 mg/kg	0.0267 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.63 mg/kg		0.63 mg/kg	0.000063 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		14.5 mg/kg	1.579	22.903 mg/kg	0.00229 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				103.6 mg/kg	2.774	287.402 mg/kg	0.0287 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		0.11 mg/kg		0.11 mg/kg	0.000011 %		
14	anthracene		204-371-1	120-12-7		0.26 mg/kg		0.26 mg/kg	0.000026 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.79 mg/kg		0.79 mg/kg	0.000079 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.95	mg/kg		0.95	mg/kg	0.000095 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				1.19	mg/kg		1.19	mg/kg	0.000119 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.7	mg/kg		0.7	mg/kg	0.00007 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.69	mg/kg		0.69	mg/kg	0.000069 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				1.17	mg/kg		1.17	mg/kg	0.000117 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				2.48	mg/kg		2.48	mg/kg	0.000248 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.61	mg/kg		0.61	mg/kg	0.000061 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.72	mg/kg		0.72	mg/kg	0.000072 %		
			201-581-5	85-01-8									
26		pyrene				2.12	mg/kg		2.12	mg/kg	0.000212 %		
			204-927-3	129-00-0									
27		PAHs (total)				<12.2	mg/kg		<12.2	mg/kg	<0.00122 %		<**LOD**
28		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				57	mg/kg		57	mg/kg	0.0057 %		
				TPH									
										Total:	0.0775 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0057%)

Classification of sample: WS103 ES 2 0.30

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

Sample details

Sample Name:
WS103 ES 2 0.30

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.3 mg/kg	23.173	30.125 mg/kg	0.00301 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		4.5 mg/kg	1.32	5.941 mg/kg	0.000594 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.1 mg/kg	1.855	<0.185 mg/kg	<0.0000185 %		<LOD
4	chromium(III) oxide		215-160-9	1308-38-9		4.6 mg/kg		4.6 mg/kg	0.00046 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		7.8 mg/kg	1.535	11.975 mg/kg	0.0012 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	393.1 mg/kg		393.1 mg/kg	0.0393 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		5.9 mg/kg	1.579	9.319 mg/kg	0.000932 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				16.7 mg/kg	2.774	46.328 mg/kg	0.00463 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
14	anthracene		204-371-1	120-12-7		0.44 mg/kg		0.44 mg/kg	0.000044 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.62 mg/kg		1.62 mg/kg	0.000162 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				2.04	mg/kg		2.04	mg/kg	0.000204 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				2.96	mg/kg		2.96	mg/kg	0.000296 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				1.61	mg/kg		1.61	mg/kg	0.000161 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				1.5	mg/kg		1.5	mg/kg	0.00015 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				2.39	mg/kg		2.39	mg/kg	0.000239 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				5.5	mg/kg		5.5	mg/kg	0.00055 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				1.43	mg/kg		1.43	mg/kg	0.000143 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				1.4	mg/kg		1.4	mg/kg	0.00014 %		
			201-581-5	85-01-8									
26		pyrene				4.34	mg/kg		4.34	mg/kg	0.000434 %		
			204-927-3	129-00-0									
27		PAHs (total)				<25.8	mg/kg		<25.8	mg/kg	<0.00258 %		<**LOD**
28		pH				8.8	pH		8.8	pH	8.8 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				87.9	mg/kg		87.9	mg/kg	0.00879 %		
				TPH									
										Total:	0.0643 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00879%)

Classification of sample: WS103 ES 4 0.80

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

Sample details

Sample Name:
WS103 ES 4 0.80

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.6 mg/kg	23.173	13.904 mg/kg	0.00139 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.8 mg/kg	1.32	16.9 mg/kg	0.00169 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.1 mg/kg	1.855	<0.185 mg/kg	<0.0000185 %		<LOD
4	chromium(III) oxide		215-160-9	1308-38-9		17.3 mg/kg		17.3 mg/kg	0.00173 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		14.8 mg/kg	1.535	22.722 mg/kg	0.00227 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	35.5 mg/kg		35.5 mg/kg	0.00355 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.11 mg/kg		0.11 mg/kg	0.000011 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		13.2 mg/kg	1.579	20.849 mg/kg	0.00208 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				39 mg/kg	2.774	108.192 mg/kg	0.0108 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-581-5	85-01-8									
26		pyrene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			204-927-3	129-00-0									
27		PAHs (total)				<1.31	mg/kg		<1.31	mg/kg	<0.000131 %		<**LOD**
28		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				15.9	mg/kg		15.9	mg/kg	0.00159 %		
				TPH									
										Total:	0.0256 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00159%)

Classification of sample: WS105 ES 2 0.30

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

Sample details

Sample Name:
WS105 ES 2 0.30

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.6 mg/kg	23.173	37.077 mg/kg	0.00371 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.5 mg/kg	1.32	16.504 mg/kg	0.00165 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.33 mg/kg	1.855	0.612 mg/kg	0.0000612 %		
4	chromium(III) oxide		215-160-9	1308-38-9		19.1 mg/kg		19.1 mg/kg	0.00191 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		47.7 mg/kg	1.535	73.231 mg/kg	0.00732 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	174 mg/kg		174 mg/kg	0.0174 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.26 mg/kg		0.26 mg/kg	0.000026 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		17.5 mg/kg	1.579	27.641 mg/kg	0.00276 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<**LOD**
10	zinc { zinc chromate }	024-007-00-3				129.6 mg/kg	2.774	359.529 mg/kg	0.036 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<**LOD**
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<**LOD**
14	anthracene		204-371-1	120-12-7		0.13 mg/kg		0.13 mg/kg	0.000013 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.57 mg/kg		0.57 mg/kg	0.000057 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.52	mg/kg		0.52	mg/kg	0.000052 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.64	mg/kg		0.64	mg/kg	0.000064 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.47	mg/kg		0.47	mg/kg	0.000047 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.39	mg/kg		0.39	mg/kg	0.000039 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.56	mg/kg		0.56	mg/kg	0.000056 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				1.04	mg/kg		1.04	mg/kg	0.000104 %		
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.38	mg/kg		0.38	mg/kg	0.000038 %		
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.31	mg/kg		0.31	mg/kg	0.000031 %		
			201-581-5	85-01-8									
26		pyrene				0.96	mg/kg		0.96	mg/kg	0.000096 %		
			204-927-3	129-00-0									
27		PAHs (total)				<6.37	mg/kg		<6.37	mg/kg	<0.000637 %		<**LOD**
28		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				98.6	mg/kg		98.6	mg/kg	0.00986 %		
				TPH									
										Total:	0.0821 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00986%)

Classification of sample: WS105 ES 4 0.70

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

Sample details

Sample Name:
WS105 ES 4 0.70

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.8 mg/kg	23.173	18.538 mg/kg	0.00185 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.8 mg/kg	1.32	20.861 mg/kg	0.00209 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.1 mg/kg	1.855	<0.185 mg/kg	<0.0000185 %		<LOD
4	chromium(III) oxide		215-160-9	1308-38-9		20.2 mg/kg		20.2 mg/kg	0.00202 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		11.6 mg/kg	1.535	17.809 mg/kg	0.00178 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	19.1 mg/kg		19.1 mg/kg	0.00191 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		16 mg/kg	1.579	25.272 mg/kg	0.00253 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				38.1 mg/kg	2.774	105.695 mg/kg	0.0106 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.08 mg/kg		<0.08 mg/kg	<0.000008 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-912-4	206-44-0									
22		fluorene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-893-2	193-39-5									
24		naphthalene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			201-581-5	85-01-8									
26		pyrene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			204-927-3	129-00-0									
27		PAHs (total)				<1.28	mg/kg		<1.28	mg/kg	<0.000128 %		<LOD
28		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				15.9	mg/kg		15.9	mg/kg	0.00159 %		
				TPH									
										Total:	0.0248 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00159%)

Classification of sample: WS106 ES 2 0.20

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

Sample details

Sample Name:
WS106 ES 2 0.20

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.1	mg/kg	23.173	25.49	mg/kg	0.00255 %		
2		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.5	mg/kg	1.32	19.145	mg/kg	0.00191 %		
3		cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		0.22	mg/kg	1.855	0.408	mg/kg	0.0000408 %		
4		chromium(III) oxide		215-160-9	1308-38-9		18.5	mg/kg		18.5	mg/kg	0.00185 %		
5		copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		32.9	mg/kg	1.535	50.51	mg/kg	0.00505 %		
6		lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	119.5	mg/kg		119.5	mg/kg	0.012 %		
7		mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.6	mg/kg		0.6	mg/kg	0.00006 %		
8		nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		14.6	mg/kg	1.579	23.061	mg/kg	0.00231 %		
9		selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<**LOD**
10		zinc { zinc chromate }	024-007-00-3				92.3	mg/kg	2.774	256.054	mg/kg	0.0256 %		
11		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1	mg/kg	1.923	<0.192	mg/kg	<0.0000192 %		<**LOD**
12		acenaphthene		201-469-6	83-32-9		<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<**LOD**
13		acenaphthylene		205-917-1	208-96-8		0.1	mg/kg		0.1	mg/kg	0.00001 %		
14		anthracene		204-371-1	120-12-7		0.1	mg/kg		0.1	mg/kg	0.00001 %		
15		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.38	mg/kg		0.38	mg/kg	0.000038 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.48	mg/kg		0.48	mg/kg	0.000048 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.68	mg/kg		0.68	mg/kg	0.000068 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.43	mg/kg		0.43	mg/kg	0.000043 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.48	mg/kg		0.48	mg/kg	0.000048 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				0.66	mg/kg		0.66	mg/kg	0.000066 %		
			205-912-4	206-44-0									
22		fluorene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.4	mg/kg		0.4	mg/kg	0.00004 %		
			205-893-2	193-39-5									
24		naphthalene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
			201-581-5	85-01-8									
26		pyrene				0.47	mg/kg		0.47	mg/kg	0.000047 %		
			204-927-3	129-00-0									
27		PAHs (total)				<4.98	mg/kg		<4.98	mg/kg	<0.000498 %		<**LOD**
28		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				69.7	mg/kg		69.7	mg/kg	0.00697 %		
				TPH									
										Total:	0.0594 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00697%)

Classification of sample: WS106 ES 4 0.80

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

Sample details

Sample Name:
WS106 ES 4 0.80

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.8 mg/kg	23.173	18.538 mg/kg	0.00185 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.2 mg/kg	1.32	20.069 mg/kg	0.00201 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.2 mg/kg	1.855	<0.371 mg/kg	<0.0000371 %		<LOD
4	chromium(III) oxide		215-160-9	1308-38-9		17.6 mg/kg		17.6 mg/kg	0.00176 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		12.7 mg/kg	1.535	19.498 mg/kg	0.00195 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	30.4 mg/kg		30.4 mg/kg	0.00304 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		14.6 mg/kg	1.579	23.061 mg/kg	0.00231 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				42.5 mg/kg	2.774	117.901 mg/kg	0.0118 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			205-912-4	206-44-0									
22		fluorene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			205-893-2	193-39-5									
24		naphthalene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			201-581-5	85-01-8									
26		pyrene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			204-927-3	129-00-0									
27		PAHs (total)				<1.38	mg/kg		<1.38	mg/kg	<0.000138 %		<LOD
28		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				19.4	mg/kg		19.4	mg/kg	0.00194 %		
				TPH									
										Total:	0.0272 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00194%)

Classification of sample: WS107 ES 1 0.30

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

Sample details

Sample Name:
WS107 ES 1 0.30

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.8 mg/kg	23.173	18.538 mg/kg	0.00185 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16.3 mg/kg	1.32	21.521 mg/kg	0.00215 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.2 mg/kg	1.855	<0.371 mg/kg	<0.0000371 %		<LOD
4	chromium(III) oxide		215-160-9	1308-38-9		18.2 mg/kg		18.2 mg/kg	0.00182 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		35.5 mg/kg	1.535	54.501 mg/kg	0.00545 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	135.3 mg/kg		135.3 mg/kg	0.0135 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.5 mg/kg		0.5 mg/kg	0.00005 %		
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		14.5 mg/kg	1.579	22.903 mg/kg	0.00229 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				87.2 mg/kg	2.774	241.906 mg/kg	0.0242 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		0.47 mg/kg		0.47 mg/kg	0.000047 %		
14	anthracene		204-371-1	120-12-7		0.61 mg/kg		0.61 mg/kg	0.000061 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		2.26 mg/kg		2.26 mg/kg	0.000226 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				2.02	mg/kg		2.02	mg/kg	0.000202 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				2.87	mg/kg		2.87	mg/kg	0.000287 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				1.47	mg/kg		1.47	mg/kg	0.000147 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				1.12	mg/kg		1.12	mg/kg	0.000112 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				2.43	mg/kg		2.43	mg/kg	0.000243 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				5.15	mg/kg		5.15	mg/kg	0.000515 %		
			205-912-4	206-44-0									
22		fluorene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				1.38	mg/kg		1.38	mg/kg	0.000138 %		
			205-893-2	193-39-5									
24		naphthalene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				2.57	mg/kg		2.57	mg/kg	0.000257 %		
			201-581-5	85-01-8									
26		pyrene				3.56	mg/kg		3.56	mg/kg	0.000356 %		
			204-927-3	129-00-0									
27		PAHs (total)				<26.6	mg/kg		<26.6	mg/kg	<0.00266 %		<**LOD**
28		pH				8.8	pH		8.8	pH	8.8 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.6	mg/kg	1.884	<1.13	mg/kg	<0.000113 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				123	mg/kg		123	mg/kg	0.0123 %		
				TPH									
										Total:	0.0691 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0123%)

Classification of sample: WS108 ES 1 0.40

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

Sample details

Sample Name:
WS108 ES 1 0.40

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.9	mg/kg	23.173	44.029	mg/kg	0.0044 %		
2		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
3		cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.2	mg/kg	1.855	<0.371	mg/kg	<0.0000371 %		<LOD
4		chromium(III) oxide		215-160-9	1308-38-9		18.6	mg/kg		18.6	mg/kg	0.00186 %		
5		copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		25.8	mg/kg	1.535	39.609	mg/kg	0.00396 %		
6		lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	90.7	mg/kg		90.7	mg/kg	0.00907 %		
7		mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
8		nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		14.4	mg/kg	1.579	22.745	mg/kg	0.00227 %		
9		selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
10		zinc { zinc chromate }	024-007-00-3				73.1	mg/kg	2.774	202.79	mg/kg	0.0203 %		
11		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1	mg/kg	1.923	<0.192	mg/kg	<0.0000192 %		<LOD
12		acenaphthene		201-469-6	83-32-9		<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
13		acenaphthylene		205-917-1	208-96-8		0.15	mg/kg		0.15	mg/kg	0.000015 %		
14		anthracene		204-371-1	120-12-7		0.2	mg/kg		0.2	mg/kg	0.00002 %		
15		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.7	mg/kg		0.7	mg/kg	0.00007 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.7	mg/kg		0.7	mg/kg	0.00007 %		
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				0.93	mg/kg		0.93	mg/kg	0.000093 %		
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				0.57	mg/kg		0.57	mg/kg	0.000057 %		
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				0.75	mg/kg		0.75	mg/kg	0.000075 %		
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				1.42	mg/kg		1.42	mg/kg	0.000142 %		
			205-912-4	206-44-0									
22		fluorene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<**LOD**
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				0.52	mg/kg		0.52	mg/kg	0.000052 %		
			205-893-2	193-39-5									
24		naphthalene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				0.92	mg/kg		0.92	mg/kg	0.000092 %		
			201-581-5	85-01-8									
26		pyrene				0.94	mg/kg		0.94	mg/kg	0.000094 %		
			204-927-3	129-00-0									
27		PAHs (total)				<8.52	mg/kg		<8.52	mg/kg	<0.000852 %		<**LOD**
28		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				78.3	mg/kg		78.3	mg/kg	0.00783 %		
				TPH									
										Total:	0.0535 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00783%)

Classification of sample: WS108 ES 2 0.90

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

Sample details

Sample Name:
WS108 ES 2 0.90

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.7 mg/kg	23.173	16.221 mg/kg	0.00162 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.6 mg/kg	1.32	16.636 mg/kg	0.00166 %		
3	cadmium { cadmium sulfate }	048-009-00-9	233-331-6	10124-36-4		<0.2 mg/kg	1.855	<0.371 mg/kg	<0.0000371 %		<LOD
4	chromium(III) oxide		215-160-9	1308-38-9		15.5 mg/kg		15.5 mg/kg	0.00155 %		
5	copper { copper dihydroxide; copper(II) hydroxide }	029-021-00-3	243-815-9	20427-59-2		13 mg/kg	1.535	19.958 mg/kg	0.002 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	22.6 mg/kg		22.6 mg/kg	0.00226 %		
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		12 mg/kg	1.579	18.954 mg/kg	0.0019 %		
9	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
10	zinc { zinc chromate }	024-007-00-3				35 mg/kg	2.774	97.095 mg/kg	0.00971 %		
11	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.1 mg/kg	1.923	<0.192 mg/kg	<0.0000192 %		<LOD
12	acenaphthene		201-469-6	83-32-9		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD
14	anthracene		204-371-1	120-12-7		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.09 mg/kg		<0.09 mg/kg	<0.000009 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
17		benzo[b]fluoranthene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
18		benzo[ghi]perylene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			205-883-8	191-24-2									
19		benzo[k]fluoranthene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
20		chrysene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
21		fluoranthene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			205-912-4	206-44-0									
22		fluorene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			201-695-5	86-73-7									
23		indeno[123-cd]pyrene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			205-893-2	193-39-5									
24		naphthalene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
25		phenanthrene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			201-581-5	85-01-8									
26		pyrene				<0.09	mg/kg		<0.09	mg/kg	<0.000009 %		<LOD
			204-927-3	129-00-0									
27		PAHs (total)				<1.38	mg/kg		<1.38	mg/kg	<0.000138 %		<LOD
28		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
29		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
30		TPH (C6 to C40) petroleum group				20.3	mg/kg		20.3	mg/kg	0.00203 %		
				TPH									
										Total:	0.0232 %		

Key

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00203%)

Appendix A: Classifier defined and non CLP determinands

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

Conversion factor: 1.462
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: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

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

CLP index number: 082-001-00-6
Description/Comments: Worst Case: IARC considers lead compounds Group 1; Carcinogenic to humans; Lead REACH Consortium considers some lead compounds Carcinogenic category 1A
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s)/Risk Phrase(s):
03 Jun 2015 - 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

- **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: Aquatic Chronic 2 H411 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

- **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: Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 1 H310 , Acute Tox. 1 H330 , Acute Tox. 4 H302

- **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: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

- **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 Chronic 1 H410 , Aquatic Acute 1 H400

- **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: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Acute Tox. 4 H302

- **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 Chronic 1 H410 , Aquatic Acute 1 H400

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

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

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

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

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: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315

PAHs (total)

Description/Comments: Worst case scenario combining risk phrases and substance specific thresholds from benzo[a]pyrene (CLP# 601-032-00-3) and benzo[a]anthracene (CLP# 601-033-00-9)
Data source: 2008/1272/EC – Table 3.2 of Annex VI of regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures and 2009/790/EC Annex IV – Annex IV of regulation 2009/790/EC - 1st Adaptation to Technical Progress for European Regulation 1272/2008
Data source date: 16 Dec 2008
Hazard Statements: Repr. 1B H360FD , Aquatic Chronic 1 H410 (M=100), Aquatic Acute 1 H400 (M=100), Muta. 1B H340 , Carc. 1B H350 >= 0.01 %, Carc. 1B H350 , Skin Sens. 1 H317

pH (CAS Number: PH)

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

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

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

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

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

Appendix B: Rationale for selection of metal species

boron {boron tribromide}

Deemed to be worst case compound

arsenic {arsenic trioxide}

Deemed to be worst case compound

cadmium {cadmium sulfate}

Deemed to be worst case compound

copper {copper dihydroxide; copper(II) hydroxide}

Deemed to be worst case compound

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

Deemed to be worst case compound

mercury {mercury}

Deemed to be worst case compound

nickel {nickel dihydroxide}

Deemed to be worst case compound

selenium {selenium}

Deemed to be worst case compound

zinc {zinc chromate}

Deemed to be worst case compound

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

Deemed to be worst case compound

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}

Deemed to be worst case compound

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2018.190.3583.7349 (09 Jul 2018)
HazWasteOnline Database: 2018.190.3583.7349 (09 Jul 2018)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
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 Wastes 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
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

APPENDIX G
PHOTOGRAPHS

Dynamic Windowless Sample Photographs

Plate 1: WS101 1.20m to 3.00m

Plate 2: WS102 1.20m to 3.00m

Notes:		Figure
	Project Collis Primary School Phase 2 GI **Project No.** H8061-18 **Carried out for** Extraspace Solutions	Plate 1 and 2

Dynamic Windowless Sample Photographs

Plate 3: WS103 1.20m to 3.00m

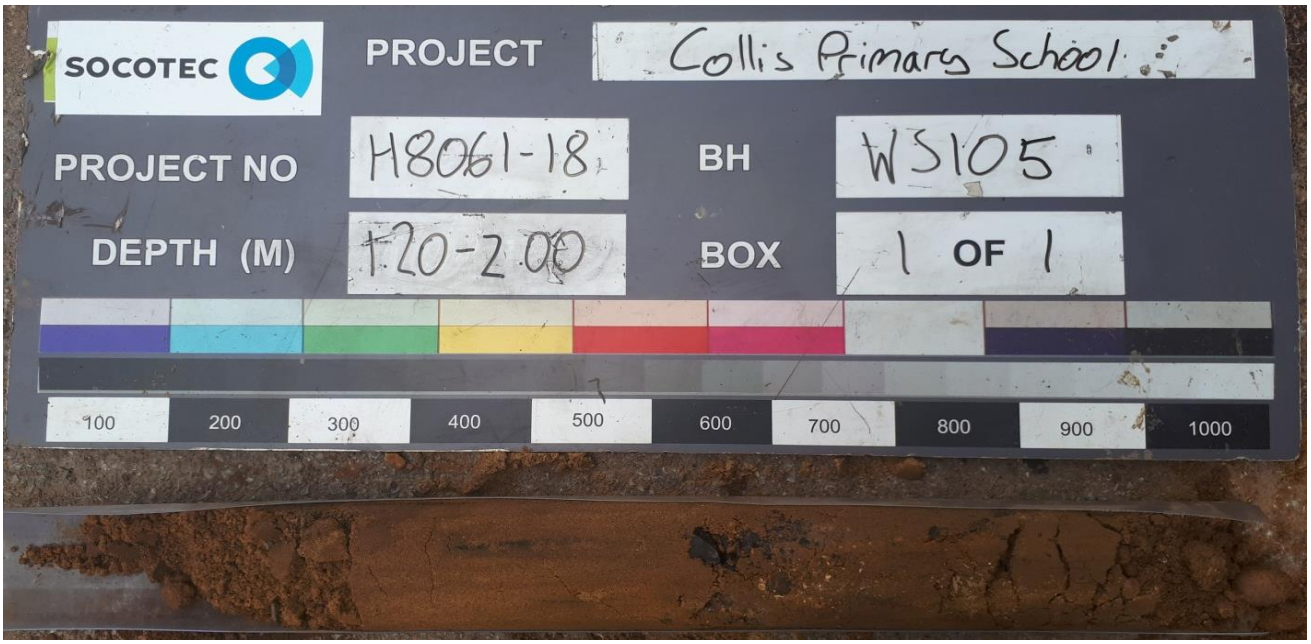

Plate 4: WS105 1.20m to 2.00m

Notes:		Figure
	Project Collis Primary School Phase 2 GI **Project No.** H8061-18 **Carried out for** Extraspace Solutions	Plate 3 and 4

Dynamic Windowless Sample Photographs

Plate 5: WS106 1.20m to 2.00m

Plate 6: WS107 1.20m to 3.00m

Notes:		Figure
	Project Collis Primary School Phase 2 GI **Project No.** H8061-18 **Carried out for** Extraspace Solutions	Plate 5 and 6

Dynamic Windowless Sample Photographs

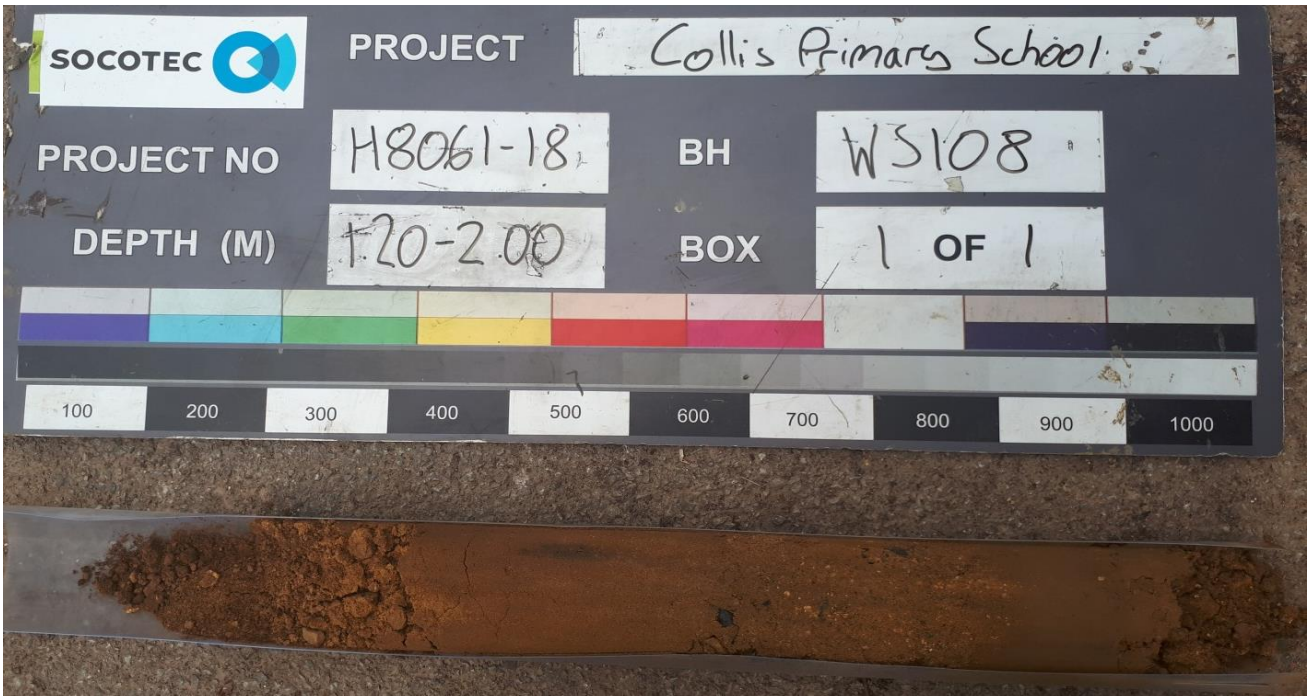

Plate 7: WS108 1.20m to 2.00m

Notes:		Figure
	Project Collis Primary School Phase 2 GI **Project No.** H8061-18 **Carried out for** Extraspace Solutions	Plate 7

Hand Dug Trial Pit Photographs

Plate 8: HDP101 0.00m to 1.20m

Notes:		Figure
	Project Collis Primary School Phase 2 GI **Project No.** H8061-18 **Carried out for** Extraspace Solutions	Plate 8

Hand Dug Trial Pit Photographs

Plate 9: HDP102 0.00m to 1.20m

Notes:		Figure
	Project Collis Primary School Phase 2 GI **Project No.** H8061-18 **Carried out for** Extraspace Solutions	Plate 9