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Ground Investigations Ireland

Housing Bundle 4 & 5 - Lot 2 – Church of the Annunciation Finglas

National Development Finance Agency

Waste Classification Report

March 2024

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DOCUMENT CONTROL SHEET

Project Title	Housing Bundle 4 & 5 - Lot 2 – Church of the Annunciation Finglas
Engineer	Malone O'Regan Consulting Engineers
Client	National Development Finance Agency
Project No	13061-08-23
Document Title	Waste Classification Report

Rev.	Status	Author(s)	Reviewed By	Approved By	Office of Origin	Issue Date
A	Final	B Sexton	J Cashen	B Sexton	Dublin	25 March 2024

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CONTENTS

1.0	Preamble.....	1
2.0	Purpose & Scope.....	1
3.0	Limitations.....	2
4.0	Site Location and Layout.....	3
5.0	Site History.....	3
6.0	Subsurface Exploration	3
6.1.	General	3
6.2.	Trial Pits.....	3
6.3.	Cable Percussion Boreholes.....	4
6.4.	Rotary Boreholes.....	4
6.5.	Surveying	5
7.0	Ground Conditions.....	5
7.1.	General	5
8.0	Laboratory Analysis	6
8.1.	Analysis Suite	6
8.2.	Asbestos.....	7
9.0	Waste Classification.....	7
10.0	Soil Recovery Facility Suitability	9
11.0	Conclusions & Recommendations	11
11.1.	Conclusions	12
11.1.1.	Waste Classification	12
11.1.2.	Asbestos	12
11.1.3.	Waste Categories	12
11.2.	Recommendations	12
11.2.1.	Waste Transfer	12
12.0	References	13



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LIST OF TABLES

Table 1 Potential Waste Categories for Disposal/Recovery	8
Table 2 Individual Sample Waste Category	10
Table 3 Geochemical Domain Suitability	11

APPENDICES

Appendix 1	Figures
Appendix 2	Trial Pit Records
Appendix 3	Cable Percussion Borehole Records
Appendix 4	Rotary Core Records
Appendix 5	Laboratory Testing
Appendix 6	HazWasteOnLine™ Report
Appendix 7	Waste Category Data Summary

1.0 Preamble

Ground Investigations Ireland (GII) was appointed by Malone O'Regan Consulting Engineers on behalf of the National Development Finance Agency to carry out a Waste Classification Assessment for a proposed residential development in Finglas, Dublin 11. All site investigation works were carried out under the supervision of a GII Geo-Environmental Engineer. The site investigation works were completed between November 2023 and February 2024.

2.0 Purpose & Scope

It is understood that as part of the proposed development there may be an excavation to accommodate foundations, services, pavements and carparking and as such the material which may be excavated and removed from site needs to be assessed in terms of waste disposal outlets. The waste classification was carried out in parallel with a wider geotechnical site investigation.

The purpose of the waste classification exercise was as follows.

- Assess the site in terms of historical use;
- Classification, in terms of waste management and final disposal outlets, of material that may require disposal following excavation during the construction phase; and
- Assessment of material against Soil Recovery Facility (SRF) criteria.

The scope of the work undertaken to facilitate the waste classification exercise included the following:

- Site walkover;
- Historical desk study;
- Excavation of six (6 No.) trial pits;
- Boring of six (6 No.) cable percussion boreholes;
- Boring of two (2 No.) follow on rotary core boreholes;
- Collection of subsoil samples for chemical analysis;
- Environmental laboratory testing;
- Waste classification; and
- SFR suitability.

The additional scope of the geotechnical investigation included the following:

- Carry out two (2 No.) soakaways to determine a soil infiltration value to BRE digest 365;
- Carry out one (1 No.) slit trench to identify existing services;
- Installation of three (3 No.) groundwater monitoring wells; and

- Geotechnical Laboratory testing.

The geotechnical site investigation is discussed in the GII Ground Investigation Report Dated March 2024.¹

3.0 Limitations

This report is based on the waste classification regulatory requirements at the time of writing this report and the conclusions and recommendations may not be applicable where there have been amendments to these requirements subsequent to writing the report.

In all cases the reader of this report shall confirm that the waste categories are acceptable to the various waste facilities to which the material may be sent. The quantification of disposal costs shall not be completed prior to confirmation with the relevant waste facilities of the waste categories. It should be noted that the environmental regulator (in this case the EPA) and the waste acceptor (in this case a landfill operator) shall decide whether a waste is hazardous or non-hazardous and or suitable for disposal at their facility.

GII has prepared this report for the sole use of the National Development Finance Agency. No other warranty, express or implied, is made as to the professional advice included in this report or other services provided by GII.

The conclusions and recommendations contained in this report are based upon information provided by others and the assumption that all relevant information has been provided by those bodies from whom it has been requested. Information obtained from third parties has not been independently verified by GII, unless otherwise stated in this report.

This report has been prepared in line with best industry standards and within the project's budgetary and time constraints. The methodology adopted and the sources of information used by GII in providing its services are outlined in this report.

The work described was undertaken between November 2023 and February 2024, this report is based on the conditions encountered and the information available during that period. The scope of this Report and the services are accordingly factually limited by these circumstances.

Site investigation locations were selected by the consultant engineer.

GII disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to GII's attention after the date of the Report.

The conclusions presented in this report represent GII's best professional judgement based on review of site conditions observed during any site visit and the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

¹ Ground Investigations Ireland, Housing Bundle 4 & 5 - Lot 2 – Church of the Annunciation Finglas, Ground Investigation Report, March 2024.

The investigation was focused on a broad assessment of the subsoil quality across the site. The assessment did not extend to the identification of asbestos containing materials associated with any on-site structures, ground gases or groundwater.

The waste classification exercise is reflective of and applicable to the ground conditions on site at the time of the site investigation and sampling. Alterations to the ground conditions or any further excavations carried out on site following the investigation are not reflected in this report.

4.0 Site Location and Layout

The site is located at the site of the former Church of the Annunciation in Finglas, Dublin 11. The site had been cleared of the church and left level prior to the site assessment.

5.0 Site History

GII reviewed the aerial photographs and historical maps maintained by the Ordnance Survey of Ireland (OSI) and the google imagery records. These included the 6-inch maps that were produced between 1829 and 1842, the 25-inch maps that were produced between 1888 and 1913 and the 6-inch Cassini Maps that were produced between the 1830's and 1930's. The site is undeveloped on all historical maps reviewed. Based on a review of the OSI and Google Imagery aerial photograph records the site had been occupied by the Church of the Annunciation until 2021 when it was demolished and the debris removed from site.

6.0 Subsurface Exploration

6.1. General

During the ground investigation a programme of intrusive investigation specified by the Consulting Engineer was undertaken to determine the sub surface conditions at the proposed site. Regular sampling and in-situ testing was undertaken in the exploratory holes to facilitate the geotechnical descriptions and to enable laboratory testing to be carried out on the soil samples recovered during excavation and drilling.

The procedures used in this site investigation are in accordance with Eurocode 7 Part 2: Ground Investigation and testing (ISEN 1997 – 2:2007) and B.S. 5930:2015.

6.2. Trial Pits

The trial pits were excavated using a JCB 3CX excavator at the locations shown in Figure 4. The locations were checked using a CAT scan to minimise the potential for encountering services during the excavation. The trial pits were sampled, logged and photographed by a Geotechnical Engineer/Engineering Geologist prior to backfilling with arisings. Notes were made of any services, inclusions, pit stability, groundwater

encountered and the characteristics of the strata encountered and are presented on the trial pit logs which are provided in Appendix 2 of this Report.

6.3. Cable Percussion Boreholes

The Cable Percussion Boreholes were drilled, at the locations shown in Figure 4, using a Dando 2000 drilling rig with regular in-situ testing and sampling undertaken to facilitate the production of geotechnical logs and laboratory testing.

The standard method of boring in soil for site investigation is known as the Cable Percussion method. It consists of using a Shell in non cohesive soils and a clay cutter in cohesive soils, both operated on a wire cable. Very hard soils, boulders and other hard obstructions are broken up by chiselling and the fragments removed with the Shell. Where ground conditions made it necessary, the borehole was lined with 200mm diameter steel casing. While the use of the Cable Percussion method of boring gives the maximum data on soil conditions, some mixing of laminated soil is inevitable. For this reason, thin lenses of granular material may not be noticed. Disturbed samples were taken from the boring tools at suitable depths, so that there is a representative sample at the top of each change in stratum and thereafter at regular intervals down the borehole until the next stratum was encountered. The disturbed samples were then sealed and sent to the laboratory where they were visually examined to confirm the description of the relevant strata. Standard Penetration Tests were carried out in the boreholes. The results of these tests, together with the depths at which the tests were taken are shown on the accompanying borehole records. The test consists of a thick wall sampler tube, 50mm external diameter, being driven into the soil by a monkey weighing 63.5kg and with a free drop of 760mm. For gravels and glacial till the driving shoe was replaced by a solid 60° cone. The Standard Penetration Test number referred to as the 'N' value is the number of blows required to drive the tube 300mm, after an initial penetration of 150mm. The number gives a guide to the consistency of the soil and can also be used to estimate the relative strength/density at the depth of the test and also to estimate the bearing capacity and compressibility of the soil. The cable percussion borehole logs are provided in Appendix 3 of this Report.

6.4. Rotary Boreholes

The rotary coring was carried out by a track mounted T44 Beretta rig at the locations shown in Figure 4. The rotary boreholes were completed from the ground surface or alternatively, where noted on the individual borehole log, from the base of the cable percussion borehole where a temporary liner was installed to facilitate follow-on rotary coring.

The T44 Beretta is equipped with rubber tracks which allow for short travel on pavement surfaces avoiding any damage to the surface. The T44 Beretta utilises a triple tube core barrel system operated using a wireline drilling process. The outer barrel is rotated by the drill rods and at its lower end, carries the coring bit. The inner barrel is mounted on a swivel so that it does not rotate during the process. The third barrel or liner is placed within the second one to retain the core intact and to preserve as much as possible the fabric of the drilling stratum. The core is cut by the coring bit and passes to the inner liner. The core is brought up to the surface within the inner barrel on a small diameter wire rope or line attached to the "overshoot"

recovery tool which is then placed into a core box in order of recovery. A drilling fluid, typically air mist or water flush is passed from the surface through hollow drill rods to the drill bit and is used to cool the drill bit. Temporary casing is used in some situations to support unstable ground or to seal off fissures or voids. It should be noted that the rotary coring can only achieve limited recovery in overburden, particularly granular or weakly cemented strata due to the flushing medium washing away the cohesive fraction during coring. The recovery achieved, where required is noted on the borehole logs and core photographs are provided to allow assessment of the core recovered. The rotary borehole logs are provided in Appendix 4 of this Report.

6.5. Surveying

The exploratory hole locations have been recorded using a KQGeo M8 GNSS System which records the coordinates and elevation of the locations to ITM as required by the project specification. The coordinates and elevations are provided on the exploratory hole logs in the appendices of this Report.

7.0 Ground Conditions

7.1. General

The ground conditions encountered during the investigation are summarised below with reference to insitu and laboratory test results. The full details of the strata encountered during the ground investigation are provided in the exploratory hole logs included in the appendices of this report. For full geotechnical descriptions of the ground conditions refer to the geotechnical site investigation report referenced in Section 2.0.

The sequence of strata encountered was consistent across the site and generally comprised;

- Topsoil/Surfacing
- Made Ground
- Granular Deposits
- Cohesive Deposits
- Bedrock

TOPSOIL: Topsoil was encountered in several of the exploratory holes and was present to a maximum depth of 0.50m BGL. Tarmacadam surfacing was present typically to a depth of 0.08m to 0.18m BGL.

MADE GROUND: Made Ground deposits were encountered beneath the Topsoil/Surfacing and were present to variable depths of between 0.50m and 1.70m BGL. These deposits were described generally as *grey brown or brown slightly sandy slightly gravelly Clay with cobbles and boulders and contained occasional fragments of concrete, red brick and plastic or grey slightly sandy clayey fine to coarse subangular to subrounded Gravel or Crushed Rock Fill.*

COHESIVE DEPOSITS: Cohesive deposits were encountered beneath the Made Ground and were described typically as *yellowish brown or brown slightly sandy slightly gravelly CLAY with occasional cobbles and boulders* overlying a *stiff dark grey or black slightly sandy slightly gravelly CLAY with occasional cobbles and boulders*. The secondary sand and gravel constituents varied across the site and with depth, with granular lenses occasionally present in the glacial till matrix. These deposits had some, occasional or frequent cobble and boulder content, where noted on the exploratory hole logs.

GRANULAR DEPOSITS: Granular deposits were encountered within the cohesive deposits and were typically described as dark grey *medium to coarse angular clayey GRAVEL*. The secondary sand/gravel and silt/clay constituents varied across the site and with depth while occasional or frequent cobble and boulder content also present, where noted on the exploratory hole logs.

BEDROCK: The rotary core boreholes recovered *medium strong to strong dark grey fine grained massive LIMESTONE*. This is typical of the Lucan Formation, which is noted on the geological mapping underlying the site.

The depth to rock varies from 9.58m BGL in BH02 to a maximum of 10.50m BGL in BH01. The total core recovery is good, typically 100% with some of the uppermost runs dropping to 80 or 90%. The SCR and RQD both are relatively poor in the upper weathered zone, often recovered as non-intact, however both indices show an increase with depth in each of the boreholes.

8.0 Laboratory Analysis

8.1. Analysis Suite

In order to assess materials, which may be excavated and removed from site, in terms of waste classification, a selection of samples collected were analysed for a suite of parameters which allows for the assessment of the soils in terms of total pollutant content for classification of materials as *hazardous* or *non-hazardous* (RILTA Suite). The suite also allows for the assessment of the soils in terms of suitability for placement at various categories of landfill. The parameter list for the RILTA suite includes analysis of the solid samples for arsenic, barium, cadmium, chromium, copper, cyanide, lead, nickel, mercury, zinc, speciated aliphatic and aromatic petroleum hydrocarbons, pH, sulphate, sulphide, moisture content, soil organic matter and an asbestos screen.

The RILTA suite also includes those parameters specified in the EU Council Decision establishing criteria for the acceptance of waste at Landfills (Council Decision 2003/33/EC), which for the solid samples are pH, total organic carbon (TOC), speciated aliphatic and aromatic petroleum hydrocarbons, BTEX, phenol, polychlorinated biphenyls (PCB) and PAH.

In line with the requirement of Council Decision 2003/33/EC a leachate was generated from the solid samples which was in turn analysed for antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, chloride, fluoride, soluble sulphate, sulphide, phenols, dissolved organic carbon (DOC) and total dissolved solids (TDS).

The laboratory testing was completed by Element Materials Technology (EMT) in the UK; EMT is a UKAS accredited laboratory. The full laboratory reports are included in Appendix 5.

8.2. Asbestos

Asbestos fibres were not detected in the samples. The laboratory did not identify asbestos containing materials (ACMs) in the samples.

9.0 Waste Classification

GII understands that any materials which may be excavated and removed from site would meet the definition of waste under the Waste Framework Directive. Due to the varying levels of anthropogenic materials encountered in the made ground there are potentially two sets of List of Waste (LoW)² codes with “mirror” entries which may be applied to excavated materials to be removed from site.

1. 17-05-03* (soil and stone containing dangerous substances, classified as hazardous) or 17-05-04 (soil and stone other than those mentioned in 17-05-03, not hazardous); or
2. 17-09-03* (other construction and demolition wastes (including mixed wastes) containing hazardous substances) or 17-09-04 (mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03).

Where waste is a mirror entry in the LoW, it can be classified via a process of analysis against standard criteria set out in the Waste Framework Directive. The assessment process is described in detail in guidance published by the Irish (EPA Waste Classification, List of Waste & Determining if Waste is Hazardous or Non-Hazardous, June 2015) and UK regulatory authorities (Guidance on the Classification and Assessment of Waste: Technical Guidance WM3, 2015). The assessment involves comparison of the concentration of various parameters against defined threshold values.

The specific LoW code which should be applied to the material at each sample location is summarised in Table 2 below. These codes are only applicable where the material is being removed from a site as a waste.

GII use HazWasteOnline™, a web-based commercial waste classification software tool which assists in the classification of potentially hazardous materials. This tool was used to determine whether the materials sampled are classified as hazardous or non-hazardous. The use of the online tool is accepted by the EPA (EPA 2014).

The conclusions presented in the report are based on GII’s professional opinion. **It should be noted that the environmental regulator (in this case the EPA) and the waste acceptor (in this case a landfill**

² Formerly European Waste Catalogue Codes (EWC Codes)

operator) shall decide whether a waste is hazardous or non-hazardous and suitable for disposal at their facility.

9.1. HazWasteOnLine™ Results

In total, fourteen (14 No.) samples were assessed using the HazWasteOnLine™ Tool. All samples were classified as being non-hazardous. The complete HazWasteOnLine™ report for all samples is included in Appendix 6. The specific LoW code which should be applied to the material at each SI location is summarised in Table 2 below. The assigning of the LoW code is based on observations recorded in the trial pits and boreholes, an estimation of the % of anthropogenic material present and the results of the HazWasteOnline™ output. The final LoW codes applied at the time of disposal may vary due to variations in % of anthropogenic material observed in the excavation phase. Where there is in excess of 2%³ anthropogenic material observed the LoW code 17 09 04 may be applied.

9.2. Landfill Waste Acceptance Criteria

Waste Acceptance Criteria (WAC) have been agreed by the EU (Council Decision 2003/33/EC) and are only applicable to material if it is to be disposed of as a waste at a landfill facility. Each individual member state and licensed operators of landfills may apply more stringent WAC. WAC limits and the associated laboratory analysis are not suitable for use in the determination of whether a waste is hazardous or non-hazardous. The data have been compared to the WAC limits set out in Council Decision 2003/33/EC as well as the specific increased WAC which the EPA have applied to a selection of EPA licenced landfills. These landfills have higher limits for a range of parameters while still operating under an inert landfill licence. The WAC data considered in combination with the waste classification outlined in Section 9.1 allows the most suitable waste category to be applied to the material tested. The potentially applicable waste categories are summarised in Table 1. A summary of the WAC data is presented in Appendix 7. The waste category assigned to each sample is summarised in Table 2.

Table 1 Potential Waste Categories for Disposal/Recovery

Waste Category	Classification Criteria
Category A Unlined Facilities	Soil and Stone only which are free from ⁴ anthropogenic materials such as concrete, brick, timber. Soil must be free from “contamination” e.g. PAHs, Hydrocarbons ⁵ .
Category B1 Inert Landfill	Reported concentrations within inert waste limits, which are set out by the adopted EU Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive 1999/31/EC (2002).

³ EPA (2020) - Guidance on Waste Acceptance Criteria at Authorised Soil Recovery Facilities.

⁴ Free from equates to less than 2%.

⁵ Total BTEX 0.05mg/kg, Mineral Oil 50mg/kg, Total PAHs 1mg/kg, Total PCBs 0.05mg/kg and Asbestos No Asbestos Detected – EPA Guidance on Waste Acceptance Criteria at Authorised Soil Recovery Facilities, 2020.

Waste Category	Classification Criteria
	Results also found to be non-hazardous using the HWOL ⁶ application.
Category B2 Inert Landfill	Reported concentrations greater than Category B1 criteria but less than IMS Hollywood Landfill acceptance criteria, as set out in their Waste Licence W0129-02. Results also found to be non-hazardous using the HWOL application.
Category C Non-Haz Landfill	Reported concentrations greater than Category B2 criteria but within non-haz landfill waste acceptance limits set out by the adopted EU Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive 1999/31/EC (2002). Results also found to be non-hazardous using the HWOL application.
Category C 1 Non-Haz Landfill	As Category C but containing < 0.001% w/w asbestos fibres.
Category C 2 Non-Haz Landfill	As Category C but containing >0.001% and <0.01% w/w asbestos fibres
Category C 3 Non-Haz Landfill	As Category C but containing >0.01% and <0.1% w/w asbestos fibres.
Category D Hazardous Treatment	Results found to be hazardous using HWOL Application.
Category D 1 Hazardous Disposal	Results found to be hazardous due to the presence of asbestos (>0.1%).

9.3. Final Waste Categorisation

All samples were assessed in terms of waste classification using the HazWasteOnLine™ tool and also the WAC set out in Council Decision 2003/33/EC and the EPA's increased WAC to give a final waste categorisation to determine the most appropriate disposal route for any waste generated. The final and most applicable waste category for each sample is summarised in Table 2.

10.0 Soil Recovery Facility Suitability

GII assessed the suitability of the material sampled in line with the EPA 2020 Guidance on waste acceptance criteria at authorised soil recovery facilities⁷.

The guidance outlines a summary of Maximum Concentrations and/or Trigger Levels in Soil & Stone for SRFs based on the location of the facility or site in the country (Geochemical Domains).

⁶ HazWasteOnLine™ Tool.

⁷ Guidance on waste acceptance criteria at authorised soil recovery facilities 2020 - ENVIRONMENTAL PROTECTION AGENCY

The subject site is located within Domain 2 and as such the samples collected have been assessed against the SRF criteria for Domain 2. The waste categories assigned to each sample are based on the material being disposed of within Domain 2.

In the event that the material is disposed of outside of Domain 2 refer to Table 3 which assesses the suitability of each individual sample to be disposed of in each Domain.

In terms of their chemical properties one of the samples of the made ground material encountered on the site may be acceptable at a Domain 2 SRF following excavation and a visual assessment of the percentage of anthropogenic material contained within it. If there is less than 2% anthropogenic material present then it may be accepted by an SRF. This assessment is at the discretion of the SRF.

Table 2 Individual Sample Waste Category

Sample ID	Sample Depth (m)	Material Type	Sample Date	LoW Code	Waste Category
TP-01	0.50	Made Ground <2% Anthropogenic Material	22/11/2023	17 05 04	Category B2 - Domain 2
TP-01	1.00	Clay	22/11/2023	17 05 04	Category A - Domain 2
TP-02	0.50	Made Ground <2% Anthropogenic Material	22/11/2023	17 05 04	Category A - Domain 2
TP-02	1.00	Made Ground <2% Anthropogenic Material	22/11/2023	17 05 04	Category B1 - Domain 2
TP-03	0.50	Made Ground <2% Anthropogenic Material	22/11/2023	17 05 04	Category B1 - Domain 2
TP-03	2.00	Clay	22/11/2023	17 05 04	Category A - Domain 2
BH-01	1.00	Clay	22/11/2023	17 05 04	Category A - Domain 2
BH-02	1.00	Clay	22/11/2023	17 05 04	Category B1 - Domain 2
BH-02	2.00	Clay	22/11/2023	17 05 04	Category A - Domain 2
BH-03	1.00	Clay	22/11/2023	17 05 04	Category A - Domain 2
BH-04	1.00	Clay	22/11/2023	17 05 04	Category A - Domain 2
BH-04	2.00	Clay	22/11/2023	17 05 04	Category A - Domain 2
BH-05	0.50	Made Ground <2% Anthropogenic Material	22/11/2023	17 05 04	Category B1 - Domain 2

Sample ID	Sample Depth (m)	Material Type	Sample Date	LoW Code	Waste Category
BH-06	1.00	Clay	22/11/2023	17 05 04	Category A - Domain 2

Table 3 Geochemical Domain Suitability

ID	Depth	Material	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7
TP-01	0.50	Made Ground <2% Anthropogenic Material	x	x	x	x	x	x	x
TP-01	1.00	Clay	x	✓	✓	x	x	x	x
TP-02	0.50	Made Ground <2% Anthropogenic Material	x	✓	✓	✓	✓	✓	x
TP-02	1.00	Made Ground <2% Anthropogenic Material	x	x	x	x	x	x	x
TP-03	0.50	Made Ground <2% Anthropogenic Material	x	x	x	x	x	x	x
TP-03	2.00	Clay	✓	✓	✓	x	✓	✓	x
BH-01	1.00	Clay	✓	✓	✓	✓	✓	✓	x
BH-02	1.00	Clay	x	x	x	x	x	x	x
BH-02	2.00	Clay	✓	✓	✓	x	✓	✓	x
BH-03	1.00	Clay	x	✓	✓	x	x	x	x
BH-04	1.00	Clay	x	✓	✓	x	x	x	x
BH-04	2.00	Clay	✓	✓	✓	x	✓	✓	x
BH-05	0.50	Made Ground <2% Anthropogenic Material	x	x	x	x	x	x	x
BH-06	1.00	Clay	✓	✓	✓	x	✓	x	x

x - not suitable for disposal in this domain

✓ - suitable for disposal in this domain

11.0 Conclusions & Recommendations

The conclusions and recommendations given and opinions expressed in this report are based on the findings of the site investigation works and laboratory testing undertaken. Where any opinion is expressed on the classification of material between site investigation locations, this is for guidance only and no liability

can be accepted for its accuracy. No responsibility can be accepted for conditions which have not been revealed by the findings at the site investigation locations.

11.1. Conclusions

11.1.1. Waste Classification

Based on the results of the HazWasteOnLine™ tool the material sampled across the site if being considered a waste can be classified as non-hazardous.

11.1.2. Asbestos

Asbestos was not detected in the soil samples.

11.1.3. Waste Categories

The most applicable waste categories for each of the samples if being considered a waste to be disposed of within Domain 2 have been presented in Table 2.

Where material is to be disposed of outside of the Geochemical Domain within which the site is located refer to Table 3 within this report.

11.2. Recommendations

11.2.1. Waste Transfer

In the event that material is excavated for removal from site, any firm engaged to transport waste material from site and the operator of any waste facility that will accept subsoils excavated from this site should be furnished with, at a minimum, copies of the **full unabridged** laboratory reports and HazWasteOnLine™ report for all samples presented in this report.

The non-hazardous material across the site if excavated should be removed from site to an appropriate facility under either the LoW codes 17 05 04 or 17 09 04. Where during excavation there is noted to be in excess of 2% anthropogenic material the appropriate LoW code which should be applied is 17 09 04.

12.0 References

Environment Agency (2013). *Waste Sampling and Testing for Disposal to Landfill*.

Environment Agency (2015). *Technical Guidance WM3 - Guidance on the classification and assessment of waste (1st edition 2015) Technical Guidance WM3*.

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Environmental Protection Agency (EPA) (2020). *Guidance on Waste Acceptance Criteria at Authorised Soil Recovery Facilities*.

Association of Geotechnical and Geoenvironmental Specialists (2019). *Waste Classification for Soils – A Practitioners Guide*.

APPENDIX 1 - Figures



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712300E

712400E

712500E

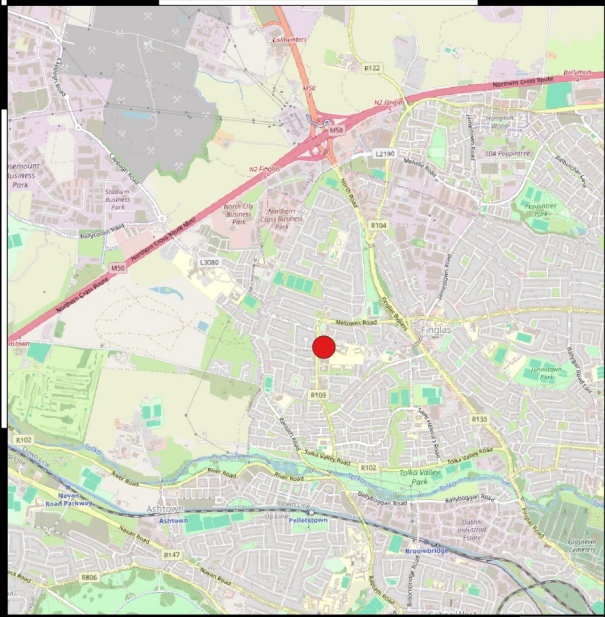
739100N

739000N

738900N

738800N

738700N



- Site Location
- Indicative Site Boundary

Client:



Project Code:

13061-08-23

Project Title:

Housing Bundle 4 & 5 - Lot 2
- Church of the Annunciation

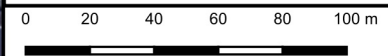
Drawing Title:

Figure 1 Site Location



GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176



Drawn By:
BS

Date:
21-03-2024

712000E

712100E


712200E

712300E

712400E

712500E



 Indicative Site Location

Client:



Project Code:

13061-08-23

Project Title:

Housing Bundle 4 & 5 - Lot 2 -
Church of the Annunciation

Drawing Title:

Figure 2 Google Aerial
Image March 2021




GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176

Drawn By:
BS

Date:
24-05-2023



 Indicative Site Location

Client:



Project Code:

13061-08-23

Project Title:

Housing Bundle 4 & 5 - Lot 2 -
Church of the Annunciation

Drawing Title:

Figure 3 Google Aerial
Image August 2021



GROUND INVESTIGATIONS IRELAND
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Newcastle, Co. Dublin
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Drawn By:
BS

Date:
24-05-2023

712200E 712230E 712260E 712290E 712320E 712350E 712380E

738990N

738960N




738930N

738900N

738870N

738840N



-  Indicative Site Boundary
-  Trial Pit
-  Borehole

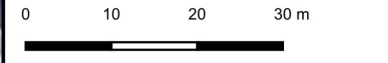
Client:


Project Code:
13061-08-23

Project Title:
Housing Bundle 4 & 5 - Lot 2
- Church of the Annunciation

Drawing Title:
Figure 4 Trial Pit and Borehole
Locations


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Drawn By: BS
 Date: 21-03-2024

712200E 712230E 712260E 712290E 712320E 712350E 712380E

APPENDIX 2 – Trial Pit Records





Excavation Method Trial Pit	Dimensions 2.30m x 0.50m x 1.90m (L x W x D)	Ground Level (mOD) 62.52	Client National Development Finance Agency	Job Number 13061-08-23(2)
	Location 738860.4 E 712261 N	Dates 17/10/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						MADE GROUND grey slightly sandy clayey fine to coarse sub angular to sub rounded Gravel		
				62.02	0.50	Firm greyish brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
				61.22	1.30	Firm to stiff brown slightly sandy gravelly CLAY		
			Slow(1) at 1.80m.	60.62	1.90	Complete at 1.90m		∇1

Plan .	Remarks Groundwater encountered at 1.80m BGL Trial pit side walls stable Trial pit backfilled upon completion		
	<table border="1"> <tr> <td>Scale (approx) 1:25</td> <td>Logged By GGR</td> <td>Figure No. 13061-08-23(2).SA01</td> </tr> </table>	Scale (approx) 1:25	Logged By GGR
Scale (approx) 1:25	Logged By GGR	Figure No. 13061-08-23(2).SA01	



Excavation Method Trial Pit	Dimensions 2.80m x 0.50m x 1.90m (L x W x D)	Ground Level (mOD) 63.86	Client National Development Finance Agency	Job Number 13061-08-23(2)
	Location 738901.1 E 712337.2 N	Dates 17/10/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				63.56	0.30	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				63.06	0.80	Soft to firm brown slightly sandy slightly gravelly CLAY		
				61.96	1.90	Firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
						Complete at 1.90m		

Plan .	Remarks No groundwater encountered Trial pit side walls stable Trial pit backfilled upon completion	
		Scale (approx) 1:25



Excavation Method Trial Pit	Dimensions 3.80m x 1.00m x 3.00m (L x W x D)	Ground Level (mOD) 64.45	Client National Development Finance Agency	Job Number 13061-08-23(2)
	Location 738921.9 E 712300.3 N	Dates 17/10/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
0.50	B1		Slow(1) at 0.70m.	63.95	0.50	MADE GROUND grey slightly sandy very gravelly Clay with fragments of red brick and concrete			
					63.55	0.90	Soft to firm grey slightly sandy slightly gravelly CLAY		∇1
1.00	B2		Slow(2) at 2.60m.	63.55	0.90	Firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles			
					62.75	1.70	Soft to firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
2.00	B3				61.85	2.60	Firm to stiff dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		∇2
3.00	B4			61.45	3.00	Complete at 3.00m			

Plan .	Remarks Groundwater encountered at 0.70m and 2.60m BGL Trial pit side walls stable Trial pit backfilled upon completion	
		Scale (approx) 1:25



Excavation Method Trial Pit	Dimensions 5.00m x 1.00m x 3.10m (L x W x D)	Ground Level (mOD) 64.47	Client National Development Finance Agency	Job Number 13061-08-23(2)
	Location 738881.1 E 712276.4 N	Dates 17/10/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B1					MADE GROUND brown slightly sandy gravelly Clay with many fragments of red brick, slab and concrete		
1.00	B2				(1.70)			
2.00	B3		Slow(1) at 1.70m.	62.77	1.70	Firm to stiff dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		∇1
3.00	B4				(1.40)			
				61.37	3.10	Complete at 3.10m		

Plan .	Remarks Groundwater encountered at 1.70m BGL Trial pit side walls stable Trial pit backfilled upon completion	
		Scale (approx) 1:25



Excavation Method Trial Pit	Dimensions 3.30m x 0.90m x 3.00m (L x W x D)	Ground Level (mOD) 62.80	Client National Development Finance Agency	Job Number 13061-08-23(2)
	Location 738860.8 E 712324.4 N	Dates 17/10/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B1			62.50	0.30	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
					0.50	MADE GROUND dark brown slightly sandy gravelly Clay with occasional angular to sub angular cobbles and fragments of red brick and plastic		
1.00	B2			62.00	0.80	Soft to firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
					0.50			
2.00	B3			61.50	1.30	Firm brown slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles		
					1.40			
3.00	B4			60.10	2.70	Very stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles		
					0.30			
				59.80	3.00	Complete at 3.00m		

Plan	Remarks
	No groundwater encountered Trial pit side walls stable Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(2).TP03

APPENDIX 3 – Cable Percussion Borehole Records





Machine : Dando 2000		Casing Diameter 200mm cased to 6.20m		Ground Level (mOD) 63.88		Client National Development Finance Agency		Job Number 13061-08-23(2)	
Method : Cable Percussion		Location 738927.6 E 712347.6 N		Dates 03/11/2023- 06/11/2023		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=23 B1			Water strike(1) at 0.60m, rose to 0.45m in 20 mins. 5,4/6,4,6,7	63.80 63.68 63.38 62.88	0.08 0.20 (0.30) 0.50 (0.50) 1.00	MADE GROUND: Tarmac MADE GROUND: Grey brown sandy gravelly CLAY MADE GROUND: Grey sandy fill with concrete fragments Stiff yellowish brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded. Stiff grey slightly sandy slightly gravelly CLAY gravel is fine to coarse sub-angular to sub-rounded.		▼1 ▼1
2.00-2.41 2.00	SPT(C) 50/260 B2			6,7/8,12,16,14 Water strike(2) at 2.20m, rose to 1.70m in 20 mins.		(2.00)			▼2 ▼2
3.00-3.45 3.00	SPT(C) N=50 B3			6,8/13,14,15,8	60.88	3.00	Very stiff dark grey slightly sandy slightly gravelly CLAY GRavel is sub-angular to sub-rounded.		
4.00-4.45 4.00	SPT(C) N=50 B4			4,9/12,16,16,6		(2.90)			
5.00-5.45 5.00	SPT(C) N=50 B5			8,9/14,16,20					
6.00 6.00-6.45	B6 SPT(C) N=50			Water strike(3) at 5.90m, rose to 5.80m in 20 mins. 10,13/50	57.98 57.68	5.90 (0.30) 6.20	Dense grey coarse sub-rounded to very angular GRAVEL with medium cobble content. Terminated at 6.20m		▼3 ▼3

Remarks Cable percussion boring techniques carried out from ground level to 6.2m bGL... Borehole terminated at 6.2m bGL due to obstruction - possible boulder or bedrock. Borehole backfilled on completion.	Scale (approx)	Logged By
	1:50	JI & JC
	Figure No. 13061-08-23(2).BH01	



Machine : Dando 2000	Casing Diameter 200mm cased to 6.30m	Ground Level (mOD) 64.05	Client National Development Finance Agency	Job Number 13061-08-23(2)
Method : Cable Percussion	Location 738925.9 E 712265.4 N	Dates 08/11/2023- 09/11/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
1.00-1.45 1.00	SPT(C) N=18 B1			2,3/4,5,5,4	63.97 63.75	0.08 (0.22) 0.30	MADE GROUND Blue grey crushed rock fill (804) MADE GROUND: Angular cobbles with concrete bricks			
2.00-2.45 2.00	SPT(C) N=31 B2			4,5/6,8,8,9	62.05	2.00	Stiff yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.			
3.00-3.45 3.00	SPT(C) N=35 B3			3,4/7,9,9,10 Water strike(1) at 3.20m, rose to 3.10m in 20 mins.						
4.00-4.45 4.00	SPT(C) N=48 B4			5,7/8,12,13,15		(4.00)				
5.00-5.45 5.10	SPT(C) N=50 B5			6,11/13,17,20						
6.00-6.45 6.00	SPT(C) N=50 B6			10,20/50	58.05 57.75	6.00 (0.30) 6.30	Dense dark grey medium to coarse angular to very angular clayey GRAVEL Terminated at 6.30m			

Remarks Cable percussion boring techniques carried out from ground level to 6.3m bGL... Borehole terminated at 6.3m bGL due to obstruction - possible boulder or bedrock.	Scale (approx)	Logged By
	1:50	JC
	Figure No. 13061-08-23(2).BH02	



Machine : Dando 2000		Casing Diameter 200mm cased to 6.20m		Ground Level (mOD) 63.29		Client National Development Finance Agency		Job Number 13061-08-23(2)	
Method : Cable Percussion		Location 738887.9 E 712349.8 N		Dates 01/11/2023- 02/11/2023		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=8 B1			1,1/1,2,2,3	62.79	(0.50) 0.50	TOPSOIL Soft to firm yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
2.00-2.45 2.30	SPT(C) N=35 B2			2,3/6,7,10,12	61.29	(1.50) 2.00	Very stiff dark grey/black slightly sandy slightly gravelly CLAY. Gravel is fine to medium angular to very angular.		
3.00-3.40 3.00	SPT(C) 50/250 B3			6,11/14,16,18,2					▼1
4.00-4.40 4.00	SPT(C) 50/250 B4			4,8/12,14,19,5		(4.20)			
5.00-5.35 5.00	SPT(C) 50/200 B5			6,7/15,15,20					▼2
6.00-6.18	SPT(C) 50/30			Water strike(2) at 5.60m, rose to 5.40m in 20 mins. 7,13/50	57.09	6.20	Terminated at 6.20m		▼2

Remarks Cable percussion boring techniques carried out from ground level to 6.2m bGL... Borehole terminated at 6.2m bGL due to obstruction - possible boulder or bedrock. Borehole backfilled on completion. Chiselling from 6.20m for 0.417 hours.	Scale (approx)	Logged By
	1:50	Jl
	Figure No. 13061-08-23(2).BH03	



Machine : Dando 2000	Casing Diameter 200mm cased to 5.60m	Ground Level (mOD) 63.07	Client National Development Finance Agency	Job Number 13061-08-23(2)
Method : Cable Percussion	Location 738884.4 E 712263.1 N	Dates 07/11/2023- 08/11/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=22 B1			3,34/6,5,5,6	62.89 62.32 62.07	(0.18) 0.18 (0.57) 0.75 (0.25) 1.00	MADE GROUND: Crushed rock fill (804) MADE GROUND: Large angular stone fill MADE GROUND: Dark grey slightly sandy slightly gravelly Clay. Gravel is fine to coarse angular. Stiff yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded with low cobble content.		
2.00-2.45 2.00	SPT(C) N=34 B2			2,3/5,7,10,12		(2.00)			
3.00-3.45 3.00	SPT(C) N=50 B3			5,11/13,14,16,7	60.07	3.00	Very stiff slightly sandy gravelly CLAY Gravel is fine to coarse sub angular to angular with low cobble content.		
4.00-4.45 4.00	SPT(C) N=50 B4			6,7/19,21,10		(2.60)			
5.00-5.45 5.00	SPT(C) N=50 B5			4,10/20,30					
5.50 5.60-6.05	B6 SPT(C) N=50			20,20/50	57.47	5.60	Terminated at 5.60m		

Remarks Borehole terminated at 5.6m bGL due to obstruction - possible boulder or bedrock. Cable percussion boring techniques carried our from ground level to 5.6m bGL. Borehole backfilled on completion. Chiselling from 5.60m to 5.60m for 0.3 hours.	Scale (approx)	Logged By
	1:50	JC
	Figure No. 13061-08-23(2).BH04	



Machine : Dando 2000		Casing Diameter 200mm cased to 6.80m		Ground Level (mOD) 62.82		Client National Development Finance Agency		Job Number 13061-08-23(2)	
Method : Cable Percussion		Location 738862 E 712333.1 N		Dates 02/11/2023- 03/11/2023		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B1				62.42	(0.40)	Brown sandy TOPSOIL		
1.00-1.45	SPT(C) N=11			1,3/2,2,3,4	62.02	0.40 (0.40) 0.80	MADE GROUND: Brown clay with fragments of red brick		
1.50	B2					(1.20)	Firm yellowish brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
2.00-2.45	SPT(C) N=15			2,2/4,3,4,4	60.82	2.00	Stiff dark grey to black slightly sandy gravelly CLAY. Gravel is fine to coarse angular to very angular.		
2.70	B3					(1.50)			
3.00-3.45	SPT(C) N=29			3,5/5,6,8,10					
3.50	B4				59.32	3.50	Very stiff dark grey to black slightly sandy gravelly CLAY. Gravel is fine to coarse angular to very angular.		
4.00-4.41	SPT(C) 53/260			6,7/11,14,17,11					
4.50	B5					(3.10)			
5.00-5.33 5.50	SPT(C) 50/180 B6			Water strike(1) at 5.00m, rose to 4.90m in 20 mins. 5,9/12,16,22					
6.00-6.25	SPT(C) 50/100			7,12/20,30					
6.60 6.80-6.88	B7 SPT(C) 50*/75 50/0			50/50	56.22 56.02	6.60 (0.20) 6.80	Dense dark grey coarse angular very clayey GRAVEL.		
							Terminated at 6.80m		

Remarks Cable percussion boring techniques carried out from ground level to 6.8m bGL. Borehole backfilled on completion. Borehole terminated at 6.8m bGL due to obstruction - possible boulder or bedrock. Chiselling from 6.80m for 0.5 hours.	Scale (approx)	Logged By
	1:50	Jl
	Figure No. 13061-08-23(2).BH05	



Machine : Dando 2000 Method : Cable Percussion	Casing Diameter 200mm cased to 5.10m	Ground Level (mOD) 64.40	Client National Development Finance Agency	Job Number 13061-08-23(2)
	Location 738884.1 E 712277.7 N	Dates 08/11/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=9 B1			1,1/2,2,2,3	63.40	1.00 (0.60)	Pit excavated prior to drilling. Soft to firm yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub rounded.		
2.00-2.45 2.00	SPT(C) N=15 B2			2,3/3,3,5,4	62.80 62.40	1.60 (0.40) 2.00	Firm to stiff black/dark grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to very angular with low cobble content. Stiff black/dark grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to very angular with low cobble content.		
3.00-3.45 3.00	SPT(C) N=22 B3			3,3/3,4,6,9		(2.00)			
4.00-4.30 4.00	SPT(C) 53/150 B4			5,7/13,17,23	60.40	4.00 (1.10)	Very stiff black/dark grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to very angular with low cobble content.		
5.00-5.00 5.00	SPT(C) 50*/0 50/0 B5			50/50	59.30	5.10	Complete at 5.10m		

Remarks Cable percussion boring techniques carried out from ground level to 5.1m bGL. Borehole terminated due to obstruction - possible boulder or bedrock. Chiselling from 4.90m to 5.10m for 1 hour.	Scale (approx)	Logged By
	1:50	Jl
	Figure No. 13061-08-23(2).BH06	

APPENDIX 4 - Rotary Borehole Records





Machine : Dando 2000 and Baretha T-41 Method : Percussion with Rotary Core Follow-on	Casing Diameter 200mm cased to 6.20m 63.5mm cased to 16.00m	Ground Level (mOD) 63.88	Client National Development Finance Agency	Job Number 13061-08-23(2)
	Location 738927.6 E 712347.6 N	Dates 03/11/2023-30/01/2024	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water							
1.00-1.45 1.00	SPT(C) N=23 B1			Water strike(1) at 0.60m, rose to 0.45m in 20 mins. 5,4/6,4,6,7	63.80 63.68 63.38 62.88	0.08 0.20 (0.30) 0.50 (0.50) 1.00	MADE GROUND: Tarmac MADE GROUND: Grey brown sandy gravelly CLAY MADE GROUND: Grey sandy fill with concrete fragments Stiff yellowish brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded. Stiff grey slightly sandy slightly gravelly CLAY gravel is fine to coarse sub-angular to sub-rounded.									
2.00-2.41 2.00	SPT(C) 50/260 B2			6,7/8,12,16,14 Water strike(2) at 2.20m, rose to 1.70m in 20 mins.		(2.00)										
3.00-3.45 3.00	SPT(C) N=50 B3 100 0 0			6,8/13,14,15,8	60.88	3.00	Very stiff dark grey slightly sandy slightly gravelly CLAY GRavel is sub-angular to sub-rounded.									
4.00-4.45 4.00	SPT(C) N=50 B4			4,9/12,16,16,6		(2.90)										
5.00-5.45 5.00	SPT(C) N=50 B5		0	8,9/14,16,20												
6.00 6.00-6.45	B6 SPT(C) N=50			Water strike(3) at 5.90m, rose to 5.80m in 20 mins. 10,13/50	57.98 57.68	5.90 (0.30) 6.20	Dense grey coarse sub-rounded to very angular GRAVEL with medium cobble content. Dark grey slightly sandy very gravelly CLAY with occasional sub angular to sub rounded cobbles									
7.00-7.45 7.00	<table border="1"> <tr> <th>TCR</th> <th>SCR</th> <th>RQD</th> <th>FI</th> </tr> <tr> <td>63</td> <td>0</td> <td>0</td> <td></td> </tr> </table>	TCR	SCR	RQD	FI	63	0	0				7,9/11,12,14,13 SPT(C) N=50		(3.80)		
TCR	SCR	RQD	FI													
63	0	0														
8.50-8.95 8.50	<table border="1"> <tr> <th>TCR</th> <th>SCR</th> <th>RQD</th> <th>FI</th> </tr> <tr> <td>59</td> <td>0</td> <td>0</td> <td></td> </tr> </table>	TCR	SCR	RQD	FI	59	0	0				9,12/15,18,17 SPT(C) N=50				
TCR	SCR	RQD	FI													
59	0	0														
10.00																

Remarks Cable percussion boring techniques carried out from ground level to 6.20 m BGL. Rotary Coring techniques carried out to 16.00m BGL. No groundwater encountered Borehole backfilled on completion.	Scale (approx) 1:50	Logged By JJ & JC & GGR
	Figure No. 13061-08-23(2).BH01	



Machine : Dando 2000 and Baretha T-41 Flush :	Casing Diameter 200mm cased to 6.20m 63.5mm cased to 16.00m	Ground Level (mOD) 63.88	Client National Development Finance Agency	Job Number 13061-08-23(2)
Core Dia: mm Method : Percussion with Rotary Core Follow-on	Location 738927.6 E 712347.6 N	Dates 03/11/2023-30/01/2024	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.45	89	26	7	24	SPT(C) N=50 8,15/24,26	53.88	10.00	Medium strong massive grey fine grained LIMESTONE with clay smearing moderately weathered		
11.50	100	80	53	23			(3.00)	10.00m to 13.00m BGL: Sequence consists of two fracture sets. F1: Dipping 0-30 degrees, close to wide spaced, planar smooth with clay smearing. F2: Dipping 70-90 Degrees, medium to wide spaced, planar smooth with clay smearing		
13.00	100	67	52	32		50.88	13.00	Strong to very strong massive dark grey fine grained LIMESTONE slightly weathered		
14.50							(3.00)	13.00m to 16.00m BGL: Sequence consists of two fracture sets. F1: Dipping 0-30 degrees, close to medium spaced, planar to undulating smooth . F2: Dipping 70-90 Degrees, medium to wide spaced, planar rough		
15.50	100	44	33	26						
16.00						47.88	16.00	Terminated at 16.00m		

Remarks	Scale (approx)	Logged By
	1:50	JJ & JC & GGR
	Figure No. 13061-08-23(2).BH01	



Machine : Dando 2000 and Baretha T-41 Method : Cable Percussion	Casing Diameter 200mm cased to 6.30m 63.5mm cased to 13.00m	Ground Level (mOD) 64.05	Client National Development Finance Agency	Job Number 13061-08-23(2)
	Location 738925.9 E 712265.4 N	Dates 08/11/2023- 31/01/2024	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
1.00-1.45 1.00	SPT(C) N=18 B1			2,3/4,5,5,4	63.97 63.75	0.08 (0.22) 0.30	MADE GROUND Blue grey crushed rock fill (804) MADE GROUND: Angular cobbles with concrete bricks			
2.00-2.45 2.00	SPT(C) N=31 B2			4,5/6,8,8,9	62.05	(1.70) 2.00	Stiff yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded. Very stiff black/dark grey slightly sandy slightly gravelly CLAY gravel is fine to coarse sub-angular to sub-rounded.			
3.00-3.45 3.00	SPT(C) N=35 B3 100 0	0	0	3,4/7,9,9,10 Water strike(1) at 3.20m, rose to 3.10m in 20 mins.						
4.00-4.45 4.00	SPT(C) N=48 B4			5,7/8,12,13,15		(4.00)				
5.00-5.45 5.10	SPT(C) N=50 B5			6,11/13,17,20						
6.00-6.45 6.00	SPT(C) N=50 B6			10,20/50	58.05 57.75	6.00 (0.30) 6.30	Dense dark grey medium to coarse angular to very angular clayey GRAVEL Very stiff grey slightly sandy very gravelly CLAY with occasional sub angular to sub rounded cobbles			
7.00-7.45 7.00	TCR SCR RQD FI SPT(C) N=50			9,12/15,20,15		(3.28)				
8.50-8.95 8.50	90 0 0 0			10,14/20,30 SPT(C) N=50						
10.00	93 27 20 6				54.47	9.58	Strong to very strong massive dark grey fine grained LIMESTONE slightly weathered			

Remarks Cable percussion boring techniques carried out from ground level to 6.30m BGL. Rotary coring techniques carried out to 13.00m BGL. No groundwater encountered Borehole backfilled upon completion	Scale (approx)	Logged By
	1:50	JC & GGR
	Figure No. 13061-08-23(2).BH02	



Machine : Dando 2000 and Baretha T-41
Flush :
Core Dia: mm
Method : Cable Percussion

Casing Diameter
200mm cased to 6.30m
63.5mm cased to 13.00m

Ground Level (mOD)
64.05

Client
National Development Finance Agency

Job Number
13061-08-23(2)

Location
738925.9 E 712265.4 N

Dates
08/11/2023-31/01/2024

Engineer

Sheet
2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
11.50	100	71	55	22			(3.42)	9.58m to 13.00m BGL: Sequence consists of two fracture sets. F1: Dipping 0-30 degrees, close to medium spaced, planar smooth with clay smearing. F2: Dipping 60-80 degrees, medium to wide spaced, undulating rough to planar smooth.			
13.00	100	89	67	18		51.05	13.00				
								Terminated at 13.00m			

Remarks	Scale (approx)	Logged By
	1:50	JC & GGR
Figure No.		13061-08-23(2).BH02



Machine : Dando 2000	Casing Diameter 200mm cased to 6.20m	Ground Level (mOD) 63.29	Client National Development Finance Agency	Job Number 13061-08-23(2)
Method : Cable Percussion	Location 738887.9 E 712349.8 N	Dates 01/11/2023- 02/11/2023	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=8 B1			1,1/1,2,2,3	62.79	(0.50) 0.50	TOPSOIL Soft to firm yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
2.00-2.45 2.30	SPT(C) N=35 B2			2,3/6,7,10,12	61.29	(1.50) 2.00	Very stiff dark grey/black slightly sandy slightly gravelly CLAY. Gravel is fine to medium angular to very angular.		
3.00-3.40 3.00	SPT(C) 50/250 B3			6,11/14,16,18,2					▼1
4.00-4.40 4.00	SPT(C) 50/250 B4			4,8/12,14,19,5		(4.20)			
5.00-5.35 5.00	SPT(C) 50/200 B5			6,7/15,15,20					▼2
6.00-6.18	SPT(C) 50/30			Water strike(2) at 5.60m, rose to 5.40m in 20 mins. 7,13/50	57.09	6.20	Terminated at 6.20m		▼2

Remarks Cable percussion boring techniques carried out from ground level to 6.2m bGL... Borehole terminated at 6.2m bGL due to obstruction - possible boulder or bedrock. Borehole backfilled on completion. Chiselling from 6.20m for 0.417 hours.	Scale (approx)	Logged By
	1:50	Jl
	Figure No. 13061-08-23(2).BH03	



Machine : Dando 2000		Casing Diameter 200mm cased to 5.60m		Ground Level (mOD) 63.07		Client National Development Finance Agency		Job Number 13061-08-23(2)	
Method : Cable Percussion		Location 738884.4 E 712263.1 N		Dates 07/11/2023- 08/11/2023		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=22 B1			3,34/6,5,5,6	62.89 62.32 62.07	(0.18) 0.18 (0.57) 0.75 (0.25) 1.00	MADE GROUND: Crushed rock fill (804) MADE GROUND: Large angular stone fill MADE GROUND: Dark grey slightly sandy slightly gravelly Clay. Gravel is fine to coarse angular. Stiff yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded with low cobble content.		
2.00-2.45 2.00	SPT(C) N=34 B2			2,3/5,7,10,12		(2.00)			
3.00-3.45 3.00	SPT(C) N=50 B3			5,11/13,14,16,7	60.07	3.00	Very stiff slightly sandy gravelly CLAY Gravel is fine to coarse sub angular to angular with low cobble content.		
4.00-4.45 4.00	SPT(C) N=50 B4			6,7/19,21,10		(2.60)			
5.00-5.45 5.00	SPT(C) N=50 B5			4,10/20,30					
5.50 5.60-6.05	B6 SPT(C) N=50			20,20/50	57.47	5.60	Terminated at 5.60m		

Remarks Borehole terminated at 5.6m bGL due to obstruction - possible boulder or bedrock. Cable percussion boring techniques carried out from ground level to 5.6m bGL. Borehole backfilled on completion. Chiselling from 5.60m to 5.60m for 0.3 hours.	Scale (approx)	Logged By
	1:50	JC
	Figure No. 13061-08-23(2).BH04	



Machine : Dando 2000		Casing Diameter 200mm cased to 6.80m		Ground Level (mOD) 62.82		Client National Development Finance Agency		Job Number 13061-08-23(2)	
Method : Cable Percussion		Location 738862 E 712333.1 N		Dates 02/11/2023- 03/11/2023		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B1				62.42	(0.40)	Brown sandy TOPSOIL		
1.00-1.45	SPT(C) N=11			1,3/2,2,3,4	62.02	0.40 (0.40) 0.80	MADE GROUND: Brown clay with fragments of red brick		
1.50	B2					(1.20)	Firm yellowish brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
2.00-2.45	SPT(C) N=15			2,2/4,3,4,4	60.82	2.00	Stiff dark grey to black slightly sandy gravelly CLAY. Gravel is fine to coarse angular to very angular.		
2.70	B3					(1.50)			
3.00-3.45	SPT(C) N=29			3,5/5,6,8,10					
3.50	B4				59.32	3.50	Very stiff dark grey to black slightly sandy gravelly CLAY. Gravel is fine to coarse angular to very angular.		
4.00-4.41	SPT(C) 53/260			6,7/11,14,17,11					
4.50	B5					(3.10)			
5.00-5.33 5.50	SPT(C) 50/180 B6			Water strike(1) at 5.00m, rose to 4.90m in 20 mins. 5,9/12,16,22					
6.00-6.25	SPT(C) 50/100			7,12/20,30					
6.60 6.80-6.88	B7 SPT(C) 50*/75 50/0			50/50	56.22 56.02	6.60 (0.20) 6.80	Dense dark grey coarse angular very clayey GRAVEL.		
							Terminated at 6.80m		

Remarks Cable percussion boring techniques carried out from ground level to 6.8m bGL. Borehole backfilled on completion. Borehole terminated at 6.8m bGL due to obstruction - possible boulder or bedrock. Chiselling from 6.80m for 0.5 hours.	Scale (approx)	Logged By
	1:50	Jl
	Figure No. 13061-08-23(2).BH05	



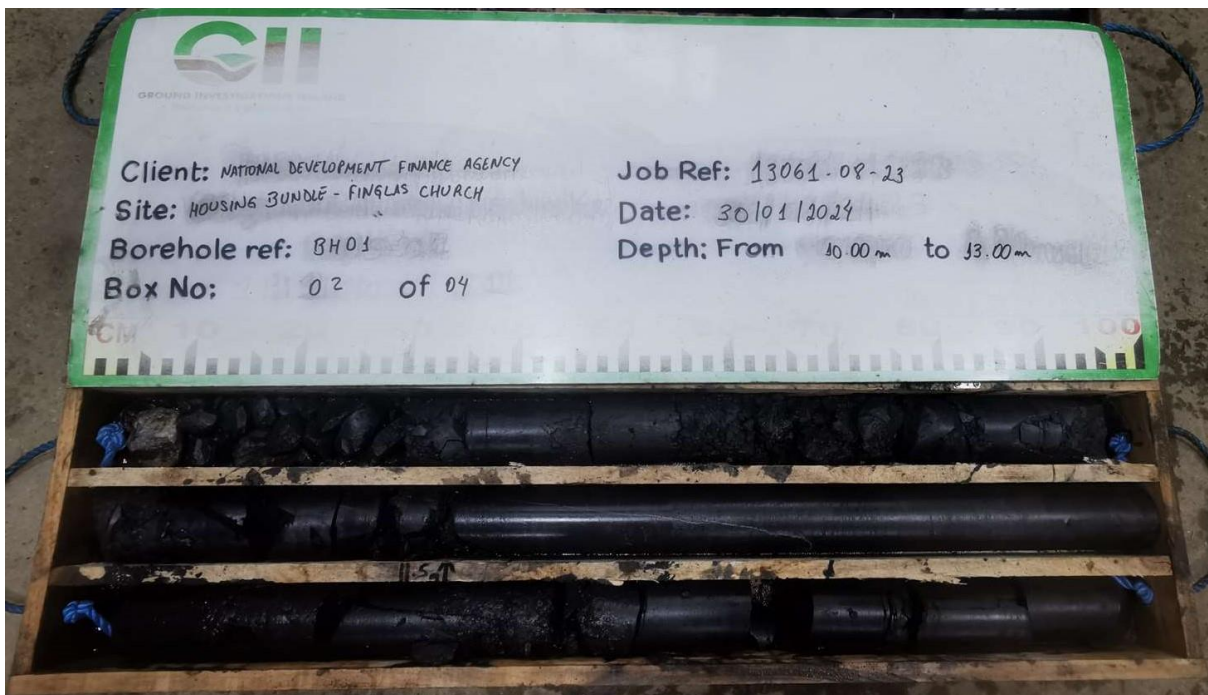
Machine : Dando 2000		Casing Diameter 200mm cased to 5.10m		Ground Level (mOD) 64.40		Client National Development Finance Agency		Job Number 13061-08-23(2)	
Method : Cable Percussion		Location 738884.1 E 712277.7 N		Dates 08/11/2023		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=9 B1			1,1/2,2,2,3	63.40	1.00 (1.00)	Pit excavated prior to drilling. Soft to firm yellowish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub rounded.		
2.00-2.45 2.00	SPT(C) N=15 B2			2,3/3,3,5,4	62.80 62.40	1.60 (0.40) 2.00	Firm to stiff black/dark grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to very angular with low cobble content. Stiff black/dark grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to very angular with low cobble content.		
3.00-3.45 3.00	SPT(C) N=22 B3			3,3/3,4,6,9		(2.00)			
4.00-4.30 4.00	SPT(C) 53/150 B4			5,7/13,17,23	60.40	4.00 (1.10)	Very stiff black/dark grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to very angular with low cobble content.		
5.00-5.00 5.00	SPT(C) 50*/0 50/0 B5			50/50	59.30	5.10	Complete at 5.10m		

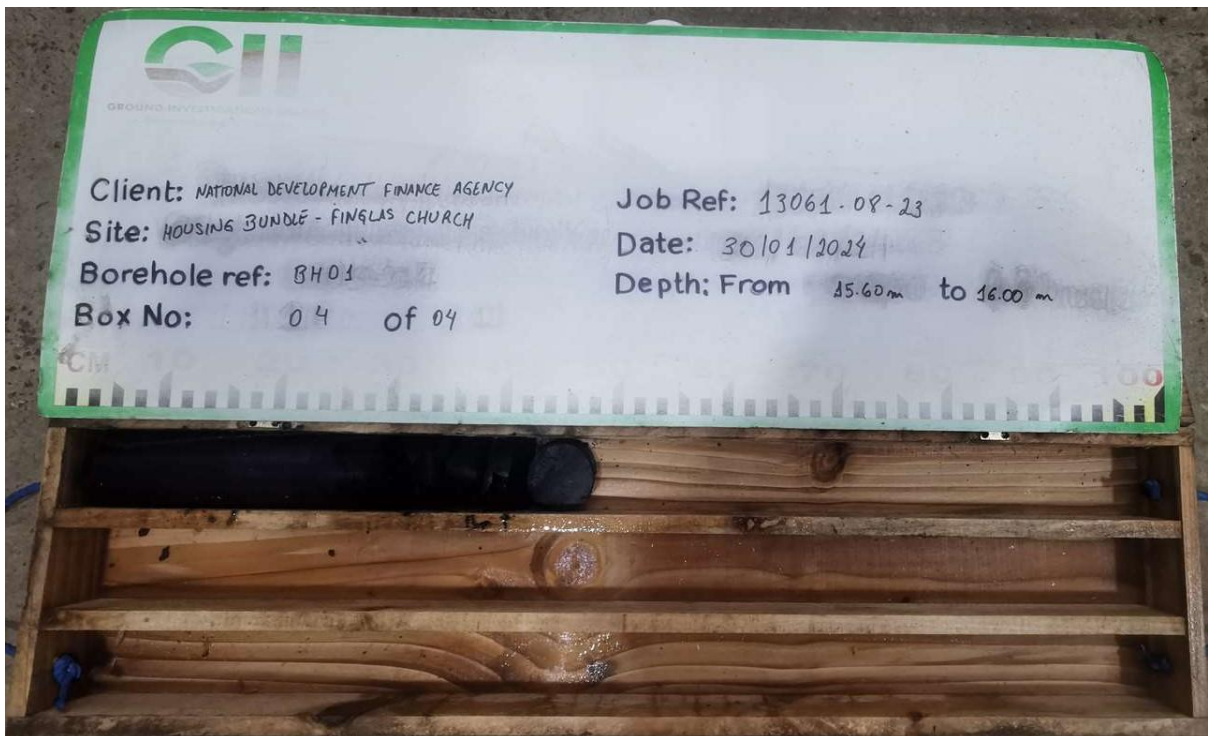
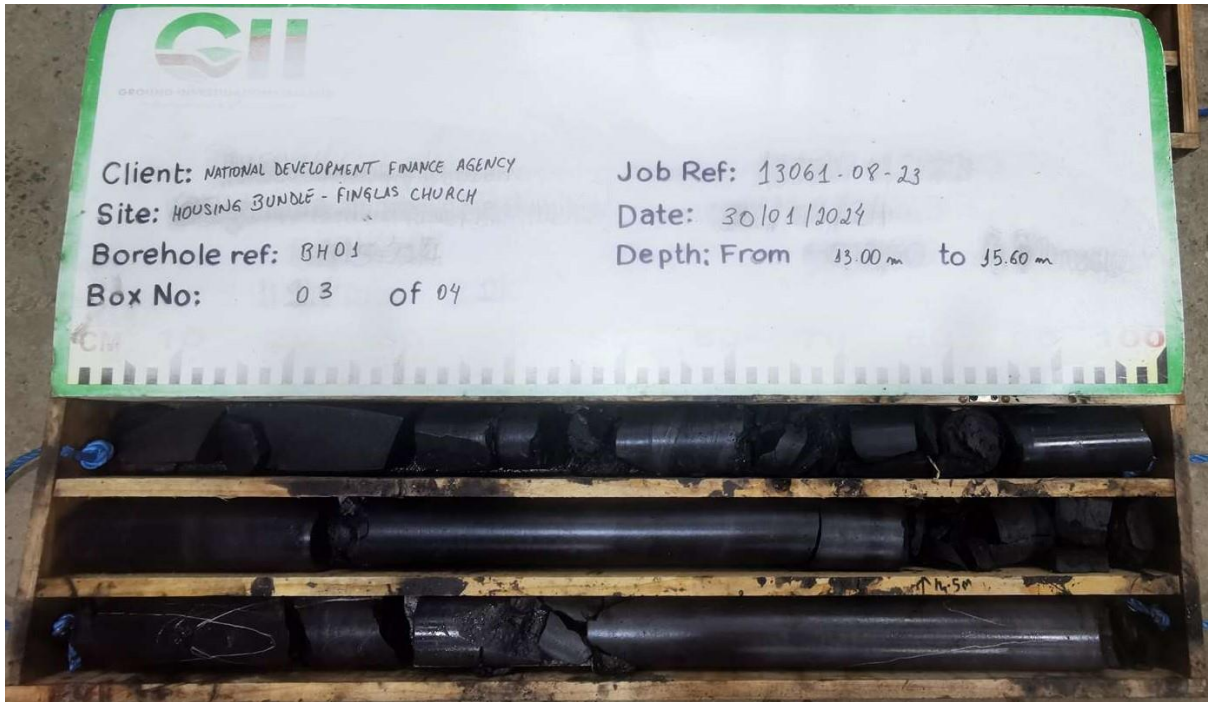
Remarks Cable percussion boring techniques carried out from ground level to 5.1m bGL. Borehole terminated due to obstruction - possible boulder or bedrock. Chiselling from 4.90m to 5.10m for 1 hour.	Scale (approx)	Logged By
	1:50	Jl
	Figure No. 13061-08-23(2).BH06	

Housing Bundle_ Finglas Church_ Rotary Core Photos

BH01

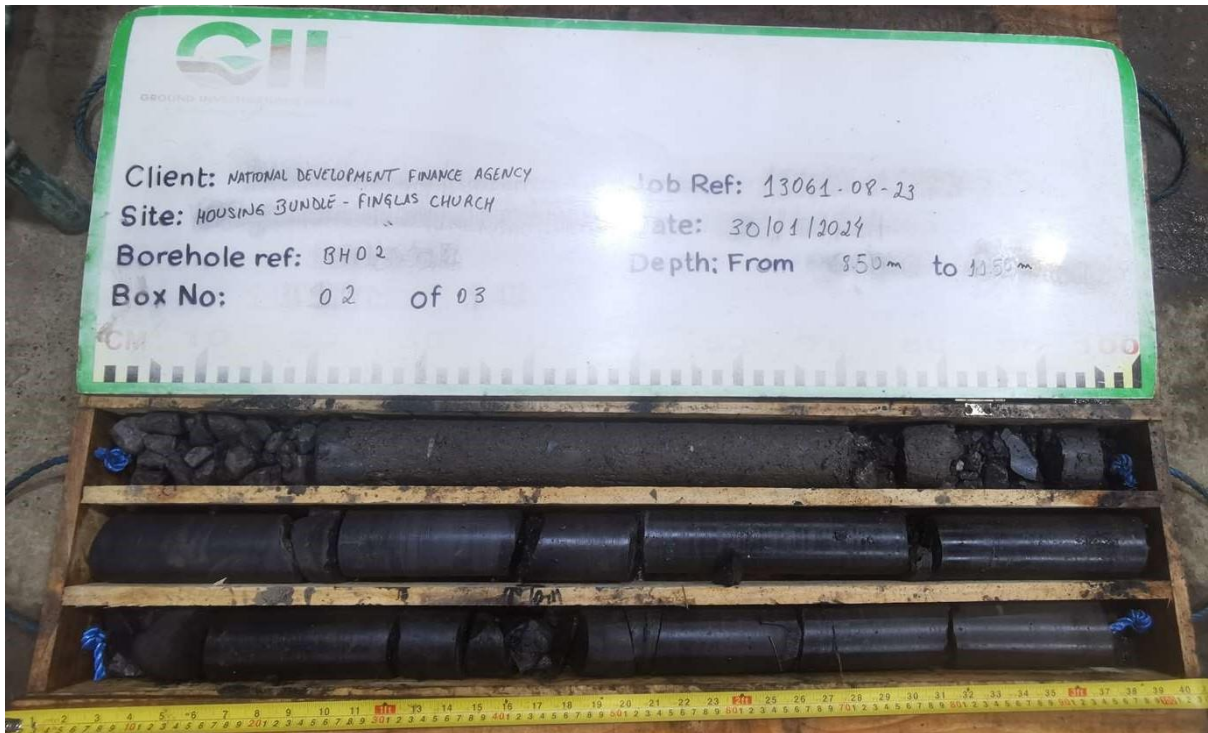
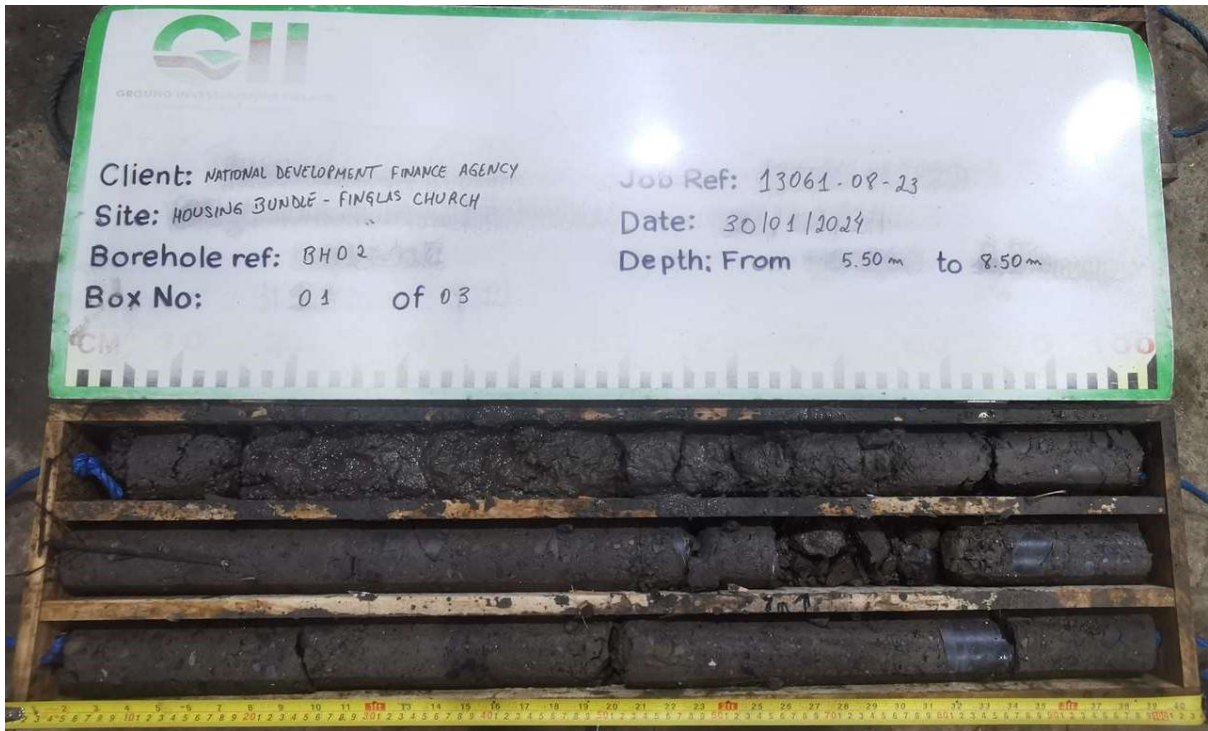


Housing Bundle_ Finglas Church_ Rotary Core Photos

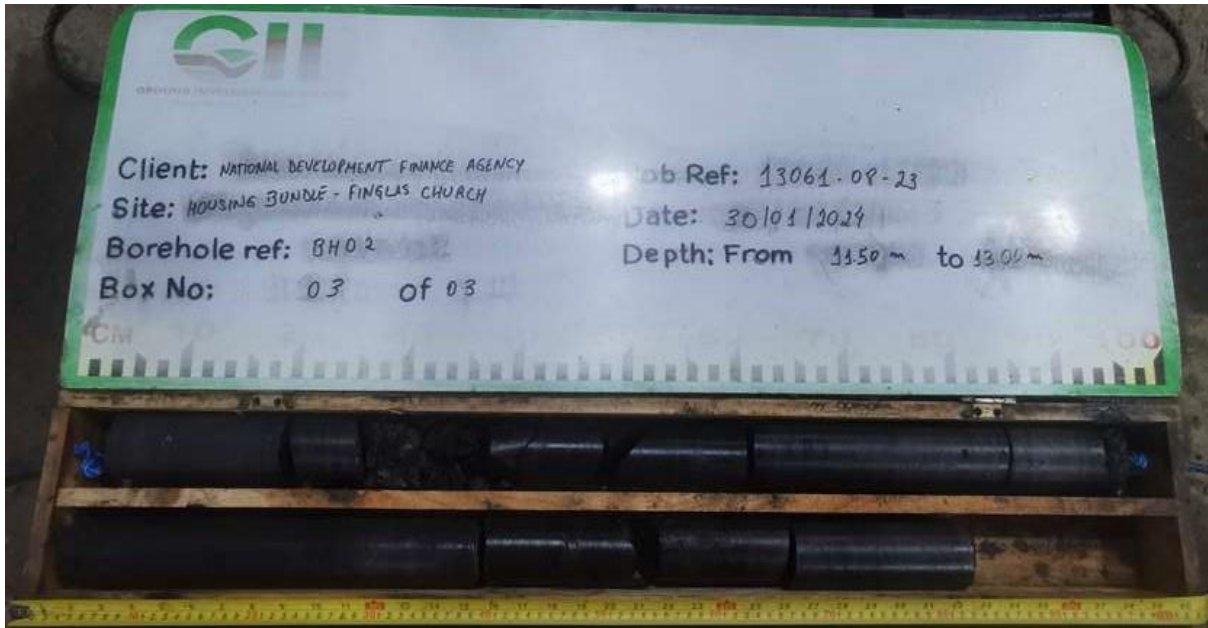


Housing Bundle_ Finglas Church_ Rotary Core Photos

BH02



Housing Bundle_ Finglas Church_ Rotary Core Photos



APPENDIX 5 – Laboratory Testing



Ground Investigations Ireland
Catherinstown House
Hazelhatch Road
Newcastle
Co. Dublin
Ireland
D22 K5P8



4225



Attention : Diarmaid MagLochlainn
Date : 21st March, 2024
Your reference : 13061-08-23
Our reference : Test Report 23/19933 Batch 1
Location : Housing Bundle- Finglas Church
Date samples received : 27th November, 2023
Status : Final Report
Issue : 202403211254

Fourteen samples were received for analysis on 27th November, 2023 of which fourteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

The greenhouse gas emissions generated (in Carbon – Co2e) to obtain the results in this report are estimated as:

Scope 1&2 emissions - 65.739 kg of CO2

Scope 1&2&3 emissions - 155.359 kg of CO2

Authorised By:



Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Finglas Church
Contact: Diarmaid MagLochlainn
EMT Job No: 23/19933

Report : Solid

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

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
	Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	BH-01	BH-02	BH-02			
Depth	0.50	1.00	0.50	1.00	0.50	2.00	1.00	1.00	2.00	1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	LOD/LOR	Units	Method No.
Antimony	2	2	1	3	3	2	<1	1	1	3	<1	mg/kg	TM30/PM15
Arsenic #	16.5	12.8	8.3	17.5	17.3	12.3	5.6	10.6	8.6	11.2	<0.5	mg/kg	TM30/PM15
Barium #	135	92	61	140	139	45	39	52	53	310	<1	mg/kg	TM30/PM15
Cadmium #	2.7	2.3	0.7	2.2	2.8	1.9	1.2	1.9	1.5	2.4	<0.1	mg/kg	TM30/PM15
Chromium #	31.3	17.4	32.0	30.2	26.6	15.3	12.5	15.5	19.5	20.2	<0.5	mg/kg	TM30/PM15
Copper #	52	37	24	49	52	27	13	28	21	30	<1	mg/kg	TM30/PM15
Lead #	91	19	92	241	113	20	13	15	15	18	<5	mg/kg	TM30/PM15
Mercury #	0.2	<0.1	<0.1	0.3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	3.4	3.5	1.0	4.0	4.6	3.8	1.6	2.7	2.9	7.8	<0.1	mg/kg	TM30/PM15
Nickel #	49.3	51.0	18.1	50.7	61.0	38.9	14.9	36.1	34.6	45.2	<0.7	mg/kg	TM30/PM15
Selenium #	2	<1	<1	2	2	1	<1	<1	3	5	<1	mg/kg	TM30/PM15
Zinc #	103	89	59	124	135	75	49	66	62	76	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.15	<0.03	0.08	<0.03	0.18	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.14	<0.03	0.10	<0.03	0.43	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.13	<0.03	0.09	<0.03	0.35	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.10	<0.06	0.08	<0.06	0.26	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.10	<0.02	0.06	<0.02	0.28	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.13	<0.07	0.09	<0.07	0.44	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.08	<0.04	0.04	<0.04	0.27	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	<0.04	<0.04	<0.04	<0.04	0.17	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	<0.04	<0.04	0.16	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	0.35	<0.22	0.23	<0.22	1.47	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	0.83	<0.64	<0.64	<0.64	2.60	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.09	<0.05	0.06	<0.05	0.32	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.04	<0.02	0.03	<0.02	0.12	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	104	105	104	68	90	98	84	95	96	97	<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30	<30	<30	<30	<30	<30	<30	321	<30	<30	<30	mg/kg	TM5/PM8/PM16

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Finglas Church
Contact: Diarmaid MagLochlainn
EMT Job No: 23/19933

Report : Solid

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

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	BH-01	BH-02	BH-02	BH-03			
Depth	0.50	1.00	0.50	1.00	0.50	2.00	1.00	1.00	2.00	1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1 ^{SV}	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL) #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	12.0	0.8	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 (EH_CU_1D_AL) #	<4	<4	<4	<4	<4	<4	<4	75	6	<4	<4	mg/kg	TMS/PM8/PM16
>C16-C21 (EH_CU_1D_AL) #	<7	<7	<7	<7	<7	<7	<7	174	11	<7	<7	mg/kg	TMS/PM8/PM16
>C21-C35 (EH_CU_1D_AL) #	<7	<7	<7	<7	<7	<7	<7	60	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C35-C40 (EH_CU_1D_AL)	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-40 (EH_CU+HS_1D_AL)	<26	<26	<26	<26	<26	<26	<26	321	<26	<26	<26	mg/kg	TMS/PM8/PM16
>C6-C10 (HS_1D_AL)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1 ^{SV}	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_CU_1D_AL)	<10	<10	<10	<10	<10	<10	<10	312	18	<10	<10	mg/kg	TMS/PM8/PM16
>C25-C35 (EH_CU_1D_AL)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR) #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR) #	<4	<4	<4	<4	<4	<4	<4	17	<4	<4	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR) #	<7	<7	<7	<7	<7	<7	<7	76	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR) #	38	<7	<7	<7	<7	<7	<7	29	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC35-EC40 (EH_CU_1D_AR)	10	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-40 (EH_CU+HS_1D_AR)	48	<26	<26	<26	<26	<26	<26	122	<26	<26	<26	mg/kg	TMS/PM8/PM16
Total aliphatics and aromatics(C5-40) (EH_CU+HS_1D_Total)	<52	<52	<52	<52	<52	<52	<52	443	<52	<52	<52	mg/kg	TMS/PM8/PM16
>EC6-EC10 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_CU_1D_AR)	<10	<10	<10	<10	<10	<10	<10	120	<10	<10	<10	mg/kg	TMS/PM8/PM16
>EC25-EC35 (EH_CU_1D_AR)	38	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5	<5 ^{SV}	<5	<5	ug/kg	TM36/PM12
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5 ^{SV}	<5	<5	ug/kg	TM36/PM12
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5	<5 ^{SV}	<5	<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5 ^{SV}	<5	<5	ug/kg	TM36/PM12
m/p-Xylene #	15	<5	<5	<5	<5	<5	<5	6	<5 ^{SV}	<5	<5	ug/kg	TM36/PM12
o-Xylene #	10	<5	<5	<5	<5	<5	<5	<5	<5 ^{SV}	<5	<5	ug/kg	TM36/PM12
PCB 28 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	ug/kg	TM17/PM8

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Finglas Church
Contact: Diarmaid MagLochlainn
EMT Job No: 23/19933

Report : Solid

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

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	BH-01	BH-02	BH-02	BH-03			
Depth	0.50	1.00	0.50	1.00	0.50	2.00	1.00	1.00	2.00	1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	LOD/LOR	Units	Method No.
Natural Moisture Content	27.6	20.1	11.3	32.5	29.3	13.4	6.0	13.3	7.3	14.4	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	21.6	16.7	10.1	24.5	22.6	11.8	5.6	11.8	6.8	12.6	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	0.0735	-	0.0399	0.0209	-	0.0057	-	0.0151	-	0.0049	<0.0015	g/l	TM38/PM20
Chromium III	31.3	17.4	32.0	30.2	26.6	15.3	12.5	15.5	19.5	20.2	<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	3.75	0.47	0.32	1.87	1.39	0.46	0.28	0.27	0.48	0.69	<0.02	%	TM21/PM24
Organic Matter	6.5	-	0.6	-	-	0.8	-	0.5	-	1.2	<0.2	%	TM21/PM24
pH #	7.67	8.68	11.35	8.76	8.57	8.74	9.45	8.44	8.24	8.65	<0.01	pH units	TM73/PM11
Asbestos Type*	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD		None	Subcontracted

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Finglas Church
Contact: Diarmaid MagLochlainn
EMT Job No: 23/19933

Report : Solid

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

EMT Sample No.	41-44	45-48	49-52	53-56							LOD/LOR	Units	Method No.
	Sample ID	BH-04	BH-04	BH-05	BH-06								
Depth	1.00	2.00	0.50	1.00									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	22/11/2023	22/11/2023	22/11/2023	22/11/2023									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	27/11/2023	27/11/2023	27/11/2023	27/11/2023									
Antimony	2	2	3	2							<1	mg/kg	TM30/PM15
Arsenic #	13.4	9.9	15.1	13.6							<0.5	mg/kg	TM30/PM15
Barium #	69	51	124	91							<1	mg/kg	TM30/PM15
Cadmium #	2.4	2.1	1.9	1.8							<0.1	mg/kg	TM30/PM15
Chromium #	18.2	17.3	22.8	42.0							<0.5	mg/kg	TM30/PM15
Copper #	41	27	61	35							<1	mg/kg	TM30/PM15
Lead #	18	16	133	23							<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	0.4	<0.1							<0.1	mg/kg	TM30/PM15
Molybdenum #	4.4	3.1	3.3	3.0							<0.1	mg/kg	TM30/PM15
Nickel #	50.8	39.9	42.1	54.7							<0.7	mg/kg	TM30/PM15
Selenium #	1	1	1	1							<1	mg/kg	TM30/PM15
Zinc #	95	75	114	98							<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	0.05	<0.04							<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03							<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05							<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04							<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	<0.03	0.17	<0.03							<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04							<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	0.31	<0.03							<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	0.27	<0.03							<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	0.19	<0.06							<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02	0.20	<0.02							<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	0.30	<0.07							<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	0.19	<0.04							<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	<0.04	<0.04	0.11	<0.04							<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04							<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	0.11	<0.04							<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04							<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	1.02	<0.22							<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	1.90	<0.64							<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	0.22	<0.05							<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	0.08	<0.02							<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1							<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	97	75	97	90							<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30	<30	<30	<30 ^{SV}							<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Finglas Church
Contact: Diarmaid MagLochlainn
EMT Job No: 23/19933

Report : CEN 10:1 1 Batch
Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	BH-01	BH-02	BH-02	BH-03			
Depth	0.50	1.00	0.50	1.00	0.50	2.00	1.00	1.00	2.00	1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	LOD/LOR	Units	Method No.
Dissolved Antimony #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.029	0.004	0.026	0.007	0.007	<0.003	<0.003	0.010	0.026	0.003	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.29	0.04	0.26	0.07	0.07	<0.03	<0.03	0.10	0.26	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	0.0236	0.0084	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	0.236	0.084	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.008	0.006	<0.002	0.012	0.007	0.010	0.023	0.015	0.021	0.008	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.08	0.06	<0.02	0.12	0.07	0.10	0.23	0.15	0.21	0.08	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.033	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.33	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	0.03	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	0.3	<0.3	0.6	0.4	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	3	<3	6	4	<3	<3	3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	18.7	1.9	19.7	5.9	<0.5	0.6	6.5	5.1	30.7	<0.5	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	187	19	197	59	<5	6	65	51	307	<5	<5	mg/kg	TM38/PM0
Mass of raw test portion	0.1201	0.1078	0.1074	0.1321	0.1198	0.1026	0.1049	0.1099	0.1004	0.1047		kg	NONE/PM17
Chloride #	3.7	1.0	0.6	<0.3	<0.3	<0.3	0.4	0.5	9.5	0.5	<0.3	mg/l	TM38/PM0
Chloride #	37	10	6	<3	<3	<3	4	5	95	5	<3	mg/kg	TM38/PM0
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17
Dissolved Organic Carbon	4	<2	4	<2	<2	<2	<2	3	<2	<2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	<20	40	<20	<20	<20	<20	30	<20	<20	<20	mg/kg	TM60/PM0
pH	8.23	8.18	11.14	8.40	8.30	8.11	8.09	8.09	8.03	8.11	<0.01	pH units	TM73/PM0

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Finglas Church
Contact: Diarmaid MagLochlainn
EMT Job No: 23/19933

Report : EN12457_2
Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40						
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	BH-01	BH-02	BH-02	BH-03						
Depth	0.50	1.00	0.50	1.00	0.50	2.00	1.00	1.00	2.00	1.00						
COC No / misc											Please see attached notes for all abbreviations and acronyms					
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1	1	1	1	Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Date of Receipt	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023	27/11/2023						
Solid Waste Analysis																
Total Organic Carbon #	3.75	0.47	0.32	1.87	1.39	0.46	0.28	0.27	0.48	0.69	3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025 ^{SV}	6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	<30	<30	<30	<30	<30	321	<30	<30	500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	0.35	<0.22	0.23	<0.22	1.47	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	0.83	<0.64	<0.64	<0.64	2.60	<0.64	<0.64	<0.64	<0.64	<0.64	100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																
Arsenic #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.29	0.04	0.26	0.07	0.07	<0.03	<0.03	0.10	0.26	<0.03	20	100	300	<0.03	mg/kg	TM30/PM17
Cadmium #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.04	1	5	<0.005	mg/kg	TM30/PM17
Chromium #	<0.015	<0.015	0.236	0.084	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.5	10	70	<0.015	mg/kg	TM30/PM17
Copper #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	2	50	100	<0.07	mg/kg	TM30/PM17
Mercury #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.08	0.06	<0.02	0.12	0.07	0.10	0.23	0.15	0.21	0.08	0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.33	<0.03	0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03	0.03	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	1309	490	1400	830	740	440	470	810	1070	450	4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	40	<20	40	<20	<20	<20	<20	30	<20	<20	500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1201	0.1078	0.1074	0.1321	0.1198	0.1026	0.1049	0.1099	0.1004	0.1047	-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	74.7	83.3	83.6	68.1	74.9	87.6	86.2	82.3	89.8	86.1	-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.869	0.882	0.882	0.858	0.87	0.887	0.886	0.881	0.89	0.885	-	-	-		l	NONE/PM17
Moisture Content 105C (% Dry Weight)	33.9	20.0	19.7	46.8	33.4	14.1	16.0	21.5	11.4	16.2	-	-	-	<0.1	%	PM4/PM0
pH #	7.67	8.68	11.35	8.76	8.57	8.74	9.45	8.44	8.24	8.65	-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	3	<3	6	4	<3	<3	3	<3	<3	10	150	500	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	187	19	197	59	<5	6	65	51	307	<5	1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	37	10	6	<3	<3	<3	4	5	95	5	800	15000	25000	<3	mg/kg	TM38/PM0

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 23/19933

SOILS and ASH

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

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

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

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

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

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

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

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

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

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

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

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

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

WATERS

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

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

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

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

STACK EMISSIONS

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

BLANKS

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

Please include all sections of this report if it is reproduced

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

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a requirement of our Accreditation Body for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Laboratory records are kept for a period of no less than 6 years.

REPORTS FROM THE SOUTH AFRICA LABORATORY

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

Measurement Uncertainty

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

Customer Provided Information

Sample ID and depth is information provided by the customer.

Age of Diesel

The age of release estimation is based on the nC17/pristane ratio only as prescribed by Christensen and Larsen (1993) and Kaplan, Galperin, Alimi et al., (1996).

Age estimation should be treated with caution as it can be influenced by site specific factors of which the laboratory are not aware.

ABBREVIATIONS and ACRONYMS USED

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

HWOL ACRONYMS AND OPERATORS USED

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

EMT Job No: 23/19933

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Preparation of Soil and Marine Sediment Samples for Total Organic Carbon.			AD	Yes

EMT Job No: 23/19933

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Preparation of Soil and Marine Sediment Samples for Total Organic Carbon.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009; SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009; SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009; SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AD	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes

EMT Job No: 23/19933

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	
Subcontracted	See attached subcontractor report for accreditation status and provider.					AR	

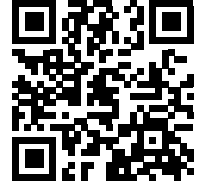
APPENDIX 6 – HazWasteOnLine™ Report



Waste Classification Report

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

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



CKBTG-YU3EW-J3KBW

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

Job name

Finglas Church

Description/Comments

Project

13061-08-23

Site

Finglas Church

Classified by

Name: **Barry Sexton**
Date: **21 Mar 2024 07:40 GMT**
Telephone: **353 (01) 601 5175 / 5176**

Company: **Ground Investigations Ireland Ltd**
Catherinstown House, Hazelhatch Road,
Newcastle, Co. Dublin.

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

HazWasteOnline™ Certification:

CERTIFIED

Course

Hazardous Waste Classification
Most recent 3 year Refresher

Date

10 Apr 2019
19 Apr 2022

Next 3 year Refresher due by Apr 2025

Purpose of classification

7 - Disposal of Waste

Address of the waste

Finglas Church Dublin

Post Code N/A

Description of industry/producer giving rise to the waste

Construction

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

Foundation Excavation and Site Levelling

Description of the waste

Made Ground and Soil & Stone

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP-01-22/11/2023-0.50m		Non Hazardous		3
2	TP-01-22/11/2023-1.00m		Non Hazardous		6
3	TP-02-22/11/2023-0.50m		Non Hazardous		8
4	TP-02-22/11/2023-1.00m		Non Hazardous		10
5	TP-03-22/11/2023-0.50m		Non Hazardous		12
6	TP-03-22/11/2023-2.00m		Non Hazardous		14
7	BH-01-22/11/2023-1.00m		Non Hazardous		16
8	BH-02-22/11/2023-1.00m		Non Hazardous		18
9	BH-02-22/11/2023-2.00m		Non Hazardous		21
10	BH-03-22/11/2023-1.00m		Non Hazardous		23
11	BH-04-22/11/2023-1.00m		Non Hazardous		25
12	BH-04-22/11/2023-2.00m		Non Hazardous		27
13	BH-05-22/11/2023-0.50m		Non Hazardous		29
14	BH-06-22/11/2023-1.00m		Non Hazardous		31

Related documents

#	Name	Description
1	Finglas Church.HWOL	Element .hwol file used to populate the Job
2	Example waste stream template for contaminated soils	waste stream template used to create this Job


Report

Created by: Barry Sexton

Created date: 21 Mar 2024 07:40 GMT

Appendices	Page
Appendix A: Classifier defined and non EU CLP determinands	33
Appendix B: Rationale for selection of metal species	34
Appendix C: Version	35

Classification of sample: TP-01-22/11/2023-0.50m

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

Sample details

Sample name:	LoW Code:	
TP-01-22/11/2023-0.50m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
21.6% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 21.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	1.877 mg/kg	0.000188 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				16.5 mg/kg	1.32	17.08 mg/kg	0.00171 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2.7 mg/kg	1.142	2.418 mg/kg	0.000242 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				31.3 mg/kg	1.462	35.865 mg/kg	0.00359 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
		024-017-00-8								
6	copper { dicopper oxide; copper (I) oxide }				52 mg/kg	1.126	45.9 mg/kg	0.00459 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	91 mg/kg	1.56	111.283 mg/kg	0.00713 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				0.2 mg/kg	1.353	0.212 mg/kg	0.0000212 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				3.4 mg/kg	1.5	3.999 mg/kg	0.0004 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				49.3 mg/kg	2.976	115.036 mg/kg	0.0115 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				2 mg/kg	2.554	4.004 mg/kg	0.0004 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				103 mg/kg	2.774	224.018 mg/kg	0.0224 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
18	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		0.025 mg/kg		0.0196 mg/kg	0.00000196 %	✓		
19	pH		PH		7.67 pH		7.67 pH	7.67 pH			
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
21	acenaphthylene 205-917-1		208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
22	acenaphthene 201-469-6		83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
23	fluorene 201-695-5		86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
24	phenanthrene 201-581-5		85-01-8		0.15 mg/kg		0.118 mg/kg	0.0000118 %	✓		
25	anthracene 204-371-1		120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
26	fluoranthene 205-912-4		206-44-0		0.14 mg/kg		0.11 mg/kg	0.000011 %	✓		
27	pyrene 204-927-3		129-00-0		0.13 mg/kg		0.102 mg/kg	0.0000102 %	✓		
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.1 mg/kg		0.0784 mg/kg	0.00000784 %	✓		
29	chrysene 601-048-00-0	205-923-4	218-01-9		0.1 mg/kg		0.0784 mg/kg	0.00000784 %	✓		
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.09 mg/kg		0.0706 mg/kg	0.00000706 %	✓		
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.04 mg/kg		0.0314 mg/kg	0.00000314 %	✓		
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.08 mg/kg		0.0627 mg/kg	0.00000627 %	✓		
33	indeno[123-cd]pyrene 205-893-2		193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
35	benzo[ghi]perylene 205-883-8		191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
36	polychlorobiphenyls; PCB 602-039-00-4	215-648-1	1336-36-3		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %			<LOD
37	barium { barium oxide } 215-127-9		1304-28-5		135 mg/kg	1.117	118.171 mg/kg	0.0118 %	✓		
38	coronene 205-881-7		191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
39	benzo[j]fluoranthene 601-035-00-X	205-910-3	205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
Total:									0.0695 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- 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 Solid waste without liquid phase


Hazard Statements hit:

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

Because of determinand:

xylene: (conc.: 1.96e-06%)

Classification of sample: TP-01-22/11/2023-1.00m

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

Sample details

Sample name:	LoW Code:
TP-01-22/11/2023-1.00m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
16.7% (wet weight correction)	

Hazard properties

None identified


Determinands

Moisture content: 16.7% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	1.994 mg/kg	0.000199 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				12.8 mg/kg	1.32	14.078 mg/kg	0.00141 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2.3 mg/kg	1.142	2.189 mg/kg	0.000219 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				17.4 mg/kg	1.462	21.184 mg/kg	0.00212 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				37 mg/kg	1.126	34.701 mg/kg	0.00347 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	19 mg/kg	1.56	24.687 mg/kg	0.00158 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				3.5 mg/kg	1.5	4.374 mg/kg	0.000437 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				51 mg/kg	2.976	126.441 mg/kg	0.0126 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				89 mg/kg	2.774	205.667 mg/kg	0.0206 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
18	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	pH		PH		8.68 pH		8.68 pH	8.68 pH		
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
21	acenaphthylene 205-917-1		208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
22	acenaphthene 201-469-6		83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	fluorene 201-695-5		86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
24	phenanthrene 201-581-5		85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
25	anthracene 204-371-1		120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	fluoranthene 205-912-4		206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
27	pyrene 204-927-3		129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
29	chrysene 601-048-00-0	205-923-4	218-01-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
33	indeno[123-cd]pyrene 205-893-2		193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
35	benzo[ghi]perylene 205-883-8		191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
36	polychlorobiphenyls; PCB 602-039-00-4	215-648-1	1336-36-3		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
37	barium { barium oxide } 215-127-9		1304-28-5		92 mg/kg	1.117	85.565 mg/kg	0.00856 %	✓	
38	coronene 205-881-7		191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
39	benzo[j]fluoranthene 601-035-00-X	205-910-3	205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0569 %		

Key

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

Classification of sample: TP-02-22/11/2023-0.50m

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

Sample details

Sample name: TP-02-22/11/2023-0.50m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 10.1% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified


Determinands

Moisture content: 10.1% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.076 mg/kg	0.000108 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				8.3 mg/kg	1.32	9.852 mg/kg	0.000985 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				0.7 mg/kg	1.142	0.719 mg/kg	0.0000719 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				32 mg/kg	1.462	42.046 mg/kg	0.0042 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				24 mg/kg	1.126	24.292 mg/kg	0.00243 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	92 mg/kg	1.56	129.009 mg/kg	0.00827 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1 mg/kg	1.5	1.349 mg/kg	0.000135 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				18.1 mg/kg	2.976	48.429 mg/kg	0.00484 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				59 mg/kg	2.774	147.144 mg/kg	0.0147 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				11.35 pH		11.35 pH	11.35 pH		
			PH							
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				0.08 mg/kg		0.0719 mg/kg	0.00000719 %	✓	
		201-581-5	85-01-8							
25	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							
26	fluoranthene				0.1 mg/kg		0.0899 mg/kg	0.00000899 %	✓	
		205-912-4	206-44-0							
27	pyrene				0.09 mg/kg		0.0809 mg/kg	0.00000809 %	✓	
		204-927-3	129-00-0							
28	benzo[a]anthracene				0.08 mg/kg		0.0719 mg/kg	0.00000719 %	✓	
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				0.06 mg/kg		0.0539 mg/kg	0.00000539 %	✓	
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				0.06 mg/kg		0.0539 mg/kg	0.00000539 %	✓	
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				0.03 mg/kg		0.027 mg/kg	0.0000027 %	✓	
	601-036-00-5	205-916-6	207-08-9							
32	benzo[a]pyrene; benzo[def]chrysene				0.04 mg/kg		0.036 mg/kg	0.0000036 %	✓	
	601-032-00-3	200-028-5	50-32-8							
33	indeno[123-cd]pyrene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2	193-39-5							
34	dibenz[a,h]anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
35	benzo[ghi]perylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8	191-24-2							
36	polychlorobiphenyls; PCB				<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
	602-039-00-4	215-648-1	1336-36-3							
37	barium { barium oxide }				61 mg/kg	1.117	61.228 mg/kg	0.00612 %	✓	
		215-127-9	1304-28-5							
38	coronene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7	191-07-1							
39	benzo[j]fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-035-00-X	205-910-3	205-82-3							
Total:								0.0476 %		

Key

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

Classification of sample: TP-02-22/11/2023-1.00m

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

Sample details

Sample name: TP-02-22/11/2023-1.00m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 24.5% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified


Determinands

Moisture content: 24.5% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				3 mg/kg	1.197	2.711 mg/kg	0.000271 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				17.5 mg/kg	1.32	17.445 mg/kg	0.00174 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2.2 mg/kg	1.142	1.897 mg/kg	0.00019 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				30.2 mg/kg	1.462	33.325 mg/kg	0.00333 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				49 mg/kg	1.126	41.652 mg/kg	0.00417 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	241 mg/kg	1.56	283.816 mg/kg	0.0182 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				0.3 mg/kg	1.353	0.307 mg/kg	0.0000307 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				4 mg/kg	1.5	4.531 mg/kg	0.000453 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				50.7 mg/kg	2.976	113.927 mg/kg	0.0114 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				2 mg/kg	2.554	3.856 mg/kg	0.000386 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				124 mg/kg	2.774	259.716 mg/kg	0.026 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
18	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	pH		PH		8.76 pH		8.76 pH	8.76 pH		
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
21	acenaphthylene 205-917-1		208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
22	acenaphthene 201-469-6		83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	fluorene 201-695-5		86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
24	phenanthrene 201-581-5		85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
25	anthracene 204-371-1		120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	fluoranthene 205-912-4		206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
27	pyrene 204-927-3		129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
29	chrysene 601-048-00-0	205-923-4	218-01-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
33	indeno[123-cd]pyrene 205-893-2		193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
35	benzo[ghi]perylene 205-883-8		191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
36	polychlorobiphenyls; PCB 602-039-00-4	215-648-1	1336-36-3		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
37	barium { barium oxide } 215-127-9		1304-28-5		140 mg/kg	1.117	118.015 mg/kg	0.0118 %	✓	
38	coronene 205-881-7		191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
39	benzo[j]fluoranthene 601-035-00-X	205-910-3	205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0834 %		

Key

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

Classification of sample: TP-03-22/11/2023-0.50m

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

Sample details

Sample name: TP-03-22/11/2023-0.50m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 22.6% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified


Determinands

Moisture content: 22.6% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				3 mg/kg	1.197	2.78	mg/kg	0.000278 %	✓	
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				17.3 mg/kg	1.32	17.679	mg/kg	0.00177 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				2.8 mg/kg	1.142	2.476	mg/kg	0.000248 %	✓	
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				26.6 mg/kg	1.462	30.091	mg/kg	0.00301 %	✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				52 mg/kg	1.126	45.315	mg/kg	0.00453 %	✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	113 mg/kg	1.56	136.425	mg/kg	0.00875 %	✓	
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				0.2 mg/kg	1.353	0.21	mg/kg	0.000021 %	✓	
	080-010-00-X	231-299-8	7487-94-7								
9	molybdenum { molybdenum(VI) oxide }				4.6 mg/kg	1.5	5.341	mg/kg	0.000534 %	✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				61 mg/kg	2.976	140.521	mg/kg	0.0141 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				2 mg/kg	2.554	3.953	mg/kg	0.000395 %	✓	
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				135 mg/kg	2.774	289.871	mg/kg	0.029 %	✓	
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52	mg/kg	<0.0052 %		<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.57 pH		8.57 pH	8.57 pH		
			PH							
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				0.18 mg/kg		0.139 mg/kg	0.0000139 %	✓	
		201-581-5	85-01-8							
25	anthracene				0.06 mg/kg		0.0464 mg/kg	0.00000464 %	✓	
		204-371-1	120-12-7							
26	fluoranthene				0.43 mg/kg		0.333 mg/kg	0.0000333 %	✓	
		205-912-4	206-44-0							
27	pyrene				0.35 mg/kg		0.271 mg/kg	0.0000271 %	✓	
		204-927-3	129-00-0							
28	benzo[a]anthracene				0.26 mg/kg		0.201 mg/kg	0.0000201 %	✓	
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				0.28 mg/kg		0.217 mg/kg	0.0000217 %	✓	
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				0.32 mg/kg		0.248 mg/kg	0.0000248 %	✓	
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				0.12 mg/kg		0.0929 mg/kg	0.00000929 %	✓	
	601-036-00-5	205-916-6	207-08-9							
32	benzo[a]pyrene; benzo[def]chrysene				0.27 mg/kg		0.209 mg/kg	0.0000209 %	✓	
	601-032-00-3	200-028-5	50-32-8							
33	indeno[123-cd]pyrene				0.17 mg/kg		0.132 mg/kg	0.0000132 %	✓	
		205-893-2	193-39-5							
34	dibenz[a,h]anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
35	benzo[ghi]perylene				0.16 mg/kg		0.124 mg/kg	0.0000124 %	✓	
		205-883-8	191-24-2							
36	polychlorobiphenyls; PCB				<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
	602-039-00-4	215-648-1	1336-36-3							
37	barium { barium oxide }				139 mg/kg	1.117	120.12 mg/kg	0.012 %	✓	
		215-127-9	1304-28-5							
38	coronene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7	191-07-1							
39	benzo[j]fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-035-00-X	205-910-3	205-82-3							
Total:								0.0802 %		

Key

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

Classification of sample: TP-03-22/11/2023-2.00m

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

Sample details

Sample name: TP-03-22/11/2023-2.00m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 11.8% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified





Determinands

Moisture content: 11.8% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.112 mg/kg	0.000211 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				12.3 mg/kg	1.32	14.324 mg/kg	0.00143 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.9 mg/kg	1.142	1.914 mg/kg	0.000191 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				15.3 mg/kg	1.462	19.723 mg/kg	0.00197 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	26.812 mg/kg	0.00268 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	20 mg/kg	1.56	27.515 mg/kg	0.00176 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				3.8 mg/kg	1.5	5.028 mg/kg	0.000503 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				38.9 mg/kg	2.976	102.115 mg/kg	0.0102 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				1 mg/kg	2.554	2.252 mg/kg	0.000225 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				75 mg/kg	2.774	183.51 mg/kg	0.0184 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.74 pH		8.74 pH	8.74 pH		
			PH							
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
25	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							
26	fluoranthene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-912-4	206-44-0							
27	pyrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		204-927-3	129-00-0							
28	benzo[a]anthracene				<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
32	benzo[a]pyrene; benzo[def]chrysene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
33	indeno[123-cd]pyrene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2	193-39-5							
34	dibenz[a,h]anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
35	benzo[ghi]perylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8	191-24-2							
36	polychlorobiphenyls; PCB				<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
	602-039-00-4	215-648-1	1336-36-3							
37	barium { barium oxide }				45 mg/kg	1.117	44.314 mg/kg	0.00443 %	✓	
		215-127-9	1304-28-5							
38	coronene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7	191-07-1							
39	benzo[j]fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-035-00-X	205-910-3	205-82-3							
Total:								0.0474 %		

Key

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

Classification of sample: BH-01-22/11/2023-1.00m

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

Sample details

Sample name: BH-01-22/11/2023-1.00m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 5.6% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified


Determinands

Moisture content: 5.6% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197 mg/kg	<0.00012 %		<LOD	
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				5.6 mg/kg	1.32	6.98 mg/kg	0.000698 %	✓		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				1.2 mg/kg	1.142	1.294 mg/kg	0.000129 %	✓		
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				12.5 mg/kg	1.462	17.246 mg/kg	0.00172 %	✓		
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD	
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				13 mg/kg	1.126	13.817 mg/kg	0.00138 %	✓		
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	13 mg/kg	1.56	19.142 mg/kg	0.00123 %	✓		
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD	
	080-010-00-X	231-299-8	7487-94-7								
9	molybdenum { molybdenum(VI) oxide }				1.6 mg/kg	1.5	2.266 mg/kg	0.000227 %	✓		
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				14.9 mg/kg	2.976	41.863 mg/kg	0.00419 %	✓		
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD	
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				49 mg/kg	2.774	128.321 mg/kg	0.0128 %	✓		
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD	
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
	601-021-00-3	203-625-9	108-88-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
18	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	pH		PH		9.45 pH		9.45 pH	9.45 pH		
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
21	acenaphthylene 205-917-1		208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
22	acenaphthene 201-469-6		83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	fluorene 201-695-5		86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
24	phenanthrene 201-581-5		85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
25	anthracene 204-371-1		120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	fluoranthene 205-912-4		206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
27	pyrene 204-927-3		129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
29	chrysene 601-048-00-0	205-923-4	218-01-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
33	indeno[123-cd]pyrene 205-893-2		193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
35	benzo[ghi]perylene 205-883-8		191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
36	polychlorobiphenyls; PCB 602-039-00-4	215-648-1	1336-36-3		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
37	barium { barium oxide } 215-127-9		1304-28-5		39 mg/kg	1.117	41.105 mg/kg	0.00411 %	✓	
38	coronene 205-881-7		191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
39	benzo[j]fluoranthene 601-035-00-X	205-910-3	205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0323 %		

Key

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

Classification of sample: BH-02-22/11/2023-1.00m

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

Sample details

Sample name: BH-02-22/11/2023-1.00m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 11.8% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified


Determinands

Moisture content: 11.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.056 mg/kg	0.000106 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				10.6 mg/kg	1.32	12.344 mg/kg	0.00123 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.9 mg/kg	1.142	1.914 mg/kg	0.000191 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				15.5 mg/kg	1.462	19.981 mg/kg	0.002 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				28 mg/kg	1.126	27.805 mg/kg	0.00278 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	15 mg/kg	1.56	20.636 mg/kg	0.00132 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.7 mg/kg	1.5	3.573 mg/kg	0.000357 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				36.1 mg/kg	2.976	94.765 mg/kg	0.00948 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				66 mg/kg	2.774	161.489 mg/kg	0.0161 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				443 mg/kg		390.726 mg/kg	0.0391 %	✓	
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
18	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		0.006 mg/kg		0.0052 mg/kg	0.000000529 %	✓	
19	pH PH				8.44 pH		8.44 pH	8.44 pH		
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
21	acenaphthylene 205-917-1		208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
22	acenaphthene 201-469-6		83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	fluorene 201-695-5		86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
24	phenanthrene 201-581-5		85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
25	anthracene 204-371-1		120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	fluoranthene 205-912-4		206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
27	pyrene 204-927-3		129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
29	chrysene 601-048-00-0	205-923-4	218-01-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
33	indeno[123-cd]pyrene 205-893-2		193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
35	benzo[ghi]perylene 205-883-8		191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
36	polychlorobiphenyls; PCB 602-039-00-4	215-648-1	1336-36-3		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
37	barium { barium oxide } 215-127-9		1304-28-5		52 mg/kg	1.117	51.207 mg/kg	0.00512 %	✓	
38	coronene 205-881-7		191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
39	benzo[j]fluoranthene 601-035-00-X	205-910-3	205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0783 %		

Key

 	User supplied data
 	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
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 Solid waste without liquid phase

Hazard Statements hit:


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

Because of determinands:

TPH (C6 to C40) petroleum group: (conc.: 0.0391%)

xylene: (conc.: 5.29e-07%)

Classification of sample: BH-02-22/11/2023-2.00m

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

Sample details

Sample name:	LoW Code:	
BH-02-22/11/2023-2.00m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
6.8% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 6.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide } 051-005-00-X 215-175-0 1309-64-4				1 mg/kg	1.197	1.116 mg/kg	0.000112 %	✓	
2	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3				8.6 mg/kg	1.32	10.583 mg/kg	0.00106 %	✓	
3	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0				1.5 mg/kg	1.142	1.597 mg/kg	0.00016 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 1308-38-9				19.5 mg/kg	1.462	26.562 mg/kg	0.00266 %	✓	
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
6	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				21 mg/kg	1.126	22.036 mg/kg	0.0022 %	✓	
7	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6			1	15 mg/kg	1.56	21.806 mg/kg	0.0014 %	✓	
8	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
9	molybdenum { molybdenum(VI) oxide } 042-001-00-9 215-204-7 1313-27-5				2.9 mg/kg	1.5	4.055 mg/kg	0.000405 %	✓	
10	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7				34.6 mg/kg	2.976	95.976 mg/kg	0.0096 %	✓	
11	selenium { nickel selenate } 028-031-00-5 239-125-2 15060-62-5				3 mg/kg	2.554	7.141 mg/kg	0.000714 %	✓	
12	zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9				62 mg/kg	2.774	160.301 mg/kg	0.016 %	✓	
13	TPH (C6 to C40) petroleum group TPH				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.24 pH		8.24 pH	8.24 pH		
			PH							
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				0.06 mg/kg		0.0559 mg/kg	0.00000559 %	✓	
		201-581-5	85-01-8							
25	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							
26	fluoranthene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-912-4	206-44-0							
27	pyrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		204-927-3	129-00-0							
28	benzo[a]anthracene				<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				0.05 mg/kg		0.0466 mg/kg	0.00000466 %	✓	
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
32	benzo[a]pyrene; benzo[def]chrysene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
33	indeno[123-cd]pyrene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2	193-39-5							
34	dibenz[a,h]anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
35	benzo[ghi]perylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8	191-24-2							
36	polychlorobiphenyls; PCB				<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
	602-039-00-4	215-648-1	1336-36-3							
37	barium { barium oxide }				53 mg/kg	1.117	55.151 mg/kg	0.00552 %	✓	
		215-127-9	1304-28-5							
38	coronene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7	191-07-1							
39	benzo[j]fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-035-00-X	205-910-3	205-82-3							
Total:								0.0453 %		

Key

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

Classification of sample: BH-03-22/11/2023-1.00m

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

Sample details

Sample name:	LoW Code:	
BH-03-22/11/2023-1.00m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
12.6% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 12.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				3 mg/kg	1.197	3.139 mg/kg	0.000314 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				11.2 mg/kg	1.32	12.924 mg/kg	0.00129 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2.4 mg/kg	1.142	2.396 mg/kg	0.00024 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				20.2 mg/kg	1.462	25.803 mg/kg	0.00258 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
	024-017-00-8									
6	copper { dicopper oxide; copper (I) oxide }				30 mg/kg	1.126	29.521 mg/kg	0.00295 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	18 mg/kg	1.56	24.539 mg/kg	0.00157 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				7.8 mg/kg	1.5	10.227 mg/kg	0.00102 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				45.2 mg/kg	2.976	117.577 mg/kg	0.0118 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				5 mg/kg	2.554	11.16 mg/kg	0.00112 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				76 mg/kg	2.774	184.27 mg/kg	0.0184 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
18	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
19	pH		PH		8.65 pH		8.65 pH	8.65 pH			
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
21	acenaphthylene 205-917-1		208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD	
22	acenaphthene 201-469-6		83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
23	fluorene 201-695-5		86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
24	phenanthrene 201-581-5		85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD	
25	anthracene 204-371-1		120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
26	fluoranthene 205-912-4		206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD	
27	pyrene 204-927-3		129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD	
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD	
29	chrysene 601-048-00-0	205-923-4	218-01-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD	
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD	
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
33	indeno[123-cd]pyrene 205-893-2		193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
35	benzo[ghi]perylene 205-883-8		191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
36	polychlorobiphenyls; PCB 602-039-00-4	215-648-1	1336-36-3		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD	
37	barium { barium oxide } 215-127-9		1304-28-5		310 mg/kg	1.117	302.506 mg/kg	0.0303 %	✓		
38	coronene 205-881-7		191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
39	benzo[j]fluoranthene 601-035-00-X	205-910-3	205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD	
Total:									0.077 %		

Key

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

Classification of sample: BH-04-22/11/2023-1.00m

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

Sample details

Sample name:	LoW Code:	
BH-04-22/11/2023-1.00m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
12.4% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 12.4% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	antimony { antimony trioxide } 051-005-00-X 215-175-0 1309-64-4				2	mg/kg	1.197	2.097	mg/kg	0.00021 %	✓	
2	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3				13.4	mg/kg	1.32	15.499	mg/kg	0.00155 %	✓	
3	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0				2.4	mg/kg	1.142	2.402	mg/kg	0.00024 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 1308-38-9				18.2	mg/kg	1.462	23.302	mg/kg	0.00233 %	✓	
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				<0.3	mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
6	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				41	mg/kg	1.126	40.437	mg/kg	0.00404 %	✓	
7	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6			1	18	mg/kg	1.56	24.595	mg/kg	0.00158 %	✓	
8	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
9	molybdenum { molybdenum(VI) oxide } 042-001-00-9 215-204-7 1313-27-5				4.4	mg/kg	1.5	5.782	mg/kg	0.000578 %	✓	
10	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7				50.8	mg/kg	2.976	132.446	mg/kg	0.0132 %	✓	
11	selenium { nickel selenate } 028-031-00-5 239-125-2 15060-62-5				1	mg/kg	2.554	2.237	mg/kg	0.000224 %	✓	
12	zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9				95	mg/kg	2.774	230.864	mg/kg	0.0231 %	✓	
13	TPH (C6 to C40) petroleum group TPH				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.54 pH		8.54 pH	8.54 pH			
			PH								
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		205-917-1	208-96-8								
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		201-695-5	86-73-7								
24	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		201-581-5	85-01-8								
25	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		204-371-1	120-12-7								
26	fluoranthene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		205-912-4	206-44-0								
27	pyrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		204-927-3	129-00-0								
28	benzo[a]anthracene				<0.06 mg/kg		<0.06 mg/kg	<0.000006 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
29	chrysene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
30	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
31	benzo[k]fluoranthene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
32	benzo[a]pyrene; benzo[def]chrysene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
33	indeno[123-cd]pyrene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		205-893-2	193-39-5								
34	dibenz[a,h]anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
35	benzo[ghi]perylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		205-883-8	191-24-2								
36	polychlorobiphenyls; PCB				<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %			<LOD
	602-039-00-4	215-648-1	1336-36-3								
37	barium { barium oxide }				69 mg/kg	1.117	67.486 mg/kg	0.00675 %	✓		
		215-127-9	1304-28-5								
38	coronene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		205-881-7	191-07-1								
39	benzo[j]fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-035-00-X	205-910-3	205-82-3								
Total:									0.0593 %		

Key

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

Classification of sample: BH-04-22/11/2023-2.00m

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

Sample details

Sample name:	LoW Code:	
BH-04-22/11/2023-2.00m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
10.7% (wet weight correction)		

Hazard properties

None identified

Determinands

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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide } 051-005-00-X 215-175-0 1309-64-4				2 mg/kg	1.197	2.138 mg/kg	0.000214 %	✓	
2	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3				9.9 mg/kg	1.32	11.673 mg/kg	0.00117 %	✓	
3	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0				2.1 mg/kg	1.142	2.142 mg/kg	0.000214 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 1308-38-9				17.3 mg/kg	1.462	22.579 mg/kg	0.00226 %	✓	
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
6	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				27 mg/kg	1.126	27.146 mg/kg	0.00271 %	✓	
7	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6			1	16 mg/kg	1.56	22.287 mg/kg	0.00143 %	✓	
8	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
9	molybdenum { molybdenum(VI) oxide } 042-001-00-9 215-204-7 1313-27-5				3.1 mg/kg	1.5	4.153 mg/kg	0.000415 %	✓	
10	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7				39.9 mg/kg	2.976	106.046 mg/kg	0.0106 %	✓	
11	selenium { nickel selenate } 028-031-00-5 239-125-2 15060-62-5				1 mg/kg	2.554	2.281 mg/kg	0.000228 %	✓	
12	zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9				75 mg/kg	2.774	185.798 mg/kg	0.0186 %	✓	
13	TPH (C6 to C40) petroleum group TPH				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
18	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	pH		PH		8.64 pH		8.64 pH	8.64 pH		
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
21	acenaphthylene 205-917-1		208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
22	acenaphthene 201-469-6		83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	fluorene 201-695-5		86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
24	phenanthrene 201-581-5		85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
25	anthracene 204-371-1		120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	fluoranthene 205-912-4		206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
27	pyrene 204-927-3		129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
29	chrysene 601-048-00-0	205-923-4	218-01-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
33	indeno[123-cd]pyrene 205-893-2		193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
35	benzo[ghi]perylene 205-883-8		191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
36	polychlorobiphenyls; PCB 602-039-00-4	215-648-1	1336-36-3		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
37	barium { barium oxide }	215-127-9	1304-28-5		51 mg/kg	1.117	50.849 mg/kg	0.00508 %	✓	
38	coronene 205-881-7		191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
39	benzo[j]fluoranthene 601-035-00-X	205-910-3	205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0484 %		

Key

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

Classification of sample: BH-05-22/11/2023-0.50m

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

Sample details

Sample name:	LoW Code:	
BH-05-22/11/2023-0.50m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
19.2% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 19.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				3 mg/kg	1.197	2.902 mg/kg	0.00029 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				15.1 mg/kg	1.32	16.109 mg/kg	0.00161 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.9 mg/kg	1.142	1.754 mg/kg	0.000175 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				22.8 mg/kg	1.462	26.925 mg/kg	0.00269 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
		024-017-00-8								
6	copper { dicopper oxide; copper (I) oxide }				61 mg/kg	1.126	55.493 mg/kg	0.00555 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	133 mg/kg	1.56	167.624 mg/kg	0.0107 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				0.4 mg/kg	1.353	0.437 mg/kg	0.0000437 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				3.3 mg/kg	1.5	4 mg/kg	0.0004 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				42.1 mg/kg	2.976	101.243 mg/kg	0.0101 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				1 mg/kg	2.554	2.064 mg/kg	0.000206 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				114 mg/kg	2.774	255.532 mg/kg	0.0256 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.35 pH		8.35 pH	8.35 pH		
			PH							
20	naphthalene				0.05 mg/kg		0.0404 mg/kg	0.00000404 %	✓	
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				0.17 mg/kg		0.137 mg/kg	0.0000137 %	✓	
		201-581-5	85-01-8							
25	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							
26	fluoranthene				0.31 mg/kg		0.25 mg/kg	0.000025 %	✓	
		205-912-4	206-44-0							
27	pyrene				0.27 mg/kg		0.218 mg/kg	0.0000218 %	✓	
		204-927-3	129-00-0							
28	benzo[a]anthracene				0.19 mg/kg		0.154 mg/kg	0.0000154 %	✓	
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				0.2 mg/kg		0.162 mg/kg	0.0000162 %	✓	
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				0.22 mg/kg		0.178 mg/kg	0.0000178 %	✓	
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				0.08 mg/kg		0.0646 mg/kg	0.00000646 %	✓	
	601-036-00-5	205-916-6	207-08-9							
32	benzo[a]pyrene; benzo[def]chrysene				0.19 mg/kg		0.154 mg/kg	0.0000154 %	✓	
	601-032-00-3	200-028-5	50-32-8							
33	indeno[123-cd]pyrene				0.11 mg/kg		0.0889 mg/kg	0.00000889 %	✓	
		205-893-2	193-39-5							
34	dibenz[a,h]anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
35	benzo[ghi]perylene				0.11 mg/kg		0.0889 mg/kg	0.00000889 %	✓	
		205-883-8	191-24-2							
36	polychlorobiphenyls; PCB				<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
	602-039-00-4	215-648-1	1336-36-3							
37	barium { barium oxide }				124 mg/kg	1.117	111.865 mg/kg	0.0112 %	✓	
		215-127-9	1304-28-5							
38	coronene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7	191-07-1							
39	benzo[j]fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-035-00-X	205-910-3	205-82-3							
Total:								0.0741 %		

Key

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

Classification of sample: BH-06-22/11/2023-1.00m

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

Sample details

Sample name:	LoW Code:
BH-06-22/11/2023-1.00m	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
17.9%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	1.966 mg/kg	0.000197 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				13.6 mg/kg	1.32	14.742 mg/kg	0.00147 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.8 mg/kg	1.142	1.688 mg/kg	0.000169 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				42 mg/kg	1.462	50.397 mg/kg	0.00504 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %		<LOD
		024-017-00-8								
6	copper { dicopper oxide; copper (I) oxide }				35 mg/kg	1.126	32.352 mg/kg	0.00324 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	23 mg/kg	1.56	29.454 mg/kg	0.00189 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				3 mg/kg	1.5	3.695 mg/kg	0.000369 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				54.7 mg/kg	2.976	133.66 mg/kg	0.0134 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				1 mg/kg	2.554	2.097 mg/kg	0.00021 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				98 mg/kg	2.774	223.202 mg/kg	0.0223 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
18	xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
19	pH		PH		8.4 pH		8.4 pH	8.4 pH			
20	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
21	acenaphthylene 205-917-1		208-96-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD	
22	acenaphthene 201-469-6		83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
23	fluorene 201-695-5		86-73-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
24	phenanthrene 201-581-5		85-01-8		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD	
25	anthracene 204-371-1		120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
26	fluoranthene 205-912-4		206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD	
27	pyrene 204-927-3		129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD	
28	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD	
29	chrysene 601-048-00-0	205-923-4	218-01-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD	
30	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
31	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD	
32	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
33	indeno[123-cd]pyrene 205-893-2		193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
34	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
35	benzo[ghi]perylene 205-883-8		191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
36	polychlorobiphenyls; PCB 602-039-00-4	215-648-1	1336-36-3		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD	
37	barium { barium oxide } 215-127-9		1304-28-5		91 mg/kg	1.117	83.415 mg/kg	0.00834 %	✓		
38	coronene 205-881-7		191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD	
39	benzo[j]fluoranthene 601-035-00-X	205-910-3	205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD	
Total:									0.0621 %		

Key

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

Appendix A: Classifier defined and non EU CLP determinands

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

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

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

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

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

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

EU CLP index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

03 Jun 2015 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

• pH (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

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

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

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

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

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

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

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

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

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

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

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

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

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

EU CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans;

POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

▫ **barium oxide** (EC Number: 215-127-9, CAS Number: 1304-28-5)

Description/Comments: Data from ECHA's C&L Inventory Database, Sigma Aldrich SDS dated 6/2/20
Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/88825>
Data source date: 02 Apr 2020
Hazard Statements: Acute Tox. 3; H301 , Skin Corr. 1B; H314 , Eye Dam. 1; H318 , Acute Tox. 1; H332

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

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

Appendix B: Rationale for selection of metal species

antimony {antimony trioxide}

Worst case CLP species based on hazard statements/molecular weight and low solubility. Industrial sources include: flame retardants in electrical apparatus, textiles and coatings (edit as required)

arsenic {arsenic trioxide}

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

cadmium {cadmium oxide}

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

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

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

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

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

copper {dicopper oxide; copper (I) oxide}

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

lead {lead chromate}

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

mercury {mercury dichloride}

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

molybdenum {molybdenum(VI) oxide}

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

nickel {nickel chromate}

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

selenium {nickel selenate}

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

zinc {zinc chromate}

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

barium {barium oxide}

Cr VI not detected

Appendix C: Version

HazWasteOnline Classification Engine: EU WM3 1st Edition v1.1.NI using the EU LoW

HazWasteOnline Classification Engine Version: 2024.80.5988.11077 (20 Mar 2024)

HazWasteOnline Database: 2024.80.5988.11077 (20 Mar 2024)

This classification utilises the following guidance and legislation:

WM3 v1.1.NI - Waste Classification - 1st Edition v1.1.NI - Jan 2021

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2020 No. 1540 of 16th December 2020

17th ATP - Regulation (EU) 2021/849 of 11 March 2021

18th ATP - Regulation (EU) 2022/692 of 16 February 2022

POPs Amendment 2022 - Regulation (EU) 2022/2400 of 23 November 2022

19th ATP - Regulation (EU) 2023/1434 of 25 April 2023

20th ATP - Regulation (EU) 2023/1435 of 2 May 2023

APPENDIX 7 – Waste Category Summary Data



Waste Categorisation Summary Table

Finglas Church



Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	BH-01	BH-02	BH-02	BH-03	BH-04	BH-04	BH-05	BH-06						
	0.50	1.00	0.50	1.00	0.50	2.00	1.00	1.00	2.00	1.00	1.00	2.00	0.50	1.00	Domain 2 (1.5 limit)	Category B1 Criteria	Category B2 Criteria	Hazardous Criteria	LOD LOR	Units
Sample Depth (m)	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Made Ground <2% Anthropogenic Material	Made Ground <2% Anthropogenic Material	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Made Ground <2% Anthropogenic Material	Clay						
Material Description																				
Sample Date	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023	22/11/2023						
LoW Code	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04						
Waste Category	Category B2 - Domain 2	Category A - Domain 2	Category A - Domain 2	Category B1 - Domain 2	Category B1 - Domain 2	Category A - Domain 2	Category A - Domain 2	Category B1 - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category B1 - Domain 2	Category A - Domain 2						
Metals																				
Antimony	2	2	1	3	2	2	<1	1	1	3	2	2	3	2	-	-	-	HazWaste	<1	mg/kg
Arsenic	16.5	12.8	8.3	17.5	17.3	12.3	5.6	10.6	8.6	11.2	13.4	9.9	15.1	13.6	37.35	-	-	HazWaste	<0.5	mg/kg
Barium	135	92	61	140	139	45	39	52	53	310	89	51	124	91	-	-	-	HazWaste	<1	mg/kg
Cadmium	2.7	2.3	0.7	2.2	2.8	1.9	1.2	1.9	1.5	2.4	2.4	2.1	1.9	1.8	4.52	-	-	HazWaste	<0.1	mg/kg
Chromium	31.3	17.4	32	30.2	26.6	15.3	12.5	15.5	18.5	20.2	18.2	17.3	22.8	42	75.45	-	-	HazWaste	<0.5	mg/kg
Copper	52	37	24	49	52	27	13	28	21	30	41	27	27	35	95.25	-	-	HazWaste	<1	mg/kg
Lead	91	19	92	241	113	20	13	15	15	18	18	16	133	23	129.15	-	-	HazWaste	<5	mg/kg
Mercury	0.2	<0.1	<0.1	0.3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	0.54	-	-	HazWaste	<0.1	mg/kg
Molybdenum	3.4	3.5	1	4	4.6	3.8	1.6	2.7	2.9	7.8	4.4	3.1	3.3	3	-	-	-	HazWaste	<0.1	mg/kg
Nickel	46.3	51	16.1	50.7	61	36.9	14.9	36.1	34.6	45.2	50.8	39.9	42.1	54.7	92.85	-	-	HazWaste	<0.7	mg/kg
Selenium	2	<1	<1	2	2	1	<1	<1	3	5	1	1	1	1	-	-	-	HazWaste	<1	mg/kg
Zinc	103	89	59	124	135	75	49	66	62	76	95	75	114	98	295.5	-	-	HazWaste	<5	mg/kg
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	-	HazWaste	<0.3	mg/kg
pH (solid sample)																				
pH (solid sample)	7.67	8.68	11.35	8.76	8.57	8.74	9.45	8.44	8.24	8.65	8.54	8.64	8.35	8.4	-	-	-	HazWaste	<0.01	pH units
alkali reserve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.000	gNaOH/100g
Asbestos																				
Asbestos (Dry Weight)	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	-	-	0.1	<0.001	%
Asbestos (Moisture Corrected Weight)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	%
ACM Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Presence	Presence
PAHs																				
Naphthalene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	HazWaste	<0.05	mg/kg
Fluorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Phenanthrene	0.15	<0.03	0.08	<0.03	0.18	<0.03	0.08	<0.03	0.08	<0.03	0.17	<0.03	0.17	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Anthracene	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Fluoranthene	0.14	<0.03	0.1	<0.03	0.43	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.31	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Pyrene	0.13	<0.03	0.09	<0.03	0.35	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.27	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Benzo(a)anthracene	0.1	<0.06	0.08	<0.06	0.26	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.19	<0.06	-	-	-	HazWaste	<0.06	mg/kg
Chrysene	0.1	<0.02	0.08	<0.02	0.28	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.02	0.2	<0.02	-	-	-	HazWaste	<0.02	mg/kg
Benzo(b)fluoranthene	0.13	<0.09	<0.07	0.44	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.3	<0.07	-	-	-	HazWaste	<0.07	mg/kg
Benzo(k)fluoranthene	0.08	<0.04	0.04	<0.04	0.27	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.19	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Indeno(1,2,3-cd)pyrene	<0.04	<0.04	<0.04	<0.04	0.17	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Dibenz(a,h)anthracene	<0.04	<0.04	<0.04	<0.04	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Benzo(ghi)perylene	<0.04	<0.04	<0.04	<0.04	0.16	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Chlorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
PAH 6 Total	0.35	<0.22	0.23	<0.22	1.47	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	1.02	<0.22	-	-	-	HazWaste	<0.22	mg/kg
PAH 17 Total	0.83	<0.64	<0.64	<0.64	2.60	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1.9	<0.64	1	100	100	-	<0.64	mg/kg
Benzo(b)fluoranthene	0.09	<0.05	0.06	<0.05	0.32	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.22	<0.05	-	-	-	HazWaste	<0.05	mg/kg
Benzo(k)fluoranthene	0.04	<0.02	0.03	<0.02	0.12	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.08	<0.02	-	-	-	HazWaste	<0.02	mg/kg
Benzo(i)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	HazWaste	<1	mg/kg
Hydrocarbons																				
TPH (C5-40)	<52	<52	<52	<52	<52	<52	<52	443	<52	<52	<52	<52	<52	<52	-	-	-	HazWaste	<52	mg/kg
MTBE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Benzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Toluene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
m,p-Xylene	15	<5	<5	<5	<5	<5	6	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
o-Xylene	10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Total 7 PCBs	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	50	1,000	1,000	-	<35	ug/kg
WAC** Solid Sample Summary																				
Total Organic Carbon**	3.75	0.47	0.32	1.87	1.39	0.48	0.28	0.27	0.48	0.89	0.41	0.37	2.59	0.75	3	3	6	-	<0.02	%
Sum of BTEX	0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.05	6	6	-	<0.025	mg/kg
Sum of 7 PCBs	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	0.05	1	1	-	<0.035	mg/kg
Mineral Oil	<30	<30	<30	<30	<30	<30	<30	321	<30	<30	<30	<30	<30	<30	50	500	500	-	<30	mg/kg
PAH Sum of 6	0.35	<0.22	0.23	<0.22	1.47	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	1.02	<0.22	-	-	-	-	<0.22	mg/kg