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Ground Investigations Ireland

Housing Bundle 4 & 5 - Lot 2 – Ballymun

National Development Finance Agency

Waste Classification Report

May 2024

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DOCUMENT CONTROL SHEET

Project Title	Housing Bundle 4 & 5 - Lot 2 – Ballymun
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	02 May 2024

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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 Ballymun, 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 March 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;
- Boring of twelve (12 No.) trial pits;
- Boring of twenty two (22 No.) cable percussion boreholes;
- Boring of five (5 No.) rotary follow on 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:

- Completion of five (5 No.) soakaway tests to determine a soil infiltration value to BRE digest 365;
- Completion of fourteen (14 No.) slit trenches to determine existing service details;
- 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 March 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.

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.

[1] Ground Investigations Ireland, Housing Bundle 4 & 5 - Lot 2 – Ballymun, Ground Investigation Report, March 2024.

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 Ballymun, Dublin 11 (Figure 1 Appendix 1). At the time of the assessment the site was comprised of an several interconnected open landscaped public green areas.

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 several Dublin City Council flats. These were demolished and the debris removed from site in the late 2000's.

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 6. 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 6, 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 60º 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 6. 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 follow on borehole logs are provided in Appendix 3 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
- Made Ground
- Cohesive Deposits
- Granular
- Bedrock

TOPSOIL: Topsoil was encountered in the majority of exploratory holes and was present to a maximum depth of 0.30m BGL.

MADE GROUND: Made Ground deposits were encountered from surface or beneath the topsoil and were present to a depth of 0.60m to 4.10m BGL. These deposits were described generally as *brown slightly sandy gravelly Clay* or *dark grey slightly sandy slightly gravelly Clay with occasional fragments of concrete, red brick, metal, pipe and plastic.*

COHESIVE DEPOSITS: Cohesive deposits were encountered beneath the Made Ground and were described typically as *brown slightly sandy slightly gravelly CLAY with occasional cobbles and boulders* overlying a *dark grey slightly sandy 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 occasional, some or frequent cobble and boulder content, where noted on the exploratory hole logs.

GRANULAR DEPOSITS: A granular deposit was encountered within the cohesive deposits at BH02 and was typically described as *grey clayey sandy subrounded to subangular fine to coarse GRAVEL with occasional cobbles and rare boulders.* The secondary sand and silt/clay constituents may vary 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 *strong to very strong grey/dark grey massive fine grained argillaceous LIMESTONE*. This is typical of the Lucan Formation, which is noted on the Geological Survey Ireland bedrock geology maps for the area. Rare visible pyrite veins were noted during logging which are typically present within the Calp Limestone. The depth to rock varies from 16.30m BGL in BH02 to a maximum of 18.80m BGL in BH19 to the south of the site.

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 4.

8.2. Asbestos

Asbestos fibres were detected in the sample TP-01 0.70m BGL. The laboratory identified asbestos containing materials (ACMs) in the sample in the form of asbestos cement. **The level of asbestos detected had not been quantified by the laboratory at the time of writing this report.**

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

[2] Formerly European Waste Catalogue Codes (EWC Codes)

9.1. HazWasteOnLineTM Results

In total, forty-one (41 No.) samples were assessed using the HazWasteOnLine™ Tool. **The sample TP-01 at 0.70m BGL was not assessed using the HWOL tool due to the fact that the asbestos detected in the sample had not been quantified by the laboratory at the time of writing this report.** The sample BH-10 0.50m was classified as hazardous due to elevated levels of TPH and the associated hazardous properties HP7[3] Carcinogenic and HP11[4] Mutagenic. The sample BH-19 2.00m was classified as hazardous based on the hazardous property HP8[5] (Corrosive) due to elevated level of pH. The remaining samples were classified as being non-hazardous. The complete HazWasteOnLine™ report for all samples is included in Appendix 5. 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%[6] 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 6. The waste category assigned to each sample is summarised in Table 2.

[3] HP 7: Carcinogenic "waste which induces cancer or increases its incidence".
[4] HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell".
[5] Waste which on application can cause skin corrosion.
[6] EPA (2020) - Guidance on Waste Acceptance Criteria at Authorised Soil Recovery Facilities.

Table 1 Potential Waste Categories for Disposal/Recovery

Waste Category	Classification Criteria
Category A Unlined Facilities	Soil and Stone only which are free from[7] anthropogenic materials such as concrete, brick, timber. Soil must be free from "contamination" e.g. PAHs, Hydrocarbons[8].
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). Results also found to be non-hazardous using the HWOL[9] 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.

[7] Free from equates to less than 2%.
[8] 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.
[9] HazWasteOnLine™ Tool.

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 facilities[10].
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).
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 several of the samples of the made ground material encountered across 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
BH04	0.50	Made Ground <2% Anthropogenic Material	24/11/2023	17 05 04	Category A - Domain 2
BH04	1.00	Clay	24/11/2023	17 05 04	Category A - Domain 2
BH07	0.60	Made Ground <2% Anthropogenic Material	23/11/2023	17 05 04	Category A - Domain 2
BH07	1.50	Clay	23/11/2023	17 05 04	Category A - Domain 2
BH08	1.00	Made Ground <2% Anthropogenic Material	23/11/2023	17 05 04	Category A - Domain 2
BH08	2.00	Clay	23/11/2023	17 05 04	Category A - Domain 2
BH09	0.50	Made Ground <2% Anthropogenic Material	23/11/2023	17 05 04	Category B2 - All Domains
BH09	1.50	Clay	23/11/2023	17 05 04	Category A - Domain 2
BH10	0.50	Made Ground <2% Anthropogenic Material	23/11/2023	17 05 03	Category D - All Domains

[10] Guidance on waste acceptance criteria at authorised soil recovery facilities 2020 - ENVIRONMENTAL PROTECTION AGENCY

Sample ID	Sample Depth (m)	Material Type	Sample Date	LoW Code	Waste Category
BH10	1.20	Clay	23/11/2023	17 05 04	Category A - Domain 2
BH11	0.50	Made Ground <2% Anthropogenic Material	23/11/2023	17 05 04	Category A - Domain 2
BH11	1.50	Clay	23/11/2023	17 05 04	Category A - Domain 2
BH13	0.50	Made Ground <2% Anthropogenic Material	24/11/2023	17 05 04	Category A- Domain 2
BH13	1.00	Clay	24/11/2023	17 05 04	Category A- Domain 2
BH14A	1.00	Made Ground <2% Anthropogenic Material	24/11/2023	17 05 04	Category A- Domain 2
BH15	0.40	Made Ground <2% Anthropogenic Material	24/11/2023	17 05 04	Category B1- Domain 2
BH15	1.50	Clay	24/11/2023	17 05 04	Category A- Domain 2
BH17	0.50	Made Ground <2% Anthropogenic Material	23/11/2023	17 05 04	Category A- Domain 2
BH17	2.00	Clay	23/11/2023	17 05 04	Category A- Domain 2
BH19	0.50	Made Ground <2% Anthropogenic Material	23/11/2023	17 05 04	Category B1- Domain 2
BH19	2.00	Clay	23/11/2023	17 05 03	Category D - All Domains
TP-01	0.70	Made Ground <2% Anthropogenic Material	13/12/2023	No Code Assigned - Awaiting Asbestos Result	Awaiting Asbestos Result
TP-01	2.00	Clay	13/12/2023	17 05 04	Category A- Domain 2
TP-02	1.20	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category A- Domain 2
TP-02	3.00	Clay	13/12/2023	17 05 04	Category B2 - Domain 2
TP-03	0.50	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category A - Domain 2
TP-03	2.00	Clay	13/12/2023	17 05 04	Category A - Domain 2
TP-03	3.50	Clay	13/12/2023	17 05 04	Category A - Domain 2

Sample ID	Sample Depth (m)	Material Type	Sample Date	LoW Code	Waste Category
TP-04	0.50	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category A - Domain 2
TP-05	1.00	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category A - Domain 2
TP-05	3.00	Clay	13/12/2023	17 05 04	Category A - Domain 2
TP-06	0.50	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category A - Domain 2
TP-07	1.00	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category A - Domain 2
TP-07	3.00	Clay	13/12/2023	17 05 04	Category A - Domain 2
TP-08	2.00	Clay	13/12/2023	17 05 04	Category A - Domain 2
TP-08	3.40	Clay	13/12/2023	17 05 04	Category B1 - Domain 2
TP-09	2.20	Clay	13/12/2023	17 05 04	Category A - Domain 2
TP-10	1.00	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category A - Domain 2
TP-11	0.50	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category A - Domain 2
TP-11	3.00	Clay	13/12/2023	17 05 04	Category A - Domain 2
TP-12	0.50	Made Ground <2% Anthropogenic Material	13/12/2023	17 05 04	Category B1 - Domain 2
TP-12	1.00	Made Ground <2% Anthropogenic Material	13/12/2023	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
BH04	0.5	Made Ground <2% Anthropogenic Material	✓	✓	✓	×	×	✓	×
BH04	1	Clay	✓	✓	✓	×	✓	✓	×
BH07	0.6	Made Ground <2% Anthropogenic Material	✓	✓	✓	×	✓	✓	×
BH07	1.5	Clay	✓	✓	✓	×	×	×	×
BH08	1	Made Ground <2% Anthropogenic Material	×	✓	✓	×	×	×	×
BH08	2	Clay	✓	✓	✓	×	✓	✓	×
BH09	0.5	Made Ground <2% Anthropogenic Material	×	×	×	×	×	×	×
BH09	1.5	Clay	✓	✓	✓	×	✓	✓	×
BH10	0.5	Made Ground <2% Anthropogenic Material	×	×	×	×	×	×	×
BH10	1.2	Clay	✓	✓	✓	×	✓	×	×
BH11	0.5	Made Ground <2% Anthropogenic Material	✓	✓	✓	✓	✓	✓	×
BH11	1.5	Clay	✓	✓	✓	×	✓	✓	×
BH13	0.5	Made Ground <2% Anthropogenic Material	✓	✓	✓	✓	✓	✓	✓
BH13	1	Clay	✓	✓	✓	✓	✓	✓	×
BH14A	1	Made Ground <2% Anthropogenic Material	✓	✓	✓	✓	✓	✓	×
BH15	0.4	Made Ground <2% Anthropogenic Material	×	×	×	×	×	×	×
BH15	1.5	Clay	✓	✓	✓	×	✓	✓	×
BH17	0.5	Made Ground <2% Anthropogenic Material	×	✓	✓	×	×	×	×
BH17	2	Clay	✓	✓	✓	×	✓	✓	×

ID	Depth	Material	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7
BH19	0.5	Made Ground <2% Anthropogenic Material	×	×	×	×	×	×	×
BH19	2	Clay	×	×	×	×	×	×	×
TP-01	0.7	Made Ground <2% Anthropogenic Material	×	×	×	×	×	×	×
TP-01	2	Clay	✓	✓	✓	×	✓	✓	×
TP-02	1.2	Made Ground <2% Anthropogenic Material	×	✓	✓	✓	✓	✓	×
TP-02	3	Clay	×	×	×	×	×	×	×
TP-03	0.5	Made Ground <2% Anthropogenic Material	✓	✓	✓	✓	✓	✓	×
TP-03	2	Clay	✓	✓	✓	×	✓	×	×
TP-03	3.5	Clay	✓	✓	✓	×	✓	✓	×
TP-04	0.5	Made Ground <2% Anthropogenic Material	✓	✓	✓	×	✓	✓	×
TP-05	1	Made Ground <2% Anthropogenic Material	×	✓	×	×	×	✓	×
TP-05	3	Clay	✓	✓	✓	✓	✓	✓	×
TP-06	0.5	Made Ground <2% Anthropogenic Material	✓	✓	✓	×	×	×	×
TP-07	1	Made Ground <2% Anthropogenic Material	✓	✓	✓	×	×	✓	×
TP-07	3	Clay	✓	✓	✓	✓	✓	✓	×
TP-08	2	Clay	✓	✓	✓	×	✓	✓	×
TP-08	3.4	Clay	×	×	×	×	×	×	×
TP-09	2.2	Clay	✓	✓	✓	×	✓	✓	×
TP-10	1	Made Ground <2% Anthropogenic Material	✓	✓	✓	✓	✓	×	×
TP-11	0.5	Made Ground <2% Anthropogenic Material	✓	✓	✓	×	✓	✓	×

ID	Depth	Material	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7
TP-11	3	Clay	✓	✓	✓	×	✓	✓	×
TP-12	0.5	Made Ground <2% Anthropogenic Material	×	×	×	×	×	×	×
TP-12	1	Made Ground <2% Anthropogenic Material	✓	✓	✓	×	✓	×	×

× - 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 at BH-10 0.50m and BH-19 2.00m if being considered a waste can be classified as hazardous due to elevated levels of TPH and pH, respectively.

The sample TP-01 at 0.70m BGL was not assessed using the HWOL tool due to the fact that the asbestos detected in the sample had not been quantified by the laboratory at the time of writing this report.

11.1.2. Asbestos

Asbestos was detected in the sample TP-01 at 0.70m BGL. The asbestos detected in the sample had not been quantified by the laboratory at the time of writing this report.

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. Further Sampling and Analysis

It is recommended that further sampling of the material at TP-01 0.70m BGL be undertaken to facilitate alkali reserve testing to more robustly assess the hazardous properties assigned during the initial round of sampling.

11.2.2. 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.

The hazardous material across the site if excavated should be removed from site to an appropriate facility under either the LoW codes 17 05 03 or 17 09 03. 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 03.

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*.

Environmental Protection Agency (EPA) (2014). Letter to Licences *Re: Waste Classification & Haz Waste On-Line™*.

Environmental Protection Agency (EPA) (2015). *Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous.*

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

Client:

An Ghníomhaireacht Airgeadais d'Fhorbairt Náisiúnta
National Development Finance Agency

Project Code:
13061-08-23

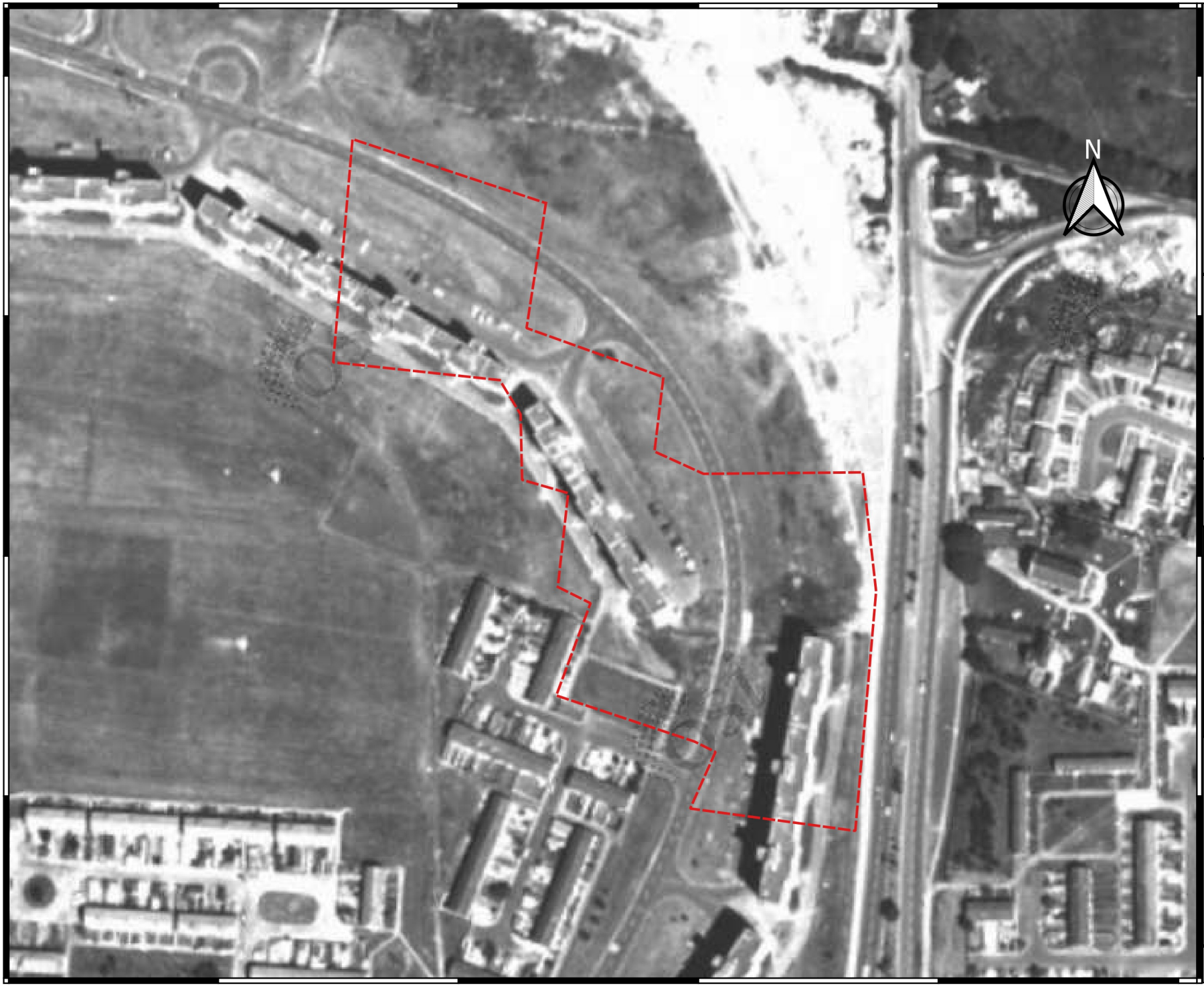
Project Title:
Ballymun NDFA

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

0 30 60 90 120 150 m

Drawn By:	Date:
BS	19-04-2024



Indicative Site Location

Client:

An Ghníomhaireacht Airgeadais d'Fhorbairt Náisiúnta
National Development Finance Agency

Project Code:
13061-08-23

Project Title:
Ballymun NDFA

Drawing Title:
Figure 2 OSI 1995 Aerial Image

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176

Drawn By:	Date:
BS	18-04-2024

Indicative Site Location

Client:

An Ghníomhaireacht Airgeadais d'Fhorbairt Náisiúnta
National Development Finance Agency

Project Code:

13061-08-23

Project Title:

Ballymun NDFA

Drawing Title:

Figure 3 OSI 1999-2003 Aerial Image Series

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176

Drawn By:	Date:
BS	18-04-2024

Indicative Site Location

Client:

An Ghníomhaireacht Airgeadais d'Fhorbairt Náisiúnta
National Development Finance Agency

Project Code:

13061-08-23

Project Title:

Ballymun NDFA

Drawing Title:

Figure 4 OSI 2004-2006 Aerial Image Series

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176

Drawn By:	Date:
BS	18-04-2024

Indicative Site Location

Client:

An Ghníomhaireacht Airgeadais d'Fhorbairt Náisiúnta
National Development Finance Agency

Project Code:

13061-08-23

Project Title:

Ballymun NDFA

Drawing Title:

Figure 5 OSI 2005-2012 Aerial Image Series

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176

Drawn By:	Date:
BS	18-04-2024

Indicative Site Boundary

Borehole

Trial Pit

Client:

An Ghníomhaireacht Airgeadais d'Fhorbairt Náisiúnta
National Development Finance Agency

Project Code:

13061-08-23

Project Title:

Ballymun NDFA

Drawing Title:

Figure 6 Trial Pit and Borehole Locations

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

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

0 15 30 45 60 m

Drawn By:	Date:
BS	18-04-2024

APPENDIX 2 – Trial Pit Records

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP01

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	2.70m x 0.70m x 2.80m (L x W x D)	65.15	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715277.3 E 740365.8 N	19/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				64.85	0.30	MADE GROUND brown slightly sandy gravelly Clay with occasional sub angular to sub rounded cobbles and fragments of red brick, timber and wire		
0.70	B1				(0.70)			
				64.15	1.00	Firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
1.20	B2				(0.60)			
				63.55	1.60	Stiff brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
2.00	B3				(1.00)			
				62.55	2.60	Stiff grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles		▽1
2.60	B4		Slow(1) at 2.70m.		(0.20)			
				62.35	2.80	OBSTRUCTION: Due to possible boulder or bedrock		
						Complete at 2.80m		

Plan

Remarks

Groundwater encountered at 2.70m BGL
Trial pit side walls collapsing
Trial pit terminated due to bedrock
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP01

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP02

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	3.50m x 0.70m x 3.40m (L x W x D)	64.74	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715238.1 E 740343.3 N	19/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				64.44	0.30			
0.50	B1					MADE GROUND brown slightly sandy gravelly Clay with fragments of plastic, pipe and fabric		
					(0.70)			
				63.74	1.00			
1.20	B2					MADE GROUND grey slightly sandy gravelly Clay with fragments of wire, plastic and metal		
					(0.80)			
			Slow(1) at 1.70m.					▽1
				62.94	1.80			
2.00	B3					Firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles and boulders		
					(1.40)			
3.00	B4							
				61.54	3.20			
					(0.20)	Firm dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles and boulders		
3.30	B5			61.34	3.40	OBSTRUCTION: Due to large boulder		
						Complete at 3.40m		

Plan

Remarks

Groundwater encountered at 1.70m BGL
Trial pit side walls collapsing
Trial pit terminated due to a large boulder or bedrock
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP02

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP03

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	4.00m x 0.50m x 3.50m (L x W x D)	63.78	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715264.8 E 740341.3 N	23/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				63.48	0.30	MADE GROUND brown slightly sandy gravelly Clay with grass and rootlets and fragments of plastic and red bricks		
0.50	B1				(0.60)			
				62.88	0.90	Soft to firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles and boulders		
1.00	B2				(0.60)			▽1
			Slow/ Moderate(1) at 1.40m.	62.28	1.50	Firm dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
2.00	B3				(1.10)			
				61.18	2.60	Firm to stiff dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
					(0.50)			
3.00	B4			60.68	3.10	Stiff dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles and boulders		
					(0.40)			
3.50	B5			60.28	3.50	OBSTRUCTION: Due to large boulder		
						Complete at 3.50m		

Plan

Remarks

Groundwater encountered at 1.40m BGL
Trial pit side walls stable
Trial pit terminated due to a large boulder
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP03

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP04

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	4.60m x 0.50m x 1.00m (L x W x D)	63.43	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715285.4 E 740327.5 N	23/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				63.13	0.30			
0.50	B1				(0.60)	MADE GROUND brown slightly sandy gravelly Clay with grass and rootlets and fragments of plastic, concrete, metal, pipe		
			Slow(1) at 0.90m.	62.53	0.90	OBSTRUCTION: Due to old foundation		▽1
						Complete at 1.00m		

Plan

Remarks

Groundwater encountered at 0.90m BGL
Trial pit side walls stable
Trial pit terminated due to possible foundation
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP04

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP05

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	3.30m x 0.50m x 3.70m (L x W x D)	63.60	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715315.8 E 740260.3 N	23/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				63.30	0.30	MADE GROUND brown slightly sandy gravelly Clay with grass and rootlets and fragments of plastic and red bricks		
0.50	B1				(0.60)			
				62.70	0.90	Firm dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
1.00	B2				(0.70)			
				62.00	1.60	Firm to stiff dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
2.00	B3				(0.80)			
			Slow(1) at 2.40m.	61.20	2.40	Stiff dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		▽1
					(0.80)			
3.00	B4							
				60.40	3.20	Stiff dark grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles and boulders		
					(0.50)			
3.70	B5			59.90	3.70	OBSTRUCTION: Due to large boulder		
						Complete at 3.70m		

Plan

Remarks

Groundwater encountered at 2.40m BGL
Trial pit side walls collapsing
Trial pit terminated due to a large boulder
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP05

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP06

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	3.40m x 0.50m x 1.60m (L x W x D)	63.07	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715346.5 E 740228.3 N	23/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				62.77	0.30	MADE GROUND brown slightly sandy gravelly Clay with grass and rootlets and fragments of plastic, concrete, red brick, pipe		
0.50	B1				(0.50)			
				62.27	0.80	Firm grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
1.00	B2				(0.80)			▽1
			Fast(1) at 1.30m.					
				61.47	1.60	Terminated Trial pit due to groundwater		
						Complete at 1.60m		

Plan

Remarks

Groundwater encountered at 1.30m BGL
Trial pit side walls stable
Trial pit terminated due to groundwater
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP06

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP07

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	3.80m x 1.00m x 3.50m (L x W x D)	63.21	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715344 E 740211.8 N	23/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				62.91	0.30	MADE GROUND brown slightly sandy gravelly Clay with grass and rootlets and fragments of plastic, wire, metal, pipe		
0.50	B1				(0.90)			
1.00	B2			62.01	1.20	Firm grey slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
					(0.80)			
2.00	B3			61.21	2.00	Stiff grey slightly sandy very gravelly CLAY with some sub angular to sub rounded cobbles		
			Slow(1) at 2.60m.		(1.00)			▽1
3.00	B4			60.21	3.00	Stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders		
					(0.50)			
3.50	B5			59.71	3.50	OBSTRUCTION: Due to large boulder		
						Complete at 3.50m		

Plan

Remarks

Groundwater encountered at 2.60m BGL
Trial pit side walls collapsing
Trial pit terminated due to a large boulder
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP07

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP08

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	3.30m x 0.50m x 3.40m (L x W x D)	63.31	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715334.9 E 740174.7 N	23/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				63.01	0.30	MADE GROUND brown slightly sandy slightly gravelly Clay with grass and rootlets and rare fragments of red bricks		
0.50	B1				(0.60)			
				62.41	0.90	Firm light brown slightly sandy slightly gravelly CLAY		
1.00	B2				(0.60)			
				61.81	1.50	Firm greyish brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
2.00	B3				(0.90)			
			Slow(1) at 2.30m.					▽1
				60.91	2.40	Firm greyish brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
					(0.50)			
				60.41	2.90	Stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders		
3.00	B4				(0.50)			
3.40	B5		Slow(2) at 3.40m.	59.91	3.40	OBSTRUCTION: Due to large boulder		▽2
						Complete at 3.40m		

Plan

Remarks

Groundwater encountered at 2.30m and 3.40m BGL
Trial pit side walls spalling
Trial pit terminated due to a large boulder
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP08

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP09

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	2.20m x 0.50m x 2.00m (L x W x D)	63.00	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715354.1 E 740171.7 N	24/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				62.70	0.30	MADE GROUND brown slightly sandy gravelly Clay with grass and rootlets and fragments of plastic		
0.50	B1				(0.50)			
				62.20	0.80	POSSIBLE MADE GROUND brown slightly sandy gravelly Clay with occasional sub angular to sub rounded cobbles and boulders		
					(0.40)			
1.20	B2		Slow(1) at 1.20m.	61.80	1.20	Soft to firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		▽1
					(0.40)			
				61.40	1.60	Firm brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
					(0.60)			
2.20	B3			60.80	2.20	Terminated Trial pit due to side walls collapsing		
						Complete at 2.20m		

Plan

Remarks

Groundwater encountered at 1.20m BGL
Trial pit side walls collapsing
Trial pit terminated due to side walls collapsing
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP09

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP10

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	4.20m x 0.50m x 1.70m (L x W x D)	62.66	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715413.8 E 740217.6 N	24/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				62.36	0.30	MADE GROUND brown slightly sandy gravelly Clay with grass and rootlets and fragments of plastic		
0.50	B1							
					(1.30)			
1.00	B2							
				61.06	1.60			
					(0.10)	MADE GROUND brown very sandy gravelly CLAY with pipe		
				60.96	1.70	OBSTRUCTION: Due to services		
						Complete at 1.70m		

Plan

Remarks

No groundwater encountered
Trial pit side walls stable
Trial pit terminated due to services
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP10

Ground Investigations Ireland Ltd
www.gii.ie

Site	Trial Pit Number
Housing Bundle_Ballymun	TP11

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	2.80m x 0.50m x 3.30m (L x W x D)	63.06	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715386.3 E 740162.8 N	24/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				62.76	0.30			
					(0.10)	MADE GROUND grey slightly sandy very gravelly Clay with grass and rootlets and fragments of plastic and geotextile		
			Slow(1) at 0.40m.	62.66	0.40			▽1
0.50	B1				(0.50)	MADE GROUND brown slightly sandy gravelly Clay with rare sub angular to sub rounded cobbles		
				62.16	0.90			
1.00	B2				(0.90)	Stiff brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
				61.26	1.80			
2.00	B3				(1.10)	Stiff brown slightly sandy gravelly CLAY with occasional sub angular to sub rounded cobbles		
				60.16	2.90			
3.00	B4				(0.40)	Stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders		
				59.76	3.30	OBSTRUCTION: Due to large boulder		
						Complete at 3.30m		

Plan

Remarks

Groundwater encountered at 0.40m BGL
Trial pit side walls stable
Trial pit terminated due to possible large boulder
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP11

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Site	Trial Pit Number
Housing Bundle_Ballymun	TP12

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	2.90m x 0.50m x 1.50m (L x W x D)	63.40	National Development Finance Agency	13061-08-23(4)
	Location	**Dates**	**Engineer**	**Sheet**
	715409.4 E 740135.9 N	24/10/2023		1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
				63.10	0.30	MADE GROUND brown slightly sandy gravelly Clay with grass and rootlets and fragments of plastic, concrete, metal		
0.50	B1							
					(1.20)			
1.00	B2							
			Slow/ Moderate(1) at 1.40m.					▽1
				61.90	1.50	OBSTRUCTION: Due to old foundation		
						Complete at 1.50m		

Plan

Remarks

Groundwater encountered at 1.40m BGL
Trial pit side walls stable
Trial pit terminated due to possible foundation
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	GGR	13061-08-23(4).TP12

Housing Bundle - Ballymun

TP01

Housing Bundle - Ballymun

TP02

Housing Bundle - Ballymun

TP03

Housing Bundle - Ballymun

TP04

Housing Bundle - Ballymun

TP05

Housing Bundle - Ballymun

TP06

Housing Bundle - Ballymun

TP07

Housing Bundle - Ballymun

TP08

Housing Bundle - Ballymun

TP09

Housing Bundle - Ballymun

TP10

Housing Bundle - Ballymun

TP11

Housing Bundle - Ballymun

TP12

APPENDIX 3 – Borehole Records

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Site Housing Bundle_Ballymun			**Borehole Number** BH01
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 6.20m	**Ground Level (mOD)** 65.29	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715231.1 E 740385.2 N	**Dates** 08/12/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					65.09	(0.20) 0.20	Brown slightly sandy slightly gravelly TOPSOIL with rootlets. Gravel is subangular to subrounded fine to coarse.		
0.50	B1				64.59	(0.50) 0.70	MADE GROUND (reworked): Brown slightly sandy gravelly Clay. Gravel is angular to subrounded fine to coarse.		
1.00-1.45 1.00	SPT(C) N=15 B2			1,2/4,4,4,3		(2.10)	Stiff brown slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse.		
2.00-2.45 2.00	SPT(C) N=20 B3			2,3/4,5,6,5					
					62.49	2.80			
3.00-3.45 3.00	SPT(C) N=29 B4			3,4/5,6,8,10			Stiff grey to dark grey slightly sandy gravelly CLAY with occasional subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
4.00-4.45 4.00	SPT(C) N=43 B5			7,9/10,11,11,11		(2.20)			
					60.29	5.00			
5.00-5.19 5.00	SPT(C) 50/40 B6			8,9/10,12,13,15			Very stiff grey to dark grey slightly sandy gravelly CLAY with occasional subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
						(1.20)			
6.00-6.21 6.00	SPT(C) 50/60 B7			7,7/13,17,20	59.09	6.20			
							Terminated at 6.20m		

Remarks
No groundwater encountered.
Cable percussion boring techniques carried out from ground level to 6.20m BGL.
Borehole backfilled on completion.
Chiselling from 5.50m to 5.50m for 1 hour.

Scale (approx)	Logged By
1:50	CE

Figure No. 13061-08-23(4).BH01

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Site Housing Bundle_Ballymun			**Borehole Number** BH02
Machine : Dando 2000 and Baretha T-41 **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 5.50m 63.50mm cased to 28.00m	**Ground Level (mOD)** 64.69	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715239.1 E 740368.7 N	**Dates** 16/11/2023-14/02/2024	**Engineer**	**Sheet** 1/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
							MADE GROUND: Brown sandy gravelly Clay.		
0.50	B1					(0.90)			
					63.79	0.90			
1.00-1.45 1.00	SPT(C) N=12 B2			2,2/3,3,3,3	63.69	1.00	Firm to stiff brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
						(1.00)	Firm brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
					62.69	2.00			
2.00-2.45 2.00	SPT(C) N=25 B3			3,4/7,6,7,5			Stiff dark grey/black slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to angular.		
3.00-3.45 3.00	SPT(C) N=43 B4			5,7/7,9,12,15		(2.00)			
	26.67 0	0							
					60.69	4.00			
4.00-4.45 4.00	SPT(C) N=50 B5			6,9/12,16,22			Very stiff dark grey/black slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to angular.		
						(1.50)			
5.00-5.45 5.00	SPT(C) N=50 B6			8,11/15,17,18					
					59.19	5.50			
				7,9/9,11,13,13			Dense grey slightly sandy slightly clayey fine to coarse sub angular to sub rounded GRAVEL with occasional sub angular to sub rounded cobbles		
7.00-7.45 7.00	SPT(C) N=46					(3.00)			
	TCR 40 SCR 0 RQD 0		FI						
8.50-8.94 8.50	6,8/10,12,14,14 SPT(C) 50/290				56.19	8.50	Very stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders		
	TCR 73.33 SCR 0 RQD 0		23						
10.00									

Remarks
Cable percussion boring techniques carried out from ground level to 5.50m BGL. Obstruction - due to possible boulder or bedrock.
Rotary coring carried out to 28.00m BGL.
Borehole backfilled on completion.
Chiselling from 5.50m to 5.50m for 1 hour.

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH02

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Site Housing Bundle_Ballymun			**Borehole Number** BH02
Machine : Dando 2000 and Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 5.50m 63.50mm cased to 28.00m	**Ground Level (mOD)** 64.69	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715239.1 E 740368.7 N	**Dates** 16/11/2023-14/02/2024	**Engineer**	**Sheet** 2/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.22	100	0	0		SPT(C) 50/70 20,5/50			... as previous		
11.50-11.72	86.67	0	0		20,5/50 SPT(C) 50/65		(7.80)			
13.00-13.22	100	0	0		20,5/50 SPT(C) 50/70					
14.50-14.72	100	0	0		20,5/50 SPT(C) 50/70					
16.00	100	56	50			48.39	16.30	Strong to very strong massive dark grey to black argillaceous LIMESTONE with rare calcite veining and rare pyrite mineralisation. Partially weathered		
17.50	100	66.67	53.33	21						
19.00	100	66	39.33	32						

Remarks

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH02

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Site Housing Bundle_Ballymun			**Borehole Number** BH02
Machine : Dando 2000 and Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 5.50m 63.50mm cased to 28.00m	**Ground Level (mOD)** 64.69	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715239.1 E 740368.7 N	**Dates** 16/11/2023-14/02/2024	**Engineer**	**Sheet** 3/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
								... as previous		
20.50	100	60.67	46	22						
22.00	100	62.67	38.67	28			(11.70)	16.30m to 28.00m BGL: 3 Fracture sets - F1: Fractures are dipping 0 - 30 degrees, very close to medium spaced, undulating smooth to planar smooth, with slight clay smearing. F2: Fractures are dipping 50 - 70 degrees, wide to very wide spaced, undulating rough, with slight brown staining. F3: Fractures are dipping 70 - 90 degrees, medium to wide spaced, undulating rough to planar rough, with slight clay smearing and brown staining.		
23.50	100	68.67	52.67	23						
25.00	100	80	73.33	15						
26.50	100	49.33	27.33	29						
28.00						36.69	28.00	Terminated at 28.00m		

Remarks

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH02

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Site Housing Bundle_Ballymun			**Borehole Number** BH03
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 5.20m	**Ground Level (mOD)** 64.62	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715248.7 E 740335.7 N	**Dates** 17/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					64.52	0.10	TOPSOIL		
0.50	B1						MADE GROUND: Brown/ Dark grey slightly sandy gravelly Clay with fragments of steel, concrete and plastic		
1.00-1.45 1.00	SPT(C) N=8 B2			1,1/2,2,2,2					
2.00-2.45 2.00	SPT(C) N=10 B3			2,1/2,2,3,3		(4.00)			
3.00-3.45 3.00	SPT(C) N=12 B4			2,3/2,3,4,3					
4.00-4.45 4.00	SPT(C) N=45 B5			5,79/11,15,19	60.52	4.10	Very stiff black slightly sandy slightly gravelly CLAY with some sub angular to sub rounded cobbles and boulders		
						(0.90)			
5.00-5.45 5.00	SPT(C) N=50 B6			20,20/50	59.62	5.00	Terminated at 5.20m		

Remarks
Cable percussion boring techniques carried out from ground level to 5.00m BGL
Borehole terminated at 5.00m BGL due to obstruction - possible boulder or bedrock.
Borehole backfilled on completion.
Chiselling from 5.00m to 5.20m for 1 hour.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH03

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Site Housing Bundle_Ballymun			**Borehole Number** BH04
Machine : Dando 2000 and Baretha T-41 **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 5.00m 63.50mm cased to 28.00m	**Ground Level (mOD)** 64.21	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715233 E 740317.3 N	**Dates** 20/11/2023-08/02/2024	**Engineer**	**Sheet** 1/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
					64.01	(0.20) 0.20	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets			
0.50	B1					(0.50)	MADE GROUND brown grey gravelly Clay			
					63.51	0.70	Firm to stiff Brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.			
1.00	B2									
1.20-1.65	SPT(C) N=12			2,2/3,2,3,4						
						(1.70)				
2.00-2.45	SPT(C) N=15			2,3/3,3,4,5						
2.00	B3									
					61.81	2.40	Very stiff dark grey/black slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.			
	100 0	0								
3.00-3.45	SPT(C) N=35			4,4/7,9,9,10						
3.00	B4									
						(2.60)				
4.00-4.45	SPT(C) N=43			6,7/9,8,10,16						
4.00	B5									
5.00	B6									
5.00-5.00	SPT(C) 20*/0			9,11/16,34	59.21	5.00	Very stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders			
	50/0									
	TCR **SCR**	**RQD**	**FI**							
5.50										
	93.33 0	0								
7.00-7.45				8,13/50 SPT(C) N=50						
7.00										
	100 0	0								
8.50-8.72				20,5/50 SPT(C) 50/70						
8.50										
	86.67 0	0								
			33							
10.00										

Remarks
Cable percussion boring techniques carried out from ground level to 5.00m BGL. Obstruction - possible boulder or bedrock.
Rotary coring carried out to 28.00m BGL.
Standpipe installed in borehole upon completion. Slotted standpipe from 28.00m to 1.00m BGL with a pea gravel surround. Plain standpipe installed from 1.00m BGL to GL with a bentonite seal and a flush cover
Borehole backfilled upon completion

Scale (approx)	Logged By
1:50	GGR

Figure No. 13061-08-23(4).BH04

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Site Housing Bundle_Ballymun			**Borehole Number** BH04
Machine : Dando 2000 and Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 5.00m 63.50mm cased to 28.00m	**Ground Level (mOD)** 64.21	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715233 E 740317.3 N	**Dates** 20/11/2023-08/02/2024	**Engineer**	**Sheet** 2/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
10.00-10.22	100	0	0		SPT(C) 50/70 20,5/50			... as previous			
11.50-11.72	100	0	0		20,5/50 SPT(C) 50/65		(12.50)				
13.00-13.22	86.67	0	0		20,5/50 SPT(C) 50/70						
14.50-14.71	100	0	0		20,5/50 SPT(C) 50/60						
16.00-16.22	80	0	0		20,5/50 SPT(C) 50/70						
17.50-17.72	100	38	11.33		20,5/50 SPT(C) 50/65	46.71	17.50	Strong to very strong massive dark grey fine grained argillaceous LIMESTONE with rare white calcite veining and rare pyrite mineralisation. Partially weathered			
19.00	100	56	29.33	28							

Remarks

Scale (approx)	Logged By
1:50	GGR

Figure No. 13061-08-23(4).BH04

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Site Housing Bundle_Ballymun			**Borehole Number** BH04
Machine : Dando 2000 and Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 5.00m 63.50mm cased to 28.00m	**Ground Level (mOD)** 64.21	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715233 E 740317.3 N	**Dates** 20/11/2023-08/02/2024	**Engineer**	**Sheet** 3/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
								... as previous			
20.50	100	42	23.33	25							
22.00	100	56.67	28.66	25			(10.50)				
23.50	100	74.67	46.66	21				17.50m to 28.00m BGL: Sequence consists of three fracture sets. F1: Dipping 0-30 degrees, very close to medium spaced, undulating to planar smooth, with brown staining. F2: Dipping 70-90 degrees, medium to wide spaced, undulating smooth to planar rough with clay smearing. F3: Dipping 40-60 degrees, medium to very wide spaced, planar rough.			
25.00	90	45.33	25.33	18							
26.50	100	69.33	69.33	22							
28.00						36.21	28.00	Terminated at 28.00m			

Remarks

Scale (approx)	Logged By
1:50	GGR

Figure No. 13061-08-23(4).BH04

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Site Housing Bundle_Ballymun			**Borehole Number** BH05
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 7.40m	**Ground Level (mOD)** 65.23	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715251.1 E 740381.3 N	**Dates** 11/12/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					65.03	(0.20) 0.20	Brown slightly sandy slightly gravelly TOPSOIL with rootlets. Gravel is subangular to subrounded fine to coarse.		
					64.83	(0.20) 0.40	MADE GROUND (reworked): Brown slightly sandy gravelly Clay. Gravel is angular to subrounded fine to coarse.		
0.50	B1						Firm to stiff brown slightly sandy slightly gravelly CLAY with occasional subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
1.00-1.45 1.00	SPT(C) N=14 B2			1,2/4,3,3,4		(1.60)			
2.00-2.45 2.00	SPT(C) N=22 B3			5,4/6,6,5,5	63.23	2.00	Stiff brown slightly sandy slightly gravelly CLAY with occasional subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
						(0.60)			
3.00-3.45 3.00	SPT(C) N=35 B4			3,6/7,8,10,10	62.63	2.60	Stiff grey to dark grey slightly sandy gravelly CLAY with occasional subrounded cobbles and boulders. Gravel is subangular to subrounded fine to coarse.		
						(1.40)			
4.00-4.45 4.00	SPT(C) N=49 B5			8,9/11,10,12,16	61.23	4.00	Very stiff grey to dark grey slightly sandy gravelly CLAY with occasional subrounded cobbles and boulders. Gravel is subangular to subrounded fine to coarse.		
5.00-5.20 5.00	SPT(C) 50/50 B6			8,10/17,13,17,3					
						(3.40)			
6.00-6.20 6.00	SPT(C) 50/50 B7			9,9/10,10,17,13					
7.00-7.23 7.00	SPT(C) 50/75 B8			10,17/19,31					
					57.83	7.40	Terminated at 7.40m		

Remarks
No groundwater encountered.
Cable percussion boring techniques carried out from ground level to 7.40m BGL.
Borehole backfilled on completion.
Chiselling from 5.50m to 5.50m for 1 hour.

Scale (approx)	Logged By
1:50	CE

Figure No. 13061-08-23(4).BH05

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Site Housing Bundle_Ballymun			**Borehole Number** BH06
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 6.00m	**Ground Level (mOD)** 63.75	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715300.3 E 740265.6 N	**Dates** 20/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					63.60	(0.15) 0.15	TOPSOIL		
					63.50	0.25	MADE GROUND: Brown slightly sandy slightly gravelly Clay		
0.50	B1				63.40	0.35	MADE GROUND: Tarmac		
						(0.95)	MADE GROUND: Brownish grey slightly sandy Clay with fragments of plastic and red brick		▼1 ▽1
1.20-1.65	SPT(C) N=9			2,4/2,2,2,3 Water strike(1) at 1.30m, rose to 1.15m in 20 mins.	62.45	1.30	Firm brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
1.50	B2								
2.00-2.45	SPT(C) N=12			2,2/2,3,3,4		(1.70)			
2.50	B3								
3.00-3.45	SPT(C) N=25			3,5/5,6,6,8	60.75	3.00	Stiff dark grey/black slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
3.40	B4					(1.00)			
4.00-4.45	SPT(C) N=50			5,7/10,12,14,14	59.75	4.00	Very stiff dark grey/black slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
4.50	B5								
5.00-5.45	SPT(C) N=50			6,9/11,17,20,2		(2.10)			
5.50	B6								
6.00-6.45	SPT(C) N=50			10,19/50	57.65	6.10	Terminated at 6.10m		

Remarks
Cable percussion boring techniques carried out from ground level to 6.1m bGL.
Borehole terminated at 6.1m bGL due to obstruction - possible boulder or bedrock.
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH06

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Site Housing Bundle_Ballymun			**Borehole Number** BH07
Machine : Dando 2000 and Baretha T-41 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 6.00m 63.50mm cased to 26.50m	**Ground Level (mOD)** 62.84	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715339.1 E 740298.8 N	**Dates** 14/11/2023-06/02/2024	**Engineer**	**Sheet** 1/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					62.64	(0.20) 0.20	TOPSOIL		
					62.34	(0.30) 0.50	MADE GROUND: Dark blue slightly sandy clayey fine to coarse angular to sub angular Gravel		
0.60	B1					(0.60)	MADE GROUND: Brown sandy gravelly Clay with fragments of timber and red brick		
1.00-1.45	SPT(C) N=13			2,1/2,2,2,7	61.74	1.10			
						(0.40)	Firm brown slightly sandy gravelly CLAY gravel is fine to coarse angular to very angular.		
1.50	B2				61.34	1.50			
2.00-2.45	SPT(C) N=18			2,2/3,4,4,7			Stiff grey to black slightly sandy gravelly CLAY. Gravel is fine to medium angular.		
						(1.50)			
2.50	B3								
3.00-3.45	90 0 SPT(C) N=45	0		8,6/8,11,12,14	59.84	3.00	Very stiff grey to black slightly sandy gravelly CLAY. Gravel is fine to medium angular.		
3.50	B4								
4.00-4.45	SPT(C) N=50			6,9/12,14,16,8					
						(3.00)			
4.50	B5								
5.00-5.45	SPT(C) N=50			15,18/25,25					
6.00-6.45	TCR SCR RQD FI			20,20/50 SPT(C) N=50 Water strike(1) at 6.00m, rose to 5.80m in 20 mins.	56.84	6.00	Very stiff dark grey slightly sandy gravelly CLAY with some sub angular to rounded cobbles and boulders		
6.00									
7.00-7.45				6,9/12,19,19 SPT(C) N=50					
	46.67 0	0	0						
8.50-8.88				9,15/20,25,5 SPT(C) 50/225		(4.70)			
8.50									
	80 0	0							
10.00									

Remarks
Cable percussion boring techniques carried out from ground level to 6.00m BGL.
Rotary coring techniques carried out to 26.50m BGL
Groundwater encountered at 6.00m BGL
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH07

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Site Housing Bundle_Ballymun			**Borehole Number** BH07
Machine : Dando 2000 and Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 6.00m 63.50mm cased to 26.50m	**Ground Level (mOD)** 62.84	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715339.1 E 740298.8 N	**Dates** 14/11/2023-06/02/2024	**Engineer**	**Sheet** 2/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.30	100	0	0		SPT(C) 50/150 9,16/22,28			... as previous		
						52.14	10.70	Very stiff brownish dark grey very sandy gravelly CLAY with some sub angular to rounded cobbles and boulders		
							(0.80)			
11.50-11.50 11.50	100	0	0		11,14/36,14 SPT(C)	51.34	11.50	Very stiff dark grey slightly sandy gravelly CLAY with some sub angular to rounded cobbles and boulders		
13.00-13.21 13.00	100	0	0		19,6/50 SPT(C) 50/60					
14.50-14.72 14.50	96.67	0	0		18,7/50 SPT(C) 50/70		(5.70)			
16.00-16.22 16.00	100	5.33	0	5	20,5/50 SPT(C) 50/65					
17.50-17.73 17.50	93.33	38.67	14	32	20,5/50 SPT(C) 50/75	45.64	17.20	Strong massive dark grey fine grained argillaceous LIMESTONE with rare calcite veins and rare pyrite mineralisation. Partially weathered.		
19.00	100	52.67	8	43						

Remarks

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH07

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Site Housing Bundle_Ballymun			**Borehole Number** BH07
Machine : Dando 2000 and Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 6.00m 63.50mm cased to 26.50m	**Ground Level (mOD)** 62.84	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715339.1 E 740298.8 N	**Dates** 14/11/2023-06/02/2024	**Engineer**	**Sheet** 3/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
								... as previous		
20.50	100	76.67	65.83	20			(9.30)			
22.00	100	73.33	62	15						
23.50	100	36	21.33	29				17.20m to 26.50m BGL: Sequence consists of three fracture sets. F1: Dipping 0-30 degrees, very close to medium spaced, planar rough, with clay smearing. F2: Dipping 40-60 degrees, wide to very wide spaced, undulating rough. F3: Dipping 70-90 degrees, medium to wide spaced, undulating rough.		
25.00	93.33	49.33	38	21						
26.50						36.34	26.50	Terminated at 26.50m		

Remarks

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH07

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Site Housing Bundle_Ballymun			**Borehole Number** BH08
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 7.00m	**Ground Level (mOD)** 63.55	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715322.7 E 740219 N	**Dates** 15/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					63.35	(0.20) 0.20	TOPSOIL		
						(0.40)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with fragments of plastic.		
					62.95	0.60	Firm dark grey/black mottled orange slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to very angular.		
1.00	B1								
1.20-1.65	SPT(C) N=11			3,2/3,3,2,3		(1.40)			
2.00-2.45	SPT(C) N=12			1,2/3,2,4,3	61.55	2.00	Stiff grey to black slightly sandy gravelly CLAY. Gravel is fine to medium angular.		
2.00	B2					(1.00)			
3.00-3.45	SPT(C) N=33			4,6/6,9,8,10	60.55	3.00	Very stiff grey to black slightly sandy gravelly CLAY. Gravel is fine to medium angular.		
3.00	B3								
4.00-4.45	SPT(C) N=50			5,8/8,12,14,16					
4.00	B4								
5.00-5.45	SPT(C) N=50			5,6/15,16,19		(4.00)			
5.00	B5								
6.00-6.45	SPT(C) N=50			9,10/20,25,5					
6.00	B6								
7.00	B7				56.55	7.00	Terminated at 7.00m		

Remarks
Borehole terminated at 7.00m BGL due to obstruction - possible boulder or bedrock.
Cable percussion boring techniques carried out from ground level to 7.00m BGL.
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH08

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Site Housing Bundle_Ballymun			**Borehole Number** BH09
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 7.00m	**Ground Level (mOD)** 63.20	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715322.9 E 740189.3 N	**Dates** 17/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					63.00	(0.20) 0.20	TOPSOIL		
0.50	B1					(0.70)	MADE GROUND: Brown slightly sandy slightly gravelly Clay . Gravel is fine to coarse sub-angular to sub-rounded with plastic, red brick and glass fragments.		
1.20-1.65	SPT(C) N=8			2,2/1,2,2,3	62.30	0.90	Firm brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to angular.		
1.50	B2					(1.80)			
2.00-2.45	SPT(C) N=10			1,2/2,2,3,3					
3.00-3.45	SPT(C) N=41			6,8/8,10,11,11,12	60.50	2.70	Very stiff Black/dark grey slightly sandy slightly gravelly CLAY gravel is medium to coarse angular to very angular with medium cobble content.		
3.00	B3								
4.00-4.45	SPT(C) N=50			5,9/11,13,14,12					
4.00	B4					(4.30)			
5.00-5.45	SPT(C) N=50			7,11/16,19,15					
5.00	B5								
6.00-6.45	SPT(C) N=50			10,20/25,25					
6.00	B6								
					56.20	7.00	Terminated at 7.00m		

Remarks
Cable percussion boring techniques carried out from ground level to 7.00m BGL.
Borehole terminated at 7.00m BGL due to obstruction - possible boulder or bedrock.
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH09

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Site Housing Bundle_Ballymun			**Borehole Number** BH10
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 7.00m	**Ground Level (mOD)** 63.33	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715330.4 E 740175.3 N	**Dates** 16/11/2023	**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					(1.00)	MADE GROUND: Brown sandy slightly gravelly Clay. Gravel is fine to coarse sub-angular to sub-rounded with fragments of steel, plastic and red brick		
					62.33	1.00			
1.20-1.65 1.20	SPT(C) N=11 B2			2,3/3,2,3,3		(1.00)	Firm to stiff 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=11 B3			1,3/2,3,3,3	61.33	2.00	Firm to stiff dark grey/black slightly sandy slightly gravelly CLAY. gravel is medium to coarse angular to very angular with medium cobble content.		
						(1.00)			
3.00-3.45 3.00	SPT(C) N=30 B4			3,4/6,7,8,9	60.33	3.00	Very stiff dark grey/black slightly sandy slightly gravelly CLAY. gravel is medium to coarse angular to very angular with medium cobble content.		
4.00-4.45 4.00	SPT(C) N=50 B5			12,8/9,13,17,11					
5.00-5.45 5.00	SPT(C) N=50 B6			8,12/15,17,18		(4.00)			
6.00-6.45 6.00	SPT(C) N=50 B7			12,25/50					
					56.33	7.00	Terminated at 7.00m		

Remarks
Borehole terminated at 7.00m BGL due to obstruction - possible boulder or bedrock.
Cable percussion boring techniques carried out from ground level to 7.00m BGL.
Borehole backfilled upon completion

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH10

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Site Housing Bundle_Ballymun			**Borehole Number** BH11
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 7.00m	**Ground Level (mOD)** 63.10	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715352.1 E 740165.4 N	**Dates** 10/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					62.90	(0.20) 0.20	TOPSOIL		
0.50	B1					(0.60)	MADE GROUND: Brown sandy gravelly Clay. Gravel is fine to coarse sub-angular to sub-rounded with plastic, plaster and mortar fragments.		
1.00-1.45	SPT(C) N=7			1,1/2,1,2,2	62.30	0.80	Soft to firm yellowish/brown slightly gravelly CLAY. Gravel is fine to coarse angular.		
1.50	B2					(1.20)			
2.00-2.45	SPT(C) N=8			1,2/2,2,2,2	61.10	2.00	Firm to stiff black/dark grey slightly sandy gravelly CLAY. Gravel is medium to coarse angular to very angular with high cobble content.		
2.80	B3					(1.00)			
3.00-3.45	SPT(C) N=31			3,3/6,8,8,9	60.10	3.00	Very stiff black/dark grey slightly sandy gravelly CLAY. Gravel is medium to coarse angular to very angular with high cobble content.		
3.50	B4								
4.00-4.45	SPT(C) N=41			4,6/8,10,10,13					
4.50	B5								
5.00-5.45	SPT(C) N=48			5,6/11,13,13,11		(4.00)			
5.50	B6								
6.00-6.45	SPT(C) N=50			4,8/12,16,22					
6.50	B7								
					56.10	7.00	Terminated at 7.00m		

Remarks
Borehole backfilled on completion.
Cable percussion boring techniques carried out from ground level to 7.00m BGL.
Borehole terminated at 7.00m BGL due to obstruction - possible boulder or bedrock.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH11

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Site Housing Bundle_Ballymun			**Borehole Number** BH12
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 0.80m	**Ground Level (mOD)** 62.16	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715375.3 E 740205.9 N	**Dates** 15/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					62.06	0.10	TOPSOIL		
						(0.40)	MADE GROUND: Brown gravelly Clay		
0.50	B1				61.66	0.50	MADE GROUND: Brown slightly clayey Sand		
						(0.30)			
					61.36	0.80	Abandoned at 0.80m		

Remarks
Borehole backfilled on completion.
Borehole abandoned due to encountering water main.
Borehole re drilled at location BH12A.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH12

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Site Housing Bundle_Ballymun			**Borehole Number** BH12A
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 3.40m	**Ground Level (mOD)** 62.12	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715375.4 E 740207.1 N	**Dates** 15/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					61.92	(0.20) 0.20	TOPSOIL.		
0.50	B1					(0.80)	MADE GROUND: Brown/Dark brown silty sandy Clay.		
1.00-1.45 1.00	SPT(C) N=7 B2			1,1/1,2,2,2	61.12	1.00	Soft to firm brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
						(1.00)			
2.00-2.45 2.00	SPT(C) N=9 B3			1,2/2,3,2,2	60.12	2.00	Firm greyish brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
						(1.40)			
3.00-3.45 3.00	SPT(C) N=15 B4			1,2/2,3,2,8	58.72	3.40	Terminated at 3.40m		

Remarks
Cable percussion boring techniques carried out from ground level to 3.40m BGL.
Borehole abandoned at 3.40m BGL due to possible presence of services.
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	JC

Figure No.
13061-08-23(4).BH12A

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Site Housing Bundle_Ballymun			**Borehole Number** BH13
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 5.20m	**Ground Level (mOD)** 62.43	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715356.6 E 740236 N	**Dates** 21/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					62.23	(0.20) 0.20	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
0.50	B1					(0.80)	MADE GROUND: Brown slightly slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		
1.00	B2				61.43	1.00			
1.20-1.65	SPT(C) N=11			2,2/3,2,3,3		(0.90)	Firm Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded.		▼1
				Water strike(1) at 1.80m, rose to 1.10m in 5 mins.	60.53	1.90			▽1
2.00 2.00-2.45	B3 SPT(C) N=33			3,5/7,9,9,8			Very stiff dark grey/black slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to sub-rounded. with low cobble content.		
3.00-3.45 3.00	SPT(C) N=50 B4			6,9/12,16,22		(3.30)			
4.00-4.45 4.00	SPT(C) N=50 B5			7,11/14,17,19					
5.00-5.20 5.00	SPT(C) 50/0 B6			25/50	57.23	5.20	Terminated at 5.20m		

Remarks
Cable percussion boring techniques carried out from ground level to 5.20m BGL
Borehole terminated at 5.20m BGL due to obstruction - possible boulder or bedrock.
Inspection pit hand dug to 1.20m BGL
Borehole backfilled upon completion
Chiselling from 2.60m to 3.00m for 0.33 hours. Chiselling from 5.00m to 5.20m for 1 hour.

Scale (approx)	Logged By
1:50	GGR

Figure No. 13061-08-23(4).BH13

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Site Housing Bundle_Ballymun			**Borehole Number** BH14
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 2.30m	**Ground Level (mOD)** 62.09	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715405.2 E 740242.1 N	**Dates** 21/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					61.94	(0.15) 0.15	TOPSOIL		
					61.69	(0.25) 0.40	MADE GROUND: Brown slightly sandy slightly gravelly Clay with red brick and plastic fragments		
1.00	B1						MADE GROUND: Brownish grey slightly sandy slightly gravelly Clayey with some sub angular to sub rounded cobbles and fragments of concrete and mortar		
1.20-1.65	SPT(C) N=50			20,30/50 Water strike(1) at 1.55m, fell to 1.60m in 20 mins.		(1.90)			▼1
2.00-2.45 2.00	SPT(C) N=50 B2			15,20/50	59.79	2.30	Terminated at 2.30m		

Remarks
Cable percussion boring techniques carried out from ground level to 2.30m BGL
Borehole backfilled on completion.
Borehole terminated at 2.50m BGL due to casing not advancing. Possible foundations of demolished buildings.
Borehole re drilled at location BH14A
Chiselling from 1.30m to 1.50m for 0.5 hours. Chiselling from 2.30m to 2.30m for 0.5 hours.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH14

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Site Housing Bundle_Ballymun			**Borehole Number** BH14A
Machine : Dando 2000 and Baretha T-41 **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 6.20m 63.50mm cased to 27.50m	**Ground Level (mOD)**	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location	**Dates** 21/11/2023-16/02/2024	**Engineer**	**Sheet** 1/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
						(0.20) 0.20	Brown slightly sandy slightly gravelly TOPSOIL.			
							MADE GROUND: Brown slightly sandy slightly gravelly Clay with fragments of red bricks and pieces of timber			
1.00	B1					(1.30)				
1.20-1.65 1.20	SPT(C) N=4 B2			0,1/1,0,1,2						
				Water strike(1) at 1.70m, rose to 1.60m in 20 mins.		1.50 (0.30) 1.80	Soft brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to angular.		▼1	
2.00-2.45	SPT(C) N=23			3,3/5,5,6,7		(0.70)	Stiff dark grey/black slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to angular.			
2.50	B3					2.50	Very stiff dark grey/black slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub-angular to angular.			
3.00-3.45	SPT(C) N=41 0 0	0		4,6/9,10,11,11						
3.50	B4									
4.00-4.45	SPT(C) N=50			6,7/12,15,14,9		(3.70)				
4.50	B4									
5.00-5.45	SPT(C) N=50			7,10/13,15,18,4						
5.50	B6									
6.00-6.45				9,15/19,23,8 SPT(C) N=50						
	TCR / **SCR** / **RQD** / **FI**									
6.20	87.5 / 0 / 0					6.20	Very stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders			
7.00-7.21 7.00			0	20,5/50 SPT(C) 50/60						
	100 / 0 / 0									
8.50-8.72 8.50				20,5/50 SPT(C) 50/70						
	100 / 0 / 0									
10.00										

Remarks
Cable percussion boring techniques carried out from ground level to 6.20m BGL. Obstruction - due to possible boulder or bedrock.
Rotary coring carried out to 27.50m BGL
Standpipe installed in borehole upon completion. Slotted standpipe from 27.50m to 1.00m BGL with a pea gravel surround. Plain standpipe installed from 1.00m BGL to GL with a bentonite seal and a flush cover
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	GGR

Figure No. 13061-08-23(4).BH14A

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Site Housing Bundle_Ballymun			**Borehole Number** BH14A
Machine : Dando 2000 and Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 6.20m 63.50mm cased to 27.50m	**Ground Level (mOD)**	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location	**Dates** 21/11/2023-16/02/2024	**Engineer**	**Sheet** 2/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
10.00-10.22	100	0	0		SPT(C) 50/70 20,5/50		(9.20)	... as previous			
11.50-11.73 11.50	100	0	0		20,5/50 SPT(C) 50/75						
13.00	100	0	0								
14.50	100	14.67	14.67	10			15.40	Very strong massive dark grey to black argillaceous LIMESTONE with rare calcite veining and rare pyrite mineralisation. Partially weathered			
16.00	100	42	14.67	26							
17.50	100	58	28.67	31							
19.00	100	67.33	56.67	19							

Remarks

Scale (approx)	Logged By
1:50	GGR

Figure No. 13061-08-23(4).BH14A

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH14A
Machine : Dando 2000 and Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 6.20m 63.50mm cased to 27.50m	**Ground Level (mOD)**	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location	**Dates** 21/11/2023-16/02/2024	**Engineer**	**Sheet** 3/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
								... as previous			
20.50	100	58.67	31.33	26			(12.10)				
22.00	100	81.33	58	18				15.40m to 27.50m BGL: 2 Fracture sets - F1: Fractures are dipping 0 - 20 degrees, very close to medium spaced, smooth planar to smooth undulating, with slightl clay smearing. F2: Fracture are dipping 70 - 90 degrees, wide to very wide spaced, undulating rough, with slight clay smearing.			
23.50	100	64	36	26							
25.00	93.33	68	32.67	19							
26.50	100	73	73	8							
27.50							27.50	Terminated at 27.50m			

Remarks

Scale (approx)	Logged By
1:50	GGR

Figure No. 13061-08-23(4).BH14A

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH15
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 6.00m	**Ground Level (mOD)** 62.24	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715431.9 E 740210.2 N	**Dates** 22/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					62.09	(0.15) 0.15	Brown slightly sandy slightly gravelly TOPSOIL with grass and rootlets		
0.40	B1					(1.15)	MADE GROUND: Brownish grey slightly sandy slightly gravelly Clay with fragments of steel, brick and plastic		
1.20-1.65	SPT(C) N=11			5,3/3,2,1,5	60.94	1.30	Firm greyish brown slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders		
1.50	B2					(1.10)			
2.00-2.45	SPT(C) N=13			2,2/3,3,2,5					
2.50	B3			Water strike(1) at 2.50m, rose to 2.40m in 20 mins.	59.84	2.40	Very stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders		▼1 ▽1
3.00-3.45	SPT(C) N=33			5,5/7,8,9,9					
3.50	B4								
4.00-4.45	SPT(C) N=50			6,8/12,13,16,9		(3.60)			
4.50	B5								
5.00-5.45	SPT(C) N=50			7,9/13,15,22					
5.50	B6								
6.00-6.45	SPT(C) N=50			6,15/22,28	56.24	6.00	Complete at 6.00m		

Remarks
Cable percussion boring techniques carried out from ground level to 6.00 m BGL.
Borehole terminated at 6.00 BGL due to obstruction - possible boulder or bedrock.
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	GGR

Figure No. 13061-08-23(4).BH15

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH16
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 7.00m	**Ground Level (mOD)** 62.09	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715433.8 E 740183.5 N	**Dates** 13/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						(0.40)	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of steel and plastic		
					61.69	0.40			
0.50	B1						Firm brown sandy slightly gravelly CLAY		
						(1.10)			
1.00-1.45 1.00	SPT(C) N=11 B2			1,1/2,3,3,3					
					60.59	1.50	Firm to stiff grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders		
2.00-2.45 2.00	SPT(C) N=14 B3			2,3/3,4,3,4		(1.30)			
					59.29	2.80	Very stiff black slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders		
3.00-3.45 3.00	SPT(C) N=33 B4			6,7/8,8,9,8					
4.00-4.45 4.00	SPT(C) N=45 B5			4,9/10,11,11,13					
						(4.20)			
5.00-5.45 5.00	SPT(C) N=50 B6			7,10/12,16,16,6					
6.00-6.45 6.00	SPT(C) N=50 B7			9,11/16,21,13					
7.00-7.45 7.00	SPT(C) N=50 B8			30,20/50	55.09	7.00	Complete at 7.00m		

Remarks
Cable percussion boring techniques carried out from ground level to 7.00 m BGL.
Borehole terminated at 7.00 BGL due to obstruction - possible boulder or bedrock.
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH16

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH17
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 8.00m	**Ground Level (mOD)** 62.59	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715426.1 E 740163.4 N	**Dates** 07/11/2023	**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					(1.70)	MADE GROUND: Soft brown sandy gravelly Clay. Gravel is fine to coarse sub-angular to sub-rounded with plastic and steel wire fragments.		
1.00-1.45 1.00	SPT(C) N=16 B2			1,2/3,3,4,6					
					60.89	1.70			
2.00-2.45 2.00	SPT(C) N=14 B3			2,3/4,3,3,4		(1.00)	Firm to stiff greyish brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub-rounded to angular.		
					59.89	2.70			
3.00-3.45 3.00	SPT(C) N=32 B4			4,5/6,8,9,9			Very stiff black/Dark grey slightly sandy slightly gravelly CLAY. Gravel is medium to coarse angular to very angular with medium cobble content.		
4.00-4.45 4.00	SPT(C) N=37 B5			5,6/9,8,10,10					
5.00-5.45 5.00	SPT(C) N=50 B6			7,9/10,12,14,14		(5.30)			
6.00-6.45 6.00	SPT(C) N=50 B7			5,10/13,15,19,3					
7.00	B8								
7.50-7.95	SPT(C) N=50			10,16/20,17,13					
					54.59	8.00	Terminated at 8.00m		

Remarks
Cable percussion boring techniques carried out from ground level to 8.00 BGL.
Borehole terminated at 8.00 BGL due to obstruction - possible boulder or bedrock.
Borehole backfilled upon completion

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH17

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH18
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 0.80m	**Ground Level (mOD)** 62.56	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715402.4 E 740193.6 N	**Dates** 14/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					62.46	0.10	TOPSOIL		
0.50	B1					(0.70)	MADE GROUND: Brown slightly gravelly Clay with low cobble content.		
					61.76	0.80	Terminated at 0.80m		

Remarks
Cable percussion boring techniques carried out from ground level to 0.80 BGL.
Borehole terminated at 0.80 BGL due to obstruction - possible boulder or bedrock
Borehole re drilled as BH18A
Borehole backfilled on completion.
Chiselling from 0.80m to 0.80m for 1 hour.

Scale (approx)	Logged By
1:50	JC

Figure No. 13061-08-23(4).BH18

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH18A
Machine : Dando 2000 **Method :** Cable Percussion	**Casing Diameter** 200mm cased to 6.00m	**Ground Level (mOD)** 62.65	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715390.6 E 740189.4 N	**Dates** 14/11/2023	**Engineer**	**Sheet** 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						(0.70)	MADE GROUND: Brown sandy gravelly Clay		
0.50	B1				61.95	0.70			
						(0.20)	Concrete.		
					61.75	0.90			
1.00-1.45 1.00	SPT(C) N=13 B2			1,2/3,4,3,3			Firm to stiff brown sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded with low cobble content.		
						(1.10)			
2.00-2.45 2.00	SPT(C) N=16 B3			2,3/4,3,5,4	60.65	2.00			
						(1.00)	Stiff brown sandy gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded with low cobble content.		
3.00-3.45 3.00	SPT(C) N=39 B4			5,6/6,9,11,13	59.65	3.00			
4.00-4.45 4.00	SPT(C) N=49 B5			5,7/9,11,14,15			Very stiff dark grey/black slightly sandy gravelly CLAY. Gravel is fine to coarse sub-angular to angular.		
						(3.00)			
5.00-5.45 5.00	SPT(C) N=50 B6			6,10/13,16,19,2					
6.00-6.45 6.00	SPT(C) N=50 B7			9,12/14,36	56.65	6.00			
							Terminated at 6.00m		

Remarks
Borehole terminated at 6.00 BGL due to obstruction - possible boulder or bedrock.
Borehole backfilled on completion.
Cable percussion boring techniques carried out from ground level to 6.00 BGL.

Scale (approx)	Logged By
1:50	JC

Figure No.
13061-08-23(4).BH18A

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH19
Machine : Dando 2000 & Baretha T-41 **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 7.60m 63.50mm cased to 26.50m	**Ground Level (mOD)** 62.95	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715400.6 E 740162.9 N	**Dates** 08/11/2023	**Engineer**	**Sheet** 1/3

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
					62.75	(0.20) 0.20	TOPSOIL			
0.50	B1					(0.80)	MADE GROUND: Brown sandy gravelly Clay. Gravel is fine to coarse sub-angular to sub-rounded with fragments of concrete.			
1.00-1.45 1.00	SPT(C) N=50 B2			20,31/50	61.95	1.00	Very stiff greyish brown slightly sandy slightly gravelly CLAY. Gravel is medium to coarse sub-angular to sub-rounded.			
2.00-2.45 2.00	SPT(C) N=50 B3			16,21/19,17,14		(1.50)				
3.00-3.45 3.00	SPT(C) N=34 B4			3,5/7,8,9,10	60.45	2.50	Very stiff dark grey slightly sandy gravelly CLAY. Gravel is fine to coarse angular to very angular with medium cobble content.			
	100 0	0								
4.00-4.45 4.00	SPT(C) N=41 B5			7,8/9,10,11,11						
5.00-5.45 5.00	SPT(C) N=50 B6			8,10/12,14,14,10		(5.10)				
6.00-6.45 6.00	SPT(C) N=50 B7			9,12/16,19,15						
7.00	**TCR** **SCR**	**RQD**	**FI**	B8						
7.00	100 0	0			55.35	7.60	Very stiff dark grey slightly sandy very gravelly CLAY with some sub angular to sub rounded cobbles and boulders			
8.50-8.71 8.50	53.33 0	0	0	11,14/50 SPT(C) 50/60						
10.00										

Remarks
Cable percussion boring techniques carried out from ground level to 7.60 BGL. Obstruction - due to possible boulder or bedrock.
Rotary Follow-on carried out to 26.50m BGL.
Standpipe installed in borehole upon completion. Slotted standpipe installed from 26.50m to 1.00m BGL with a pea gravel surround. Plain standpipe installed from 1.00m BGL to GL with a bentonite seal and a flush cover.
Borehole backfilled on completion.

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH19

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH19
Machine : Dando 2000 & Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 7.60m 63.50mm cased to 26.50m	**Ground Level (mOD)** 62.95	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715400.6 E 740162.9 N	**Dates** 08/11/2023	**Engineer**	**Sheet** 2/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
10.00-10.21	26.67	0	0		SPT(C) 50/60 20,5/50		(6.30)	... as previous			
11.50-11.71 11.50	20	0	0		20,5/50 SPT(C) 50/55						
13.00-13.22 13.00	56	0	0		20,5/50 SPT(C) 50/65	49.05	13.90	Very stiff brownish dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders			
14.50-14.72 14.50	100	0	0		20,5/50 SPT(C) 50/65		(3.60)				
16.00-16.22 16.00	100	0	0		20,5/50 SPT(C) 50/70						
17.50-17.72 17.50	78.67	12.67	6.67	9	20,5/50 SPT(C) 50/70	45.45	17.50	Very stiff dark grey slightly sandy gravelly CLAY with some sub angular to sub rounded cobbles and boulders			
19.00	76.67	17.33	17.33	17		44.15	(1.30) 18.80	Strong to very strong massive dark grey to black fine grained argillaceous LIMESTONE with rare calcite veining and rare pyrite mineralisation. Distinctly to partially weathered.			

Remarks

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH19

Ground Investigations Ireland Ltd
www.gii.ie

Site Housing Bundle_Ballymun			**Borehole Number** BH19
Machine : Dando 2000 & Baretha T-41 **Flush :** **Core Dia :** mm **Method :** Cable Percussion with Rotary Core Follow-on	**Casing Diameter** 200mm cased to 7.60m 63.50mm cased to 26.50m	**Ground Level (mOD)** 62.95	**Client** National Development Finance Agency	**Job Number** 13061-08-23(4)
	Location 715400.6 E 740162.9 N	**Dates** 08/11/2023	**Engineer**	**Sheet** 3/3

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
								... as previous			
20.50	86.67	44	34.67	19							
22.00	100	46	43.33	32			(7.70)	18.80m to 26.50m BGL: 3 Fracture sets - F1: Fracture are dipping 0 - 30 degrees, very close to medium spaced, planar smooth to undulating rough. F2: Fractures are 70 - 90 degrees, medium to wide spaced, planar to undulating smooth, with clay smearing. F3: Fracture are dipping 50 - 70 degrees, wide to very wide spaced, undulating smooth, with clay smearing.			
23.50	100	51.33	29.33	32							
25.00	86.67	54.67	29.33	25							
26.50						36.45	26.50	Terminated at 26.50m			

Remarks

Scale (approx)	Logged By
1:50	JC & GGR

Figure No. 13061-08-23(4).BH19

APPENDIX 4 – Laboratory Testing

Element Materials Technology
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Catherinestown House
Hazelhatch Road
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D22 K5P8

Attention :	Conor Finnerty
Date :	19th December, 2023
Your reference :	13061-08-23
Our reference :	Test Report 23/20105 Batch 1
Location :	Housing Bundle - Ballymum
Date samples received :	29th November, 2023
Status :	Final Report
Issue :	202312191428

Fourteen samples were received for analysis on 29th 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

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

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	LOD/LOR	Units	Method No.
Sample ID	BH07	BH07	BH08	BH08	BH09	BH09	BH10	BH10	BH11	BH11			
Depth	0.60	1.50	1.00	2.00	0.50	1.50	0.50	1.20	0.50	1.50			
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	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023			
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	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023			
Antimony	2	2	2	2	3	2	6	3	2	1	<1	mg/kg	TM30/PM15
Arsenic #	17.6	11.0	14.6	10.0	18.8	8.0	18.4	14.5	14.3	8.5	<0.5	mg/kg	TM30/PM15
Barium #	107	64	99	64	121	45	144	122	70	47	<1	mg/kg	TM30/PM15
Cadmium #	1.5	2.2	2.3	1.6	2.2	1.9	2.3	1.8	1.4	1.6	<0.1	mg/kg	TM30/PM15
Chromium #	24.0	17.7	21.5	19.7	24.2	13.1	35.9	30.1	18.1	11.3	<0.5	mg/kg	TM30/PM15
Copper #	42	32	39	26	52	27	51	36	37	24	<1	mg/kg	TM30/PM15
Lead #	55	17	40	17	83	13	83	21	58	15	<5	mg/kg	TM30/PM15
Mercury #	0.1	<0.1	0.1	0.1	0.2	<0.1	0.3	<0.1	0.2	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	2.4	4.1	3.4	3.6	3.9	3.0	3.8	3.2	2.5	3.1	<0.1	mg/kg	TM30/PM15
Nickel #	42.0	48.4	45.9	36.4	50.4	36.8	47.1	62.2	35.8	31.7	<0.7	mg/kg	TM30/PM15
Selenium #	1	<1	<1	1	2	1	2	1	<1	<1	<1	mg/kg	TM30/PM15
Zinc #	96	85	106	74	133	72	143	103	99	65	<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 #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
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
Fluoranthene #	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	0.07	<0.03	0.05	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	0.07	<0.03	0.04	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.09	<0.06	0.09	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02	<0.02	<0.02	0.05	<0.02	0.07	<0.02	0.12	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.14	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<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
Indeno(123cd)pyrene #	<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
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	<0.04	<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 #	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<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	95	91	97	95	104	98	94	97	97	100	<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30	<30	<30	<30	<30	<30	3724	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

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	LOD/LOR	Units	Method No.
Sample ID	BH07	BH07	BH08	BH08	BH09	BH09	BH10	BH10	BH11	BH11			
Depth	0.60	1.50	1.00	2.00	0.50	1.50	0.50	1.20	0.50	1.50			
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	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023			
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	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023			
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)#	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL)#	0.8 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1 SV	<0.1	<0.1 SV	0.2	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<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	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL)#	<4	<4	<4	<4	<4	<4	10	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL)#	<7	<7	<7	<7	<7	<7	51	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL)#	<7	<7	<7	<7	<7	<7	3501	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_CU_1D_AL)	<7	<7	<7	<7	<7	<7	162	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH_CU+HS_1D_AL)	<26	<26	<26	<26	<26	<26	3724	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	0.8 SV	<0.1	<0.1 SV	0.2	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_CU_1D_AL)	<10	<10	<10	<10	<10	<10	520	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_CU_1D_AL)	<10	<10	<10	<10	<10	<10	3044	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR)#	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR)#	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR)#	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR)#	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)#	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)#	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)#	<7	<7	<7	<7	<7	<7	241	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_CU_1D_AR)	<7	<7	<7	<7	<7	<7	25	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH_CU+HS_1D_AR)	<26	<26	<26	<26	<26	<26	266	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH_CU+HS_1D_Total)	<52	<52	<52	<52	<52	<52	3990	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR)#	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_CU_1D_AR)	<10	<10	<10	<10	<10	<10	41	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_CU_1D_AR)	<10	<10	<10	<10	<10	<10	202	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE#	<5 SV	<5	<5 SV	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
Benzene#	<5 SV	<5	<5 SV	<5	<5 SV	<5	7 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
Toluene#	13 SV	<5	<5 SV	<5	<5 SV	<5	22 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
Ethylbenzene#	<5 SV	<5	<5 SV	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
m/p-Xylene#	8 SV	<5	<5 SV	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
o-Xylene#	<5 SV	<5	<5 SV	10	<5 SV	<5	7 SV	<5	<5	<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

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

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	LOD/LOR	Units	Method No.
Sample ID	BH07	BH07	BH08	BH08	BH09	BH09	BH10	BH10	BH11	BH11			
Depth	0.60	1.50	1.00	2.00	0.50	1.50	0.50	1.20	0.50	1.50			
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	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023			
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	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023			
Natural Moisture Content	20.6	14.8	23.5	13.1	31.9	14.4	24.9	20.0	23.6	12.4	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	17.1	12.9	19.0	11.6	24.2	12.6	19.9	16.7	19.1	11.0	<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) #	0.0896	-	0.0405	-	0.0217	-	0.0279	0.0409	-	0.0141	<0.0015	g/l	TM38/PM20
Chromium III	24.0	17.7	21.5	19.7	24.2	13.1	35.9	30.1	18.1	11.3	<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	1.90	0.39	2.01	0.51	3.03	0.66	3.64	0.32	1.90	0.32	<0.02	%	TM21/PM24
Organic Matter	3.3	-	3.5	-	5.2	-	6.3	0.6	-	0.6	<0.2	%	TM21/PM24
pH #	8.15	8.51	8.37	8.19	8.11	8.62	8.25	8.39	7.84	8.65	<0.01	pH units	TM73/PM11
Asbestos Type*	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD		None	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

Report : Solid

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

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	41-44	45-48	49-52	53-56							LOD/LOR	Units	Method No.
Sample ID	BH17	BH17	BH19	BH19									
Depth	0.50	2.00	0.50	2.00									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	23/11/2023	23/11/2023	23/11/2023	23/11/2023									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	29/11/2023	29/11/2023	29/11/2023	29/11/2023									
Antimony	2	2	2	2							<1	mg/kg	TM30/PM15
Arsenic #	13.3	10.1	12.7	11.7							<0.5	mg/kg	TM30/PM15
Barium #	101	178	107	65							<1	mg/kg	TM30/PM15
Cadmium #	2.3	1.9	1.4	0.8							<0.1	mg/kg	TM30/PM15
Chromium #	20.7	13.5	25.7	38.6							<0.5	mg/kg	TM30/PM15
Copper #	36	28	28	17							<1	mg/kg	TM30/PM15
Lead #	38	18	32	22							<5	mg/kg	TM30/PM15
Mercury #	0.2	<0.1	0.2	<0.1							<0.1	mg/kg	TM30/PM15
Molybdenum #	3.2	3.5	3.2	1.5							<0.1	mg/kg	TM30/PM15
Nickel #	44.6	42.2	35.3	21.8							<0.7	mg/kg	TM30/PM15
Selenium #	1	<1	1	<1							<1	mg/kg	TM30/PM15
Zinc #	106	77	81	65							<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<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	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	<0.03	<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	0.05	<0.03							<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	0.04	<0.03							<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06							<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02	<0.02	<0.02							<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07							<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<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							<0.04	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	<0.04	<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	<0.22	<0.22							<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64							<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05							<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02							<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1							<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	101	96	97	98							<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30	<30	109	<30							<30	mg/kg	TM5/PM8/PM16

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

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									
Sample ID	BH17	BH17	BH19	BH19									
Depth	0.50	2.00	0.50	2.00									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	23/11/2023	23/11/2023	23/11/2023	23/11/2023									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	29/11/2023	29/11/2023	29/11/2023	29/11/2023									

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)#	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL)#	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL)#	<0.2	<0.2	<0.2	<0.2							<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL)#	<4	<4	<4	<4							<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL)#	<7	<7	<7	<7							<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL)#	<7	<7	86	<7							<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_CU_1D_AL)	<7	<7	23	<7							<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH_CU+HS_1D_AL)	<26	<26	109	<26							<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_CU_1D_AL)	<10	<10	<10	<10							<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_CU_1D_AL)	<10	<10	82	<10							<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR)#	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR)#	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR)#	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR)#	<0.2	<0.2	<0.2	<0.2							<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)#	<4	<4	<4	<4							<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)#	<7	<7	<7	<7							<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)#	<7	<7	298	126							<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_CU_1D_AR)	<7	<7	77	43							<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH_CU+HS_1D_AR)	<26	<26	375	169							<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH_CU+HS_1D_Total)	<52	<52	484	169							<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR)#	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_CU_1D_AR)	<10	<10	38	<10							<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_CU_1D_AR)	<10	<10	266	121							<10	mg/kg	TM5/PM8/PM16
MTBE#	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
Benzene#	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
Toluene#	<5	<5	<5	7							<5	ug/kg	TM36/PM12
Ethylbenzene#	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
m/p-Xylene#	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
o-Xylene#	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
PCB 28#	<5	<5	<5	<5							<5	ug/kg	TM17/PM8
PCB 52#	<5	<5	<5	<5							<5	ug/kg	TM17/PM8
PCB 101#	<5	<5	<5	<5							<5	ug/kg	TM17/PM8
PCB 118#	<5	<5	<5	<5							<5	ug/kg	TM17/PM8
PCB 138#	<5	<5	<5	<5							<5	ug/kg	TM17/PM8
PCB 153#	<5	<5	<5	<5							<5	ug/kg	TM17/PM8
PCB 180#	<5	<5	<5	<5							<5	ug/kg	TM17/PM8
Total 7 PCBs#	<35	<35	<35	<35							<35	ug/kg	TM17/PM8

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

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	BH17	BH17	BH19	BH19									
Depth	0.50	2.00	0.50	2.00									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	23/11/2023	23/11/2023	23/11/2023	23/11/2023									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	29/11/2023	29/11/2023	29/11/2023	29/11/2023									
Natural Moisture Content	23.6	12.2	18.8	14.1							<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	19.1	10.9	15.8	12.3							<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3							<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	-	0.0720	-	0.2287							<0.0015	g/l	TM38/PM20
Chromium III	20.7	13.5	25.7	38.6							<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	1.17	0.40	0.99	1.24							<0.02	%	TM21/PM24
Organic Matter	-	0.7	-	2.1							<0.2	%	TM21/PM24
pH #	7.95	8.48	9.45	11.53							<0.01	pH units	TM73/PM11
Asbestos Type*	NAD	NAD	NAD	NAD								None	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

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	LOD/LOR	Units	Method No.
Sample ID	BH07	BH07	BH08	BH08	BH09	BH09	BH10	BH10	BH11	BH11			
Depth	0.60	1.50	1.00	2.00	0.50	1.50	0.50	1.20	0.50	1.50			
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	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023			
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	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023			
Dissolved Antimony #	<0.002	<0.002	0.003	<0.002	0.003	<0.002	0.023	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	0.03	<0.02	0.03	<0.02	0.23	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	0.0034	0.0026	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0037	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	0.034	0.026	<0.025	<0.025	<0.025	<0.025	<0.025	0.037	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	<0.003	0.034	0.003	0.006	<0.003	0.009	<0.003	0.013	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	<0.03	0.34	0.03	0.06	<0.03	0.09	<0.03	0.13	<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	<0.0015	<0.0015	<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	<0.015	<0.015	<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 #	0.003	0.014	0.010	0.020	0.004	0.012	0.009	<0.002	0.004	0.010	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.03	0.14	0.10	0.20	0.04	0.12	0.09	<0.02	0.04	0.10	<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	<0.003	<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	<0.03	<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	0.4	<0.3	0.3	<0.3	0.4	<0.3	0.3	<0.3	0.4	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	4	<3	3	<3	4	<3	<3	<3	4	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	20.7	15.1	21.8	2.9	0.9	0.9	<0.5	10.1	116.7	2.7	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	207	151	218	29	9	9	<5	101	1167	27	<5	mg/kg	TM38/PM0
Mass of raw test portion	0.1132	0.1023	0.1177	0.1046	0.1209	0.1025	0.1154	0.1116	0.1152	0.1041		kg	NONE/PM17
Chloride #	0.4	<0.3	0.6	0.3	1.2	<0.3	1.8	4.5	0.8	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	4	<3	6	3	12	<3	18	45	8	<3	<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	2	<2	3	4	<2	<2	4	<2	<2	<2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	<20	30	40	<20	<20	40	<20	<20	<20	<20	mg/kg	TM60/PM0
pH	7.96	7.99	7.56	7.84	8.26	8.09	8.33	7.93	7.92	8.07	<0.01	pH units	TM73/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

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	LOD/LOR	Units	Method No.
Sample ID	BH07	BH07	BH08	BH08	BH09	BH09	BH10	BH10	BH11	BH11			
Depth	0.60	1.50	1.00	2.00	0.50	1.50	0.50	1.20	0.50	1.50			
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	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023			
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	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023			
Total Dissolved Solids #	117	62	143	57	137	53	132	87	284	53	<35	mg/l	TM20/PM0
Total Dissolved Solids #	1170	620	1431	570	1369	530	1320	870	2841	530	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

Report : CEN 10:1 1 Batch

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	BH17	BH17	BH19	BH19									
Depth	0.50	2.00	0.50	2.00									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	23/11/2023	23/11/2023	23/11/2023	23/11/2023									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	29/11/2023	29/11/2023	29/11/2023	29/11/2023									
Dissolved Antimony #	<0.002	<0.002	0.003	<0.002							<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	0.03	<0.02							<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	0.0043	<0.0025							<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	0.043	<0.025							<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.023	0.012	0.006	0.019							<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.23	0.12	0.06	0.19							<0.03	mg/kg	TM30/PM17
Dissolved Cadmium #	<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	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	0.0077							<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	0.077							<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	0.020	0.014							<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	0.20	0.14							<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<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	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.008	0.012	0.015	0.007							<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.08	0.12	0.15	0.07							<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	0.006	0.005							<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	0.06	0.05							<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003							<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03							<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<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	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<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	mg/kg	TM61/PM0
Phenol	<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	mg/kg	TM26/PM0
Fluoride	0.3	<0.3	<0.3	<0.3							<0.3	mg/l	TM173/PM0
Fluoride	3	<3	<3	<3							<3	mg/kg	TM173/PM0
Sulphate as SO4 #	90.9	20.0	39.4	43.4							<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	909	200	394	434							<5	mg/kg	TM38/PM0
Mass of raw test portion	0.1059	0.1037	0.112	0.1081								kg	NONE/PM17
Chloride #	0.5	<0.3	1.5	2.1							<0.3	mg/l	TM38/PM0
Chloride #	5	<3	15	21							<3	mg/kg	TM38/PM0
Mass of dried test portion	0.09	0.09	0.09	0.09								kg	NONE/PM17
Dissolved Organic Carbon	<2	<2	8	4							<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	<20	80	40							<20	mg/kg	TM60/PM0
pH	7.95	8.08	9.63	11.38							<0.01	pH units	TM73/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

Report : CEN 10:1 1 Batch

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	BH17	BH17	BH19	BH19									
Depth	0.50	2.00	0.50	2.00									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	23/11/2023	23/11/2023	23/11/2023	23/11/2023									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	29/11/2023	29/11/2023	29/11/2023	29/11/2023									
Total Dissolved Solids #	231	80	146	211							<35	mg/l	TM20/PM0
Total Dissolved Solids #	2311	800	1461	2109							<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

Report : EN12457_2

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

Please see attached notes for all abbreviations and acronyms

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	BH07	BH07	BH08	BH08	BH09	BH09	BH10	BH10	BH11	BH11						
Depth	0.60	1.50	1.00	2.00	0.50	1.50	0.50	1.20	0.50	1.50						
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	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023						
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	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Solid Waste Analysis																
Total Organic Carbon #	1.90	0.39	2.01	0.51	3.03	0.66	3.64	0.32	1.90	0.32	3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025 SV	<0.025	<0.025 SV	<0.025	<0.025 SV	<0.025	0.036 SV	<0.025	<0.025	<0.025	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	3724	<30	<30	<30	500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64	<0.64	<0.64	<0.64	<0.64	<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	0.034	0.026	<0.025	<0.025	<0.025	<0.025	<0.025	0.037	0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	<0.03	<0.03	0.34	0.03	0.06	<0.03	0.09	<0.03	0.13	<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	<0.015	<0.015	<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 #	0.03	0.14	0.10	0.20	0.04	0.12	0.09	<0.02	0.04	0.10	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	0.03	<0.02	0.03	<0.02	0.23	<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	<0.03	<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 #	1170	620	1431	570	1369	530	1320	870	2841	530	4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	<20	<20	30	40	<20	<20	40	<20	<20	<20	500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1132	0.1023	0.1177	0.1046	0.1209	0.1025	0.1154	0.1116	0.1152	0.1041	-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	79.8	88.1	76.6	86.2	74.6	87.4	77.7	81.0	78.0	86.9	-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.877	0.888	0.873	0.886	0.869	0.887	0.874	0.879	0.875	0.887	-	-	-		l	NONE/PM17
Moisture Content 105C (% Dry Weight)	25.4	13.5	30.5	16.0	34.0	14.4	28.7	23.5	28.2	15.0	-	-	-	<0.1	%	PM4/PM0
pH #	8.15	8.51	8.37	8.19	8.11	8.62	8.25	8.39	7.84	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	4	<3	3	<3	4	<3	<3	<3	4	<3	10	150	500	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	207	151	218	29	9	9	<5	101	1167	27	1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	4	<3	6	3	12	<3	18	45	8	<3	800	15000	25000	<3	mg/kg	TM38/PM0

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

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle - Ballymum
Contact: Conor Finnerty
EMT Job No: 23/20105

Report : EN12457_2

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

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	41-44	45-48	49-52	53-56							Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Sample ID	BH17	BH17	BH19	BH19												
Depth	0.50	2.00	0.50	2.00												
COC No / misc																
Containers	V J T	V J T	V J T	V J T												
Sample Date	23/11/2023	23/11/2023	23/11/2023	23/11/2023												
Sample Type	Soil	Soil	Soil	Soil												
Batch Number	1	1	1	1												
Date of Receipt	29/11/2023	29/11/2023	29/11/2023	29/11/2023												
Solid Waste Analysis																
Total Organic Carbon #	1.17	0.40	0.99	1.24							3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025	<0.025	<0.025							6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035	<0.035	<0.035							1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	109	<30							500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	<0.22	<0.22	<0.22	<0.22							-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64	<0.64	<0.64	<0.64							100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																
Arsenic #	<0.025	<0.025	0.043	<0.025							0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.23	0.12	0.06	0.19							20	100	300	<0.03	mg/kg	TM30/PM17
Cadmium #	<0.005	<0.005	<0.005	<0.005							0.04	1	5	<0.005	mg/kg	TM30/PM17
Chromium #	<0.015	<0.015	<0.015	0.077							0.5	10	70	<0.015	mg/kg	TM30/PM17
Copper #	<0.07	<0.07	0.20	0.14							2	50	100	<0.07	mg/kg	TM30/PM17
Mercury #	<0.0001	<0.0001	0.0001	<0.0001							0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.08	0.12	0.15	0.07							0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02	0.06	0.05							0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05	<0.05	<0.05							0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	<0.02	<0.02	0.03	<0.02							0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	<0.03	<0.03	<0.03	<0.03							0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03	<0.03	<0.03	<0.03							4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	2311	800	1461	2109							4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	<20	<20	80	40							500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1059	0.1037	0.112	0.1081							-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	85.3	86.9	80.1	83.5							-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.885	0.886	0.878	0.882							-	-	-		l	NONE/PM17
Moisture Content 105C (% Dry Weight)	17.2	15.1	24.9	19.7							-	-	-	<0.1	%	PM4/PM0
pH #	7.95	8.48	9.45	11.53							-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1	<0.1	<0.1							1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	3	<3	<3	<3							10	150	500	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	909	200	394	434							1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	5	<3	15	21							800	15000	25000	<3	mg/kg	TM38/PM0

Client Name: Ground Investigations Ireland

Reference: 13061-08-23

Location: Housing Bundle - Ballymum

Contact: Conor Finnerty

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
23/20105	1	BH07	0.60	1-4	No interpretation possible
23/20105	1	BH07	1.50	5-8	No interpretation possible
23/20105	1	BH08	1.00	9-12	No interpretation possible
23/20105	1	BH08	2.00	13-16	No interpretation possible
23/20105	1	BH09	0.50	17-20	No interpretation possible
23/20105	1	BH09	1.50	21-24	No interpretation possible
23/20105	1	BH10	0.50	25-28	Lubricating oil, Possible PAH's & Possible trace of degraded diesel
23/20105	1	BH10	1.20	29-32	No interpretation possible
23/20105	1	BH11	0.50	33-36	No interpretation possible
23/20105	1	BH11	1.50	37-40	No interpretation possible
23/20105	1	BH17	0.50	41-44	No interpretation possible
23/20105	1	BH17	2.00	45-48	No interpretation possible
23/20105	1	BH19	0.50	49-52	Trace of PAH's, Trace of lubricating oil & Possible tarmac/bitumen
23/20105	1	BH19	2.00	53-56	Possible tarmac/bitumen

Client Name: Ground Investigations Ireland

Reference: 13061-08-23

Location: Housing Bundle - Ballymum

Contact: Conor Finnerty

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
23/20105	1	BH07	0.60	1-4	EPH	Sample holding time exceeded
23/20105	1	BH07	1.50	5-8	EPH	Sample holding time exceeded
23/20105	1	BH08	1.00	9-12	EPH	Sample holding time exceeded
23/20105	1	BH08	2.00	13-16	EPH	Sample holding time exceeded
23/20105	1	BH09	0.50	17-20	EPH	Sample holding time exceeded
23/20105	1	BH09	1.50	21-24	EPH	Sample holding time exceeded
23/20105	1	BH10	0.50	25-28	EPH	Sample holding time exceeded
23/20105	1	BH10	1.20	29-32	EPH	Sample holding time exceeded
23/20105	1	BH11	0.50	33-36	EPH	Sample holding time exceeded
23/20105	1	BH11	1.50	37-40	EPH	Sample holding time exceeded
23/20105	1	BH17	0.50	41-44	EPH	Sample holding time exceeded
23/20105	1	BH17	2.00	45-48	EPH, GRO	Sample holding time exceeded
23/20105	1	BH19	0.50	49-52	EPH, GRO	Sample holding time exceeded
23/20105	1	BH19	2.00	53-56	EPH, GRO	Sample holding time exceeded

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

It is a requirement under ISO 17025 that we inform clients if samples are deviating i.e. outside what is expected. A deviating sample indicates that the sample 'may' be compromised but not necessarily will be compromised. The result is still accredited and our analytical reports will still show accreditation on the relevant analytes.

EMT Job No.: 23/20105

SOILS and ASH

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

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

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

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

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

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

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

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

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

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

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

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

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

WATERS

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

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

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

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

STACK EMISSIONS

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

BLANKS

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

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a 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: 23/20105

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
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: 23/20105

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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 GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
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: 2013I	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: 2013I	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: 2013I	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: 23/20105

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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	

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Attention :	Scott Graydon
Date :	19th December, 2023
Your reference :	13061-08-23
Our reference :	Test Report 23/20297 Batch 1
Location :	Housing Bundle Ballymum
Date samples received :	1st December, 2023
Status :	Final Report
Issue :	202312191428

Eight samples were received for analysis on 1st December, 2023 of which seven were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

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

Scope 1&2 emissions - 32.508 kg of CO2

Scope 1&2&3 emissions - 76.824 kg of CO2

Authorised By:

Bruce Leslie
Project Manager

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle Ballymum
Contact: Scott Graydon
EMT Job No: 23/20297

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	21-24	25-28	29-32				LOD/LOR	Units	Method No.
Sample ID	BH04	BH04	BH13	BH13	BH14A	BH15	BH15						
Depth	0.50	1.00	0.50	1.00	1.00	0.40	1.50						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1						
Date of Receipt	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023						
Antimony	2	2	2	2	1	3	2				<1	mg/kg	TM30/PM15
Arsenic #	10.9	12.0	13.7	14.0	8.9	14.6	8.8				<0.5	mg/kg	TM30/PM15
Barium #	81	65	66	85	74	149	79				<1	mg/kg	TM30/PM15
Cadmium #	2.2	1.8	0.7	1.2	1.1	9.4	2.0				<0.1	mg/kg	TM30/PM15
Chromium #	25.3	38.1	26.8	20.3	35.2	37.1	22.6				<0.5	mg/kg	TM30/PM15
Copper #	30	30	29	26	26	35	26				<1	mg/kg	TM30/PM15
Lead #	25	32	33	30	35	41	16				<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1				<0.1	mg/kg	TM30/PM15
Molybdenum #	4.0	4.6	2.3	2.7	3.0	4.9	3.9				<0.1	mg/kg	TM30/PM15
Nickel #	38.5	37.9	30.0	35.2	28.6	39.6	35.2				<0.7	mg/kg	TM30/PM15
Selenium #	2	2	<1	2	<1	1	<1				<1	mg/kg	TM30/PM15
Zinc #	96	87	106	104	73	110	71				<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<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	mg/kg	TM4/PM8
Acenaphthene #	<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	mg/kg	TM4/PM8
Phenanthrene #	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	<0.03				<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04				<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	<0.03	<0.03	<0.03	0.11	<0.03				<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	<0.03	<0.03	<0.03	0.09	<0.03				<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	<0.06	0.09	<0.06				<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02	<0.02	<0.02	<0.02	0.08	<0.02				<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07	<0.07	0.13	<0.07				<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	<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	<0.04	0.06	<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	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<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	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	<0.22	<0.22	<0.22	0.36	<0.22				<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	0.69	<0.64				<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05				<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02				<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1				<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	92	96	94	94	94	93	92				<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30	<30	<30	<30	<30	<30	<30				<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 Ballymum
Contact: Scott Graydon
EMT Job No: 23/20297

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	21-24	25-28	29-32				LOD/LOR	Units	Method No.
Sample ID	BH04	BH04	BH13	BH13	BH14A	BH15	BH15						
Depth	0.50	1.00	0.50	1.00	1.00	0.40	1.50						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1						
Date of Receipt	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023						
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)#	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL)#	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<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				<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL)#	<4	<4	<4	<4	<4	<4	<4				<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL)#	<7	<7	<7	<7	<7	<7	<7				<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL)#	<7	<7	<7	<7	<7	<7	<7				<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_CU_1D_AL)	<7	<7	<7	<7	<7	<7	<7				<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH_CU+HS_1D_AL)	<26	<26	<26	<26	<26	<26	<26				<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_CU_1D_AL)	<10	<10	<10	<10	<10	<10	<10				<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_CU_1D_AL)	<10	<10	<10	<10	<10	<10	<10				<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR)#	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR)#	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR)#	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR)#	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2				<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)#	<4	<4	<4	<4	<4	<4	<4				<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)#	<7	<7	<7	<7	<7	<7	<7				<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)#	<7	<7	<7	<7	<7	<7	<7				<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_CU_1D_AR)	<7	<7	<7	<7	<7	<7	<7				<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH_CU+HS_1D_AR)	<26	<26	<26	<26	<26	<26	<26				<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH_CU+HS_1D_Total)	<52	<52	<52	<52	<52	<52	<52				<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR)#	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_CU_1D_AR)	<10	<10	<10	<10	<10	<10	<10				<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_CU_1D_AR)	<10	<10	<10	<10	<10	<10	<10				<10	mg/kg	TM5/PM8/PM16
MTBE#	<5 SV	<5	<5	<5 SV	<5	<5	<5				<5	ug/kg	TM36/PM12
Benzene#	<5 SV	<5	<5	<5 SV	<5	<5	<5				<5	ug/kg	TM36/PM12
Toluene#	<5 SV	<5	<5	<5 SV	<5	<5	<5				<5	ug/kg	TM36/PM12
Ethylbenzene#	<5 SV	<5	<5	<5 SV	<5	<5	<5				<5	ug/kg	TM36/PM12
m/p-Xylene#	<5 SV	<5	<5	<5 SV	<5	<5	<5				<5	ug/kg	TM36/PM12
o-Xylene#	<5 SV	<5	<5	<5 SV	<5	<5	<5				<5	ug/kg	TM36/PM12
PCB 28#	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM17/PM8
PCB 52#	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM17/PM8
PCB 101#	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM17/PM8
PCB 118#	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM17/PM8
PCB 138#	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM17/PM8
PCB 153#	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM17/PM8
PCB 180#	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM17/PM8
Total 7 PCBs#	<35	<35	<35	<35	<35	<35	<35				<35	ug/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle Ballymum
Contact: Scott Graydon
EMT Job No: 23/20297

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	21-24	25-28	29-32				LOD/LOR	Units	Method No.
Sample ID	BH04	BH04	BH13	BH13	BH14A	BH15	BH15						
Depth	0.50	1.00	0.50	1.00	1.00	0.40	1.50						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1						
Date of Receipt	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023						
Natural Moisture Content	13.6	18.3	13.7	16.8	17.5	16.8	14.2				<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	12.0	15.5	12.1	14.4	14.9	14.4	12.4				<0.1	%	PM4/PM0
Hexavalent Chromium #	<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) #	1.4924	-	-	0.0582	-	-	0.0260				<0.0015	g/l	TM38/PM20
Chromium III	25.3	38.1	26.8	20.3	35.2	37.1	22.6				<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	0.82	1.22	1.01	0.93	1.03	1.32	0.39				<0.02	%	TM21/PM24
Organic Matter	1.4	-	-	1.6	-	-	0.7				<0.2	%	TM21/PM24
pH #	7.69	7.46	8.07	8.28	8.06	8.13	8.32				<0.01	pH units	TM73/PM11
Asbestos Type*	NAD	NAD	NAD	NAD	NAD	NAD	NAD					None	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle Ballymum
Contact: Scott Graydon
EMT Job No: 23/20297

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	21-24	25-28	29-32				LOD/LOR	Units	Method No.
Sample ID	BH04	BH04	BH13	BH13	BH14A	BH15	BH15						
Depth	0.50	1.00	0.50	1.00	1.00	0.40	1.50						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1						
Date of Receipt	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023						
Dissolved Antimony #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003				<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03				<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<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	mg/kg	TM30/PM17
Dissolved Barium #	0.018	0.021	<0.003	<0.003	0.006	0.007	0.010				<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.18	0.21	<0.03	<0.03	0.06	0.07	0.10				<0.03	mg/kg	TM30/PM17
Dissolved Cadmium #	<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	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<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	<0.015	<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	mg/l	TM30/PM17
Dissolved Copper (A10) #	<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	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.005	0.009	0.006	0.007	0.004	0.003	0.020				<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.05	0.09	0.06	0.07	0.04	0.03	0.20				<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<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	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<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	mg/kg	TM30/PM17
Dissolved Zinc #	<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	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<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	mg/kg	TM61/PM0
Phenol	<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	mg/kg	TM26/PM0
Fluoride	<0.3	0.4	0.6	0.5	0.4	0.3	<0.3				<0.3	mg/l	TM173/PM0
Fluoride	<3	4	6	5	4	3	<3				<3	mg/kg	TM173/PM0
Sulphate as SO4 #	712.9	229.1	4.1	5.3	16.0	0.6	3.9				<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	7126	2290	41	53	160	6	39				<5	mg/kg	TM38/PM0
Mass of raw test portion	0.1032	0.1106	0.111	0.1075	0.1186	0.113	0.1055					kg	NONE/PM17
Chloride #	0.7	1.0	0.5	0.6	0.4	0.5	0.5				<0.3	mg/l	TM38/PM0
Chloride #	7	10	5	6	4	5	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					kg	NONE/PM17
Dissolved Organic Carbon	<2	<2	<2	<2	2	2	<2				<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	<20	<20	<20	20	20	<20				<20	mg/kg	TM60/PM0
pH	7.98	8.01	8.17	8.09	8.16	8.13	8.05				<0.01	pH units	TM73/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle Ballymum
Contact: Scott Graydon
EMT Job No: 23/20297

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	21-24	25-28	29-32				LOD/LOR	Units	Method No.
Sample ID	BH04	BH04	BH13	BH13	BH14A	BH15	BH15						
Depth	0.50	1.00	0.50	1.00	1.00	0.40	1.50						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1						
Date of Receipt	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023						
Total Dissolved Solids #	1193	423	91	78	100	86	60				<35	mg/l	TM20/PM0
Total Dissolved Solids #	11926	4228	910	780	1000	860	600				<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle Ballymum
Contact: Scott Graydon
EMT Job No: 23/20297

Report : EN12457_2

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

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-4	5-8	9-12	13-16	21-24	25-28	29-32								
Sample ID	BH04	BH04	BH13	BH13	BH14A	BH15	BH15								
Depth	0.50	1.00	0.50	1.00	1.00	0.40	1.50								
COC No / misc															
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T								
Sample Date	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023								
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1	1	1								
Date of Receipt	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023	01/12/2023				Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Solid Waste Analysis																
Total Organic Carbon #	0.82	1.22	1.01	0.93	1.03	1.32	0.39				3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025 SV	<0.025	<0.025	<0.025 SV	<0.025	<0.025	<0.025				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				1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	<30	<30	<30	<30	<30				500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	<0.22	<0.22	<0.22	<0.22	<0.22	0.36	<0.22				-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64	<0.64	<0.64	<0.64	<0.64	0.69	<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				0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.18	0.21	<0.03	<0.03	0.06	0.07	0.10				20	100	300	<0.03	mg/kg	TM30/PM17
Cadmium #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005				0.04	1	5	<0.005	mg/kg	TM30/PM17
Chromium #	<0.015	<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				2	50	100	<0.07	mg/kg	TM30/PM17
Mercury #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001				0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.05	0.09	0.06	0.07	0.04	0.03	0.20				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				0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03				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				0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	11926	4228	910	780	1000	860	600				4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	<20	<20	<20	<20	20	20	<20				500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1032	0.1106	0.111	0.1075	0.1186	0.113	0.1055				-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	86.8	81.5	81.2	83.9	76.2	80.0	85.2				-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.886	0.879	0.879	0.883	0.872	0.878	0.884				-	-	-		l	NONE/PM17
Moisture Content 105C (% Dry Weight)	15.2	22.8	23.1	19.3	31.3	24.9	17.4				-	-	-	<0.1	%	PM4/PM0
pH #	7.69	7.46	8.07	8.28	8.06	8.13	8.32				-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	4	6	5	4	3	<3				10	150	500	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	7126	2290	41	53	160	6	39				1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	7	10	5	6	4	5	5				800	15000	25000	<3	mg/kg	TM38/PM0

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

Client Name: Ground Investigations Ireland

Reference: 13061-08-23

Location: Housing Bundle Ballymum

Contact: Scott Graydon

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
23/20297	1	BH04	0.50	1-4	No interpretation possible
23/20297	1	BH04	1.00	5-8	No interpretation possible
23/20297	1	BH13	0.50	9-12	No interpretation possible
23/20297	1	BH13	1.00	13-16	No interpretation possible
23/20297	1	BH14A	1.00	21-24	No interpretation possible
23/20297	1	BH15	0.40	25-28	No interpretation possible
23/20297	1	BH15	1.50	29-32	No interpretation possible

Client Name: Ground Investigations Ireland

Matrix : Solid

Reference: 13061-08-23

Location: Housing Bundle Ballymum

Contact: Scott Graydon

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
23/20297	1	BH04	0.50	1-4	GRO	Sample holding time exceeded
23/20297	1	BH04	1.00	5-8	GRO	Sample holding time exceeded
23/20297	1	BH13	0.50	9-12	GRO	Sample holding time exceeded
23/20297	1	BH13	1.00	13-16	GRO	Sample holding time exceeded
23/20297	1	BH14A	1.00	21-24	GRO	Sample holding time exceeded
23/20297	1	BH15	0.40	25-28	GRO	Sample holding time exceeded
23/20297	1	BH15	1.50	29-32	GRO	Sample holding time exceeded

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

It is a requirement under ISO 17025 that we inform clients if samples are deviating i.e. outside what is expected. A deviating sample indicates that the sample 'may' be compromised but not necessarily will be compromised. The result is still accredited and our analytical reports will still show accreditation on the relevant analytes.

SOILS and ASH

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

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

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

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

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

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

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

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

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

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

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

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

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

WATERS

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

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

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

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

STACK EMISSIONS

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

BLANKS

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

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a 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: 23/20297

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
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: 23/20297

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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 GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
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: 2013I	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: 2013I	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: 2013I	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: 23/20297

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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	

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Attention :	Diarmaid MagLochlainn
Date :	3rd January, 2024
Your reference :	13061-08-23
Our reference :	Test Report 23/21539 Batch 1
Location :	Housing Bundle- Ballymun Lot 4 (AKA Ballymun
Date samples received :	18th December, 2023
Status :	Final Report
Issue :	202401031332

Twenty one samples were received for analysis on 18th December, 2023 of which twenty one 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 - 102.446 kg of CO2

Scope 1&2&3 emissions - 242.107 kg of CO2

Authorised By:

Liza Klebe
Project Co-ordinator

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

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	LOD/LOR	Units	Method No.
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	TP-03	TP-04	TP-05	TP-05			
Depth	0.70	2.00	1.20	3.00	0.50	2.00	3.50	0.50	1.00	3.00			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
Antimony	2	2	4	2	2	2	2	2	2	2	<1	mg/kg	TM30/PM15
Arsenic #	11.4	9.3	15.5	13.3	13.7	12.3	12.1	11.3	9.3	14.1	<0.5	mg/kg	TM30/PM15
Barium #	92	47	142	81	83	79	115	82	73	44	<1	mg/kg	TM30/PM15
Cadmium #	1.6	1.8	1.1	1.1	1.3	2.0	1.9	1.6	3.1	1.3	<0.1	mg/kg	TM30/PM15
Chromium #	20.2	14.0	42.1	16.5	24.6	26.8	31.0	21.9	54.2	21.4	<0.5	mg/kg	TM30/PM15
Copper #	28	23	56	26	39	34	30	26	26	23	<1	mg/kg	TM30/PM15
Lead #	56	14	72	27	42	34	26	32	21	19	<5	mg/kg	TM30/PM15
Mercury #	0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	2.7	2.9	4.6	2.0	2.9	3.3	5.0	2.4	6.2	3.5	<0.1	mg/kg	TM30/PM15
Nickel #	33.7	32.7	39.4	29.2	40.2	44.1	41.3	33.3	34.8	40.9	<0.7	mg/kg	TM30/PM15
Selenium #	1	1	2	1	1	1	3	2	2	<1	<1	mg/kg	TM30/PM15
Zinc #	89	73	226	82	129	167	86	94	87	89	<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 #	0.11	<0.03	<0.03	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.20	<0.03	0.05	0.07	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.29	<0.03	0.04	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.13	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.19	<0.02	0.05	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.23	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	0.05	<0.04	<0.04	<0.04	<0.04	<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	<0.04	<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 #	0.55	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.33	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.06	<0.02	<0.02	<0.02	<0.02	<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	74	99	97	104	97	79	104	105	104	107	<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30	<30	<30	51	<30	<30	35	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

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	LOD/LOR	Units	Method No.
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	TP-03	TP-04	TP-05	TP-05			
Depth	0.70	2.00	1.20	3.00	0.50	2.00	3.50	0.50	1.00	3.00			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)#	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<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 SV	<0.1 SV	<0.1	<0.1	<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 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL)#	<0.2	<0.2	<0.2	1.1	<0.2	<0.2	1.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL)#	<4	<4	<4	9	<4	<4	8	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL)#	<7	<7	<7	41	<7	<7	26	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL)#	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_CU_1D_AL)	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH_CU+HS_1D_AL)	<26	<26	<26	51	<26	<26	35	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_CU_1D_AL)	<10	<10	<10	50	<10	<10	35	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_CU_1D_AL)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR)#	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR)#	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<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 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR)#	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)#	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)#	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)#	<7	<7	72	70	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_CU_1D_AR)	<7	<7	14	21	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH_CU+HS_1D_AR)	<26	<26	86	91	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH_CU+HS_1D_Total)	<52	<52	86	142	<52	<52	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR)#	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_CU_1D_AR)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_CU_1D_AR)	<10	<10	67	65	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE#	<5	<5	<5	<5	<5	<5 SV	<5 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
Benzene#	<5	<5	<5	<5	<5	<5 SV	<5 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
Toluene#	<5	<5	16	<5	<5	<5 SV	<5 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
Ethylbenzene#	<5	<5	<5	<5	<5	<5 SV	<5 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
m/p-Xylene#	<5	<5	<5	6	<5	<5 SV	<5 SV	<5	<5	<5	<5	ug/kg	TM36/PM12
o-Xylene#	<5	<5	<5	<5	<5	<5 SV	<5 SV	<5	<5	<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	11	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101#	<5	<5	15	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118#	<5	<5	10	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138#	<5	<5	10	6	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 153#	<5	<5	6	<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	52	<35	<35	<35	<35	<35	<35	<35	<35	ug/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

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	LOD/LOR	Units	Method No.
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	TP-03	TP-04	TP-05	TP-05			
Depth	0.70	2.00	1.20	3.00	0.50	2.00	3.50	0.50	1.00	3.00			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
Natural Moisture Content	16.8	13.2	26.8	14.4	21.9	19.5	17.1	18.5	15.4	18.0	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	14.4	11.7	21.1	12.6	18.0	16.3	14.6	15.6	13.3	15.3	<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) #	-	0.0086	-	0.1734	-	0.1379	-	0.0148	-	0.0092	<0.0015	g/l	TM38/PM20
Chromium III	20.2	14.0	42.1	16.5	24.6	26.8	31.0	21.9	54.2	21.4	<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	0.83	0.31	2.19	0.52	1.17	1.02	0.93	1.11	0.77	0.40	<0.02	%	TM21/PM24
Organic Matter	-	0.5	-	0.9	-	1.8	-	1.9	-	0.7	<0.2	%	TM21/PM24
pH #	8.48	8.65	7.64	10.88	8.41	7.91	7.99	8.33	7.97	8.47	<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

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	57-60	61-64	65-68	69-72	73-76	77-80	LOD/LOR	Units	Method No.
Sample ID	TP-06	TP-07	TP-07	TP-08	TP-08	TP-09	TP-10	TP-11	TP-11	TP-12			
Depth	0.50	1.00	3.00	2.00	3.40	2.20	1.00	0.50	3.00	0.50			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
Antimony	2	2	2	2	1	2	2	3	2	2	<1	mg/kg	TM30/PM15
Arsenic #	14.3	12.3	8.1	10.7	8.2	11.1	10.7	14.9	8.9	12.6	<0.5	mg/kg	TM30/PM15
Barium #	120	84	54	64	102	63	88	114	88	89	<1	mg/kg	TM30/PM15
Cadmium #	2.2	2.2	1.3	1.8	1.2	1.8	1.0	2.0	1.7	1.4	<0.1	mg/kg	TM30/PM15
Chromium #	51.9	19.9	34.9	19.6	35.1	21.0	42.6	23.3	12.5	19.8	<0.5	mg/kg	TM30/PM15
Copper #	35	32	23	28	20	29	36	41	25	25	<1	mg/kg	TM30/PM15
Lead #	48	32	16	19	15	18	39	44	17	30	<5	mg/kg	TM30/PM15
Mercury #	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	5.4	3.2	3.7	3.4	4.5	3.6	2.2	3.4	3.5	2.7	<0.1	mg/kg	TM30/PM15
Nickel #	47.9	41.0	41.1	38.1	28.6	41.8	44.3	42.2	32.8	30.2	<0.7	mg/kg	TM30/PM15
Selenium #	1	1	2	<1	3	<1	<1	1	5	2	<1	mg/kg	TM30/PM15
Zinc #	128	89	79	77	56	92	112	113	69	80	<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 #	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
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
Fluoranthene #	0.08	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	mg/kg	TM4/PM8
Pyrene #	0.07	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.07	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.12	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.07	<0.04	<0.04	<0.04	<0.04	<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	<0.04	<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	<0.04	<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 #	0.27	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.03	<0.02	<0.02	<0.02	<0.02	<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	108	105	109	108	109	110	107	111	109	<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30	<30	38	<30	59	<30	<30	<30	45	61	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

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	57-60	61-64	65-68	69-72	73-76	77-80	LOD/LOR	Units	Method No.
Sample ID	TP-06	TP-07	TP-07	TP-08	TP-08	TP-09	TP-10	TP-11	TP-11	TP-12			
Depth	0.50	1.00	3.00	2.00	3.40	2.20	1.00	0.50	3.00	0.50			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)#	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<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 SV	<0.1	<0.1 SV	<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 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<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	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL)#	<4	<4	7	<4	9	<4	<4	<4	6	7	<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL)#	<7	<7	19	<7	21	<7	<7	<7	16	21	<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL)#	<7	<7	12	<7	29	<7	<7	<7	23	33	<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_CU_1D_AL)	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH_CU+HS_1D_AL)	<26	<26	38	<26	59	<26	<26	<26	45	61	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_CU_1D_AL)	<10	<10	38	<10	41	<10	<10	<10	34	40	<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_CU_1D_AL)	<10	<10	<10	<10	16	<10	<10	<10	<10	21	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR)#	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<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 SV	<0.1	<0.1 SV	<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 SV	<0.1	<0.1 SV	<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	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)#	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)#	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)#	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_CU_1D_AR)	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH_CU+HS_1D_AR)	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH_CU+HS_1D_Total)	<52	<52	<52	<52	59	<52	<52	<52	<52	61	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR)#	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<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	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_CU_1D_AR)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE#	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5 SV	<5	<5	ug/kg	TM36/PM12
Benzene#	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5 SV	<5	<5	ug/kg	TM36/PM12
Toluene#	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5 SV	<5	<5	ug/kg	TM36/PM12
Ethylbenzene#	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5 SV	<5	<5	ug/kg	TM36/PM12
m/p-Xylene#	<5	<5	<5 SV	<5	<5 SV	<5	<5	<5	<5 SV	<5	<5	ug/kg	TM36/PM12
o-Xylene#	<5	<5	<5 SV	<5	<5 SV	<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

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

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	57-60	61-64	65-68	69-72	73-76	77-80	LOD/LOR	Units	Method No.
Sample ID	TP-06	TP-07	TP-07	TP-08	TP-08	TP-09	TP-10	TP-11	TP-11	TP-12			
Depth	0.50	1.00	3.00	2.00	3.40	2.20	1.00	0.50	3.00	0.50			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
Natural Moisture Content	18.1	19.3	10.9	15.3	11.5	15.8	18.5	18.2	13.0	15.3	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	15.3	16.2	9.9	13.3	10.3	13.6	15.6	15.4	11.5	13.3	<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) #	-	0.0160	-	0.0938	-	0.0081	-	0.0598	-	0.0976	<0.0015	g/l	TM38/PM20
Chromium III	51.9	19.9	34.9	19.6	35.1	21.0	42.6	23.3	12.5	19.8	<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	1.21	0.97	0.46	0.42	0.48	0.46	1.31	1.27	0.86	0.97	<0.02	%	TM21/PM24
Organic Matter	-	1.7	-	0.7	-	0.8	-	2.2	-	1.7	<0.2	%	TM21/PM24
pH #	8.27	8.44	8.71	8.42	8.59	8.58	8.30	8.31	8.73	8.54	<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : Solid

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

EMT Sample No.	81-84												
Sample ID	TP-12												
Depth	1.00												
COC No / misc													
Containers	V J T												
Sample Date	13/12/2023												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	18/12/2023												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Antimony	3										<1	mg/kg	TM30/PM15
Arsenic #	15.5										<0.5	mg/kg	TM30/PM15
Barium #	123										<1	mg/kg	TM30/PM15
Cadmium #	1.8										<0.1	mg/kg	TM30/PM15
Chromium #	47.2										<0.5	mg/kg	TM30/PM15
Copper #	40										<1	mg/kg	TM30/PM15
Lead #	51										<5	mg/kg	TM30/PM15
Mercury #	0.2										<0.1	mg/kg	TM30/PM15
Molybdenum #	4.9										<0.1	mg/kg	TM30/PM15
Nickel #	42.6										<0.7	mg/kg	TM30/PM15
Selenium #	1										<1	mg/kg	TM30/PM15
Zinc #	114										<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04										<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03										<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05										<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04										<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03										<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04										<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.06										<0.03	mg/kg	TM4/PM8
Pyrene #	0.05										<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06										<0.06	mg/kg	TM4/PM8
Chrysene #	0.05										<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07										<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04										<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	<0.04										<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04										<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04										<0.04	mg/kg	TM4/PM8
Coronene	<0.04										<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22										<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64										<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05										<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02										<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1										<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	106										<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_AL)	<30										<30	mg/kg	TM5/PM8/PM16

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : Solid

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

EMT Sample No.	81-84												
Sample ID	TP-12												
Depth	1.00												
COC No / misc													
Containers	V J T												
Sample Date	13/12/2023												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	18/12/2023												

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											LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)#	<0.1										<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL)#	<0.1										<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1										<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL)#	<0.2										<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL)#	<4										<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL)#	<7										<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL)#	<7										<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_CU_1D_AL)	<7										<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH_CU+HS_1D_AL)	<26										<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1										<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_CU_1D_AL)	<10										<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_CU_1D_AL)	<10										<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR)#	<0.1										<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR)#	<0.1										<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR)#	<0.1										<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR)#	<0.2										<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)#	<4										<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)#	<7										<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)#	<7										<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_CU_1D_AR)	<7										<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH_CU+HS_1D_AR)	<26										<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH_CU+HS_1D_Total)	<52										<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR)#	<0.1										<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_CU_1D_AR)	<10										<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_CU_1D_AR)	<10										<10	mg/kg	TM5/PM8/PM16
MTBE#	<5										<5	ug/kg	TM36/PM12
Benzene#	<5										<5	ug/kg	TM36/PM12
Toluene#	<5										<5	ug/kg	TM36/PM12
Ethylbenzene#	<5										<5	ug/kg	TM36/PM12
m/p-Xylene#	<5										<5	ug/kg	TM36/PM12
o-Xylene#	<5										<5	ug/kg	TM36/PM12
PCB 28#	<5										<5	ug/kg	TM17/PM8
PCB 52#	<5										<5	ug/kg	TM17/PM8
PCB 101#	<5										<5	ug/kg	TM17/PM8
PCB 118#	<5										<5	ug/kg	TM17/PM8
PCB 138#	<5										<5	ug/kg	TM17/PM8
PCB 153#	<5										<5	ug/kg	TM17/PM8
PCB 180#	<5										<5	ug/kg	TM17/PM8
Total 7 PCBs#	<35										<35	ug/kg	TM17/PM8

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : Solid

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

EMT Sample No.	81-84												
Sample ID	TP-12												
Depth	1.00												
COC No / misc													
Containers	V J T												
Sample Date	13/12/2023												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	18/12/2023												
												LOD/LOR	Units	Method No.
Natural Moisture Content	25.5											<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	20.3											<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3											<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	-											<0.0015	g/l	TM38/PM20
Chromium III	47.2											<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	1.88											<0.02	%	TM21/PM24
Organic Matter	-											<0.2	%	TM21/PM24
pH #	8.40											<0.01	pH units	TM73/PM11

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Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

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	LOD/LOR	Units	Method No.
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	TP-03	TP-04	TP-05	TP-05			
Depth	0.70	2.00	1.20	3.00	0.50	2.00	3.50	0.50	1.00	3.00			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
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	0.0028	<0.0025	0.0094	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	0.028	<0.025	0.094	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.008	<0.003	0.051	0.015	0.008	0.078	0.029	0.011	0.082	0.012	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.08	<0.03	0.51	0.15	0.08	0.78	0.29	0.11	0.82	0.12	<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	<0.0015	0.0017	<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	<0.015	0.017	<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	0.032	<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	0.32	<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 #	0.015	0.021	0.009	0.009	0.016	0.015	0.019	0.014	0.016	0.009	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.15	0.21	0.09	0.09	0.16	0.15	0.19	0.14	0.16	0.09	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	0.011	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	0.11	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	0.025	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	0.25	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	0.006	<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	0.06	<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	0.5	<0.3	0.4	<0.3	0.6	0.5	0.4	0.5	0.3	0.4	<0.3	mg/l	TM173/PM0
Fluoride	5	<3	4	<3	6	5	4	5	3	4	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.4	1.8	25.0	32.8	6.1	43.3	103.1	4.3	37.5	2.4	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	14	18	250	328	61	433	1031	43	375	24	<5	mg/kg	TM38/PM0
Mass of raw test portion	0.1059	0.1039	0.1183	0.1082	0.1121	0.1055	0.1039	0.1096	0.1056	0.1096		kg	NONE/PM17
Chloride #	0.4	<0.3	0.7	1.2	<0.3	0.4	<0.3	<0.3	0.4	0.5	<0.3	mg/l	TM38/PM0
Chloride #	4	<3	7	12	<3	4	<3	<3	4	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	<2	10	3	<2	<2	2	<2	2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	<20	<20	100	30	<20	<20	<20	<20	<20	<20	mg/kg	TM60/PM0
pH	8.14	8.03	8.16	10.45	8.08	8.08	7.91	8.20	8.26	8.34	<0.01	pH units	TM73/PM0

Please see attached notes for all abbreviations and acronyms

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Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

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	LOD/LOR	Units	Method No.
Sample ID	TP-01	TP-01	TP-02	TP-02	TP-03	TP-03	TP-03	TP-04	TP-05	TP-05			
Depth	0.70	2.00	1.20	3.00	0.50	2.00	3.50	0.50	1.00	3.00			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
Total Dissolved Solids #	71	51	200	177	76	161	216	73	157	74	<35	mg/l	TM20/PM0
Total Dissolved Solids #	710	510	2000	1769	760	1610	2161	730	1570	740	<350	mg/kg	TM20/PM0

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Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : CEN 10:1 1 Batch

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

EMT Sample No.	41-44	45-48	49-52	53-56	57-60	61-64	65-68	69-72	73-76	77-80	LOD/LOR	Units	Method No.
Sample ID	TP-06	TP-07	TP-07	TP-08	TP-08	TP-09	TP-10	TP-11	TP-11	TP-12			
Depth	0.50	1.00	3.00	2.00	3.40	2.20	1.00	0.50	3.00	0.50			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
Dissolved Antimony #	0.002	0.002	0.003	<0.002	<0.002	0.003	<0.002	0.003	0.003	0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.02	<0.02	0.03	<0.02	<0.02	0.03	<0.02	0.03	0.03	0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0029	0.0030	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0030	0.0026	0.0037	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.029	0.030	<0.025	<0.025	<0.025	<0.025	<0.025	0.030	0.026	0.037	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.011	0.008	0.007	0.006	0.018	0.009	0.010	0.010	0.008	0.011	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.11	0.08	0.07	0.06	0.18	0.09	0.10	0.10	0.08	0.11	<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	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	0.0031	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.031	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	0.013	<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	0.13	<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 #	0.010	0.012	0.028	0.013	0.033	0.009	0.011	0.011	0.032	0.011	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.10	0.12	0.28	0.13	0.33	0.09	0.11	0.11	0.32	0.11	<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	0.006	<0.003	<0.003	<0.003	0.007	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	<0.03	0.07	<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	0.006	<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	0.06	<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	0.4	0.5	0.3	<0.3	0.4	0.7	0.4	0.5	0.4	0.3	<0.3	mg/l	TM173/PM0
Fluoride	4	5	3	<3	4	7	4	5	4	3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	3.1	3.8	2.5	17.4	7.5	2.1	<0.5	10.9	5.0	5.1	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	31	38	25	174	75	21	<5	109	50	51	<5	mg/kg	TM38/PM0
Mass of raw test portion	0.1062	0.1105	0.1062	0.1112	0.1042	0.1089	0.118	0.1066	0.1042	0.1081		kg	NONE/PM17
Chloride #	14.8	<0.3	0.3	2.7	0.5	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	mg/l	TM38/PM0
Chloride #	148	<3	3	27	5	<3	<3	<3	<3	4	<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	3	2	<2	<2	<2	2	2	2	<2	3	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30	<20	<20	<20	<20	20	<20	20	<20	30	<20	mg/kg	TM60/PM0
pH	7.87	8.11	8.01	7.97	7.97	8.02	8.07	8.03	7.95	8.01	<0.01	pH units	TM73/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : CEN 10:1 1 Batch

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

EMT Sample No.	41-44	45-48	49-52	53-56	57-60	61-64	65-68	69-72	73-76	77-80	LOD/LOR	Units	Method No.
Sample ID	TP-06	TP-07	TP-07	TP-08	TP-08	TP-09	TP-10	TP-11	TP-11	TP-12			
Depth	0.50	1.00	3.00	2.00	3.40	2.20	1.00	0.50	3.00	0.50			
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023			
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023			
Total Dissolved Solids #	116	73	46	76	53	56	67	83	46	82	<35	mg/l	TM20/PM0
Total Dissolved Solids #	1161	730	460	760	530	560	670	830	460	820	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : CEN 10:1 1 Batch

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

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	81-84										LOD/LOR	Units	Method No.
Sample ID	TP-12												
Depth	1.00												
COC No / misc													
Containers	V J T												
Sample Date	13/12/2023												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	18/12/2023												
Dissolved Antimony #	0.002										<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.02										<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0041										<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.041										<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.010										<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.10										<0.03	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005										<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005										<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015										<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015										<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007										<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07										<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005										<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05										<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.012										<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.12										<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002										<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02										<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003										<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03										<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003										<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03										<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001										<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001										<0.0001	mg/kg	TM61/PM0
Phenol	<0.01										<0.01	mg/l	TM26/PM0
Phenol	<0.1										<0.1	mg/kg	TM26/PM0
Fluoride	0.5										<0.3	mg/l	TM173/PM0
Fluoride	5										<3	mg/kg	TM173/PM0
Sulphate as SO4 #	6.2										<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	62										<5	mg/kg	TM38/PM0
Mass of raw test portion	0.1076											kg	NONE/PM17
Chloride #	<0.3										<0.3	mg/l	TM38/PM0
Chloride #	<3										<3	mg/kg	TM38/PM0
Mass of dried test portion	0.09											kg	NONE/PM17
Dissolved Organic Carbon	3										<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30										<20	mg/kg	TM60/PM0
pH	7.99										<0.01	pH units	TM73/PM0

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : CEN 10:1 1 Batch

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

EMT Sample No.	81-84												
Sample ID	TP-12												
Depth	1.00												
COC No / misc													
Containers	V J T												
Sample Date	13/12/2023												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	18/12/2023												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Total Dissolved Solids #	79										<35	mg/l	TM20/PM0
Total Dissolved Solids #	790										<350	mg/kg	TM20/PM0

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : EN12457_2

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

Please see attached notes for all abbreviations and acronyms

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	TP-03	TP-04	TP-05	TP-05						
Depth	0.70	2.00	1.20	3.00	0.50	2.00	3.50	0.50	1.00	3.00						
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023						
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Solid Waste Analysis																
Total Organic Carbon #	0.83	0.31	2.19	0.52	1.17	1.02	0.93	1.11	0.77	0.40	3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025 [SV]	<0.025 [SV]	<0.025	<0.025	<0.025	6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035	0.052	<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	51	<30	<30	35	<30	<30	<30	500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	0.55	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	1.33	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																
Arsenic #	<0.025	0.028	<0.025	0.094	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.08	<0.03	0.51	0.15	0.08	0.78	0.29	0.11	0.82	0.12	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	<0.015	0.017	<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	0.32	<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 #	0.15	0.21	0.09	0.09	0.16	0.15	0.19	0.14	0.16	0.09	0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02	<0.02	0.11	<0.02	0.04	<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	0.25	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03	<0.03	0.06	<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 #	710	510	2000	1769	760	1610	2161	730	1570	740	4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	40	<20	<20	100	30	<20	<20	<20	<20	<20	500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1059	0.1039	0.1183	0.1082	0.1121	0.1055	0.1039	0.1096	0.1056	0.1096	-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	84.6	87.0	76.4	82.8	80.4	85.6	86.3	82.0	84.8	82.1	-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.884	0.887	0.872	0.881	0.878	0.885	0.886	0.88	0.884	0.88	-	-	-		l	NONE/PM17
Moisture Content 105C (% Dry Weight)	18.2	14.9	30.9	20.7	24.3	16.9	15.9	22.0	17.9	21.7	-	-	-	<0.1	%	PM4/PM0
pH #	8.48	8.65	7.64	10.88	8.41	7.91	7.99	8.33	7.97	8.47	-	-	-	<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	5	<3	4	<3	6	5	4	5	3	4	10	150	500	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	14	18	250	328	61	433	1031	43	375	24	1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	4	<3	7	12	<3	4	<3	<3	4	5	800	15000	25000	<3	mg/kg	TM38/PM0

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

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : EN12457_2

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

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	41-44	45-48	49-52	53-56	57-60	61-64	65-68	69-72	73-76	77-80						
Sample ID	TP-06	TP-07	TP-07	TP-08	TP-08	TP-09	TP-10	TP-11	TP-11	TP-12						
Depth	0.50	1.00	3.00	2.00	3.40	2.20	1.00	0.50	3.00	0.50						
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	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023						
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	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	18/12/2023	Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Solid Waste Analysis																
Total Organic Carbon #	1.21	0.97	0.46	0.42	0.48	0.46	1.31	1.27	0.86	0.97	3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025	<0.025 SV	<0.025	<0.025 SV	<0.025	<0.025	<0.025	<0.025 SV	<0.025	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	38	<30	59	<30	<30	<30	45	61	500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	0.27	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																
Arsenic #	0.029	0.030	<0.025	<0.025	<0.025	<0.025	<0.025	0.030	0.026	0.037	0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.11	0.08	0.07	0.06	0.18	0.09	0.10	0.10	0.08	0.11	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	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.031	0.5	10	70	<0.015	mg/kg	TM30/PM17
Copper #	<0.07	<0.07	<0.07	0.13	<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 #	0.10	0.12	0.28	0.13	0.33	0.09	0.11	0.11	0.32	0.11	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	0.03	<0.02	<0.02	0.03	<0.02	0.03	0.03	0.02	0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	<0.03	0.07	<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	0.06	4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	1161	730	460	760	530	560	670	830	460	820	4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	30	<20	<20	<20	<20	20	<20	20	<20	30	500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1062	0.1105	0.1062	0.1112	0.1042	0.1089	0.118	0.1066	0.1042	0.1081	-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	84.6	81.2	84.9	9072.1	86.7	83.0	76.0	84.0	86.7	83.2	-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.884	0.879	0.884	0.9	0.886	0.882	0.871	0.883	0.886	0.882	-	-	-		l	NONE/PM17
Moisture Content 105C (% Dry Weight)	18.3	23.1	17.8	<0.1	15.4	20.5	31.7	19.1	15.3	20.3	-	-	-	<0.1	%	PM4/PM0
pH #	8.27	8.44	8.71	8.42	8.59	8.58	8.30	8.31	8.73	8.54	-	-	-	<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	4	5	3	<3	4	7	4	5	4	3	10	150	500	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	31	38	25	174	75	21	<5	109	50	51	1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	148	<3	3	27	5	<3	<3	<3	<3	4	800	15000	25000	<3	mg/kg	TM38/PM0

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn
EMT Job No: 23/21539

Report : EN12457_2

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

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	81-84															
Sample ID	TP-12															
Depth	1.00															
COC No / misc																
Containers	V J T															
Sample Date	13/12/2023															
Sample Type	Soil															
Batch Number	1															
Date of Receipt	18/12/2023											Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Solid Waste Analysis																	
Total Organic Carbon #	1.88											3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025											6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035											1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30											500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	<0.22											-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64											100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																	
Arsenic #	0.041											0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.10											20	100	300	<0.03	mg/kg	TM30/PM17
Cadmium #	<0.005											0.04	1	5	<0.005	mg/kg	TM30/PM17
Chromium #	<0.015											0.5	10	70	<0.015	mg/kg	TM30/PM17
Copper #	<0.07											2	50	100	<0.07	mg/kg	TM30/PM17
Mercury #	<0.0001											0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.12											0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02											0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05											0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	0.02											0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	<0.03											0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03											4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	790											4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	30											500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1076											-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	84.0											-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.883											-	-	-		l	NONE/PM17
Moisture Content 105C (% Dry Weight)	19.1											-	-	-	<0.1	%	PM4/PM0
pH #	8.40											-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1											1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	5											10	150	500	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	62											1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	<3											800	15000	25000	<3	mg/kg	TM38/PM0

Client Name: Ground Investigations Ireland

Matrix : Solid

Reference: 13061-08-23

Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)

Contact: Diarmaid MagLochlainn

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
23/21539	1	TP-01	0.70	1-4	No Interpretation Possible
23/21539	1	TP-01	2.00	5-8	No Interpretation Possible
23/21539	1	TP-02	1.20	9-12	possible Naturally Occurring Compounds
23/21539	1	TP-02	3.00	13-16	possible Degraded Diesel, Naturally Occurring Compounds
23/21539	1	TP-03	0.50	17-20	No Interpretation Possible
23/21539	1	TP-03	2.00	21-24	No Interpretation Possible
23/21539	1	TP-03	3.50	25-28	trace of possible Degraded Diesel
23/21539	1	TP-04	0.50	29-32	No Interpretation Possible
23/21539	1	TP-05	1.00	33-36	No Interpretation Possible
23/21539	1	TP-05	3.00	37-40	No Interpretation Possible
23/21539	1	TP-06	0.50	41-44	No Interpretation Possible
23/21539	1	TP-07	1.00	45-48	No Interpretation Possible
23/21539	1	TP-07	3.00	49-52	trace of possible Degraded Diesel
23/21539	1	TP-08	2.00	53-56	No Interpretation Possible
23/21539	1	TP-08	3.40	57-60	trace of possible Degraded Diesel
23/21539	1	TP-09	2.20	61-64	No Interpretation Possible
23/21539	1	TP-10	1.00	65-68	No Interpretation Possible
23/21539	1	TP-11	0.50	69-72	No Interpretation Possible
23/21539	1	TP-11	3.00	73-76	trace of possible Degraded Diesel
23/21539	1	TP-12	0.50	77-80	trace of possible Degraded Diesel
23/21539	1	TP-12	1.00	81-84	No Interpretation Possible

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn

Note:

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

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

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

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

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analyst Name	Date Of Analysis	Analysis	Result
23/21539	1	TP-01	0.70	3	Bart Kuznicki	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Bart Kuznicki	21/12/2023	**Asbestos Fibres**	Fibre Bundles
					Bart Kuznicki	21/12/2023	**Asbestos ACM**	Asbestos Cement
					Bart Kuznicki	21/12/2023	**Asbestos Type**	Chrysotile
23/21539	1	TP-01	2.00	7	Mathew Day	21/12/2023	**General Description (Bulk Analysis)**	brown soil
					Mathew Day	21/12/2023	**Asbestos Fibres**	NAD
					Mathew Day	21/12/2023	**Asbestos ACM**	NAD
					Mathew Day	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-02	1.20	11	Emily Anderton	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones and vegetation
					Emily Anderton	21/12/2023	**Asbestos Fibres**	NAD
					Emily Anderton	21/12/2023	**Asbestos ACM**	NAD
					Emily Anderton	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-02	3.00	15	Emily Anderton	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Emily Anderton	21/12/2023	**Asbestos Fibres**	NAD
					Emily Anderton	21/12/2023	**Asbestos ACM**	NAD
					Emily Anderton	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-03	0.50	19	Charlotte Taylor	21/12/2023	**General Description (Bulk Analysis)**	brown soil/stones
					Charlotte Taylor	21/12/2023	**Asbestos Fibres**	NAD
					Charlotte Taylor	21/12/2023	**Asbestos ACM**	NAD
					Charlotte Taylor	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-03	2.00	23	Charlotte Taylor	21/12/2023	**General Description (Bulk Analysis)**	brown soil/stones
					Charlotte Taylor	21/12/2023	**Asbestos Fibres**	NAD
					Charlotte Taylor	21/12/2023	**Asbestos ACM**	NAD
					Charlotte Taylor	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-03	3.50	27	Bart Kuznicki	22/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Bart Kuznicki	22/12/2023	**Asbestos Fibres**	NAD
					Bart Kuznicki	22/12/2023	**Asbestos Fibres (2)**	NAD
					Bart Kuznicki	22/12/2023	**Asbestos ACM**	NAD
					Bart Kuznicki	22/12/2023	**Asbestos ACM (2)**	NAD
					Bart Kuznicki	22/12/2023	**Asbestos Type**	NAD
					Bart Kuznicki	22/12/2023	**Asbestos Type (2)**	NAD

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analyst Name	Date Of Analysis	Analysis	Result
23/21539	1	TP-04	0.50	31	Charlotte Taylor	22/12/2023	**General Description (Bulk Analysis)**	brown soil/stones
					Charlotte Taylor	22/12/2023	**Asbestos Fibres**	NAD
					Charlotte Taylor	22/12/2023	**Asbestos ACM**	NAD
					Charlotte Taylor	22/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-05	1.00	35	Emily Anderton	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Emily Anderton	21/12/2023	**Asbestos Fibres**	NAD
					Emily Anderton	21/12/2023	**Asbestos ACM**	NAD
					Emily Anderton	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-05	3.00	39	Mathew Day	21/12/2023	**General Description (Bulk Analysis)**	brown soil
					Mathew Day	21/12/2023	**Asbestos Fibres**	NAD
					Mathew Day	21/12/2023	**Asbestos ACM**	NAD
					Mathew Day	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-06	0.50	43	Emily Anderton	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Emily Anderton	21/12/2023	**Asbestos Fibres**	NAD
					Emily Anderton	21/12/2023	**Asbestos ACM**	NAD
					Emily Anderton	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-07	1.00	47	Bart Kuznicki	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Bart Kuznicki	21/12/2023	**Asbestos Fibres**	NAD
					Bart Kuznicki	21/12/2023	**Asbestos ACM**	NAD
					Bart Kuznicki	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-07	3.00	51	Bart Kuznicki	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Bart Kuznicki	21/12/2023	**Asbestos Fibres**	NAD
					Bart Kuznicki	21/12/2023	**Asbestos ACM**	NAD
					Bart Kuznicki	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-08	2.00	55	Emily Anderton	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with clay and stones
					Emily Anderton	21/12/2023	**Asbestos Fibres**	NAD
					Emily Anderton	21/12/2023	**Asbestos ACM**	NAD
					Emily Anderton	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-08	3.40	59	Bart Kuznicki	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Bart Kuznicki	21/12/2023	**Asbestos Fibres**	NAD
					Bart Kuznicki	21/12/2023	**Asbestos ACM**	NAD
					Bart Kuznicki	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-09	2.20	63	Charlotte Taylor	21/12/2023	**General Description (Bulk Analysis)**	brown soil/stones
					Charlotte Taylor	21/12/2023	**Asbestos Fibres**	NAD
					Charlotte Taylor	21/12/2023	**Asbestos ACM**	NAD
					Charlotte Taylor	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-10	1.00	67	Charlotte Taylor	21/12/2023	**General Description (Bulk Analysis)**	brown soil/stones
					Charlotte Taylor	21/12/2023	**Asbestos Fibres**	NAD
					Charlotte Taylor	21/12/2023	**Asbestos ACM**	NAD
					Charlotte Taylor	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-11	0.50	71	Emily Anderton	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Emily Anderton	21/12/2023	**Asbestos Fibres**	NAD
					Emily Anderton	21/12/2023	**Asbestos ACM**	NAD

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analyst Name	Date Of Analysis	Analysis	Result
23/21539	1	TP-11	0.50	71	Emily Anderton	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-11	3.00	75	Mathew Day	21/12/2023	**General Description (Bulk Analysis)**	brown soil
					Mathew Day	21/12/2023	**Asbestos Fibres**	NAD
					Mathew Day	21/12/2023	**Asbestos ACM**	NAD
					Mathew Day	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-12	0.50	79	Mathew Day	21/12/2023	**General Description (Bulk Analysis)**	brown soil
					Mathew Day	21/12/2023	**Asbestos Fibres**	NAD
					Mathew Day	21/12/2023	**Asbestos ACM**	NAD
					Mathew Day	21/12/2023	**Asbestos Type**	NAD
23/21539	1	TP-12	1.00	83	Emily Anderton	21/12/2023	**General Description (Bulk Analysis)**	Brown soil with stones
					Emily Anderton	21/12/2023	**Asbestos Fibres**	NAD
					Emily Anderton	21/12/2023	**Asbestos ACM**	NAD
					Emily Anderton	21/12/2023	**Asbestos Type**	NAD

Client Name: Ground Investigations Ireland
Reference: 13061-08-23
Location: Housing Bundle- Ballymun Lot 4 (AKA Ballymun PPP)
Contact: Diarmaid MagLochlainn

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 23/21539						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.
It is a requirement under ISO 17025 that we inform clients if samples are deviating i.e. outside what is expected. A deviating sample indicates that the sample 'may' be compromised but not necessarily will be compromised. The result is still accredited and our analytical reports will still show accreditation on the relevant analytes.

EMT Job No.: 23/21539

SOILS and ASH

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

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

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

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

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

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

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

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

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

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

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

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

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

WATERS

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

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

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

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

STACK EMISSIONS

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

BLANKS

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

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a 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: 23/21539

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
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: 23/21539

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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 GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
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: 2013I	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: 2013I	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: 2013I	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: 23/21539

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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
TM65	Asbestos Bulk Identification method based on HSG 248 Second edition (2021)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	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	

APPENDIX 5 – 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:

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

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

N1ZOB-JM63D-KU30V

Job name

Ballymun NDFA

Description/Comments

Project

13061-08-23

Site

Ballymun NDFA

Classified by

Name:
Barry Sexton
Date:
01 May 2024 13:22 GMT
Telephone:
353 (0)1 601 5175 / 5176

Company:
Ground Investigations Ireland Ltd
Catherinestown 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	Date
Hazardous Waste Classification	10 Apr 2019
Most recent 3 year Refresher	19 Apr 2022

Next 3 year Refresher due by Apr 2025

Purpose of classification

7 - Disposal of Waste

Address of the waste

Ballymun **Post Code** N/A

Description of industry/producer giving rise to the waste

Housing Development

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

Foundation Excavtion

Description of the waste

Made Ground and Soil & Stone

Job summary

Related documents

#	Name	Description
1	EMT-23-21539-Batch-1-202401031332.HWOL	Element .hwol file used to populate the Job
2	EMT-23-20297-Batch-1-202312191428.HWOL	Element .hwol file used to populate the Job
3	EMT-23-20105-Batch-1-202312191428.HWOL	Element .hwol file used to populate the Job
4	Example waste stream template for contaminated soils	waste stream template used to create this Job

Report

Created by: Barry Sexton

Created date: 01 May 2024 13:22 GMT

Classification of sample: TP-01-13/12/2023-2.00m

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

Sample details

Sample name:
TP-01-13/12/2023-2.00m
Moisture content:
11.7%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 11.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.114 mg/kg	0.000211 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.3 mg/kg	1.32	10.842 mg/kg	0.00108 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	1.816 mg/kg	0.000182 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		14 mg/kg	1.462	18.068 mg/kg	0.00181 %	✓	
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		23 mg/kg	1.126	22.866 mg/kg	0.00229 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	19.282 mg/kg	0.00124 %	✓	
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	3.842 mg/kg	0.000384 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		32.7 mg/kg	2.976	85.937 mg/kg	0.00859 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.255 mg/kg	0.000226 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		73 mg/kg	2.774	178.819 mg/kg	0.0179 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		47	mg/kg	1.117	46.336	mg/kg	0.00463 %	✓	
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:	0.044 %		

Key

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

Classification of sample: TP-02-13/12/2023-1.20m

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

Sample details

Sample name:
TP-02-13/12/2023-1.20m
Moisture content:
21.1%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 21.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		4 mg/kg	1.197	3.778 mg/kg	0.000378 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.5 mg/kg	1.32	16.147 mg/kg	0.00161 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1 mg/kg	1.142	0.991 mg/kg	0.0000991 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42.1 mg/kg	1.462	48.548 mg/kg	0.00485 %	✓	
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		56 mg/kg	1.126	49.746 mg/kg	0.00497 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	72 mg/kg	1.56	88.61 mg/kg	0.00568 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.214 mg/kg	0.0000214 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	5.445 mg/kg	0.000544 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		39.4 mg/kg	2.976	92.522 mg/kg	0.00925 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	4.03 mg/kg	0.000403 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		226 mg/kg	2.774	494.669 mg/kg	0.0495 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		86 mg/kg		67.854 mg/kg	0.00679 %	✓	
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		0.016 mg/kg		0.0126 mg/kg	0.00000126 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		7.64	pH		7.64	pH	7.64 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		0.05	mg/kg		0.0395	mg/kg	0.00000395 %	✓	
27	●	pyrene		204-927-3	129-00-0		0.04	mg/kg		0.0316	mg/kg	0.00000316 %	✓	
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		0.05	mg/kg		0.0395	mg/kg	0.00000395 %	✓	
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		0.052	mg/kg		0.041	mg/kg	0.0000041 %	✓	
37		barium { ● barium oxide }		215-127-9	1304-28-5		142	mg/kg	1.117	125.091	mg/kg	0.0125 %	✓	
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:	0.0968 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinand:

toluene: (conc.: 1.26e-06%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00679%)

Classification of sample: TP-02-13/12/2023-3.00m

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

Sample details

Sample name:
TP-02-13/12/2023-3.00m
Moisture content:
12.6%
(wet weight correction)

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

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.093 mg/kg	0.000209 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.3 mg/kg	1.32	15.348 mg/kg	0.00153 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1 mg/kg	1.142	1.098 mg/kg	0.00011 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		16.5 mg/kg	1.462	21.077 mg/kg	0.00211 %	✓	
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		26 mg/kg	1.126	25.585 mg/kg	0.00256 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	27 mg/kg	1.56	36.809 mg/kg	0.00236 %	✓	
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 mg/kg	1.5	2.622 mg/kg	0.000262 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		29.2 mg/kg	2.976	75.957 mg/kg	0.0076 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.232 mg/kg	0.000223 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		82 mg/kg	2.774	198.818 mg/kg	0.0199 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		142 mg/kg		124.108 mg/kg	0.0124 %	✓	
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				0.006	mg/kg		0.0052	mg/kg	0.000000524 %	✓	
		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				10.88	pH		10.88	pH	10.88 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		0.0524	mg/kg	0.00000524 %	✓	
			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				0.07	mg/kg		0.0612	mg/kg	0.00000612 %	✓	
			205-912-4	206-44-0									
27		pyrene				0.06	mg/kg		0.0524	mg/kg	0.00000524 %	✓	
			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				0.03	mg/kg		0.0262	mg/kg	0.00000262 %	✓	
		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 }				81	mg/kg	1.117	79.042	mg/kg	0.0079 %	✓	
			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:	0.0574 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinands:

TPH (C6 to C40) petroleum group: (conc.: 0.0124%)
xylene: (conc.: 5.24e-07%)

Classification of sample: TP-03-13/12/2023-0.50m

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

Sample details

Sample name:
TP-03-13/12/2023-0.50m
Moisture content:
18%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	1.963 mg/kg	0.000196 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.7 mg/kg	1.32	14.833 mg/kg	0.00148 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3 mg/kg	1.142	1.218 mg/kg	0.000122 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24.6 mg/kg	1.462	29.483 mg/kg	0.00295 %	✓	
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		39 mg/kg	1.126	36.006 mg/kg	0.0036 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	42 mg/kg	1.56	53.72 mg/kg	0.00344 %	✓	
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	3.567 mg/kg	0.000357 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		40.2 mg/kg	2.976	98.11 mg/kg	0.00981 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.094 mg/kg	0.000209 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		129 mg/kg	2.774	293.449 mg/kg	0.0293 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.41	pH		8.41	pH	8.41 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		0.05	mg/kg		0.041	mg/kg	0.0000041 %	✓	
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		83	mg/kg	1.117	75.989	mg/kg	0.0076 %	✓	
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:	0.0646 %		

Key

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

Classification of sample: TP-03-13/12/2023-2.00m

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

Sample details

Sample name:
TP-03-13/12/2023-2.00m
Moisture content:
16.3%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 16.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.004 mg/kg	0.0002 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.3 mg/kg	1.32	13.593 mg/kg	0.00136 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2 mg/kg	1.142	1.912 mg/kg	0.000191 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26.8 mg/kg	1.462	32.785 mg/kg	0.00328 %	✓	
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		34 mg/kg	1.126	32.041 mg/kg	0.0032 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	34 mg/kg	1.56	44.389 mg/kg	0.00285 %	✓	
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		3.3 mg/kg	1.5	4.144 mg/kg	0.000414 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		44.1 mg/kg	2.976	109.859 mg/kg	0.011 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.138 mg/kg	0.000214 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		167 mg/kg	2.774	387.767 mg/kg	0.0388 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		7.91	pH		7.91	pH	7.91 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		79	mg/kg	1.117	73.827	mg/kg	0.00738 %	✓	
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:	0.0743 %		

Key

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

Classification of sample: TP-03-13/12/2023-3.50m

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

Sample details

Sample name:
TP-03-13/12/2023-3.50m
Moisture content:
14.6%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 14.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.045 mg/kg	0.000204 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.1 mg/kg	1.32	13.643 mg/kg	0.00136 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	1.854 mg/kg	0.000185 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		31 mg/kg	1.462	38.693 mg/kg	0.00387 %	✓	
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		30 mg/kg	1.126	28.845 mg/kg	0.00288 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	26 mg/kg	1.56	34.634 mg/kg	0.00222 %	✓	
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		5 mg/kg	1.5	6.406 mg/kg	0.000641 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41.3 mg/kg	2.976	104.973 mg/kg	0.0105 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		3 mg/kg	2.554	6.543 mg/kg	0.000654 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		86 mg/kg	2.774	203.744 mg/kg	0.0204 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		7.99	pH		7.99	pH	7.99 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		115	mg/kg	1.117	109.652	mg/kg	0.011 %	✓	
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:	0.0593 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP-04-13/12/2023-0.50m

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

Sample details

Sample name:
TP-04-13/12/2023-0.50m
Moisture content:
15.6%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 15.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.021 mg/kg	0.000202 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.3 mg/kg	1.32	12.592 mg/kg	0.00126 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.6 mg/kg	1.142	1.543 mg/kg	0.000154 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21.9 mg/kg	1.462	27.015 mg/kg	0.0027 %	✓	
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		26 mg/kg	1.126	24.706 mg/kg	0.00247 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	32 mg/kg	1.56	42.127 mg/kg	0.0027 %	✓	
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		2.4 mg/kg	1.5	3.039 mg/kg	0.000304 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33.3 mg/kg	2.976	83.649 mg/kg	0.00836 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	4.311 mg/kg	0.000431 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		94 mg/kg	2.774	220.09 mg/kg	0.022 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.33	pH		8.33	pH	8.33 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		82	mg/kg	1.117	77.271	mg/kg	0.00773 %	✓	
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:	0.0538 %		

Key

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

Classification of sample: TP-05-13/12/2023-1.00m

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

Sample details

Sample name:
TP-05-13/12/2023-1.00m
Moisture content:
13.3%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 13.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.076 mg/kg	0.000208 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.3 mg/kg	1.32	10.646 mg/kg	0.00106 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.1 mg/kg	1.142	3.07 mg/kg	0.000307 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		54.2 mg/kg	1.462	68.681 mg/kg	0.00687 %	✓	
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		26 mg/kg	1.126	25.38 mg/kg	0.00254 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	28.4 mg/kg	0.00182 %	✓	
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		6.2 mg/kg	1.5	8.064 mg/kg	0.000806 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		34.8 mg/kg	2.976	89.799 mg/kg	0.00898 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	4.428 mg/kg	0.000443 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		87 mg/kg	2.774	209.251 mg/kg	0.0209 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		7.97	pH		7.97	pH	7.97 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		73	mg/kg	1.117	70.665	mg/kg	0.00707 %	✓	
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:	0.0565 %		

Key

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

Classification of sample: TP-05-13/12/2023-3.00m

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

Sample details

Sample name:
TP-05-13/12/2023-3.00m
Moisture content:
15.3%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 15.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.028 mg/kg	0.000203 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.1 mg/kg	1.32	15.768 mg/kg	0.00158 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3 mg/kg	1.142	1.258 mg/kg	0.000126 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21.4 mg/kg	1.462	26.492 mg/kg	0.00265 %	✓	
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		23 mg/kg	1.126	21.933 mg/kg	0.00219 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	25.102 mg/kg	0.00161 %	✓	
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		3.5 mg/kg	1.5	4.447 mg/kg	0.000445 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		40.9 mg/kg	2.976	103.105 mg/kg	0.0103 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		89 mg/kg	2.774	209.123 mg/kg	0.0209 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.47	pH		8.47	pH	8.47 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		44	mg/kg	1.117	41.61	mg/kg	0.00416 %	✓	
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:	0.0499 %		

Key

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

Classification of sample: TP-06-13/12/2023-0.50m

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

Sample details

Sample name:
TP-06-13/12/2023-0.50m
Moisture content:
15.3%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 15.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.028 mg/kg	0.000203 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.3 mg/kg	1.32	15.992 mg/kg	0.0016 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.129 mg/kg	0.000213 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		51.9 mg/kg	1.462	64.249 mg/kg	0.00642 %	✓	
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		35 mg/kg	1.126	33.377 mg/kg	0.00334 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	48 mg/kg	1.56	63.416 mg/kg	0.00407 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.115 mg/kg	0.0000115 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.4 mg/kg	1.5	6.862 mg/kg	0.000686 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		47.9 mg/kg	2.976	120.751 mg/kg	0.0121 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.163 mg/kg	0.000216 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		128 mg/kg	2.774	300.762 mg/kg	0.0301 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.27	pH		8.27	pH	8.27 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		0.06	mg/kg		0.0508	mg/kg	0.00000508 %	✓	
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		0.08	mg/kg		0.0678	mg/kg	0.00000678 %	✓	
27		pyrene		204-927-3	129-00-0		0.07	mg/kg		0.0593	mg/kg	0.00000593 %	✓	
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		0.07	mg/kg		0.0593	mg/kg	0.00000593 %	✓	
30		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.09	mg/kg		0.0762	mg/kg	0.00000762 %	✓	
31		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.03	mg/kg		0.0254	mg/kg	0.00000254 %	✓	
32		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.07	mg/kg		0.0593	mg/kg	0.00000593 %	✓	
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		120	mg/kg	1.117	113.482	mg/kg	0.0113 %	✓	
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:	0.0757 %		

Key

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

Classification of sample: TP-07-13/12/2023-1.00m

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

Sample details

Sample name:
TP-07-13/12/2023-1.00m
Moisture content:
16.2%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 16.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.006 mg/kg	0.000201 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.3 mg/kg	1.32	13.609 mg/kg	0.00136 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.106 mg/kg	0.000211 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19.9 mg/kg	1.462	24.373 mg/kg	0.00244 %	✓	
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		32 mg/kg	1.126	30.192 mg/kg	0.00302 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	32 mg/kg	1.56	41.828 mg/kg	0.00268 %	✓	
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		3.2 mg/kg	1.5	4.023 mg/kg	0.000402 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41 mg/kg	2.976	102.259 mg/kg	0.0102 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.14 mg/kg	0.000214 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		89 mg/kg	2.774	206.901 mg/kg	0.0207 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.44	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		84	mg/kg	1.117	78.593	mg/kg	0.00786 %	✓	
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:	0.0548 %		

Key

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

Classification of sample: TP-07-13/12/2023-3.00m

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

Sample details

Sample name:
TP-07-13/12/2023-3.00m
Moisture content:
9.9%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 9.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.157 mg/kg	0.000216 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.1 mg/kg	1.32	9.636 mg/kg	0.000964 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3 mg/kg	1.142	1.338 mg/kg	0.000134 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34.9 mg/kg	1.462	45.958 mg/kg	0.0046 %	✓	
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		23 mg/kg	1.126	23.332 mg/kg	0.00233 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.486 mg/kg	0.00144 %	✓	
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		3.7 mg/kg	1.5	5.001 mg/kg	0.0005 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41.1 mg/kg	2.976	110.214 mg/kg	0.011 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	4.602 mg/kg	0.00046 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		79 mg/kg	2.774	197.461 mg/kg	0.0197 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.71	pH		8.71	pH	8.71 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		54	mg/kg	1.117	54.322	mg/kg	0.00543 %	✓	
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:	0.0523 %		

Key

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

Classification of sample: TP-08-13/12/2023-2.00m

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

Sample details

Sample name:
TP-08-13/12/2023-2.00m
Moisture content:
13.3%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 13.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.076 mg/kg	0.000208 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.7 mg/kg	1.32	12.249 mg/kg	0.00122 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	1.783 mg/kg	0.000178 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19.6 mg/kg	1.462	24.837 mg/kg	0.00248 %	✓	
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		28 mg/kg	1.126	27.332 mg/kg	0.00273 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	25.695 mg/kg	0.00165 %	✓	
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		3.4 mg/kg	1.5	4.422 mg/kg	0.000442 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		38.1 mg/kg	2.976	98.314 mg/kg	0.00983 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		77 mg/kg	2.774	185.199 mg/kg	0.0185 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.42	pH		8.42	pH	8.42 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		64	mg/kg	1.117	61.953	mg/kg	0.0062 %	✓	
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:	0.0492 %		

Key

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

Classification of sample: TP-08-13/12/2023-3.40m

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

Sample details

Sample name:
TP-08-13/12/2023-3.40m
Moisture content:
10.3%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 10.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		1 mg/kg	1.197	1.074 mg/kg	0.000107 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.2 mg/kg	1.32	9.712 mg/kg	0.000971 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2 mg/kg	1.142	1.23 mg/kg	0.000123 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.1 mg/kg	1.462	46.017 mg/kg	0.0046 %	✓	
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		20 mg/kg	1.126	20.198 mg/kg	0.00202 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.987 mg/kg	0.00135 %	✓	
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		4.5 mg/kg	1.5	6.056 mg/kg	0.000606 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28.6 mg/kg	2.976	76.354 mg/kg	0.00764 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		3 mg/kg	2.554	6.872 mg/kg	0.000687 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		56 mg/kg	2.774	139.351 mg/kg	0.0139 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		59 mg/kg		52.923 mg/kg	0.00529 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.59	pH		8.59	pH	8.59 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		102	mg/kg	1.117	102.154	mg/kg	0.0102 %	✓	
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:	0.0478 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00529%)

Classification of sample: TP-09-13/12/2023-2.20m

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

Sample details

Sample name:
TP-09-13/12/2023-2.20m
Moisture content:
13.6%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 13.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.069 mg/kg	0.000207 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.1 mg/kg	1.32	12.662 mg/kg	0.00127 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	1.777 mg/kg	0.000178 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21 mg/kg	1.462	26.518 mg/kg	0.00265 %	✓	
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		29 mg/kg	1.126	28.21 mg/kg	0.00282 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	24.258 mg/kg	0.00156 %	✓	
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		3.6 mg/kg	1.5	4.666 mg/kg	0.000467 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41.8 mg/kg	2.976	107.488 mg/kg	0.0107 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		92 mg/kg	2.774	220.511 mg/kg	0.0221 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.58	pH		8.58	pH	8.58 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		63	mg/kg	1.117	60.774	mg/kg	0.00608 %	✓	
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:	0.0537 %		

Key

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

Classification of sample: TP-10-13/12/2023-1.00m

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

Sample details

Sample name:
TP-10-13/12/2023-1.00m
Moisture content:
15.6%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 15.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.021 mg/kg	0.000202 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.7 mg/kg	1.32	11.924 mg/kg	0.00119 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1 mg/kg	1.142	0.964 mg/kg	0.0000964 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42.6 mg/kg	1.462	52.549 mg/kg	0.00525 %	✓	
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		36 mg/kg	1.126	34.209 mg/kg	0.00342 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	39 mg/kg	1.56	51.343 mg/kg	0.00329 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.114 mg/kg	0.0000114 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.2 mg/kg	1.5	2.786 mg/kg	0.000279 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		44.3 mg/kg	2.976	111.28 mg/kg	0.0111 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		112 mg/kg	2.774	262.235 mg/kg	0.0262 %	✓	
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				8.3	pH		8.3	pH	8.3 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 }				88	mg/kg	1.117	82.925	mg/kg	0.00829 %	✓	
			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:	0.0651 %		

Key

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

Classification of sample: TP-11-13/12/2023-0.50m

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

Sample details

Sample name:
TP-11-13/12/2023-0.50m
Moisture content:
15.4%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 15.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3 mg/kg	1.197	3.038 mg/kg	0.000304 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.9 mg/kg	1.32	16.643 mg/kg	0.00166 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2 mg/kg	1.142	1.933 mg/kg	0.000193 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		23.3 mg/kg	1.462	28.81 mg/kg	0.00288 %	✓	
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	39.053 mg/kg	0.00391 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	44 mg/kg	1.56	58.063 mg/kg	0.00372 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.115 mg/kg	0.0000115 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	4.315 mg/kg	0.000432 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		42.2 mg/kg	2.976	106.256 mg/kg	0.0106 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.161 mg/kg	0.000216 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		113 mg/kg	2.774	265.203 mg/kg	0.0265 %	✓	
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				8.31	pH		8.31	pH	8.31 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 }				114	mg/kg	1.117	107.68	mg/kg	0.0108 %	✓	
			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:	0.0667 %		

Key

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

Classification of sample: TP-11-13/12/2023-3.00m

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

Sample details

Sample name:
TP-11-13/12/2023-3.00m
Moisture content:
11.5%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 11.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.119 mg/kg	0.000212 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.9 mg/kg	1.32	10.4 mg/kg	0.00104 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.7 mg/kg	1.142	1.719 mg/kg	0.000172 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		12.5 mg/kg	1.462	16.168 mg/kg	0.00162 %	✓	
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		25 mg/kg	1.126	24.91 mg/kg	0.00249 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.467 mg/kg	0.0015 %	✓	
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		3.5 mg/kg	1.5	4.647 mg/kg	0.000465 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		32.8 mg/kg	2.976	86.395 mg/kg	0.00864 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		5 mg/kg	2.554	11.301 mg/kg	0.00113 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		69 mg/kg	2.774	169.403 mg/kg	0.0169 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.73	pH		8.73	pH	8.73 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		88	mg/kg	1.117	86.953	mg/kg	0.0087 %	✓	
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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP-12-13/12/2023-0.50m

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

Sample details

Sample name:
TP-12-13/12/2023-0.50m
Moisture content:
13.3%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 13.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.076 mg/kg	0.000208 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.6 mg/kg	1.32	14.423 mg/kg	0.00144 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.387 mg/kg	0.000139 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19.8 mg/kg	1.462	25.09 mg/kg	0.00251 %	✓	
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		25 mg/kg	1.126	24.404 mg/kg	0.00244 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	30 mg/kg	1.56	40.571 mg/kg	0.0026 %	✓	
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		2.7 mg/kg	1.5	3.512 mg/kg	0.000351 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		30.2 mg/kg	2.976	77.929 mg/kg	0.00779 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	4.428 mg/kg	0.000443 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		80 mg/kg	2.774	192.415 mg/kg	0.0192 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		61 mg/kg		52.887 mg/kg	0.00529 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.54	pH		8.54	pH	8.54 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		0.05	mg/kg		0.0434	mg/kg	0.00000433 %	✓	
27		pyrene		204-927-3	129-00-0		0.03	mg/kg		0.026	mg/kg	0.0000026 %	✓	
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		0.03	mg/kg		0.026	mg/kg	0.0000026 %	✓	
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		89	mg/kg	1.117	86.153	mg/kg	0.00862 %	✓	
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:	0.0513 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00529%)

Classification of sample: TP-12-13/12/2023-1.00m

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

Sample details

Sample name:
TP-12-13/12/2023-1.00m
Moisture content:
20.3%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 20.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3 mg/kg	1.197	2.862 mg/kg	0.000286 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.5 mg/kg	1.32	16.311 mg/kg	0.00163 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	1.639 mg/kg	0.000164 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		47.2 mg/kg	1.462	54.981 mg/kg	0.0055 %	✓	
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		40 mg/kg	1.126	35.893 mg/kg	0.00359 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	51 mg/kg	1.56	63.402 mg/kg	0.00406 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.216 mg/kg	0.0000216 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.9 mg/kg	1.5	5.859 mg/kg	0.000586 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		42.6 mg/kg	2.976	101.051 mg/kg	0.0101 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.035 mg/kg	0.000204 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		114 mg/kg	2.774	252.053 mg/kg	0.0252 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		0.06	mg/kg		0.0478	mg/kg	0.00000478 %	✓	
27		pyrene		204-927-3	129-00-0		0.05	mg/kg		0.0399	mg/kg	0.00000398 %	✓	
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		0.05	mg/kg		0.0399	mg/kg	0.00000398 %	✓	
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		123	mg/kg	1.117	109.452	mg/kg	0.0109 %	✓	
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:	0.0677 %		

Key

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

Classification of sample: BH04-24/11/2023-0.50m

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

Sample details

Sample name:
BH04-24/11/2023-0.50m
Moisture content:
12%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.107 mg/kg	0.000211 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.9 mg/kg	1.32	12.665 mg/kg	0.00127 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.212 mg/kg	0.000221 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25.3 mg/kg	1.462	32.54 mg/kg	0.00325 %	✓	
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		30 mg/kg	1.126	29.723 mg/kg	0.00297 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	34.316 mg/kg	0.0022 %	✓	
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 mg/kg	1.5	5.281 mg/kg	0.000528 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		38.5 mg/kg	2.976	100.836 mg/kg	0.0101 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	4.495 mg/kg	0.000449 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		96 mg/kg	2.774	234.36 mg/kg	0.0234 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		7.69	pH		7.69	pH	7.69 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		81	mg/kg	1.117	79.585	mg/kg	0.00796 %	✓	
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:	0.058 %		

Key

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

Classification of sample: BH04-24/11/2023-1.00m

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

Sample details

Sample name:
BH04-24/11/2023-1.00m
Moisture content:
15.5%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 15.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.023 mg/kg	0.000202 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12 mg/kg	1.32	13.388 mg/kg	0.00134 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	1.737 mg/kg	0.000174 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.1 mg/kg	1.462	47.054 mg/kg	0.00471 %	✓	
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		30 mg/kg	1.126	28.541 mg/kg	0.00285 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	32 mg/kg	1.56	42.177 mg/kg	0.0027 %	✓	
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		4.6 mg/kg	1.5	5.831 mg/kg	0.000583 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		37.9 mg/kg	2.976	95.316 mg/kg	0.00953 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	4.316 mg/kg	0.000432 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		87 mg/kg	2.774	203.941 mg/kg	0.0204 %	✓	
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				7.46	pH		7.46	pH	7.46 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 }				65	mg/kg	1.117	61.324	mg/kg	0.00613 %	✓	
			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:	0.0545 %		

Key

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

Classification of sample: BH13-24/11/2023-0.50m

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

Sample details

Sample name:
BH13-24/11/2023-0.50m
Moisture content:
12.1%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 12.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.105 mg/kg	0.00021 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.7 mg/kg	1.32	15.9 mg/kg	0.00159 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7 mg/kg	1.142	0.703 mg/kg	0.0000703 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26.8 mg/kg	1.462	34.43 mg/kg	0.00344 %	✓	
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		29 mg/kg	1.126	28.7 mg/kg	0.00287 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	33 mg/kg	1.56	45.246 mg/kg	0.0029 %	✓	
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		2.3 mg/kg	1.5	3.033 mg/kg	0.000303 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		30 mg/kg	2.976	78.484 mg/kg	0.00785 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		106 mg/kg	2.774	258.478 mg/kg	0.0258 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.07	pH		8.07	pH	8.07 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		66	mg/kg	1.117	64.773	mg/kg	0.00648 %	✓	
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:	0.0573 %		

Key

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

Classification of sample: BH13-24/11/2023-1.00m

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

Sample details

Sample name:
BH13-24/11/2023-1.00m
Moisture content:
14.4%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 14.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.049 mg/kg	0.000205 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14 mg/kg	1.32	15.823 mg/kg	0.00158 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2 mg/kg	1.142	1.173 mg/kg	0.000117 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		20.3 mg/kg	1.462	25.397 mg/kg	0.00254 %	✓	
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		26 mg/kg	1.126	25.058 mg/kg	0.00251 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	30 mg/kg	1.56	40.056 mg/kg	0.00257 %	✓	
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		2.7 mg/kg	1.5	3.467 mg/kg	0.000347 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35.2 mg/kg	2.976	89.678 mg/kg	0.00897 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	4.372 mg/kg	0.000437 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		104 mg/kg	2.774	246.966 mg/kg	0.0247 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.28	pH		8.28	pH	8.28 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		85	mg/kg	1.117	81.237	mg/kg	0.00812 %	✓	
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:	0.0575 %		

Key

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

Classification of sample: BH14A-24/11/2023-1.00m

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

Sample details

Sample name:
BH14A-24/11/2023-1.00m
Moisture content:
14.9%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 14.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		1 mg/kg	1.197	1.019 mg/kg	0.000102 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.9 mg/kg	1.32	10 mg/kg	0.001 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1 mg/kg	1.142	1.069 mg/kg	0.000107 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.2 mg/kg	1.462	43.781 mg/kg	0.00438 %	✓	
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		26 mg/kg	1.126	24.911 mg/kg	0.00249 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	35 mg/kg	1.56	46.459 mg/kg	0.00298 %	✓	
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 mg/kg	1.5	3.83 mg/kg	0.000383 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28.6 mg/kg	2.976	72.438 mg/kg	0.00724 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		73 mg/kg	2.774	172.338 mg/kg	0.0172 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.06	pH		8.06	pH	8.06 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		74	mg/kg	1.117	70.311	mg/kg	0.00703 %	✓	
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:	0.0487 %		

Key

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

Classification of sample: BH15-24/11/2023-0.40m

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

Sample details

Sample name:
BH15-24/11/2023-0.40m
Moisture content:
14.4%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 14.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3 mg/kg	1.197	3.074 mg/kg	0.000307 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.6 mg/kg	1.32	16.501 mg/kg	0.00165 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		9.4 mg/kg	1.142	9.192 mg/kg	0.000919 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37.1 mg/kg	1.462	46.416 mg/kg	0.00464 %	✓	
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		35 mg/kg	1.126	33.732 mg/kg	0.00337 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	41 mg/kg	1.56	54.743 mg/kg	0.00351 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.116 mg/kg	0.0000116 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.9 mg/kg	1.5	6.292 mg/kg	0.000629 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		39.6 mg/kg	2.976	100.888 mg/kg	0.0101 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.186 mg/kg	0.000219 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		110 mg/kg	2.774	261.214 mg/kg	0.0261 %	✓	
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				8.13	pH		8.13	pH	8.13 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				0.07	mg/kg		0.0599	mg/kg	0.00000599 %	✓	
			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				0.11	mg/kg		0.0942	mg/kg	0.00000942 %	✓	
			205-912-4	206-44-0									
27	●	pyrene				0.09	mg/kg		0.077	mg/kg	0.0000077 %	✓	
			204-927-3	129-00-0									
28		benzo[a]anthracene				0.09	mg/kg		0.077	mg/kg	0.0000077 %	✓	
		601-033-00-9	200-280-6	56-55-3									
29		chrysene				0.08	mg/kg		0.0685	mg/kg	0.00000685 %	✓	
		601-048-00-0	205-923-4	218-01-9									
30		benzo[b]fluoranthene				0.09	mg/kg		0.077	mg/kg	0.0000077 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0342	mg/kg	0.00000342 %	✓	
		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				0.06	mg/kg		0.0514	mg/kg	0.00000514 %	✓	
			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				0.06	mg/kg		0.0514	mg/kg	0.00000514 %	✓	
			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 }				149	mg/kg	1.117	142.404	mg/kg	0.0142 %	✓	
			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:	0.0712 %		

Key

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

Classification of sample: BH15-24/11/2023-1.50m

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

Sample details

Sample name:
BH15-24/11/2023-1.50m
Moisture content:
12.4%
(wet weight correction)

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

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	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		8.8 mg/kg	1.32	10.178 mg/kg	0.00102 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2 mg/kg	1.142	2.001 mg/kg	0.0002 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22.6 mg/kg	1.462	28.935 mg/kg	0.00289 %	✓	
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		26 mg/kg	1.126	25.643 mg/kg	0.00256 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	21.862 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		3.9 mg/kg	1.5	5.125 mg/kg	0.000513 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35.2 mg/kg	2.976	91.774 mg/kg	0.00918 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		71 mg/kg	2.774	172.541 mg/kg	0.0173 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.32	pH		8.32	pH	8.32 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		79	mg/kg	1.117	77.267	mg/kg	0.00773 %	✓	
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:	0.0487 %		

Key

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

Classification of sample: BH07-23/11/2023-0.60m

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

Sample details

Sample name:
BH07-23/11/2023-0.60m
Moisture content:
17.1%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 17.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	1.985 mg/kg	0.000198 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17.6 mg/kg	1.32	19.264 mg/kg	0.00193 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.5 mg/kg	1.142	1.42 mg/kg	0.000142 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24 mg/kg	1.462	29.079 mg/kg	0.00291 %	✓	
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		42 mg/kg	1.126	39.201 mg/kg	0.00392 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	55 mg/kg	1.56	71.12 mg/kg	0.00456 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.112 mg/kg	0.0000112 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.4 mg/kg	1.5	2.985 mg/kg	0.000298 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		42 mg/kg	2.976	103.628 mg/kg	0.0104 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.117 mg/kg	0.000212 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		96 mg/kg	2.774	220.778 mg/kg	0.0221 %	✓	
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		0.013 mg/kg		0.0108 mg/kg	0.00000108 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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]		0.008	mg/kg		0.0066	mg/kg	0.000000663 %	✓	
19		pH			PH		8.15	pH		8.15	pH	8.15 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		107	mg/kg	1.117	99.037	mg/kg	0.0099 %	✓	
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:	0.062 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinand:

toluene: (conc.: 1.08e-06%)

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

Because of determinand:

xylene: (conc.: 6.63e-07%)

Classification of sample: BH07-23/11/2023-1.50m

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

Sample details

Sample name:
BH07-23/11/2023-1.50m
Moisture content:
12.9%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.085 mg/kg	0.000209 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11 mg/kg	1.32	12.65 mg/kg	0.00127 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	2.189 mg/kg	0.000219 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		17.7 mg/kg	1.462	22.532 mg/kg	0.00225 %	✓	
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		32 mg/kg	1.126	31.381 mg/kg	0.00314 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.096 mg/kg	0.00148 %	✓	
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		4.1 mg/kg	1.5	5.357 mg/kg	0.000536 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		48.4 mg/kg	2.976	125.469 mg/kg	0.0125 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		85 mg/kg	2.774	205.384 mg/kg	0.0205 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.51	pH		8.51	pH	8.51 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		64	mg/kg	1.117	62.239	mg/kg	0.00622 %	✓	
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:	0.0541 %		

Key

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

Classification of sample: BH08-23/11/2023-1.00m

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

Sample details

Sample name:
BH08-23/11/2023-1.00m
Moisture content:
19%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	1.939 mg/kg	0.000194 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.6 mg/kg	1.32	15.614 mg/kg	0.00156 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3 mg/kg	1.142	2.128 mg/kg	0.000213 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21.5 mg/kg	1.462	25.453 mg/kg	0.00255 %	✓	
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		39 mg/kg	1.126	35.567 mg/kg	0.00356 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	40 mg/kg	1.56	50.538 mg/kg	0.00324 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.11 mg/kg	0.000011 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	4.132 mg/kg	0.000413 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45.9 mg/kg	2.976	110.655 mg/kg	0.0111 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		106 mg/kg	2.774	238.188 mg/kg	0.0238 %	✓	
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				8.37	pH		8.37	pH	8.37 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 }				99	mg/kg	1.117	89.533	mg/kg	0.00895 %	✓	
			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:	0.0613 %		

Key

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

Classification of sample: BH08-23/11/2023-2.00m

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

Sample details

Sample name:
BH08-23/11/2023-2.00m
Moisture content:
11.6%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 11.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.116 mg/kg	0.000212 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	11.672 mg/kg	0.00117 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.6 mg/kg	1.142	1.616 mg/kg	0.000162 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19.7 mg/kg	1.462	25.453 mg/kg	0.00255 %	✓	
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		26 mg/kg	1.126	25.877 mg/kg	0.00259 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.441 mg/kg	0.0015 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.12 mg/kg	0.000012 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.6 mg/kg	1.5	4.774 mg/kg	0.000477 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		36.4 mg/kg	2.976	95.769 mg/kg	0.00958 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.258 mg/kg	0.000226 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		74 mg/kg	2.774	181.474 mg/kg	0.0181 %	✓	
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		0.0088	mg/kg	0.000000884 %	✓	
		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				8.19	pH		8.19	pH	8.19 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 }				64	mg/kg	1.117	63.167	mg/kg	0.00632 %	✓	
			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:	0.0484 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinand:

xylene: (conc.: 8.84e-07%)

Classification of sample: BH09-23/11/2023-0.50m

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

Sample details

Sample name:
BH09-23/11/2023-0.50m
Moisture content:
24.2%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 24.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3 mg/kg	1.197	2.722 mg/kg	0.000272 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18.8 mg/kg	1.32	18.815 mg/kg	0.00188 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2 mg/kg	1.142	1.905 mg/kg	0.00019 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24.2 mg/kg	1.462	26.81 mg/kg	0.00268 %	✓	
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		52 mg/kg	1.126	44.378 mg/kg	0.00444 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	83 mg/kg	1.56	98.134 mg/kg	0.00629 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.205 mg/kg	0.0000205 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.9 mg/kg	1.5	4.435 mg/kg	0.000443 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		50.4 mg/kg	2.976	113.703 mg/kg	0.0114 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2 mg/kg	2.554	3.872 mg/kg	0.000387 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		133 mg/kg	2.774	279.673 mg/kg	0.028 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.11	pH		8.11	pH	8.11 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		0.05	mg/kg		0.0379	mg/kg	0.00000379 %	✓	
27		pyrene		204-927-3	129-00-0		0.05	mg/kg		0.0379	mg/kg	0.00000379 %	✓	
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		0.05	mg/kg		0.0379	mg/kg	0.00000379 %	✓	
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		121	mg/kg	1.117	102.404	mg/kg	0.0102 %	✓	
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:	0.0716 %		

Key

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

Classification of sample: BH09-23/11/2023-1.50m

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

Sample details

Sample name:
BH09-23/11/2023-1.50m
Moisture content:
12.6%
(wet weight correction)

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

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.093 mg/kg	0.000209 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8 mg/kg	1.32	9.232 mg/kg	0.000923 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	1.897 mg/kg	0.00019 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		13.1 mg/kg	1.462	16.734 mg/kg	0.00167 %	✓	
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	26.569 mg/kg	0.00266 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	17.723 mg/kg	0.00114 %	✓	
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 mg/kg	1.5	3.933 mg/kg	0.000393 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		36.8 mg/kg	2.976	95.726 mg/kg	0.00957 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.232 mg/kg	0.000223 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		72 mg/kg	2.774	174.571 mg/kg	0.0175 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.62	pH		8.62	pH	8.62 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		45	mg/kg	1.117	43.912	mg/kg	0.00439 %	✓	
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:	0.0443 %		

Key

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

Classification of sample: BH10-23/11/2023-0.50m

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

Sample details

Sample name:
BH10-23/11/2023-0.50m
Moisture content:
19.9%
(wet weight correction)

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

Hazard properties

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.32%)

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.32%)

Determinands

Moisture content: 19.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		6 mg/kg	1.197	5.753 mg/kg	0.000575 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		18.4 mg/kg	1.32	19.459 mg/kg	0.00195 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3 mg/kg	1.142	2.105 mg/kg	0.00021 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.9 mg/kg	1.462	42.028 mg/kg	0.0042 %	✓	
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		51 mg/kg	1.126	45.994 mg/kg	0.0046 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	83 mg/kg	1.56	103.701 mg/kg	0.00665 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3 mg/kg	1.353	0.325 mg/kg	0.0000325 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
9		molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8	mg/kg	1.5	4.566	mg/kg	0.000457 %	✓	
10		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		47.1	mg/kg	2.976	112.286	mg/kg	0.0112 %	✓	
11		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2	mg/kg	2.554	4.091	mg/kg	0.000409 %	✓	
12		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		143	mg/kg	2.774	317.759	mg/kg	0.0318 %	✓	
13		TPH (C6 to C40) petroleum group			TPH		3990	mg/kg		3195.99	mg/kg	0.32 %	✓	
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		0.007	mg/kg		0.0056	mg/kg	0.000000561 %	✓	
16		toluene	601-021-00-3	203-625-9	108-88-3		0.022	mg/kg		0.0176	mg/kg	0.00000176 %	✓	
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]		0.007	mg/kg		0.0056	mg/kg	0.000000561 %	✓	
19		pH			PH		8.25	pH		8.25	pH	8.25 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		0.07	mg/kg		0.0561	mg/kg	0.00000561 %	✓	
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		0.07	mg/kg		0.0561	mg/kg	0.00000561 %	✓	
27		pyrene		204-927-3	129-00-0		0.07	mg/kg		0.0561	mg/kg	0.00000561 %	✓	
28		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.09	mg/kg		0.0721	mg/kg	0.00000721 %	✓	
29		chrysene	601-048-00-0	205-923-4	218-01-9		0.07	mg/kg		0.0561	mg/kg	0.00000561 %	✓	
30		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.1	mg/kg		0.0801	mg/kg	0.00000801 %	✓	
31		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.04	mg/kg		0.032	mg/kg	0.0000032 %	✓	
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

#		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									
37		barium { barium oxide }				144	mg/kg	1.117	128.782	mg/kg	0.0129 %	✓	
			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:	0.395 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinands:

benzene: (conc.: 5.61e-07%)
toluene: (conc.: 1.76e-06%)

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

Because of determinands:

TPH (C6 to C40) petroleum group: (conc.: 0.32%)
xylene: (conc.: 5.61e-07%)

Classification of sample: BH10-23/11/2023-1.20m

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

Sample details

Sample name:
BH10-23/11/2023-1.20m
Moisture content:
16.7%
(wet weight correction)

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

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		3 mg/kg	1.197	2.992 mg/kg	0.000299 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.5 mg/kg	1.32	15.948 mg/kg	0.00159 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.8 mg/kg	1.142	1.713 mg/kg	0.000171 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		30.1 mg/kg	1.462	36.646 mg/kg	0.00366 %	✓	
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		36 mg/kg	1.126	33.763 mg/kg	0.00338 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	27.286 mg/kg	0.00175 %	✓	
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		3.2 mg/kg	1.5	3.999 mg/kg	0.0004 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		62.2 mg/kg	2.976	154.208 mg/kg	0.0154 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.127 mg/kg	0.000213 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		103 mg/kg	2.774	238.019 mg/kg	0.0238 %	✓	
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	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		ethylbenzene	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4											
18		xylene	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
		601-022-00-9											
19		pH		PH		8.39	pH		8.39	pH	8.39 pH		
20		naphthalene	202-049-5	91-20-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2											
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	200-280-6	56-55-3		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9											
29		chrysene	205-923-4	218-01-9		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0											
30		benzo[b]fluoranthene	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4											
31		benzo[k]fluoranthene	205-916-6	207-08-9		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5											
32		benzo[a]pyrene; benzo[def]chrysene	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3											
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	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2											
35		benzo[ghi]perylene	205-883-8	191-24-2		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
36		polychlorobiphenyls; PCB	215-648-1	1336-36-3		<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4											
37		barium { barium oxide }	215-127-9	1304-28-5		122	mg/kg	1.117	113.466	mg/kg	0.0113 %	✓	
38		coronene	205-881-7	191-07-1		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
39		benzo[j]fluoranthene	205-910-3	205-82-3		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X											
										Total:	0.0675 %		

Key

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

Classification of sample: BH11-23/11/2023-0.50m

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

Sample details

Sample name:
BH11-23/11/2023-0.50m
Moisture content:
19.1%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 19.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	1.937 mg/kg	0.000194 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.3 mg/kg	1.32	15.274 mg/kg	0.00153 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.294 mg/kg	0.000129 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		18.1 mg/kg	1.462	21.401 mg/kg	0.00214 %	✓	
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		37 mg/kg	1.126	33.701 mg/kg	0.00337 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	58 mg/kg	1.56	73.19 mg/kg	0.00469 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.219 mg/kg	0.0000219 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.5 mg/kg	1.5	3.034 mg/kg	0.000303 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35.8 mg/kg	2.976	86.199 mg/kg	0.00862 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		99 mg/kg	2.774	222.184 mg/kg	0.0222 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		7.84	pH		7.84	pH	7.84 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		0.05	mg/kg		0.0405	mg/kg	0.00000405 %	✓	
27		pyrene		204-927-3	129-00-0		0.04	mg/kg		0.0324	mg/kg	0.00000324 %	✓	
28		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.09	mg/kg		0.0728	mg/kg	0.00000728 %	✓	
29		chrysene	601-048-00-0	205-923-4	218-01-9		0.12	mg/kg		0.0971	mg/kg	0.00000971 %	✓	
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		70	mg/kg	1.117	63.228	mg/kg	0.00632 %	✓	
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:	0.0552 %		

Key

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

Classification of sample: BH11-23/11/2023-1.50m

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

Sample details

Sample name:
BH11-23/11/2023-1.50m
Moisture content:
11%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		1 mg/kg	1.197	1.065 mg/kg	0.000107 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.5 mg/kg	1.32	9.988 mg/kg	0.000999 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.6 mg/kg	1.142	1.627 mg/kg	0.000163 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		11.3 mg/kg	1.462	14.699 mg/kg	0.00147 %	✓	
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		24 mg/kg	1.126	24.049 mg/kg	0.0024 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.824 mg/kg	0.00134 %	✓	
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	4.139 mg/kg	0.000414 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31.7 mg/kg	2.976	83.969 mg/kg	0.0084 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		65 mg/kg	2.774	160.484 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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		47	mg/kg	1.117	46.703	mg/kg	0.00467 %	✓	
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:	0.0417 %		

Key

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

Classification of sample: BH17-23/11/2023-0.50m

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

Sample details

Sample name:
BH17-23/11/2023-0.50m
Moisture content:
19.1%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 19.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	1.937 mg/kg	0.000194 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.3 mg/kg	1.32	14.206 mg/kg	0.00142 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.3 mg/kg	1.142	2.126 mg/kg	0.000213 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		20.7 mg/kg	1.462	24.476 mg/kg	0.00245 %	✓	
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		36 mg/kg	1.126	32.79 mg/kg	0.00328 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	38 mg/kg	1.56	47.952 mg/kg	0.00307 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.219 mg/kg	0.0000219 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.2 mg/kg	1.5	3.884 mg/kg	0.000388 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		44.6 mg/kg	2.976	107.388 mg/kg	0.0107 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.066 mg/kg	0.000207 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		106 mg/kg	2.774	237.894 mg/kg	0.0238 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		7.95	pH		7.95	pH	7.95 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		101	mg/kg	1.117	91.229	mg/kg	0.00912 %	✓	
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:	0.0603 %		

Key

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

Classification of sample: BH17-23/11/2023-2.00m

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

Sample details

Sample name:
BH17-23/11/2023-2.00m
Moisture content:
10.9%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 10.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.133 mg/kg	0.000213 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.1 mg/kg	1.32	11.882 mg/kg	0.00119 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9 mg/kg	1.142	1.934 mg/kg	0.000193 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		13.5 mg/kg	1.462	17.58 mg/kg	0.00176 %	✓	
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		28 mg/kg	1.126	28.089 mg/kg	0.00281 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.016 mg/kg	0.0016 %	✓	
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		3.5 mg/kg	1.5	4.678 mg/kg	0.000468 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		42.2 mg/kg	2.976	111.908 mg/kg	0.0112 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		77 mg/kg	2.774	190.326 mg/kg	0.019 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		8.48	pH		8.48	pH	8.48 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		178	mg/kg	1.117	177.076	mg/kg	0.0177 %	✓	
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:	0.0619 %		

Key

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

Classification of sample: BH19-23/11/2023-0.50m

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

Sample details

Sample name:
BH19-23/11/2023-0.50m
Moisture content:
15.8%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 15.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.016 mg/kg	0.000202 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.7 mg/kg	1.32	14.119 mg/kg	0.00141 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4 mg/kg	1.142	1.347 mg/kg	0.000135 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25.7 mg/kg	1.462	31.627 mg/kg	0.00316 %	✓	
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		28 mg/kg	1.126	26.544 mg/kg	0.00265 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	32 mg/kg	1.56	42.028 mg/kg	0.00269 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.228 mg/kg	0.0000228 %	✓	
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.2 mg/kg	1.5	4.042 mg/kg	0.000404 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35.3 mg/kg	2.976	88.462 mg/kg	0.00885 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1 mg/kg	2.554	2.15 mg/kg	0.000215 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		81 mg/kg	2.774	189.202 mg/kg	0.0189 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		484 mg/kg		407.528 mg/kg	0.0408 %	✓	
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	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
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		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		0.05	mg/kg		0.0421	mg/kg	0.00000421 %	✓	
27		pyrene		204-927-3	129-00-0		0.04	mg/kg		0.0337	mg/kg	0.00000337 %	✓	
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		107	mg/kg	1.117	100.59	mg/kg	0.0101 %	✓	
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:	0.0897 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0408%)

Classification of sample: BH19-23/11/2023-2.00m

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

Sample details

Sample name:
BH19-23/11/2023-2.00m
Moisture content:
12.3%
(wet weight correction)

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

Hazard properties

HP 8: Corrosive "waste which on application can cause skin corrosion"

pH; pH "Assumed to be irritant/corrosive because of pH value"

Because of determinand:

pH: (conc.: 11.53 pH)

Determinands

Moisture content: 12.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4		2 mg/kg	1.197	2.1 mg/kg	0.00021 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.7 mg/kg	1.32	13.548 mg/kg	0.00135 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8 mg/kg	1.142	0.801 mg/kg	0.0000801 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.6 mg/kg	1.462	49.477 mg/kg	0.00495 %	✓	
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		17 mg/kg	1.126	16.786 mg/kg	0.00168 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	30.095 mg/kg	0.00193 %	✓	
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		1.5 mg/kg	1.5	1.973 mg/kg	0.000197 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		21.8 mg/kg	2.976	56.902 mg/kg	0.00569 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		65 mg/kg	2.774	158.14 mg/kg	0.0158 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		169 mg/kg		148.213 mg/kg	0.0148 %	✓	

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
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		0.007 mg/kg		0.0061 mg/kg	0.000000614 %	✓	
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		11.53 pH		11.53 pH	11.53 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		65 mg/kg	1.117	63.646 mg/kg	0.00636 %	✓	
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:	0.0536 %		

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Solid waste without liquid phase

Hazard Statements hit:

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

Because of determinand:

toluene: (conc.: 6.14e-07%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0148%)

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: 2024.120.6033.11176 (29 Apr 2024)
HazWasteOnline Database: 2024.114.6027.11166 (23 Apr 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
21st ATP - Regulation (EU) 2024/197 of 19 October 2023

APPENDIX 6 – Waste Category Summary Data

Waste Categorisation Summary Table

Ballymun NDFA

Sample ID	BH04	BH04	BH07	BH07	BH08	BH08	BH09	BH09	BH10	BH10	BH11	BH11						
Sample Depth (m)	0.50	1.00	0.60	1.50	1.00	2.00	0.50	1.50	0.50	1.20	0.50	1.50						
Material Description	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Clay						
Sample Date	24/11/2023	24/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023						
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 03	17 05 04	17 05 04	17 05 04						
Waste Category	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category B2 - All Domains	Category A - Domain 2	Category D - All Domains	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Domain 2 (1.5 limit)	Category B1 Criteria	Category B2 Criteria	Hazardous Criteria	LOD LOR	Units
Metals																		
Antimony	2	2	2	2	2	2	3	2	6	3	2	1	-	-	-	HazWaste	<1	mg/kg
Arsenic	10.9	12	17.6	11	14.6	10	18.8	8	18.4	14.5	14.3	8.5	37.35	-	-	HazWaste	<0.5	mg/kg
Barium	81	65	107	64	99	64	121	45	144	122	70	47	-	-	-	HazWaste	<1	mg/kg
Cadmium	2.2	1.8	1.5	2.2	2.3	1.6	2.2	1.9	2.3	1.8	1.4	1.6	4.92	-	-	HazWaste	<0.1	mg/kg
Chromium	25.3	38.1	24	17.7	21.5	19.7	24.2	13.1	35.9	30.1	18.1	11.3	75.45	-	-	HazWaste	<0.5	mg/kg
Copper	30	30	42	32	39	26	52	27	51	36	37	24	95.25	-	-	HazWaste	<1	mg/kg
Lead	25	32	55	17	40	17	83	13	83	21	58	15	129.15	-	-	HazWaste	<5	mg/kg
Mercury	<0.1	<0.1	0.1	<0.1	0.1	0.1	0.2	<0.1	0.3	<0.1	0.2	<0.1	0.54	-	-	HazWaste	<0.1	mg/kg
Molybdenum	4	4.6	2.4	4.1	3.4	3.6	3.9	3	3.8	3.2	2.5	3.1	-	-	-	HazWaste	<0.1	mg/kg
Nickel	38.5	37.9	42	48.4	45.9	36.4	50.4	36.8	47.1	62.2	35.8	31.7	92.85	-	-	HazWaste	<0.7	mg/kg
Selenium	2	2	1	<1	<1	1	2	1	2	1	<1	<1	-	-	-	HazWaste	<1	mg/kg
Zinc	96	87	96	85	106	74	133	72	143	103	99	65	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	-	-	-	HazWaste	<0.3	mg/kg
pH (solid sample)	7.69	7.46	8.15	8.51	8.37	8.19	8.11	8.62	8.25	8.39	7.84	8.65	-	-	-	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	-	-	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	-	-	-	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	-	-	-	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	-	-	-	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	-	-	-	HazWaste	<0.04	mg/kg
Phenanthrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	-	-	-	HazWaste	<0.03	mg/kg
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	-	-	-	HazWaste	<0.04	mg/kg
Fluoranthene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	0.07	<0.03	0.05	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Pyrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	0.07	<0.03	0.04	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Benzo(a)anthracene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.09	<0.06	0.09	<0.06	-	-	-	HazWaste	<0.06	mg/kg
Chrysene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.05	<0.02	0.07	<0.02	0.12	<0.02	-	-	-	HazWaste	<0.02	mg/kg
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.14	<0.07	<0.07	<0.07	-	-	-	HazWaste	<0.07	mg/kg
Benzo(a)pyrene	<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
Indeno(123cd)pyrene	<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
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	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Benzo(ghi)perylene	<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
Coronene	<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	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-	-	<0.22	mg/kg
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1	100	100	-	<0.64	mg/kg
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	-	-	-	HazWaste	<0.05	mg/kg
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	-	-	-	HazWaste	<0.02	mg/kg
Benzo(j)fluoranthene	<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	<52	3990	<52	<52	<52	-	-	-	HazWaste	<52	mg/kg
MTBE	<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	7	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Toluene	<5	<5	13	<5	<5	<5	<5	<5	22	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
m/p-Xylene	<5	<5	8	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
o-Xylene	<5	<5	<5	<5	<5	10	<5	<5	7	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Total 7 PCBs	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	50	1,000	1,000	HazWaste	<35	ug/kg
WAC Solid Sample Summary**																		
Total Organic Carbon *	0.82	1.22	1.90	0.39	2.01	0.51	3.03	0.66	3.64	0.32	1.90	0.32	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	0.05	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	0.05	1	1	-	<0.035	mg/kg
Mineral Oil	<30	<30	<30	<30	<30	<30	<30	<30	3724	<30	<30	<30	50	500	500	-	<30	mg/kg
PAH Sum of 6	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-	-	<0.22	mg/kg
PAH Sum of 17	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1	100	100	-	<0.64	mg/kg
WAC Leachate Data**																		
Arsenic	<0.025	<0.025	<0.025	<0.025	0.034	0.026	<0.025	<0.025	<0.025	<0.025	<0.025	0.037	-	0.5	1.5	-	<0.025	mg/kg
Barium	0.18	0.21	<0.03	<0.03	0.34	0.03	0.06	<0.03	0.09	<0.03	0.13	<0.03	-	20	20	-	<0.03	mg/kg
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	0.04	0.04	-	<0.005	mg/kg
Chromium	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	-	0.5	0.5	-	<0.015	mg/kg
Copper	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	-	2	2	-	<0.07	mg/kg
Mercury	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	0.01	0.01	-	<0.0001	mg/kg
Molybdenum	0.05	0.09	0.03	0.14	0.10	0.20	0.04	0.12	0.09	<0.02	0.04	0.10	-	0.5	1.5	-	<0.02	mg/kg
Nickel	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	0.4	0.4	-	<0.02	mg/kg
Lead	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.5	0.5	-	<0.05	mg/kg
Antimony	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	0.03	<0.02	0.23	<0.02	<0.02	<0.02	-	0.06	0.18	-	<0.02	mg/kg
Selenium	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	-	0.1	0.3	-	<0.03	mg/kg
Zinc	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	-	4	4	-	<0.03	mg/kg
Total Dissolved Solids	11926	4228	1170	620	1431	570	1369	530	1320	870	2841	530	-	4000	12,000	-	<350	mg/kg
Dissolved Organic Carbon	<20	<20	<20	<20	30	40	<20	<20	40	<20	<20	<20	-	500	500	-	<20	mg/kg
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	1	1	-	<0.1	mg/kg
Fluoride	<3	4	4	<3	3	<3	4	<3	<3	<3	4	<3	-	10	10	-	<3	mg/kg
Sulphate as SO4	7126	2290	207	151	218	29	9	9	<5	101	1167	27	-	1000	3,000	-	<0.5	mg/kg
Chloride	7	10	4	<3	6	3	12	<3	18	45	8	<3	-	800	2,400	-	<3	mg/kg

NAD- no asbestos detected

* - Integrated Materials Solutions Landfill, Hollywood Great, Nag's Head, The Naul, Co. Dublin

** - limits as specified in Council Decision 2003/33/EC

Waste Categorisation Summary Table

Ballymun NDFA

Sample ID	BH13	BH13	BH14A	BH15	BH15	BH17	BH17	BH19	BH19	TP-01	TP-01	TP-02						
Sample Depth (m)	0.50	1.00	1.00	0.40	1.50	0.50	2.00	0.50	2.00	0.70	2.00	1.20						
Material Description	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material						
Sample Date	24/11/2023	24/11/2023	24/11/2023	24/11/2023	24/11/2023	23/11/2023	23/11/2023	23/11/2023	23/11/2023	13/12/2023	13/12/2023	13/12/2023						
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 03	No Code Assigned - Awaiting Asbestos Result	17 05 04	17 05 04	Domain 2 (1.5 limit)	Category B1 Criteria	Category B2 Criteria	Hazardous Criteria	LOD LOR	Units
Waste Category	Category A-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 B1-Domain 2	Category D - All Domains	Awaiting Asbestos Result	Category A-Domain 2	Category A-Domain 2						
Metals																		
Antimony	2	2	1	3	2	2	2	2	2	2	2	4	-	-	-	HazWaste	<1	mg/kg
Arsenic	13.7	14	8.9	14.6	8.8	13.3	10.1	12.7	11.7	11.4	9.3	15.5	37.35	-	-	HazWaste	<0.5	mg/kg
Barium	66	85	74	149	79	101	178	107	65	92	47	142	-	-	-	HazWaste	<1	mg/kg
Cadmium	0.7	1.2	1.1	9.4	2	2.3	1.9	1.4	0.8	1.6	1.8	1.1	4.92	-	-	HazWaste	<0.1	mg/kg
Chromium	26.8	20.3	35.2	37.1	22.6	20.7	13.5	25.7	38.6	20.2	14	42.1	75.45	-	-	HazWaste	<0.5	mg/kg
Copper	29	26	26	35	26	36	28	28	17	28	23	56	95.25	-	-	HazWaste	<1	mg/kg
Lead	33	30	35	41	16	38	18	32	22	56	14	72	129.15	-	-	HazWaste	<5	mg/kg
Mercury	<0.1	<0.1	<0.1	0.1	<0.1	0.2	<0.1	0.2	<0.1	0.1	<0.1	0.2	0.54	-	-	HazWaste	<0.1	mg/kg
Molybdenum	2.3	2.7	3	4.9	3.9	3.2	3.5	3.2	1.5	2.7	2.9	4.6	-	-	-	HazWaste	<0.1	mg/kg
Nickel	30	35.2	28.6	39.6	35.2	44.6	42.2	35.3	21.8	33.7	32.7	39.4	92.85	-	-	HazWaste	<0.7	mg/kg
Selenium	<1	2	<1	1	<1	1	<1	1	<1	1	1	2	-	-	-	HazWaste	<1	mg/kg
Zinc	106	104	73	110	71	106	77	81	65	89	73	226	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	-	-	-	HazWaste	<0.3	mg/kg
pH (solid sample)	8.07	8.28	8.06	8.13	8.32	7.95	8.48	9.45	11.53	8.48	8.65	7.64	-	-	-	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	-	-	0.1	<0.001	%
Asbestos (Moisture Corrected Weight)	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	%
ACM Detected	-	-	-	-	-	-	-	-	-	Asbestos Cement	-	-	-	-	-	-	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	-	-	-	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	-	-	-	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	-	-	-	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	-	-	-	HazWaste	<0.04	mg/kg
Phenanthrene	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	<0.03	<0.03	0.11	<0.03	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Fluoranthene	<0.03	<0.03	<0.03	0.11	<0.03	<0.03	<0.03	0.05	<0.03	0.2	<0.03	0.05	-	-	-	HazWaste	<0.03	mg/kg
Pyrene	<0.03	<0.03	<0.03	0.09	<0.03	<0.03	<0.03	0.04	<0.03	0.29	<0.03	0.04	-	-	-	HazWaste	<0.03	mg/kg
Benzo(a)anthracene	<0.06	<0.06	<0.06	0.09	<0.06	<0.06	<0.06	<0.06	<0.06	0.13	<0.06	<0.06	-	-	-	HazWaste	<0.06	mg/kg
Chrysene	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.02	<0.02	<0.02	0.19	<0.02	0.05	-	-	-	HazWaste	<0.02	mg/kg
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	0.13	<0.07	<0.07	<0.07	<0.07	<0.07	0.23	<0.07	<0.07	-	-	-	HazWaste	<0.07	mg/kg
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
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	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Benzo(ghi)perylene	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Coronene	<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	<0.22	<0.22	<0.22	0.36	<0.22	<0.22	<0.22	<0.22	<0.22	0.55	<0.22	<0.22	-	-	-	-	<0.22	mg/kg
PAH 17 Total	<0.64	<0.64	<0.64	0.69	<0.64	<0.64	<0.64	<0.64	<0.64	1.33	<0.64	<0.64	1	100	100	-	<0.64	mg/kg
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05	-	-	-	HazWaste	<0.05	mg/kg
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	-	-	-	HazWaste	<0.02	mg/kg
Benzo(j)fluoranthene	<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	484	169	<52	<52	86	-	-	-	HazWaste	<52	mg/kg
MTBE	<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	-	-	-	HazWaste	<5	ug/kg
Toluene	<5	<5	<5	<5	<5	<5	<5	<5	7	<5	<5	16	-	-	-	HazWaste	<5	ug/kg
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
m/p-Xylene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
o-Xylene	<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	52	50	1,000	1,000	HazWaste	<35	ug/kg
WAC Solid Sample Summary**																		
Total Organic Carbon *	1.01	0.93	1.03	1.32	0.39	1.17	0.40	0.99	1.24	0.83	0.31	2.19	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	0.05	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	0.052	0.05	1	1	-	<0.035	mg/kg
Mineral Oil	<30	<30	<30	<30	<30	<30	<30	109	<30	<30	<30	<30	50	500	500	-	<30	mg/kg
PAH Sum of 6	<0.22	<0.22	<0.22	0.36	<0.22	<0.22	<0.22	<0.22	<0.22	0.55	<0.22	<0.22	-	-	-	-	<0.22	mg/kg
PAH Sum of 17	<0.64	<0.64	<0.64	0.69	<0.64	<0.64	<0.64	<0.64	<0.64	1.33	<0.64	<0.64	1	100	100	-	<0.64	mg/kg
WAC Leachate Data**																		
Arsenic	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.043	<0.025	<0.025	0.028	<0.025	-	0.5	1.5	-	<0.025	mg/kg
Barium	<0.03	<0.03	0.06	0.07	0.10	0.23	0.12	0.06	0.19	0.08	<0.03	0.51	-	20	20	-	<0.03	mg/kg
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	0.04	0.04	-	<0.005	mg/kg
Chromium	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.077	<0.015	<0.015	<0.015	-	0.5	0.5	-	<0.015	mg/kg
Copper	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.20	0.14	<0.07	<0.07	<0.07	-	2	2	-	<0.07	mg/kg
Mercury	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	0.01	0.01	-	<0.0001	mg/kg
Molybdenum	0.06	0.07	0.04	0.03	0.20	0.08	0.12	0.15	0.07	0.15	0.21	0.09	-	0.5	1.5	-	<0.02	mg/kg
Nickel	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	0.05	<0.02	<0.02	<0.02	-	0.4	0.4	-	<0.02	mg/kg
Lead	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.5	0.5	-	<0.05	mg/kg
Antimony	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	-	0.06	0.18	-	<0.02	mg/kg
Selenium	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	-	0.1	0.3	-	<0.03	mg/kg
Zinc	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	-	4	4	-	<0.03	mg/kg
Total Dissolved Solids	910	780	1000	860	600	2311	800	1461	2109	710	510	2000	-	4000	12,000	-	<350	mg/kg
Dissolved Organic Carbon	<20	<20	20	20	<20	<20	<20	80	40	40	<20	<20	-	500	500	-	<20	mg/kg
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	1	1	-	<0.1	mg/kg
Fluoride	6	5	4	3	<3	3	<3	<3	<3	5	<3	4	-	10	10	-	<3	mg/kg
Sulphate as SO4	41	53	160	6	39	909	200	394	434	14	18	250	-	1000	3,000	-	<0.5	mg/kg
Chloride	5	6	4	5	5	5	<3	15	21	4	<3	7	-	800	2,400	-	<3	mg/kg

NAD- no asbestos detected

* - Integrated Materials Solutions Landfill, Hollywood Great, Nag's Head, The Naul, Co. Dublin

** - limits as specified in Council Decision 2003/33/EC

Waste Categorisation Summary Table

Ballymun NDFA

Sample ID	TP-02	TP-03	TP-03	TP-03	TP-04	TP-05	TP-05	TP-06	TP-07	TP-07	TP-08	TP-08						
Sample Depth (m)	3.00	0.50	2.00	3.50	0.50	1.00	3.00	0.50	1.00	3.00	2.00	3.40						
Material Description	Clay	Made Ground <2% Anthropogenic Material	Clay	Clay	Made Ground <2% Anthropogenic Material	Made Ground <2% Anthropogenic Material	Clay	Made Ground <2% Anthropogenic Material	Made Ground <2% Anthropogenic Material	Clay	Clay	Clay						
Sample Date	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023	13/12/2023						
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						
Waste Category	Category B2 - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category A - Domain 2	Category B1 - Domain 2	Domain 2 (1.5 limit)	Category B1 Criteria	Category B2 Criteria	Hazardous Criteria	LOD LOR	Units
Metals																		
Antimony	2	2	2	2	2	2	2	2	2	2	2	1	-	-	-	HazWaste	<1	mg/kg
Arsenic	13.3	13.7	12.3	12.1	11.3	9.3	14.1	14.3	12.3	8.1	10.7	8.2	37.35	-	-	HazWaste	<0.5	mg/kg
Barium	81	83	79	115	82	73	44	120	84	54	64	102	-	-	-	HazWaste	<1	mg/kg
Cadmium	1.1	1.3	2	1.9	1.6	3.1	1.3	2.2	2.2	1.3	1.8	1.2	4.92	-	-	HazWaste	<0.1	mg/kg
Chromium	16.5	24.6	26.8	31	21.9	54.2	21.4	51.9	19.9	34.9	19.6	35.1	75.45	-	-	HazWaste	<0.5	mg/kg
Copper	26	39	34	30	26	26	23	35	32	23	28	20	95.25	-	-	HazWaste	<1	mg/kg
Lead	27	42	34	26	32	21	19	48	32	16	19	15	129.15	-	-	HazWaste	<5	mg/kg
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.54	-	-	HazWaste	<0.1	mg/kg
Molybdenum	2	2.9	3.3	5	2.4	6.2	3.5	5.4	3.2	3.7	3.4	4.5	-	-	-	HazWaste	<0.1	mg/kg
Nickel	29.2	40.2	44.1	41.3	33.3	34.8	40.9	47.9	41	41.1	38.1	28.6	92.85	-	-	HazWaste	<0.7	mg/kg
Selenium	1	1	1	3	2	2	<1	1	1	2	<1	3	-	-	-	HazWaste	<1	mg/kg
Zinc	82	129	167	86	94	87	89	128	89	79	77	56	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	-	-	-	HazWaste	<0.3	mg/kg
pH (solid sample)	10.88	8.41	7.91	7.99	8.33	7.97	8.47	8.27	8.44	8.71	8.42	8.59	-	-	-	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	-	-	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	-	-	-	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	-	-	-	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	-	-	-	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	-	-	-	HazWaste	<0.04	mg/kg
Phenanthrene	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	<0.03	<0.03	-	-	-	HazWaste	<0.03	mg/kg
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	-	-	-	HazWaste	<0.04	mg/kg
Fluoranthene	0.07	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	0.08	<0.03	<0.03	<0.03	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Pyrene	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Benzo(a)anthracene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	-	-	-	HazWaste	<0.06	mg/kg
Chrysene	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.02	<0.02	-	-	-	HazWaste	<0.02	mg/kg
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.12	<0.07	<0.07	<0.07	<0.07	-	-	-	HazWaste	<0.07	mg/kg
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Indeno(123cd)pyrene	<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
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	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Benzo(ghi)perylene	<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
Coronene	<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	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.27	<0.22	<0.22	<0.22	<0.22	-	-	-	-	<0.22	mg/kg
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1	100	100	-	<0.64	mg/kg
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	-	-	-	HazWaste	<0.05	mg/kg
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	-	-	-	HazWaste	<0.02	mg/kg
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	HazWaste	<1	mg/kg
Hydrocarbons																		
TPH (C5-40)	142	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	59	-	-	-	HazWaste	<52	mg/kg
MTBE	<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	-	-	-	HazWaste	<5	ug/kg
Toluene	<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	-	-	-	HazWaste	<5	ug/kg
m/p-Xylene	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
o-Xylene	<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	50	1,000	1,000	HazWaste	<35	ug/kg
WAC Solid Sample Summary**																		
Total Organic Carbon *	0.52	1.17	1.02	0.93	1.11	0.77	0.40	1.21	0.97	0.46	0.42	0.48	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	0.05	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	0.05	1	1	-	<0.035	mg/kg
Mineral Oil	51	<30	<30	35	<30	<30	<30	<30	<30	38	<30	59	50	500	500	-	<30	mg/kg
PAH Sum of 6	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.27	<0.22	<0.22	<0.22	<0.22	-	-	-	-	<0.22	mg/kg
PAH Sum of 17	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1	100	100	-	<0.64	mg/kg
WAC Leachate Data**																		
Arsenic	0.094	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.029	0.030	<0.025	<0.025	<0.025	-	0.5	1.5	-	<0.025	mg/kg
Barium	0.15	0.08	0.78	0.29	0.11	0.82	0.12	0.11	0.08	0.07	0.06	0.18	-	20	20	-	<0.03	mg/kg
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	0.04	0.04	-	<0.005	mg/kg
Chromium	0.017	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	-	0.5	0.5	-	<0.015	mg/kg
Copper	0.32	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.13	<0.07	-	2	2	-	<0.07	mg/kg
Mercury	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	0.01	0.01	-	<0.0001	mg/kg
Molybdenum	0.09	0.16	0.15	0.19	0.14	0.16	0.09	0.10	0.12	0.28	0.13	0.33	-	0.5	1.5	-	<0.02	mg/kg
Nickel	0.11	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	0.4	0.4	-	<0.02	mg/kg
Lead	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.5	0.5	-	<0.05	mg/kg
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	0.03	<0.02	<0.02	-	0.06	0.18	-	<0.02	mg/kg
Selenium	0.25	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	-	0.1	0.3	-	<0.03	mg/kg
Zinc	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	-	4	4	-	<0.03	mg/kg
Total Dissolved Solids	1769	760	1610	2161	730	1570	740	1161	730	460	760	530	-	4000	12,000	-	<350	mg/kg
Dissolved Organic Carbon	100	30	<20	<20	<20	<20	<20	30	<20	<20	<20	<20	-	500	500	-	<20	mg/kg
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	1	1	-	<0.1	mg/kg
Fluoride	<3	6	5	4	5	3	4	4	5	3	<3	4	-	10	10	-	<3	mg/kg
Sulphate as SO4	328	61	433	1031	43	375	24	31	38	25	174	75	-	1000	3,000	-	<0.5	mg/kg
Chloride	12	<3	4	<3	<3	4	5	148	<3	3	27	5	-	800	2,400	-	<3	mg/kg

NAD- no asbestos detected

* - Integrated Materials Solutions Landfill, Hollywood Great, Nag's Head, The Naul, Co. Dublin

** - limits as specified in Council Decision 2003/33/EC

Waste Categorisation Summary Table

Ballymun NDFA

Sample ID	TP-09	TP-10	TP-11	TP-11	TP-12	TP-12	Domain 2 (1.5 limit)	Category B1 Criteria	Category B2 Criteria	Hazardous Criteria	LOD LOR	Units
Sample Depth (m)	**2.20**	**1.00**	**0.50**	**3.00**	**0.50**	**1.00**						
Material Description	**Clay**	**Made Ground <2% Anthropogenic Material**	**Made Ground <2% Anthropogenic Material**	**Clay**	**Made Ground <2% Anthropogenic Material**	**Made Ground <2% Anthropogenic Material**						
Sample Date	**13/12/2023**	**13/12/2023**	**13/12/2023**	**13/12/2023**	**13/12/2023**	**13/12/2023**						
LoW Code	**17 05 04**	**17 05 04**	**17 05 04**	**17 05 04**	**17 05 04**	**17 05 04**						
Waste Category	**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	3	2	2	3	-	-	-	HazWaste	<1	mg/kg
Arsenic	11.1	10.7	14.9	8.9	12.6	15.5	37.35	-	-	HazWaste	<0.5	mg/kg
Barium	63	88	114	88	89	123	-	-	-	HazWaste	<1	mg/kg
Cadmium	1.8	1	2	1.7	1.4	1.8	4.92	-	-	HazWaste	<0.1	mg/kg
Chromium	21	42.6	23.3	12.5	19.8	47.2	75.45	-	-	HazWaste	<0.5	mg/kg
Copper	29	36	41	25	25	40	95.25	-	-	HazWaste	<1	mg/kg
Lead	18	39	44	17	30	51	129.15	-	-	HazWaste	<5	mg/kg
Mercury	<0.1	0.1	0.1	<0.1	<0.1	0.2	0.54	-	-	HazWaste	<0.1	mg/kg
Molybdenum	3.6	2.2	3.4	3.5	2.7	4.9	-	-	-	HazWaste	<0.1	mg/kg
Nickel	41.8	44.3	42.2	32.8	30.2	42.6	92.85	-	-	HazWaste	<0.7	mg/kg
Selenium	<1	<1	1	5	2	1	-	-	-	HazWaste	<1	mg/kg
Zinc	92	112	113	69	80	114	295.5	-	-	HazWaste	<5	mg/kg
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	-	HazWaste	<0.3	mg/kg
pH (solid sample)	8.58	8.3	8.31	8.73	8.54	8.4	-	-	-	HazWaste	<0.01	pH units
alkali reserve							-	-	-	-	<0.000	gNaOH/100g
Asbestos												
Asbestos (Dry Weight)	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	-	-	-	HazWaste	<0.04	mg/kg
Acenaphthylene	<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	-	-	-	HazWaste	<0.05	mg/kg
Fluorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Phenanthrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	-	-	-	HazWaste	<0.03	mg/kg
Anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Fluoranthene	<0.03	<0.03	<0.03	<0.03	0.05	0.06	-	-	-	HazWaste	<0.03	mg/kg
Pyrene	<0.03	<0.03	<0.03	<0.03	0.03	0.05	-	-	-	HazWaste	<0.03	mg/kg
Benzo(a)anthracene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	-	-	-	HazWaste	<0.06	mg/kg
Chrysene	<0.02	<0.02	<0.02	<0.02	0.03	0.05	-	-	-	HazWaste	<0.02	mg/kg
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	-	-	-	HazWaste	<0.07	mg/kg
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Dibenzo(ah)anthracene	<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	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-	HazWaste	<0.04	mg/kg
PAH 6 Total	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-	-	<0.22	mg/kg
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1	100	100	-	<0.64	mg/kg
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	HazWaste	<0.05	mg/kg
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	-	-	HazWaste	<0.02	mg/kg
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	-	-	-	HazWaste	<1	mg/kg
Hydrocarbons												
TPH (C5-40)	<52	<52	<52	<52	61	<52	-	-	-	HazWaste	<52	mg/kg
MTBE	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Benzene	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Toluene	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Ethylbenzene	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
m/p-Xylene	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
o-Xylene	<5	<5	<5	<5	<5	<5	-	-	-	HazWaste	<5	ug/kg
Total 7 PCBs	<35	<35	<35	<35	<35	<35	50	1,000	1,000	HazWaste	<35	ug/kg
WAC Solid Sample Summary**												
Total Organic Carbon *	0.46	1.31	1.27	0.86	0.97	1.88	3	3	6	-	<0.02	%
Sum of BTEX	<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	0.05	1	1	-	<0.035	mg/kg
Mineral Oil	<30	<30	<30	45	61	<30	50	500	500	-	<30	mg/kg
PAH Sum of 6	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-	-	<0.22	mg/kg
PAH Sum of 17	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1	100	100	-	<0.64	mg/kg
WAC Leachate Data**												
Arsenic	<0.025	<0.025	0.030	0.026	0.037	0.041	-	0.5	1.5	-	<0.025	mg/kg
Barium	0.09	0.10	0.10	0.08	0.11	0.10	-	20	20	-	<0.03	mg/kg
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	0.04	0.04	-	<0.005	mg/kg
Chromium	<0.015	<0.015	<0.015	<0.015	0.031	<0.015	-	0.5	0.5	-	<0.015	mg/kg
Copper	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	-	2	2	-	<0.07	mg/kg
Mercury	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	0.01	0.01	-	<0.0001	mg/kg
Molybdenum	0.09	0.11	0.11	0.32	0.11	0.12	-	0.5	1.5	-	<0.02	mg/kg
Nickel	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	0.4	0.4	-	<0.02	mg/kg
Lead	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.5	0.5	-	<0.05	mg/kg
Antimony	0.03	<0.02	0.03	0.03	0.02	0.02	-	0.06	0.18	-	<0.02	mg/kg
Selenium	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	-	0.1	0.3	-	<0.03	mg/kg
Zinc	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	-	4	4	-	<0.03	mg/kg
Total Dissolved Solids	560	670	830	460	820	790	-	4000	12,000	-	<350	mg/kg
Dissolved Organic Carbon	20	<20	20	<20	30	30	-	500	500	-	<20	mg/kg
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	1	1	-	<0.1	mg/kg
Fluoride	7	4	5	4	3	5	-	10	10	-	<3	mg/kg
Sulphate as SO4	21	<5	109	50	51	62	-	1000	3,000	-	<0.5	mg/kg
Chloride	<3	<3	<3	<3	4	<3	-	800	2,400	-	<3	mg/kg

NAD- no asbestos detected

* - Integrated Materials Solutions Landfill, Hollywood Great, Nag's Head, The Naul, Co. Dublin

** - limits as specified in Council Decision 2003/33/EC