

Project

SHD Development at Cooldown Commons Phase 3

Report Title

Environmental Assessment Report November 2020



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Geotechnical & Environmental

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Ground Investigations Ireland

The Quarter Citywest, Cooldown Commons Phase 3

Environmental Assessment Report

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1.0 Preamble

Ground Investigations Ireland (GII) was appointed by BDFL Consulting Engineers, on behalf of Cairn Homes, to carry out an Environmental Assessment for a proposed development at Citywest Avenue, Citywest, Dublin 24. All site investigation works were carried out under the supervision of a GII Geo-Environmental Engineer. The site investigation works were completed between July and October 2020.

2.0 Purpose & Scope

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

The purpose of the environmental assessment was as follows.

- Assess the site in terms of historical use and environmental setting;
- Classification, in terms of waste management and final disposal outlets, of subsoil material that may require disposal following excavation during the construction phase; and
- Suitability for any material left on site for the proposed use following development.

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

- Excavation of nine (9 No.) trial pits;
- Boring of eighteen (18 No.) window sample boreholes;
- Boring of seventeen (17 No.) cable percussion boreholes;
- Coring of fifteen (15 No.) rotary core boreholes;
- Collection of subsoil samples for chemical analysis;
- Environmental laboratory testing;
- Waste classification; and
- Assessment of subsoil quality against human health Generic Assessment Criteria (GAC).

The additional scope of the geotechnical investigation included the following:

- Carry out 2 No. Soakaways;
- Carry out 11 No. Dynamic Probes;
- Installation of 5 No. Groundwater monitoring wells; and
- Geotechnical Laboratory testing.

The geotechnical site investigation is discussed in the GII Site Investigation Report Dated November 2020.¹

3.0 Limitations

GII has prepared this report for the sole use of Cairn Homes. 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 July and October 2020, 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 investigations 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.

The waste classification exercise and environmental assessment 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 Citywest Avenue, Citywest, Dublin 24 (Figure 1 Appendix 1). At the time of the assessment the site was an open parcel of land. The surrounding land use at time of the assessment was a mix of commercial and residential.

¹ Ground Investigations Ireland, The Quarter Citywest Cooldown Commons Phase 3, 10th November 2020.

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.

Based on a review of the OSI and Google Imagery aerial photograph records the site and surrounding lands began to undergo residential development between 2005 and 2008 to present day. The site itself was not fully developed between 2008 and 2020 but based on the aerial imagery appears to have been used as a compound or staging area for adjacent construction works.

6.0 Environmental Setting

Details of the environmental setting are outlined in Table 1. Data relating to site topography, hydrology, geology, hydrogeology and ecology of the area have been obtained from resources held by the Environmental Protection Agency (EPA), the Geological Survey of Ireland (GSI), OSI, National Parks and Wildlife Service (NPWS), the Water Framework Directive (Water Matters) website and the Office of Public Works (OPW) Flood Maps Viewer. All relevant environmental setting data is presented in Figures 5 to 11 in Appendix 1.

Table 1 Environmental Setting

Environmental Feature	Relevant Details
<i>Topography</i>	The site is relatively level with a slight decrease in topography from south to north.
<i>Hydrology & Catchment</i>	<u>Surface Water Courses:</u> The closest surface water feature is the Baldonnell Upper Stream which is located at the eastern boundary of the site. The Baldonnell Upper flows to the north and joins the Camac River approximately 2km to the north of the site. The site is situated within the Camac Upper Water Body Catchment (IE_EA_09_12). The surface water report indicates the status of the water body is 'Poor' (Appendix 2).
<i>Geology</i>	<u>Quaternary Geology:</u> The GSI Quaternary Geology map classifies the subsoil underlying the site as Till derived from limestone (TLs).

Environmental Feature	Relevant Details
	<p><u>Bedrock Geology:</u></p> <p>The bedrock underlying the site is the Lucan Formation, which is comprised of argillaceous bioclastic limestone, shale.</p> <hr/> <p><u>Karst Features:</u></p> <p>There are no recorded karst features within 1km of the site.</p>
<p>Hydrogeology</p>	<p><u>Aquifer Classification:</u></p> <p>The Lucan Formation has been classified by the GSI as a Locally Important Aquifer which is moderately productive in local zones (LI).</p> <p>The Eastern River Basin District (ERBD) Management Plan identifies that the groundwater body (GWB) beneath the site is part of the Dublin Urban Groundwater Body (IE_EA_G_005). The groundwater body report indicates the status of the water body is 'Good' (Appendix 2).</p> <hr/> <p><u>Aquifer Vulnerability:</u></p> <p>The GSI have developed a system that ranks an aquifer in terms of the intrinsic geological and hydrogeological characteristics that determine the ease with which that aquifer may be contaminated by human activities. The GSI have used this system assigned a "vulnerability" category to each aquifer nationwide. The vulnerability of groundwater depends on:</p> <ul style="list-style-type: none"> ▪ The time of travel of infiltrating water (and contaminants); ▪ The relative quantity of contaminants that can reach the groundwater; and ▪ The contaminant attenuation capacity of the geological materials through which the water and contaminants infiltrate. <p>The depth of subsoil and the subsoil type overlying the aquifer are directly linked to the vulnerability. The GSI vulnerability map indicates that the vulnerability at the site is Low.</p> <hr/> <p><u>Groundwater Flow Direction:</u></p> <p>The groundwater flow direction is assumed to reflect the regional topography and be to the north.</p> <hr/> <p><u>Well Search:</u></p> <p>A review of the GSI groundwater well database indicates that there are no wells within a 1km of the site.</p>

Environmental Feature	Relevant Details
Flood Risk	<p>The Office of Public Works (OPW) has produced flood risk maps that identify areas that may be susceptible to flooding during extreme events. The flood maps are predictive flood maps, as they provide predicted flood extent and other information for a design flood event that has an estimated probability of occurrence rather than information of floods that have occurred in the past. The maps identify the risk from fluvial and coastal flooding. The OPW rates risk in terms of %. These percentages are linked to return events or chance of occurrence in any given year:</p> <ul style="list-style-type: none"> ▪ 10% - 1 in 10 chance in any given year; ▪ 1% - 1 in 100 chance in any given year; and ▪ 0.1% - 1 in 1,000 chance in any given year. <p>They are also commonly referred to in terms of a return period (e.g., the 100-year flood event), although it should be understood that this does not mean the length of time that will elapse between two such events occurring, as, although unlikely, two or more very severe events may occur within a very short space of time. Based on the review of the OPW maps the site is low risk for fluvial flooding (Appendix 3).</p>
Radon	<p>A review of the EPA national radon map was carried out. The radon map is broken into 10km² grids. Each grid is ranked based on the percentage of dwellings within that grid where radon is present at levels greater than 200 Becquerel per metre cubed (Bq/m³). The radon map has five categories: <1 %, 1 to 5 %, 5 to 10 %, 10 to 20 % and greater than 20 %. The subject site is located within a grid where between 1% and 5% of the residences will have radon levels greater than 200Bq/m³, making it low to moderate risk for radon.</p>
Natura 2000 Sites	<p>A review of the National Parks and Wildlife Services (NPWS) databases indicates that there are no protected sites within 5km of the site.</p>

7.0 Subsurface Exploration

7.1. 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.

7.2. Window Sampling

The window sampling was carried out at the locations shown in Figure 12 using a Tecop Tec 10 percussion drilling rig. The window sampling consists of a 1m long steel tube with a cutting edge and an internal plastic liner which is mechanically driven into the ground utilising a 50kg weight falling a height of 500mm. Upon completion of the 1m sample, the tube is withdrawn and the plastic liner removed and sealed for logging and sub sampling by a Geotechnical Engineer/Engineering Geologist. The tube is replaced in the borehole and a subsequent 1m sample can be recovered. Occasionally outer casing or a reduced diameter tube is utilised to enable the window sample to progress in difficult drilling conditions. Geotechnical or environmental soil samples can be recovered from each of the liners following logging. The window sample records are provided in Appendix 4 of this Report.

7.3. Trial Pits

The trial pits were excavated using a 20 tonne excavator at the locations shown in Figure 12. 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 5 of this Report.

7.4. Cable Percussion Boreholes

The Cable Percussion Boreholes were drilled, at the locations shown in Figure 12 using a Dando 2000 drilling rig with regular in-situ testing and sampling undertaken to facilitate the production of geotechnical logs and laboratory testing.

The standard method of boring in soil for site investigation is known as the Cable Percussion method. It consists of using a Shell in non cohesive soils and a clay cutter in cohesive soils, both operated on a wire cable. Very hard soils, boulders and other hard obstructions are broken up by chiselling and the fragments removed with the Shell. Where ground conditions made it necessary, the borehole was lined with 200mm diameter steel casing. While the use of the Cable Percussion method of boring gives the maximum data on soil conditions, some mixing of laminated soil is inevitable. For this reason, thin lenses of granular material may not be noticed. Disturbed samples were taken from the boring tools at suitable depths, so that there is a representative sample at the top of each change in stratum and thereafter at regular intervals down the borehole until the next stratum was encountered. The disturbed samples were then sealed and sent to the laboratory where they were visually examined to confirm the description of the relevant strata. Standard Penetration Tests were carried out in the boreholes. The results of these tests, together with the depths at which the tests were taken are shown on the accompanying borehole records. The test consists of a thick wall sampler tube, 50mm external diameter, being driven into the soil by a monkey weighing

63.5kg and with a free drop of 760mm. For gravels and glacial till the driving shoe was replaced by a solid 60° cone. The Standard Penetration Test number referred to as the 'N' value is the number of blows required to drive the tube 300mm, after an initial penetration of 150mm. The number gives a guide to the consistency of the soil and can also be used to estimate the relative strength/density at the depth of the test and also to estimate the bearing capacity and compressibility of the soil. The cable percussion borehole logs are provided in Appendix 6 of this Report.

7.5. Rotary Boreholes

The rotary coring was carried out by a track mounted T44 Beretta rig at the locations shown in Figure 12. The rotary boreholes were completed from the ground surface or alternatively, where noted on the individual borehole log, from the base of the cable percussion borehole where a temporary liner was installed to facilitate follow-on rotary coring.

The T44 Beretta is equipped with rubber tracks which allow for short travel on pavement surfaces avoiding any damage to the surface. The T44 Beretta utilises a triple tube core barrel system operated using a wireline drilling process. The outer barrel is rotated by the drill rods and at its lower end, carries the coring bit. The inner barrel is mounted on a swivel so that it does not rotate during the process. The third barrel or liner is placed within the second one to retain the core intact and to preserve as much as possible the fabric of the drilling stratum. The core is cut by the coring bit and passes to the inner liner. The core is brought up to the surface within the inner barrel on a small diameter wire rope or line attached to the "overshoot" recovery tool which is then placed into a core box in order of recovery. A drilling fluid, typically air mist or water flush is passed from the surface through hollow drill rods to the drill bit, and is used to cool the drill bit. Temporary casing is used in some situations to support unstable ground or to seal off fissures or voids. It should be noted that the rotary coring can only achieve limited recovery in overburden, particularly granular or weakly cemented strata due to the flushing medium washing away the cohesive fraction during coring. The recovery achieved, where required is noted on the borehole logs and core photographs are provided to allow assessment of the core recovered. The rotary borehole logs are provided in Appendix 6 of this Report.

7.6. Surveying

The exploratory hole locations have been recorded using a Trimble R10 GNSS System which records the coordinates and elevation of the locations to ITM or Irish National Grid as required by the project specification. The coordinates and elevations are provided on the exploratory hole logs in the appendices of this Report.

8.0 Ground Conditions

8.1. 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 Deposits

TOPSOIL: Topsoil was encountered in exploration holes to the south and southeast of the site and was present to a maximum depth of 0.3m BGL. The majority of other exploratory holes encountered made ground from or cohesive deposits from ground level.

MADE GROUND: Made Ground deposits were encountered from ground level in several exploratory holes and were present to a relatively consistent depth of between 0.2m and 0.60m BGL. These deposits were described generally as *brown slightly sandy slightly gravelly CLAY* or *Dark grey slightly clayey sandy fine to coarse angular to subangular Crushed Rock Fill with occasional cobbles and boulders and contained occasional fragments of concrete, metal, red brick, glass and plastic.*

COHESIVE DEPOSITS: Cohesive deposits were encountered beneath the Made Ground and were described typically as *brown mottled grey sandy slightly gravelly CLAY* and *brown sandy slightly gravelly CLAY with occasional cobbles and boulders* overlying a *stiff dark grey slightly sandy slightly gravelly CLAY with occasional cobbles and boulders*. The secondary sand and gravel constituents varied across the site and with depth, with granular lenses occasionally present in the glacial till matrix. The strength of the cohesive deposits typically increased with depth and was firm to stiff or stiff below 2.00m BGL in the majority of the exploratory holes. These deposits had some, occasional or frequent cobble and boulder content where noted on the exploratory hole logs.

GRANULAR DEPOSITS: The granular deposits were encountered within the cohesive deposits and were typically described as *Dark grey or brown clayey slightly silty gravelly SAND* or *Brown clayey sandy subangular to subrounded fine to coarse GRAVEL*. The secondary sand/gravel and silt/clay constituents varied across the site and with depth while occasional or frequent cobble and boulder content also present where noted on the exploratory hole logs.

Based on the SPT N values the deposits are typically medium dense and become dense with depth. It should be noted that many of the trial pits where granular deposits or groundwater were encountered, experienced instability. This was described either as side wall spalling or as side wall collapse in the remarks section at the base of the trial pit logs. A significant groundwater strike was noted in the boreholes on encountering the granular deposits and the driller noted blowing sands or gravels during drilling.

9.0 Laboratory Analysis

9.1. 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 total pollutant content analysis also provides analytical data which can be used to assess the quality of the subsoils underlying the site and allow an assessment of their suitability for a range of proposed uses against generic assessment criteria.

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 suite was selected due to the unknown origin of the material underlying the site and no evidence of specific contaminants of concern highlighted in the site history. 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 7.

9.2. Asbestos

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

10.0 Waste Classification

GII understands that any materials which may be excavated 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 3 below. These codes are only applicable where the material is being removed for 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.**

10.1. HazWasteOnLine™ Results

In total, thirty-nine (39 No.) samples were assessed using the HazWasteOnLine™ Tool. All remaining samples were classified as being not hazardous. The complete HazWasteOnLine™ reports for all samples are included in Appendix 8. The specific LoW code which should be applied to the material at each SI location is summarised in Table 3 below. The assigning of the LoW code is based on observations recorded in the trial pits, boreholes and window samples, 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

² Formerly European Waste Catalogue Codes (EWC Codes)

vary due to variations in % of anthropogenic material observed in the excavation phase. Where there is in excess of 2%³ anthropogenic material observed the LoW code 17 09 04 may be applied.

10.2. 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 WAC which the EPA have applied to the Integrated Materials Solutions (IMS) Landfill in north County Dublin. The IMS landfill has 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 12.0 allows the most suitable waste category to be applied to the material tested. The applicable waste categories are summarised in Table 2. A summary of the WAC data is presented in Appendix 9. The waste category assigned to each sample is summarised in Table 3.

Table 2 Waste Category for Disposal/Recovery

Waste Category	Classification Criteria
Category A Unlined Soil Recovery Facilities	Soil and Stone only which are free from ⁴ anthropogenic materials such as concrete, brick timber. Soil must be free from “contamination” e.g. PAHs, Hydrocarbons ⁵ .
Category B1 Inert Landfill	Reported concentrations within inert waste limits, which are set out by the adopted EU Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive 1999/31/EC (2002). Results also found to be non-hazardous using the HWOL ⁶ application.
Category B2 Inert Landfill	Reported concentrations greater than Category B1 criteria but less than IMS Hollywood Landfill acceptance criteria, as set out in their Waste Licence W0129-02. Results also found to be non-hazardous using the HWOL application.
Category C Non-Haz Landfill	Reported concentrations greater than Category B2 criteria but within non-haz landfill waste acceptance limits set out by the adopted EU Council Decision 2003/33/EC establishing criteria and procedures for

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

⁴ Free from equates to less than 2%.

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

⁶ HazWasteOnLine™ Tool.

	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%).

10.3. 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 IMS specific 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 3.

Table 3 Individual Sample Waste Category

Sample ID	Sample Depth (m)	Material Type	Waste Category	LoW Code
WS01	0.7	Clay	Category A	17 05 04
WS01	1.7	Clay	Category A	17 05 04
WS02	0.7	Clay	Category A	17 05 04
WS02	1.7	Clay	Category A	17 05 04
WS03	0.7	Clay	Category A	17 05 04
WS03	1.7	Clay	Category A	17 05 04
WS04	0.7	Clay	Category A	17 05 04
WS04	1.7	Clay	Category A	17 05 04
WS05	0.7	Clay	Category A	17 05 04
WS05	1.7	Clay	Category A	17 05 04
WS05	2.7	Clay	Category A	17 05 04
WS06	0.7	Clay	Category A	17 05 04
WS06	1.7	Clay	Category A	17 05 04
WS07	0.7	Clay	Category A	17 05 04
WS07	1.7	Clay	Category A	17 05 04
WS07	2.7	Clay	Category A	17 05 04
WS08	0.7	Clay	Category B2	17 05 04
WS08	1.7	Clay	Category A	17 05 04
WS08	2.7	Clay	Category A	17 05 04
WS09	0.7	Clay	Category A	17 05 04
WS09	1.7	Clay	Category A	17 05 04
WS09	2.7	Clay	Category A	17 05 04

Sample ID	Sample Depth (m)	Material Type	Waste Category	LoW Code
WS10	0.7	Clay	Category A	17 05 04
WS11	0.7	Clay	Category A	17 05 04
WS11	1.7	Clay	Category A	17 05 04
WS11	2.7	Clay	Category A	17 05 04
WS12	0.7	Clay	Category A	17 05 04
WS12	1.7	Clay	Category A	17 05 04
WS12	2.7	Clay	Category A	17 05 04
WS13	0.7	Clay	Category A	17 05 04
WS13	1.7	Sand	Category A	17 05 04
WS13	2.7	Clay	Category A	17 05 04
WS14	0.7	Clay	Category A	17 05 04
WS14	1.7	Clay	Category A	17 05 04
WS14	2.7	Clay	Category A	17 05 04
WS15	0.7	Clay	Category A	17 05 04
WS16	0.7	Clay	Category A	17 05 04
WS17	0.7	Clay	Category A	17 05 04
WS18	0.7	Clay	Category A	17 05 04

11.0 Whole Waste Body Classification (Non-Parametric Statistical Test Limit)

The HazWasteOnLine™ Tool analysis combined with the WAC analysis will deliver a waste classification of an individual sample. The whole waste classification assessment attempts to classify the waste as a whole rather than as individual samples using statistical methods. The assessment highlights limit failures which are not representative of the majority of the results and under most circumstances would be considered as statistical outliers, that is to say that the primary objective is to demonstrate that the waste population being considered is below a specific WAC limit (to a pre-defined level of confidence), primarily by demonstrating that specific limit exceedances are not representative of the whole population.

Waste operators and waste producers might assume that a waste material is within a certain waste classification if any of the individual samples collected from the material exceeds a particular threshold. Alternatively, the waste operator or producer may consider the waste body as a whole and apply statistical analysis such as those set out in Appendix 2 of Environment Agency (2013), *Waste Sampling and Testing for Disposal to Landfill*. The guidance outlines a methodology for a statistical analysis which relates the classification of individual samples to the classification of the waste as a whole.

This method is based on a sample median (50th percentile) and a probabilistic demonstration that:

- At least 95% of samples are within a specific waste category or WAC limit; and
- When the analytical variation is taken into account, average concentrations are within the limit for each substance. For waste acceptance purposes where, statistical techniques are being used, the primary objective is to demonstrate that the waste population being considered is below a specific waste category or WAC limit (to a pre-defined level of confidence), primarily by demonstrating that any limit exceedances are not representative of the whole population.

Where the average waste concentration and the 95th percentile ranked samples, concentration is below a specific waste category or WAC limit, a case could be made that the waste population being considered is acceptable for disposal by landfilling under a specific waste category. In this case the upper metre of material across the site is considered a single waste population which will be removed from the site.

The statistical analysis has been carried out for the samples collected from the upper metre of material sampled across the site.

For the single dissolved organic carbon(DOC) detection greater than the inert WAC in the natural subsoils across the site, the upper 90% confidence values were below the respective inert waste thresholds, and therefore there is 95% confidence that the 50th percentile concentration is below the inert waste threshold for this parameter. The average concentration for DOC was also below the inert WAC threshold.

The natural subsoil sampled across the site can therefore be considered to comply with the inert WAC in terms of DOC.

Following the procedure set out in the guidance the natural subsoils across the site as a whole if excavated in bulk will meet the inert WAC threshold for DOC.

In order to determine whether sufficient samples have been taken to reach this conclusion GII used the guidance and equation in Appendix 1 of the AGS guidance on waste classification⁷. Following procedure set out in the guidance GII concluded that sufficient samples had been taken. A summary of the whole waste classification is presented in Appendix 10.

The acceptance of the material at such a facility is at the discretion of the waste facility operator or the EPA.

12.0 Suitable for Use Assessment

GII assessed the soil data collected from the trial pits against the LQM/CIEH S4ULs for Human Health Risk Assessment (S4ULs)⁸. The S4ULs present soil assessment criteria for an extended range of 89 substances. For each substance, S4ULs have been derived for a range of generic land uses and Soil Organic Matter (%SOM) contents. All toxicological and physical-chemical inputs used in the derivation of the S4ULs are clearly identified and discussed. For each substance, S4ULs have been derived for six generic land uses (including the two Public Open Space land uses defined in C4SL guidance) and a range of Soil Organic Matter contents (organic contaminants only). All toxicological and physical-chemical data inputs used in the derivation of the S4ULs are presented and discussed in the publication. The proposed future use of the site is residential and as such the residential S4UL criteria have been applied to the data. All parameters in the samples analysed were within the residential with homegrown produce S4ULs. A full summary of the S4UL data is presented in Appendix 11.

⁷ AGS – Waste Classification for Soils – A Practitioners Guide (2019).

⁸ LQM/CIEH 'Suitable 4 Use Levels' (S4ULs). Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3746. All rights reserved.

13.0 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 investigations 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.

13.1. Conclusions

13.1.1. Waste Classification

Based on the results of the HazWasteOnLine™ tool the material can be classified as not hazardous.

13.1.2. Waste Categories

The most applicable waste category for each of the samples has been presented in Table 3. Although the sample WS-08 0.7m exceeded the Category A threshold it has been demonstrated that this result is a statistical outlier and that the natural subsoils as a whole satisfy the Category A criteria.

13.1.3. Asbestos

Asbestos was **not** detected in the soil samples.

13.2. S4UL Assessment

All parameters testes were within the residential with homegrown produce S4UL indicating all subsoil material tested is suitable for retention on site.

13.3. Recommendations

13.3.1. Waste Transfer

In the event that material is excavated for removal from site as waste, 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 material on site if excavated as a waste should be removed to the most appropriate facility under the waste categories and LoW codes identified in Table 3. Potential outlets for the various waste categories are presented in Appendix 12, this list is not exhaustive and applicable at the time of the writing this report.

The non-hazardous material across the site if excavated as a waste 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.

14.0 References

Environment Agency (2013). *Waste Sampling and Testing for Disposal to Landfill*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/321207/Sampling_and_testing_of_waste_for_landfill.pdf

Environment Agency (2015). *Technical Guidance WM3 - Guidance on the classification and assessment of waste (1st edition 2015) Technical Guidance WM3*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/427077/LIT_10121.pdf

Environmental Protection Agency (EPA) (2014). Letter to Licences *Re: Waste Classification & Haz Waste On-Line™*. Available at: <https://www.hazwasteonline.com/marketing/media/downloads/EPA%20Waste%20classification%20communication%2020may14.pdf>

Environmental Protection Agency (EPA) (2015). *Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous*. Available at: https://www.epa.ie/pubs/reports/waste/stats/wasteclassification/EPA_Waste_Classification_2015_Web.pdf

Environmental Protection Agency (EPA) (2020). *Guidance on Waste Acceptance Criteria at Authorised Soil Recovery Facilities*. <https://www.epa.ie/pubs/advice/waste/waste/wasteacceptancecriteria.html>

Environmental Protection Agency (EPA) (June 2019). *Guidance on Soil and Stone By-products in the context of article 27 of the European Communities (Waste Directive) Regulations 2011 Version 3*. Available at: https://www.epa.ie/pubs/advice/waste/product/Guidance_on_Soil_and_Stone_By_Product.pdf

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

Nathanial, C.P.; McCaffrey, C.; Gillett, A.G.; Ogden, R.C. & Nathanial, J.F., *The LQM/CIEH S4ULs for Human Health Risk Assessment*, Land Quality Press, Nottingham (2015).

APPENDIX 1 - Figures





- Site Location
- Indicative Site Boundary

Client:



Project Code:

9766-07-20

Project Title:

The Quarter Citywest

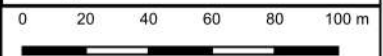
Drawing Title:

Figure 1 Site Location



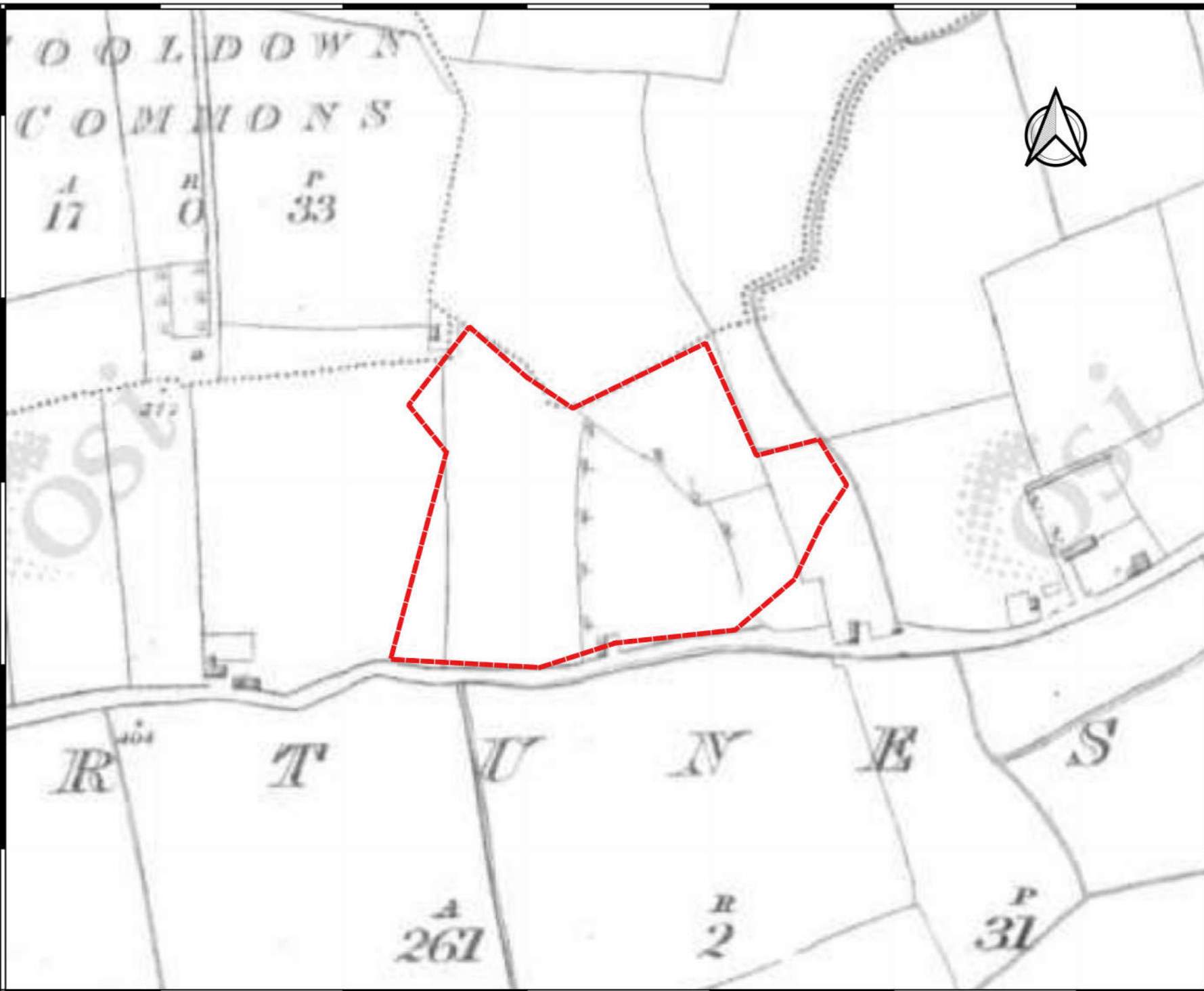
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Hazelhatch Road,
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www.gii.ie 01-6015175/5176



Drawn By:
NM

Date:
02/09/2020



 Indicative Site Boundary

Client:



Project Code:

9766-07-20

Project Title:

The Quarter Citywest

Drawing Title:

Figure 2 OSI 6 Inch Map

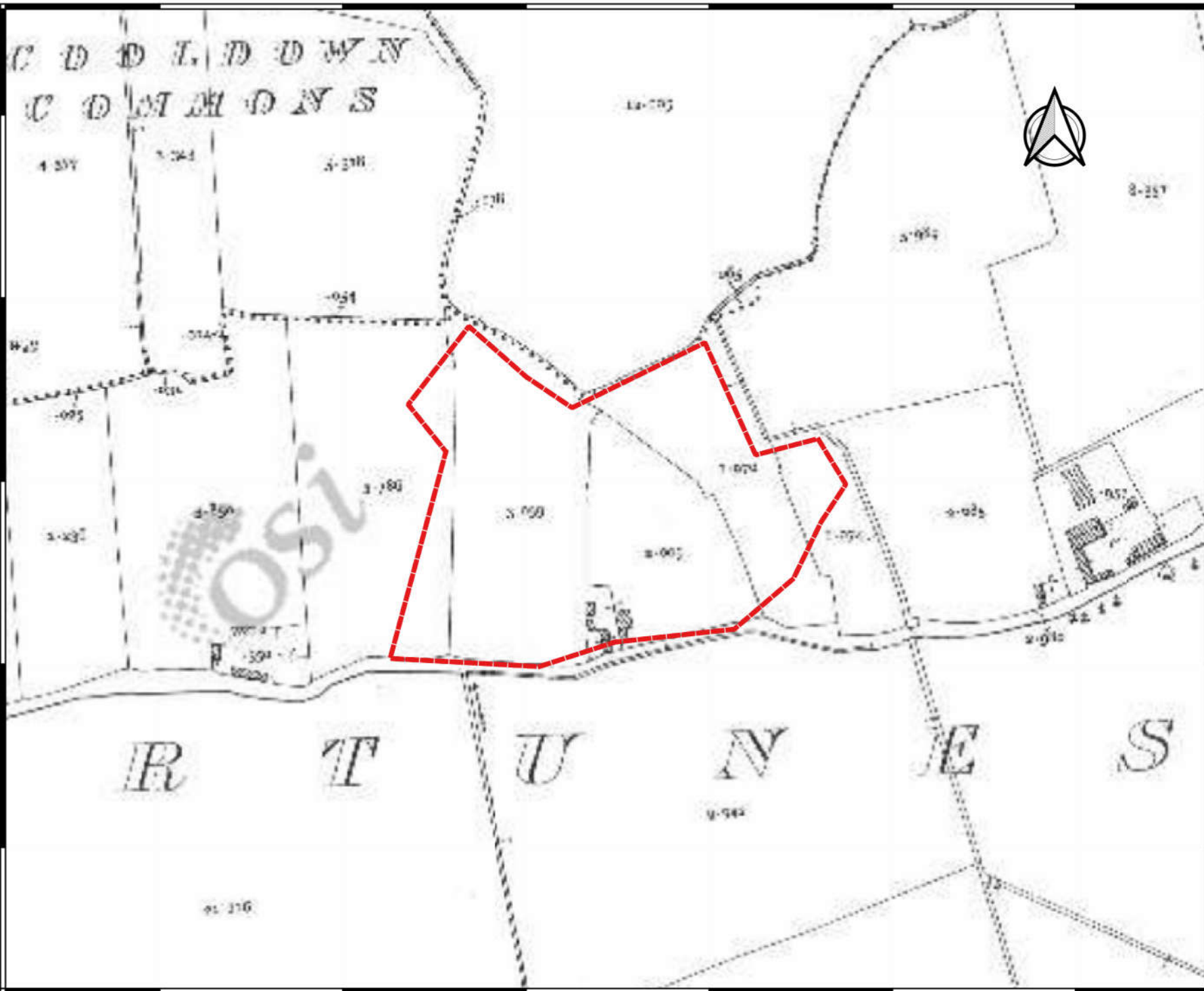


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 Indicative Site Boundary

Client:



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Drawing Title:

Figure 3 OSI 25 Inch Map

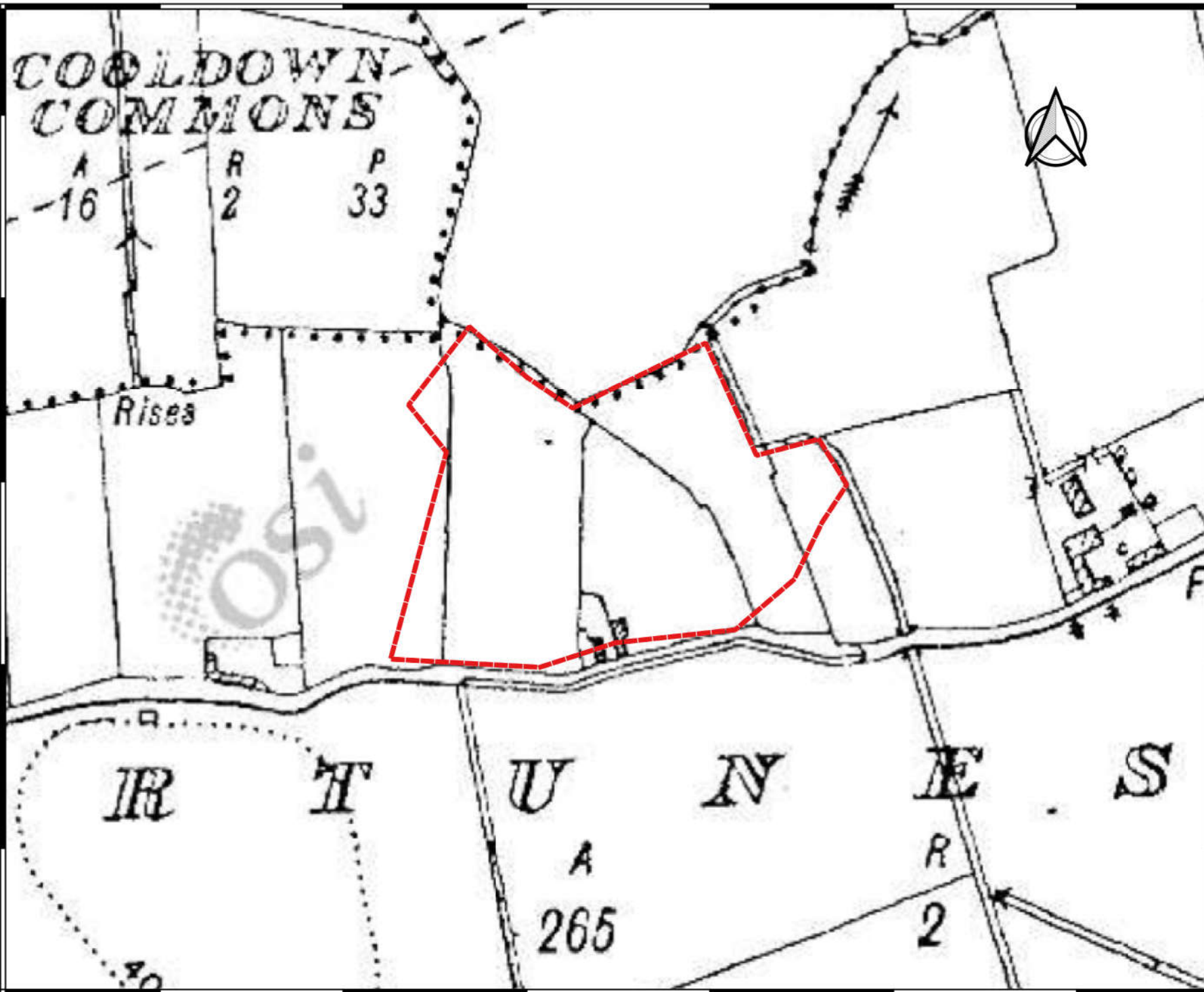


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 Indicative Site Boundary

Client:



Project Code:

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Project Title:

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Drawing Title:

Figure 4 OSI Cassini Map



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Drawn By:
NM

Date:
02/09/2020

704000E

705000E

706000E

728000N

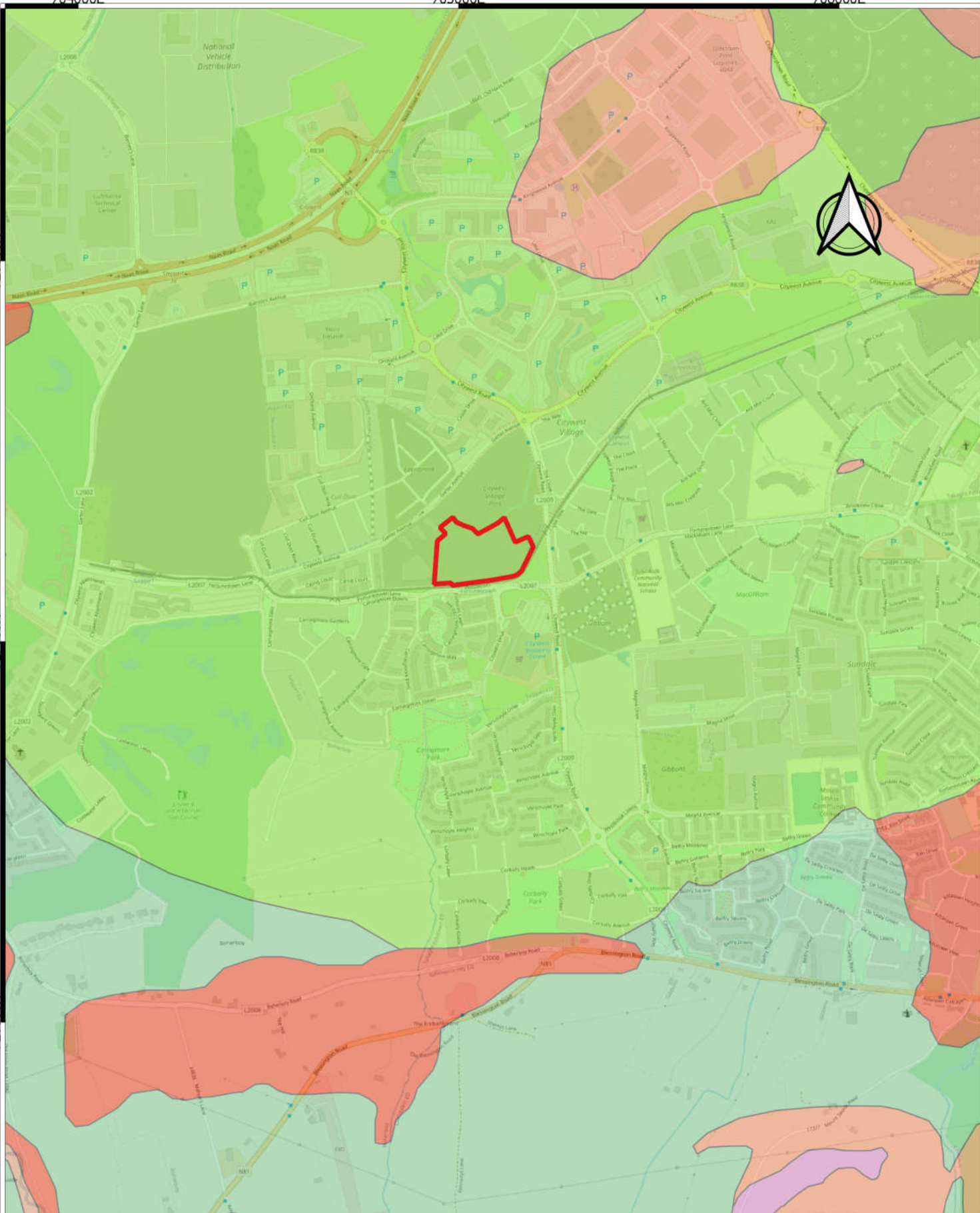
728000N

727000N

727000N

726000N

726000N



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Project Title:
The Quarter Citywest

Drawing Title:
Figure 5 Quaternary Geology

GII Project Reference:
9766-07-20

Drawn By:
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Date:
02/09/2020

Indicative Site Boundary

Subsoils

- A
- GLs
- Rck
- Scree
- TLPSSs
- TLs

704000E

704800E

705600E

728000N

727200N

726400N

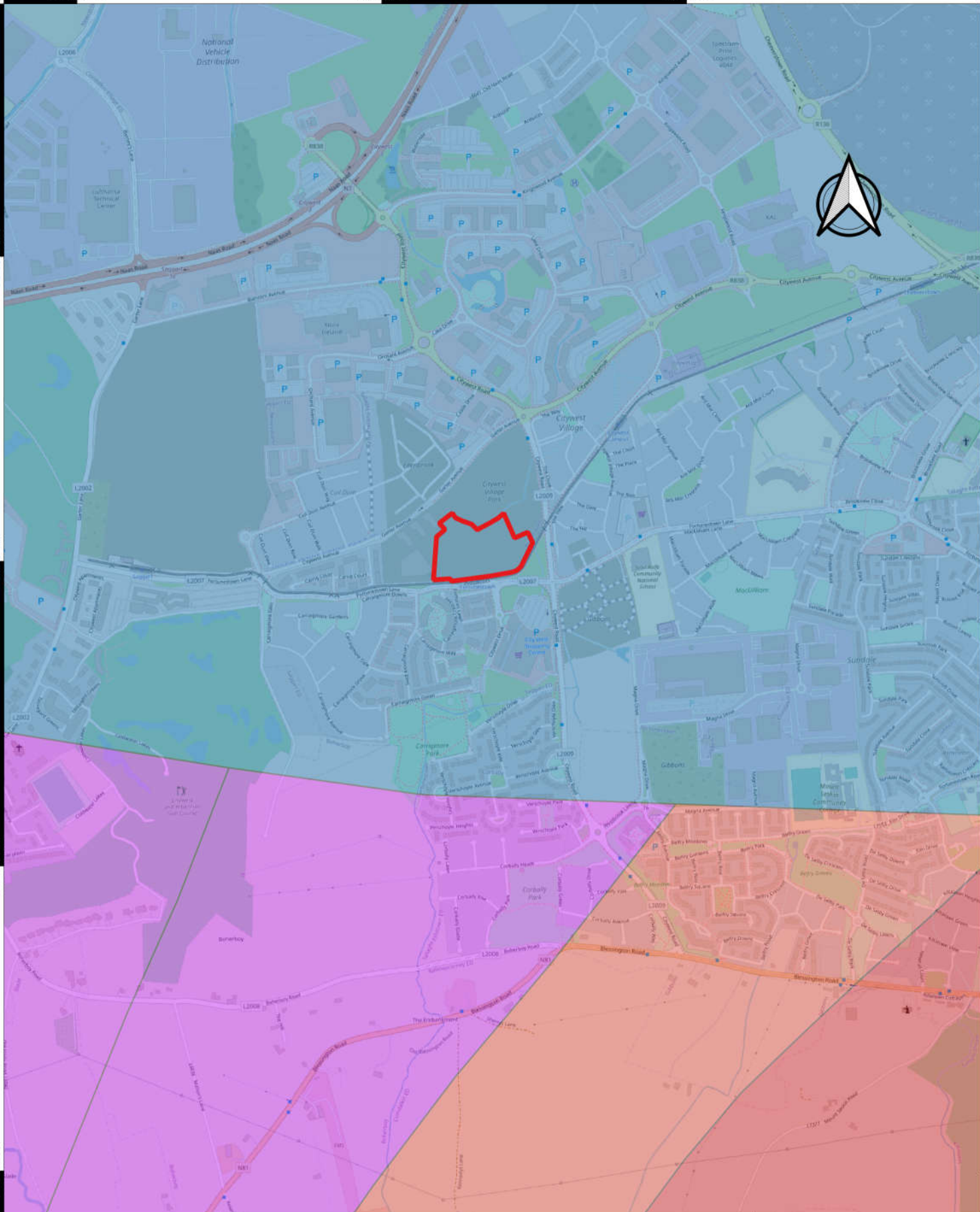
725600N

728000N

727200N

726400N

725600N



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Client:



0 0.1 0.2 0.3 0.4 0.5 km



Project Title:
The Quarter Citywest

Drawing Title:
Figure 6 Bedrock Geology

GII Project Reference:
9766-07-20

Drawn By:
NM


Date:
02/09/2020

 Indicative Site Boundary

 Aghfarrell Formation

 Butter Mountain Formation

 Lucan Formation

 Pollaphuca Formation

703500E

705000E

706500E

729000N

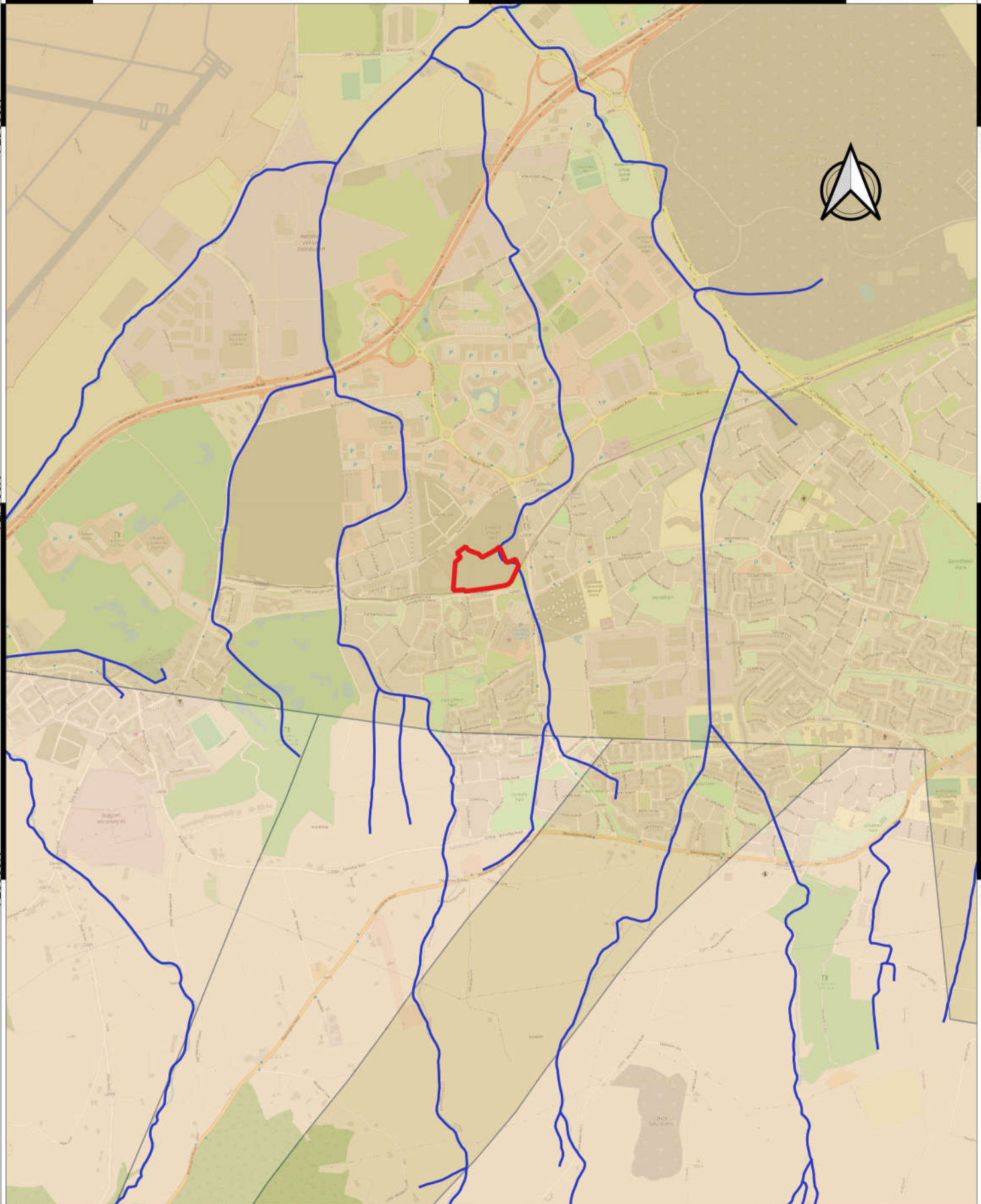
729000N

727500N

727500N

726000N

726000N



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Client:



0 0.25 0.5 0.75 km



Project Title:

The Quarter Citywest

Drawing Title:

Figure 7 Aquifer, River and
Karst Features

GII Project Reference:

9766-07-20

Drawn By:
NM

Date:
02/09/2020

 Indicative Site Boundary

 LI

 PI

 River/Stream

704400E

704800E

705200E

705600E

728000N

728000N

727600N

727600N

727200N

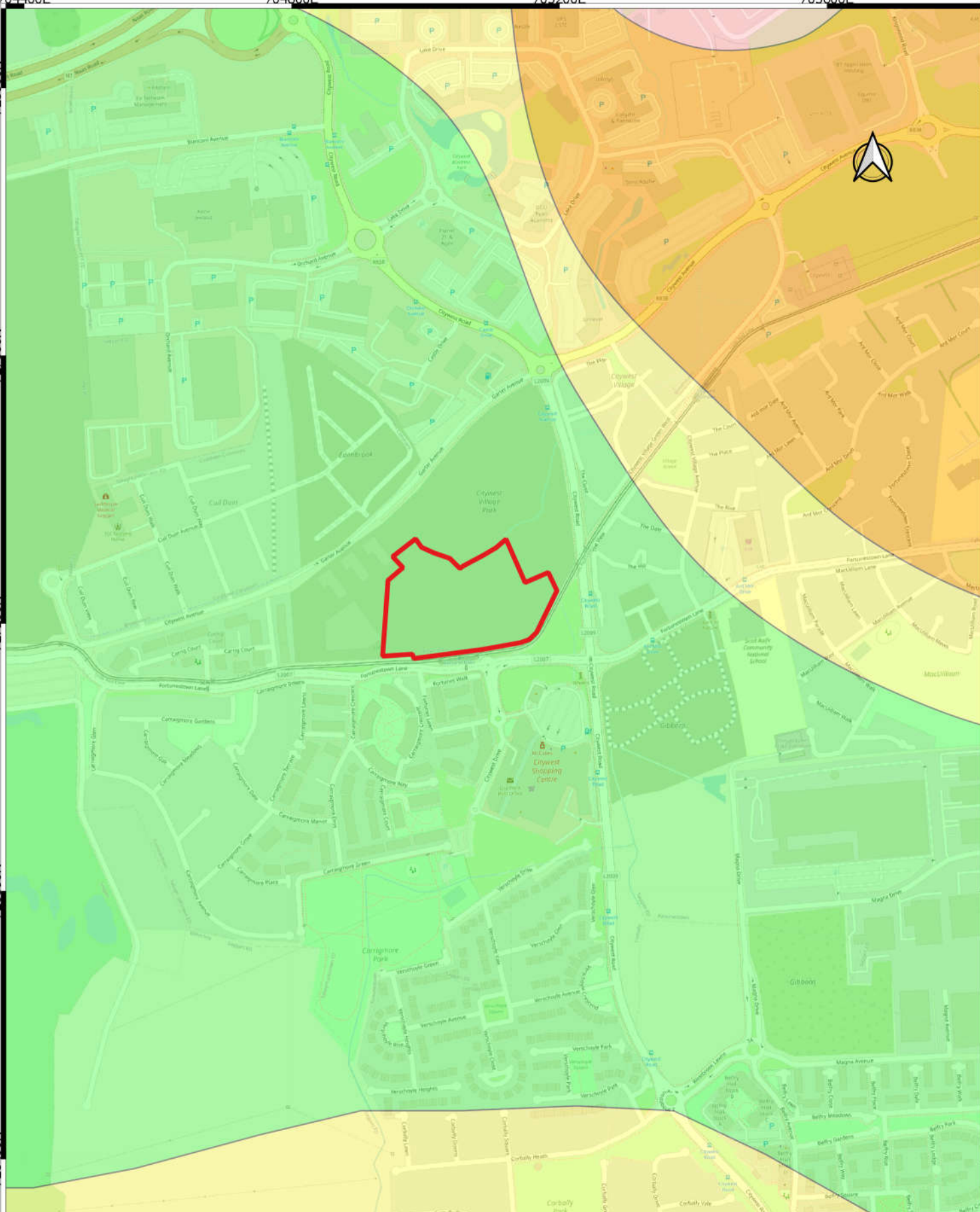
727200N

726800N

726800N

726400N

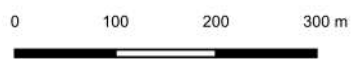
726400N



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Project Title:
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Drawing Title:
Figure 8 Aquifer Vulnerability

GII Project Reference:
9766-07-20

Drawn By:
NM

Date:
02/09/2020

Indicative Site Boundary

Aquifer Vulnerability

- E
- H
- L
- M

693000E

700000E

707000E

714000E

721000E

728000E

749000N

742000N

735000N

728000N

721000N

714000N

707000N

749000N

742000N

735000N

728000N

721000N

714000N

707000N

Rogerstown Estuary SAC

Malahide Estuary SAC

Ireland's Eye SAC

Baldoyle Bay SAC

Rye Water Valley/Cartron SAC

Rye Water Valley/Cartron SAC

Howth Head SAC

North Dublin Bay SAC

South Dublin Bay SAC

Rockabill to Dalkey Island SAC

Glenasmole Valley SAC

Wicklow Mountains SAC

Red Bog, Kildare SAC

Knocksink Wood SAC

Ballyman Glen SAC

Bray Head SAC

Glen Of The Downs SAC

Wicklow Mountains SAC

Carriggower Bog SAC



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Client:



Project Title:
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Drawing Title:
Figure 9 Special Area of Conservation

GII Project Reference:
9766-07-20

Drawn By:
NM

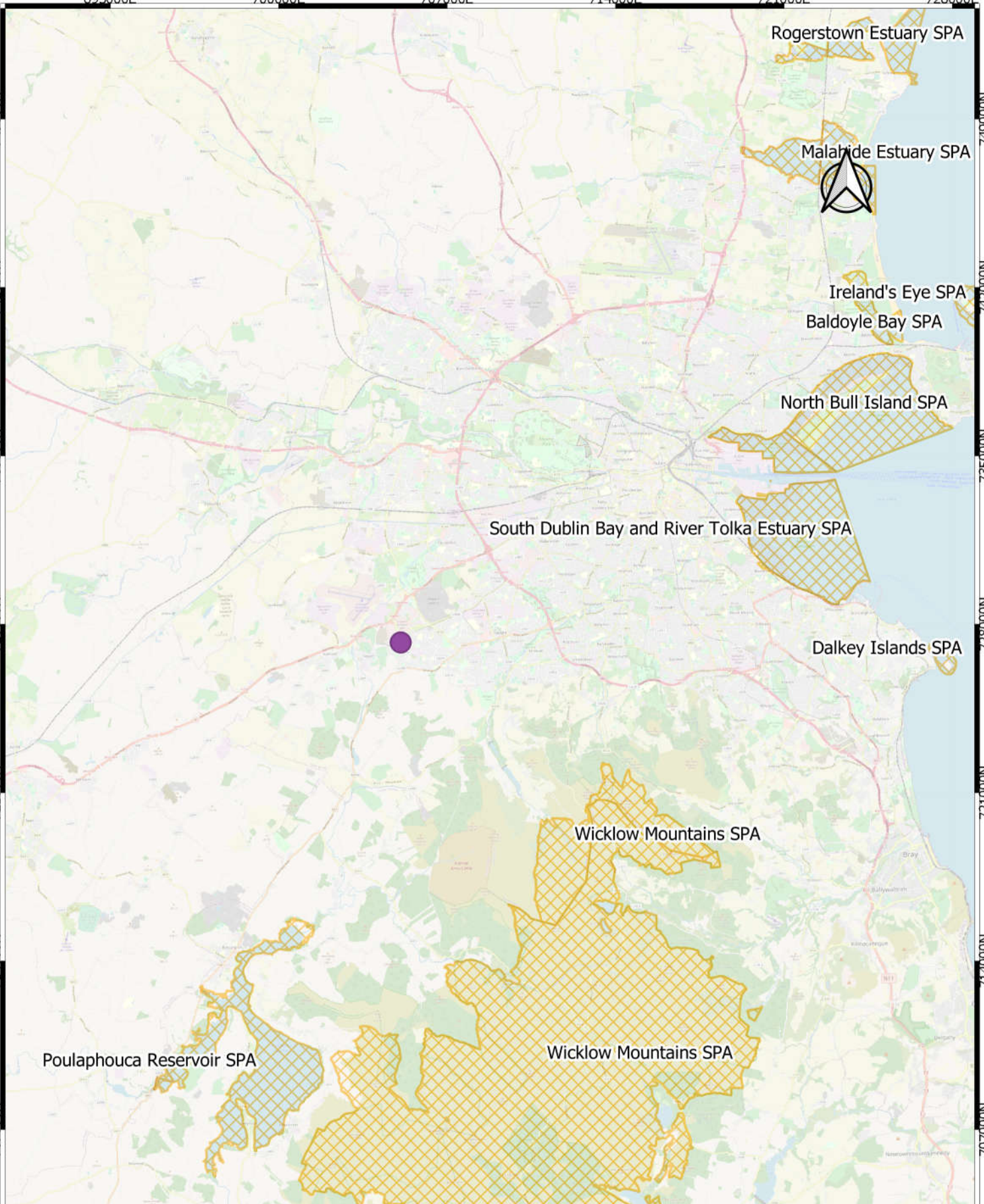
Date:
02/09/2020

- Site Location
- SAC

693000E 700000E 707000E 714000E 721000E 728000E

749000N
742000N
735000N
728000N
721000N
714000N
707000N

749000N
742000N
735000N
728000N
721000N
714000N
707000N



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Project Title:

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Drawing Title:

Figure 10 Special Protected

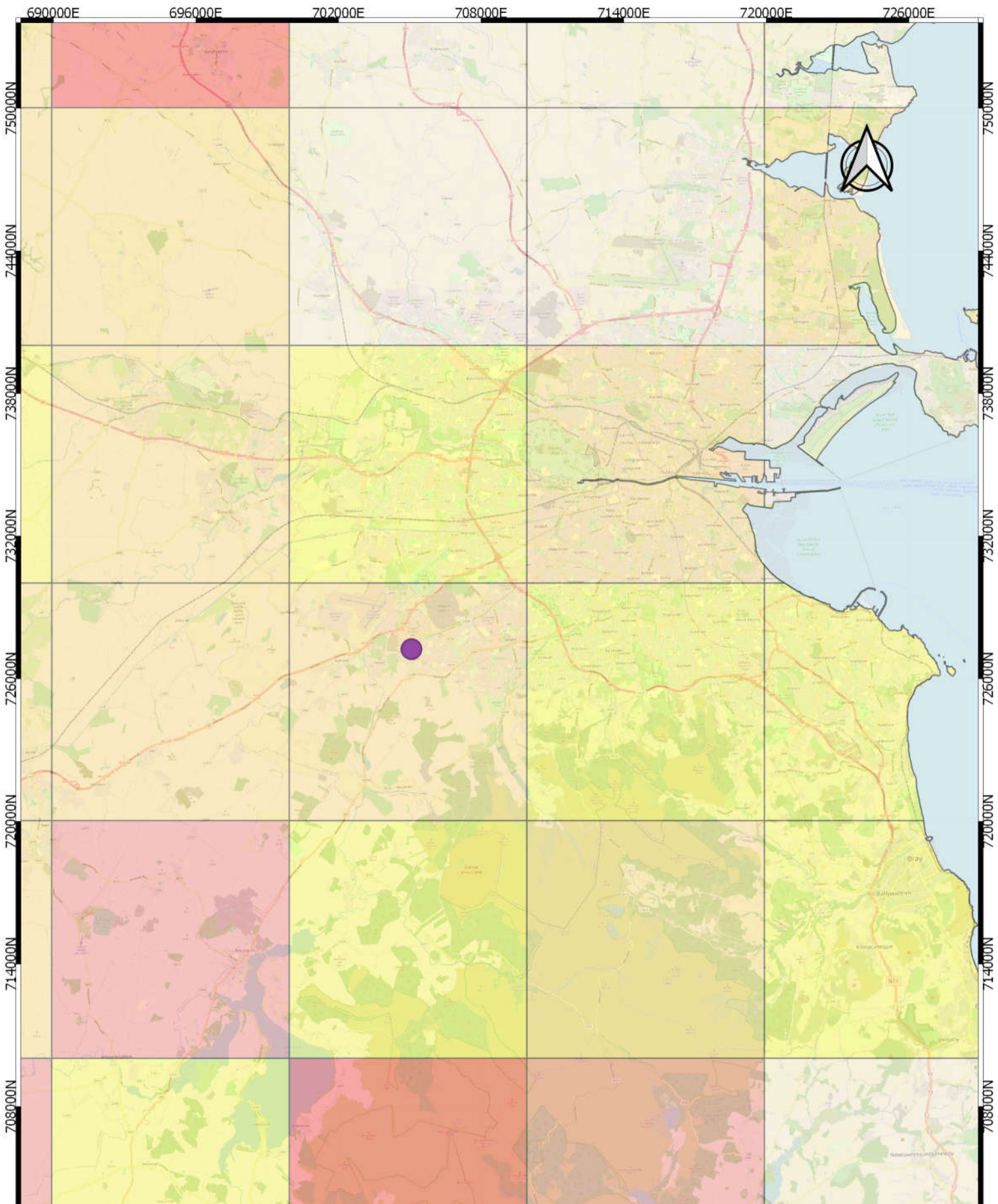
GII Project Reference:

9766-07-20

Drawn By:
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Date:
02/09/2020

-  Site Location
-  SPA



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Client:



Project Title:

The Quarter Citywest

Drawing Title:

Figure 11 Radon

GII Project Reference:

9766-07-20

Drawn By:
NM

Date:
02/09/2020

● Site Location

Radon

- <1%
- 1% - 5%
- 5% - 10%
- 10% - 20%
- >20%

704900E 704950E 705000E 705050E 705100E 705150E 705200E

727350N

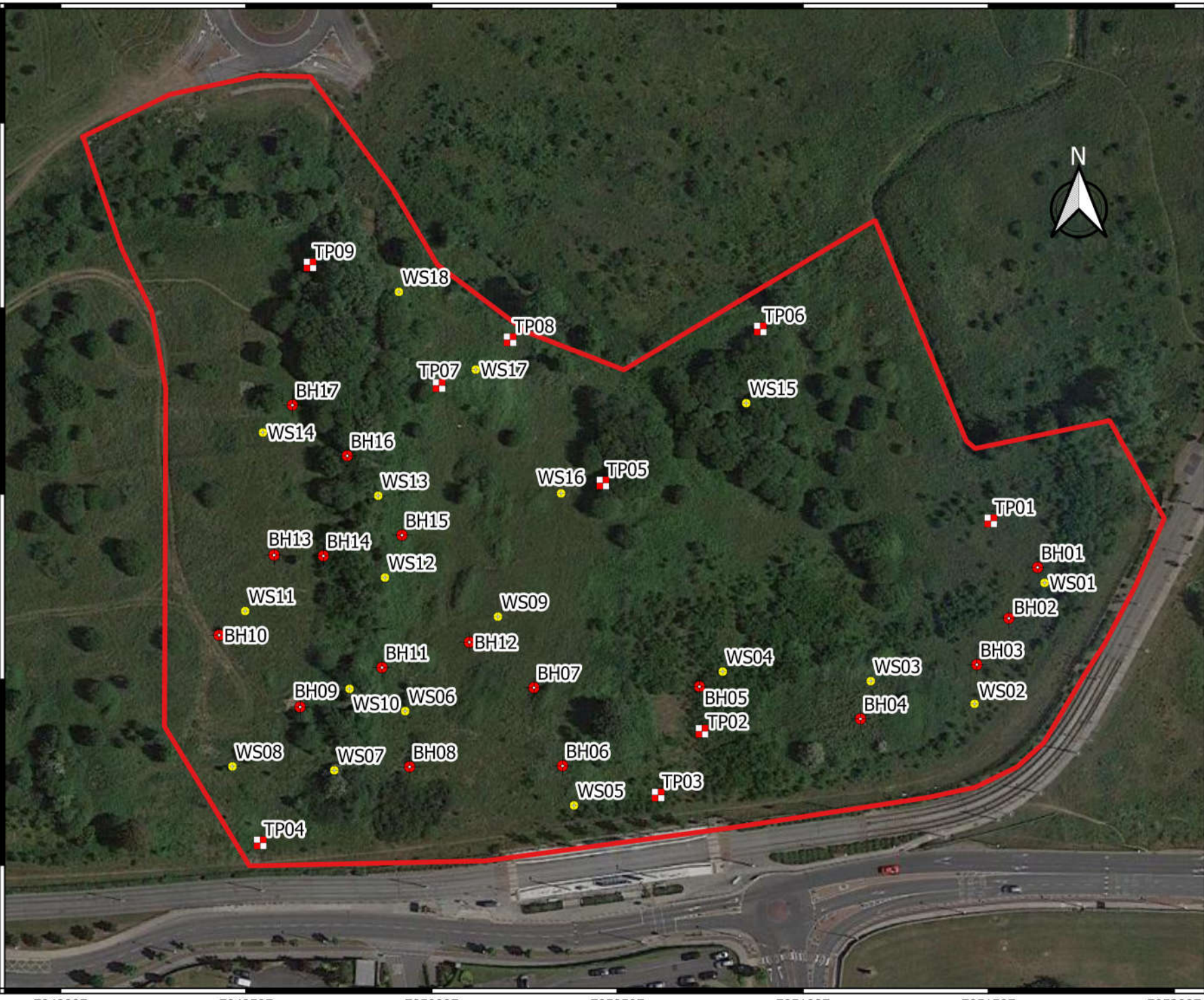
727300N

727250N

727200N

727150N

704900E 704950E 705000E 705050E 705100E 705150E 705200E



-  Indicative Site Boundary
-  CP RC Borehole
-  Trial Pit
-  Window Sample

Client:



Project Code:
9766-07-20

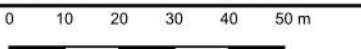
Project Title:
The Quarter Citywest,
Cooldown Commons Phase 3

Drawing Title:
Figure 12 SI Points



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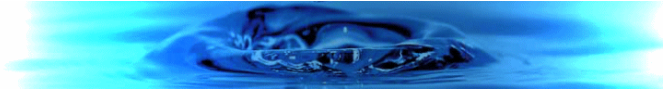


Drawn By:
J McDowell

Date:
12/11/2020

APPENDIX 2 – Water Body Reports





Chemical and Quantitative Status Report

Water Management Unit: N/A

WaterBody Category: Groundwater Waterbody

WaterBody Name: Dublin Urban

WaterBody Code: IE_EA_G_005

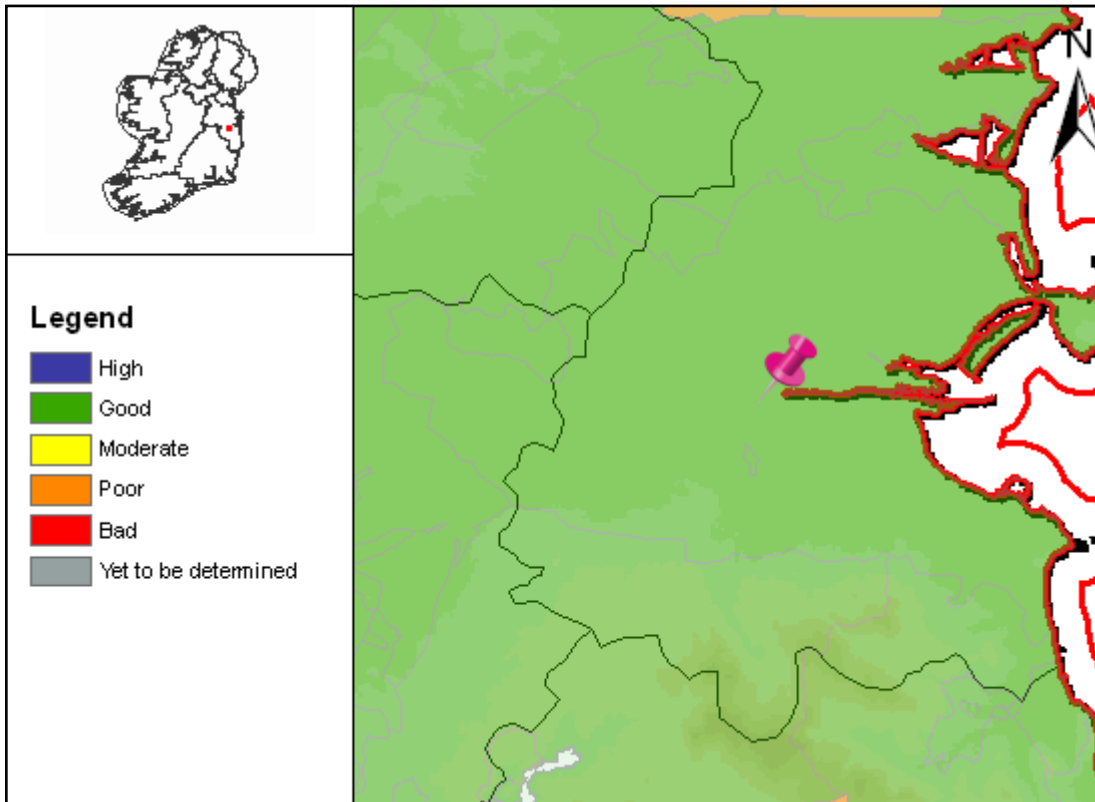
Overall Status Result: Good

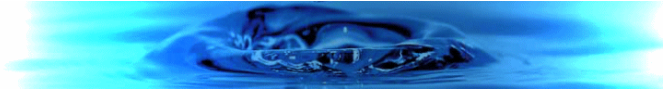
Heavily Modified: No



Report data based upon final RBMP, 2009-2015.

The information provided above is a summary of the principal findings related to the selected waterbody. Further details and explanation of individual elements of the report are outlined in the following pages.





Chemical and Quantitative Status Report

Water Management Unit: N/A
WaterBody Category: Groundwater Waterbody
WaterBody Name: Dublin Urban
WaterBody Code: IE_EA_G_005
Overall Status Result: Good
Heavily Modified: No

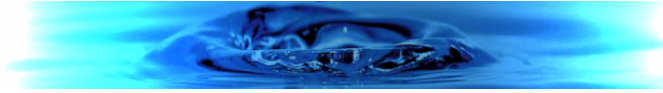


Report data based upon final RBMP, 2009-2015.

Status Element Description		Result
Status information		
INS	Status associated with saline intrusion into groundwater	N/A
DWS	Status associated with exceedances of water quality above specific standards	N/A
DS	Chemical status of groundwater due to pressure from diffuse sources of pollution	N/A
CLS	Chemical status of groundwater due to pressure from contaminated soil or land.	N/A
MS	Chemical status of groundwater due to pressure from mine sites (active or closed).	N/A
UAS	Chemical status of groundwater due to pressures from urban areas	N/A
GWS	General groundwater quality status	N/A
RPS	Status associated with MRP loading to rivers	N/A
TNS	Status associated with nitrate loading to transitional and coastal waters	N/A
SWS	Overall status associated with nutrient loadings to rivers and transitional and coastal waters	N/A
SQS	Status associated with dependant surface water quantitative status	N/A
GDS	Groundwater dependant terrestrial ecosystems status	N/A
QSO	Quantitative status overall	Good
CSO	Chemical status overall	Good
OS	Overall status	Good

water matters

'Our Plan'



GS -HC : Good status High Confidence

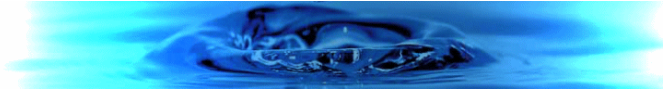
GS- LC : Good status Low Confidence

n/a - not assessed

Status

By 'Status' we mean the condition of the water in the waterbody. It is defined by its chemical status and quantitative status, whichever is worse. Groundwaters are ranked in one of 2 status classes: Good or Poor.

You can read more about status and how it is measured in our RBMP Document Library at www.wfdireland.ie (Directory 15 Status).



Status Report

Water Management Unit: IE_EA_Camnock

WaterBody Category: River Waterbody

WaterBody Name: Camac Upper

WaterBody Code: IE_EA_09_12

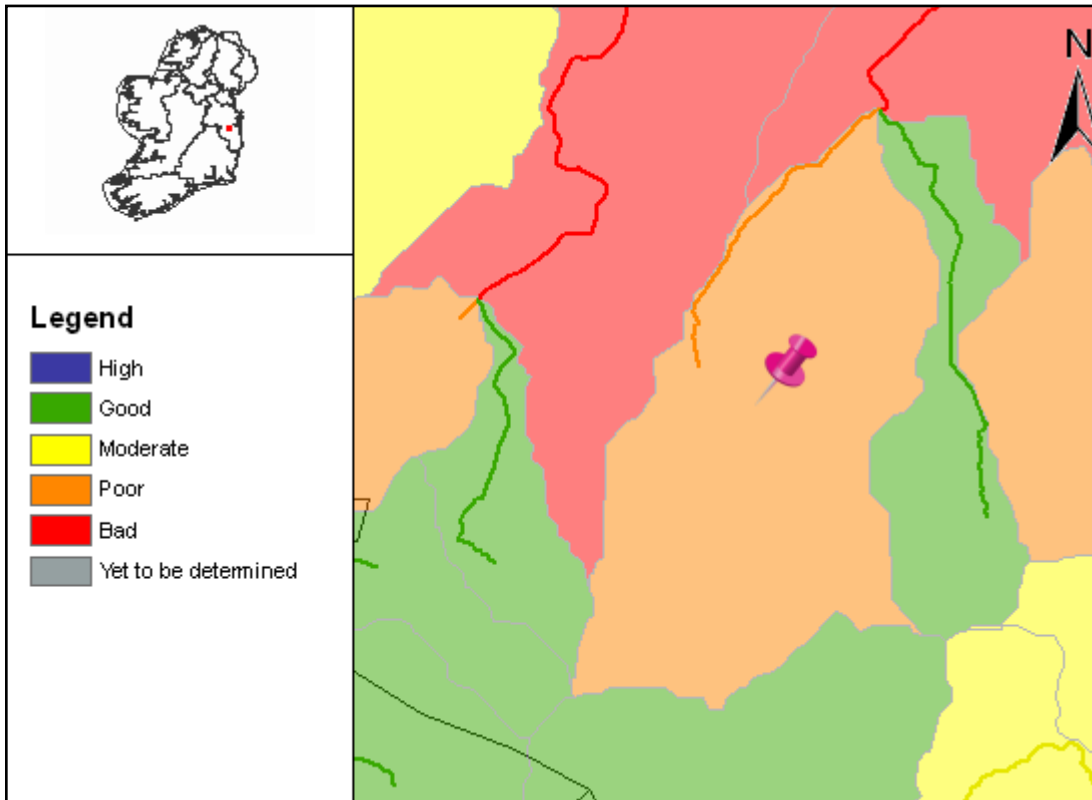
Overall Status Result: Poor

Heavily Modified: No



Report data based upon final RBMP, 2009-2015.

The information provided above is a summary of the principal findings related to the selected waterbody. Further details and explanation of individual elements of the report are outlined in the following pages.





Status Report

Water Management Unit: IE_EA_Camnock
WaterBody Category: River Waterbody
WaterBody Name: Camac Upper
WaterBody Code: IE_EA_09_12
Overall Status Result: Poor
Heavily Modified: No



Report data based upon final RBMP, 2009-2015.

Status Element Description		Result
Status information		
Q	Macroinvertebrate status	Poor
PC	General physico-chemical status	Good
FPQ	Freshwater Pearl Mussel / Macroinvertebrate status	N/A
DIA	Diatoms status	N/A
HYM	Hydromorphology status	N/A
FIS	Fish status	N/A
SP	Specific Pollutants status (SP)	N/A
ES	Overall ecological status	Poor
CS	Overall chemical status (PAS)	n/a
EXT	Extrapolated status	N/A
MON	Monitored water body	YES
DON	Donor water bodies	N/A

n/a - not assessed

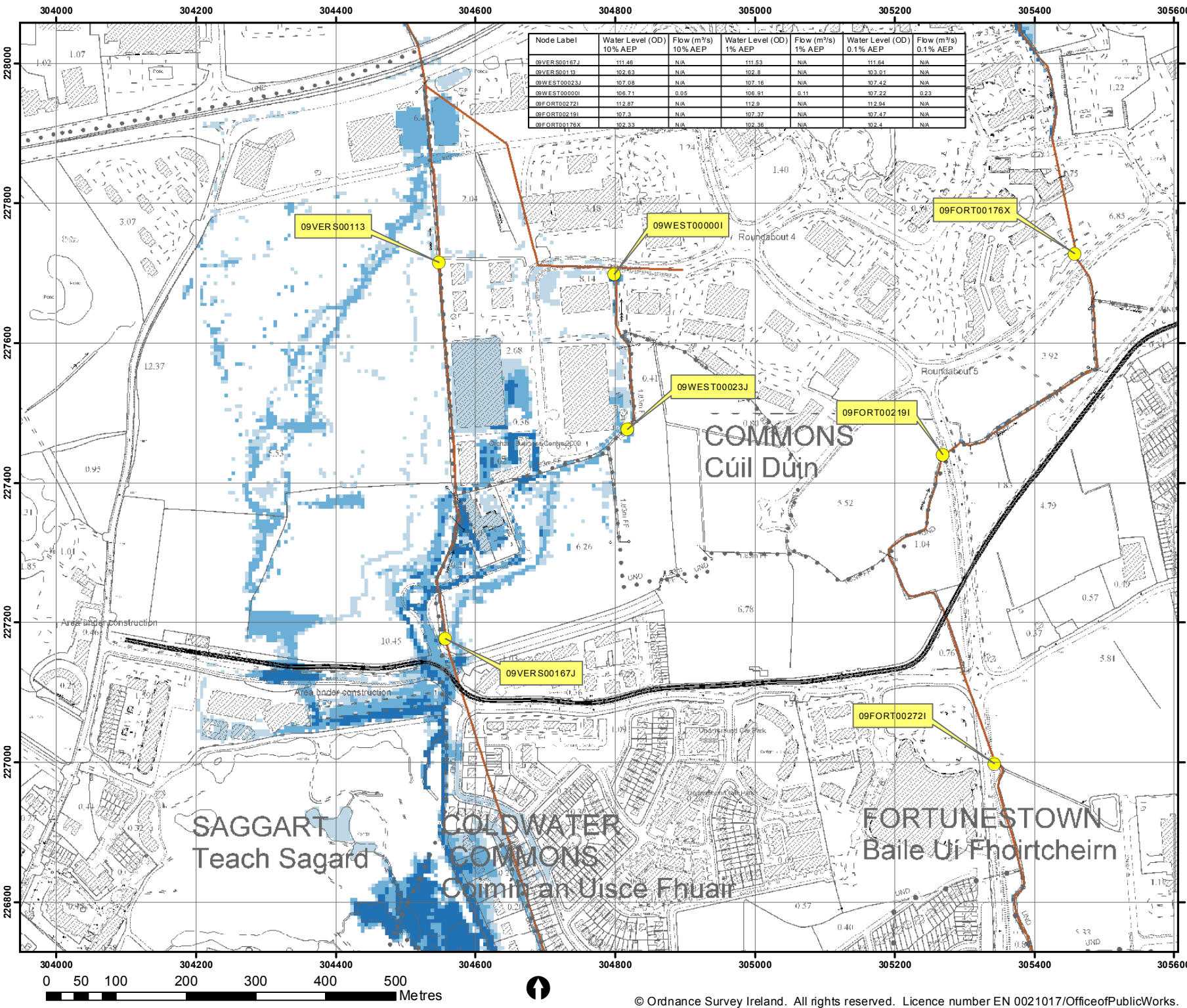
Status

By 'Status' we mean the condition of the water in the waterbody. It is defined by its chemical status and its ecological status, whichever is worse. Waters are ranked in one of 5 status classes: High, Good, Moderate, Poor, Bad. However, not all waterbodies have been monitored, and in such cases the status of a similar nearby waterbody has been used (extrapolated) to assign status. If this has been done the first line of the status report shows the code of the waterbody used to extrapolate.

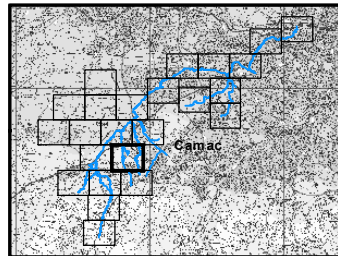
You can read more about status and how it is measured in our RBMP Document Library at www.wfdireland.ie (Directory 15 Status).

APPENDIX 3 – Flood Maps





Node Label	Water Level (OD) 10% AEP	Flow (m³/s) 10% AEP	Water Level (OD) 1% AEP	Flow (m³/s) 1% AEP	Water Level (OD) 0.1% AEP	Flow (m³/s) 0.1% AEP
09VER00167J	111.46	N/A	111.53	N/A	111.64	N/A
09VER00113	102.83	N/A	102.8	N/A	103.01	N/A
09WEST00023J	107.08	N/A	107.16	N/A	107.42	N/A
09WEST000001	106.71	0.05	106.91	0.11	107.22	0.23
09FORS00272I	112.87	N/A	112.9	N/A	112.94	N/A
09FORS00219I	107.3	N/A	107.37	N/A	107.47	N/A
09FORS00176X	102.33	N/A	102.36	N/A	102.4	N/A



IMPORTANT USER NOTE:
THE VIEWER OF THIS MAP SHOULD REFER TO THE DISCLAIMER, GUIDANCE NOTES AND CONDITIONS OF USE THAT ACCOMPANY THIS MAP.

- Legend**
- 10% Fluvial AEP Event
 - 1% Fluvial AEP Event
 - 0.1% Fluvial AEP Event
 - Modelled River Centreline
 - AFA Extents
 - Embankment
 - Wall
 - Defended Area
 - 1% AEP Standard of Protection of Flood Defence (Walls / Embankments)
 - 1% AEP Standard of Protection of Flood Defence (Walls / Embankments)
 - Node Point
 - Node Label

FINAL

REV: 01	NOTES: SOP label updated (Pg 2) Removal of Def. Area (Pg 21)	DATE: 13/11/2017
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Map:
Camac Fluvial Flood Extents

Map Type: EXTENT
Source: FLUVIAL
Map Area: HPW
Scenario: CURRENT
Drawn By: C.McG. Date: 13 November 2017
Checked By: A.S. Date: 13 November 2017
Approved By: S.P. Date: 13 November 2017
Drawing No.: E09CAM_EXFCD_F1_07
Map Series: Page 7 of 24
Drawing Scale: 1:5,000 @A3

APPENDIX 4 – Window Sample Records





Machine : Tecop 10	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 111.88	Client DBFL	Job Number 9766-07-20
Method : Drive-in Windowless Sampler	Location (dGPS) 705165.1 E 727226 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						TOPSOIL		
0.50	B			111.58	0.30	Firm brown mottled grey slightly sandy slightly gravelly CLAY with occasional subangular cobbles		
0.70	EN			110.88	1.00	Firm brown mottled grey slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
1.50	B			110.08	1.80	Firm dark grey slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
1.70	EN			108.88	3.00	Complete at 3.00m		
2.50	B							

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 90% Recovery 2.00m-3.00m BGL: 100% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS01	



Machine : Tecop 10	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 112.61	Client DBFL	Job Number 9766-07-20
Method : Drive-in Windowless Sampler	Location (dGPS) 705146.2 E 727193.4 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						TOPSOIL		
0.50	B			112.31	(0.30)	Firm to stiff brown mottled grey slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
0.70	EN				(1.20)			
1.50	B			111.11	1.50	Firm brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.70	EN				(0.60)			
				110.51	2.10	Stiff brown sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
					(0.40)			
2.50	B			110.11	2.50	Medium dense dark greyish brown clayey gravelly fine to coarse SAND. Gravel is fine to coarse, angular to subangular		
					(0.50)			
				109.61	3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 85% Recovery 1.00m-2.00m BGL: 95% Recovery 2.00m-3.00m BGL: 65% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:25	AB
	Figure No. 9766-07-20.WS02	



Machine : Tecop 10 Method : Drive-in Windowless Sampler	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 112.77	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705118.3 E 727199.5 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			112.37	0.40	Fill: Dark grey slightly clayey sandy fine to coarse angular to subangular GRAVEL (Crushed Rock Fill)		
0.70	EN			111.87	0.90	Firm to stiff brown slightly sandy slightly gravelly CLAY with occasional subangular cobbles		
1.50	B			111.27	1.50	Firm greyish brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.70	EN				(1.50)	Medium dense brown clayey gravelly fine to coarse SAND with gravelly lenses. gravel is fine to coarse, angular to subangular		
2.50	B			109.77	3.00	2.00m-3.00m BGL: Poor recovery		
						Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 65% Recovery 2.00m-3.00m BGL: 30% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS03	



Machine : Tecop 10	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 112.80	Client DBFL	Job Number 9766-07-20
Method : Drive-in Windowless Sampler	Location 705078.4 E 727202.1 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			112.50	(0.30)	MADE GROUND: Brown/black sandy gravelly Clay with charcoal and concrete fragments. Gravel is fine to coarse, angular to subangular		
0.70	EN			112.10	(0.40)	Soft brown slightly sandy slightly gravelly CLAY		
1.50	B			111.80	(0.30)	Soft to firm brown mottled grey slightly sandy slightly gravelly CLAY		
1.70	EN			111.80	1.00	Soft to firm brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
2.50	B			110.80	(0.60)	Soft brown slightly sandy slightly gravelly CLAY		
				110.20	(0.40)	Firm to stiff dark brownish grey slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
				109.80	3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 70% Recovery 2.00m-3.00m BGL: 85% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS04	



Machine : Tecop 10		Dimensions 88mm to 2.00m 68mm to 3.00m		Ground Level (mOD) 113.88		Client DBFL		Job Number 9766-07-20	
Method : Drive-in Windowless Sampler		Location 705038.3 E 727166.1 N		Dates 28/07/2020		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			113.48	0.40	Soft to firm reddish brown slightly sandy slightly gravelly CLAY (Possible Made ground)		
0.70	EN				(0.60)	Firm to stiff brown slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
1.50	B			112.88	1.00	Soft to firm light brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.70	EN				(1.50)			
2.50	B			111.38	2.50	Firm to stiff brownish grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
2.70	EN				(0.50)			
				110.88	3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 75% Recovery 2.00m-3.00m BGL: 80% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:25	AB
Figure No. 9766-07-20.WS05		



Machine : Tecop 10 Method : Drive-in Windowless Sampler	Dimensions 88mm to 2.00m	Ground Level (mOD) 113.56	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704992.8 E 727191.4 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B				(1.00)	Firm brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
0.70	EN			112.56	1.00	Firm brown mottled grey slightly sandy gravelly CLAY with many subangular cobbles Gravel is fine to coarse, angular to subangular		
1.70	EN			111.56	2.00	1.00m-2.00m BGL: Poor recovery due to cobble		
						Complete at 2.00m		

Remarks 0.00m-1.00m BGL: 95% Recovery 1.00-2.00m BGL: 30% Recovery Refusal at 2.00m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS06	



Machine : Tecop 10	Dimensions 88mm to 2.00m 68mm to 2.80m	Ground Level (mOD) 114.70	Client DBFL	Job Number 9766-07-20
Method : Drive-in Windowless Sampler	Location (dGPS) 704973.7 E 727175.5 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B				(0.90)	Firm to stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
0.70	EN			113.80	0.90	Firm greyish brown slightly gravelly sandy CLAY with occasional subangular cobbles		
1.50	B			113.20	1.50	Stiff brown slightly sandy gravelly CLAY with some subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.70	EN				(1.30)			
2.50	B							
2.70	EN			111.90	2.80	Complete at 2.80m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 90% Recovery 2.00m-2.80m BGL: 100% Recovery Refusal at 2.80m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:25	AB
Figure No. 9766-07-20.WS07		



Machine : Tecop 10		Dimensions 88mm to 2.00m 68mm to 3.00m		Ground Level (mOD) 115.58		Client DBFL		Job Number 9766-07-20	
Method : Drive-in Windowless Sampler		Location (dGPS) 704946.3 E 727176.6 N		Dates 28/07/2020		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			115.38	(0.20) 0.20	MADE GROUND: Greyish brown slightly gravelly sandy Clay with plastic		
0.70	EN			114.68	(0.70) 0.90	(Possible made ground) Firm to stiff brown slightly sandy gravelly CLAY with organic matter and occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.50	B			114.18	(0.20) 1.40	Soft to firm light brown slightly sandy gravelly CLAY with occasional rootlets. Gravel is fine to coarse, angular to subangular		
1.70	EN			113.98	(0.40) 1.60	Firm brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
2.70	EN			113.58	(1.00) 2.00	Soft to firm greyish brown slightly sandy gravelly CLAY with rootlets		
				112.58	(1.00) 3.00	2.00m-3.00m BGL: Poor recovery		
						Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 70% Recovery 2.00m-3.00m BGL: 25% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:25	AB
Figure No. 9766-07-20.WS08		



Machine : Tecop 10		Dimensions 88mm to 2.00m 68mm to 3.00m		Ground Level (mOD)		Client DBFL		Job Number 9766-07-20	
Method : Drive-in Windowless Sampler		Location		Dates 28/07/2020		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B				(0.30)	Soft to firm greyish brown slightly sandy slightly gravelly CLAY with occasional rootlets (Possible Made Ground)		
0.70	EN				0.30 (0.30)	Firm to stiff reddish brown slightly sandy slightly gravelly CLAY		
1.50	B				0.60 (0.60)	Soft to firm greyish brown slightly sandy slightly gravelly CLAY with occasional subrounded cobbles		
1.70	EN				1.20 (0.70)	Soft grey mottled brown slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
2.50	B				1.90 (1.10)	Firm brown slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
2.70	EN				3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 90% Recovery 2.00m-3.00m BGL: 60% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:25	AB
Figure No. 9766-07-20.WS09		



Machine : Tecop 10 Method : Drive-in Windowless Sampler	Dimensions 88mm to 1.30m	Ground Level (mOD) 113.90	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704977.8 E 727197.4 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			113.55	0.35	MADE GROUND: Greyish brown slightly gravelly sandy CLAY with occasional rootlets		
0.70	EN			113.10	0.80	Soft to firm dark brown slightly sandy slightly gravelly CLAY with organic matter		
1.30	B			112.60	1.30	Firm to stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
						Complete at 1.30m		

Remarks 0.00m-1.00m BGL: 90% Recovery 1.00m-1.30m BGL: 100% Recovery Refusal at 1.30m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS10	



Machine : Tecop 10		Dimensions 88mm to 2.00m 68mm to 2.80m		Ground Level (mOD) 113.86		Client DBFL		Job Number 9766-07-20	
Method : Drive-in Windowless Sampler		Location (dGPS) 704949.7 E 727218.4 N		Dates 28/07/2020		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			113.71	(0.15) 0.15	Greyish brown slightly sandy slightly gravelly CLAY with organic matter (Possible Made Ground)		
0.70	EN				(0.85)	Stiff brown slightly sandy slightly gravelly CLAY		
1.50	B			112.86	1.00	Firm to stiff brown sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
1.70	EN			112.46	1.40	Stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
2.70	EN			111.06	2.80	2.00m-2.80m BGL: Poor Recovery Complete at 2.80m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 90% Recovery 2.00m-2.80m BGL: 25% Recovery Refusal at 2.80m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS11	



Machine : Tecop 10	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 112.74	Client DBFL	Job Number 9766-07-20
Method : Drive-in Windowless Sampler	Location (dGPS) 704987.4 E 727227.4 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						FILL: Brown slightly clayey sandy fine to coarse angular to subangular GRAVEL (Crushed Rock Fill)		
0.50	B			112.44	0.30	Stiff brown slightly sandy slightly gravelly CLAY with some subangular cobbles		
0.70	EN				(0.90)			
1.50	B			111.54	1.20	Stiff brown slightly sandy very gravelly CLAY with some subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.70	EN				(0.80)			
2.50	B			110.74	2.00	Stiff brown sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
2.70	EN				(1.00)			
				109.74	3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 90% Recovery 1.00m-2.00m BGL: 70% Recovery 2.00m-3.00m BGL: 95% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS12	



Machine : Tecop 10 Method : Drive-in Windowless Sampler	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 111.81	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704985.6 E 727249.4 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			111.77	0.04	MADE GROUND: Brownish grey slightly sandy slightly gravelly Clay		
				111.76	0.05 (0.20)			
				111.56	0.25	GEOTEXTILE		
						Stiff brown slightly sandy slightly gravelly CLAY		
0.70	EN				(0.80)	Firm to stiff greyish brown slightly sandy gravelly CLAY with some subangular cobbles. Gravel is fine to coarse, angular to subangular		
				110.76	1.05 (0.25)	Firm brown slightly sandy gravelly CLAY with some subangular cobbles		
1.50	B			110.51	1.30	Medium dense brown slightly clayey gravelly fine to coarse SAND with occasional cobbles. Gravel is fine to coarse, angular to subangular		
1.70	EN				(1.00)			
2.50	B			109.51	2.30	Medium dense brown sandy very gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
2.70	EN				(0.70)			
				108.81	3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 85% Recovery 1.00m-2.00m BGL: 55% Recovery 2.00m-3.00m BGL: 45% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:25	AB
Figure No. 9766-07-20.WS13		



Machine : Tecop 10 Method : Drive-in Windowless Sampler	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 112.69	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704954.4 E 727266.5 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			112.09	(0.60)	Fill: Brown sandy fine to coarse angular to subangular Gravel with occasional angular cobbles (Crushed Rock Fill)		
0.70	EN			111.49	(0.60)	Stiff brown slightly sandy slightly gravelly CLAY with occasional rootlets		
1.50	B			110.99	(0.50)	Stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.70	EN			110.29	(0.70)	Medium dense brown clayey sandy fine to coarse angular to subangular GRAVEL with occasional subangular cobbles		
2.50	B			109.69	(0.60)	Stiff brown sandy gravelly CLAY with occasional sand lenses		
2.70	EN					Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 85% Recovery 2.00m-3.00m BGL: 80% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS14	



Machine : Tecop 10 Method : Drive-in Windowless Sampler	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 111.17	Client DBFL	Job Number 9766-07-20
	Location 705082.3 E 727277.2 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				111.07	(0.10) 0.10	FILL: Grey slightly clayey sandy fine to coarse angular to subangular GRAVEL with occasional angular cobbles (Crushed Rock Fill)		
0.50	B			110.67	(0.40) 0.50	Soft to firm brown slightly sandy slightly gravelly CLAY with occasional rootlets		
0.70	EN					Firm to stiff grey mottled brown slightly sandy gravelly CLAY with occasional rootlets. Gravel is fine to coarse, angular to subangular		
					(1.00)			
1.50	B			109.67	1.50	Firm grey mottled brown sandy gravelly CLAY with occasional rootlets. Gravel is fine to coarse, angular to subangular		
					(0.60)			
				109.07	2.10	Stiff dark brownish grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
2.50	B				(0.90)			
				108.17	3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 90% Recovery 1.00m-2.00m BGL: 90% Recovery 2.00m-3.00m BGL: 60% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:25	AB
	Figure No. 9766-07-20.WS15	



Machine : Tecop 10	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 112.07	Client DBFL	Job Number 9766-07-20
Method : Drive-in Windowless Sampler	Location (dGPS) 705034.8 E 727250.1 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			111.57	0.50	FILL: Dark grey sandy fine to coarse angular Gravel with angular cobbles (Crushed Rock Fill)		
0.70	EN			111.07	0.50	Stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.50	B			110.57	0.50	Firm brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
				110.07	0.50	Soft to firm light brown sandy gravelly CLAY with occasional sand lenses		
2.50	B			109.57	0.50	Firm light brown sandy gravelly CLAY with occasional sand lenses		
				109.07	0.50	Stiff brown slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
				109.07	3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 95% Recovery 1.00m-2.00m BGL: 85% Recovery 2.00m-3.00m BGL: 60% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS16	



Machine : Tecop 10 Method : Drive-in Windowless Sampler	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 111.43	Client DBFL	Job Number 9766-07-20
	Location 705011.8 E 727283.4 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			111.18	(0.25)	FILL: Grey slightly clayey sandy medium to coarse angular to subangular Gravel (Crushed Rock Fill)		
0.70	EN			110.73	(0.45)	Firm to stiff greyish brown slightly sandy gravelly CLAY with many subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.50	B			110.33	(0.40)	Stiff greyish brown slightly sandy gravelly CLAY with many subangular cobbles. Gravel is fine to coarse, angular to subangular		
				110.33	(0.90)	1.00m-2.00m BGL: Poor recovery		
2.50	B			109.43	(1.00)	Firm greyish brown slightly sandy gravelly CLAY with many subangular cobbles. Gravel is fine to coarse, angular to subangular		
				109.43	(1.00)	2.00m-3.00m BGL: Poor recovery		
				108.43	3.00	Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 40% Recovery 2.00m-3.00m BGL: 20% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:25	AB
	Figure No. 9766-07-20.WS17	



Machine : Tecop 10 Method : Drive-in Windowless Sampler	Dimensions 88mm to 2.00m 68mm to 3.00m	Ground Level (mOD) 111.12	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704991.1 E 727304.4 N	Dates 28/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			110.62	0.50	FILL: Greyish brown slightly clayey sandy fine to coarse angular to subangular Gravel (Crushed Rock Fill)		
0.70	EN			109.92	(0.70)	Stiff brown mottled grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.50	B			109.42	1.20 (0.50)	Stiff brown sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
2.50	B			108.12	1.70 (1.30)	Stiff light brown sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
					3.00	2.00m-3.00m BGL: Poor recovery		
						Complete at 3.00m		

Remarks 0.00m-1.00m BGL: 100% Recovery 1.00m-2.00m BGL: 75% Recovery 2.00m-3.00m BGL: 20% Recovery Complete at 3.00m BGL Borehole backfilled upon completion	Scale (approx) 1:25	Logged By AB
	Figure No. 9766-07-20.WS18	

APPENDIX 5 – Trial Pit Records





Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.70m x 0.70m x 3.00m (L x W x D)	Ground Level (mOD) 111.63	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705150.6 E 727242.4 N	Dates 29/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			111.43	(0.20)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rootlets and plastic fragments. Gravel is subangular to rounded fine to coarse.		
					0.20	Soft to firm brown sandy slightly gravelly CLAY. Gravel is subangular to rounded fine to coarse.		
1.00	B			110.88	(0.55)			
					0.75	Firm brown mottled grey sandy gravelly slightly silty CLAY with occasional subangular to rounded cobbles, some subrounded to rounded boulders and grey sand lenses. Gravel is subangular to rounded fine to coarse.		
2.00	B			109.63	(1.25)			
					2.00	Dark grey clayey slightly silty gravelly fine to medium SAND with some subangular to rounded cobbles. Gravel is subangular to rounded fine to coarse.		
2.90	B			108.93	(0.70)			
					2.70	Stiff dark grey slightly sandy slightly gravelly silty CLAY with some subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
				108.63	3.00	Complete at 3.00m		

Plan .	Remarks Groundwater encountered at 1.80m BGL (medium seepage). Side walls spalling at 1.10m BGL. Trial pit backfilled on completion.	
		Scale (approx) 1:25



Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.80m x 0.70m x 3.00m (Lx W x D)	Ground Level (mOD) 113.42	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705072.8 E 727185.8 N	Dates 29/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.60	B			112.82	0.60 (0.60)	MADE GROUND: Brown slightly clayey gravelly fine to medium Sand with large concrete slabs, plastic, metal bars and geotextiles. Gravel is angular to subangular fine to coarse.		
1.00	B			112.52	0.90 (0.30)	Firm brown slightly sandy slightly gravelly silty CLAY with some subangular cobbles. Gravel is subangular to subrounded fine to coarse.		
2.00	B			111.62	1.80 (0.90)	Soft to firm brown slightly sandy slightly gravelly silty CLAY with some subangular to subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
2.90	B			110.62	2.80 (0.20)	Stiff dark grey slightly sandy slightly gravelly silty CLAY. Gravel is subangular to subrounded fine to coarse.		
				110.42	3.00	Complete at 3.00m		

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



Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.90m x 0.70m x 3.00m (L x W x D)	Ground Level (mOD) 113.89	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705060.9 E 727168.6 N	Dates 30/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			113.24	0.65 (0.65)	MADE GROUND: Brown sandy gravelly Clay with occasional subrounded cobbles and concrete and plastic fragments. Gravel is subangular to subrounded fine to coarse.		
1.00	B			112.99	0.90 (0.25)	Soft to firm brown mottled grey slightly sandy slightly gravelly slightly silty CLAY with some subangular to rounded cobbles. Gravel is subangular to rounded fine to coarse.		
2.00	B			111.99	1.90 (1.00)	Firm brown mottled grey slightly sandy slightly gravelly slightly silty CLAY with some subangular to rounded cobbles and subrounded to rounded boulders. Gravel is subangular to rounded fine to coarse.		
3.00	B			110.99 110.89	2.90 (0.10) 3.00	Stiff Dark grey/black slightly sandy slightly gravelly silty CLAY. Gravel is subangular to subrounded fine to coarse. Complete at 3.00m		

Plan .	Remarks Groundwater encountered at 1.60m BGL (slow seepage). Side walls spalling at 2.20m BGL. Trial pit backfilled on completion.	
		Scale (approx) 1:25



Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.00m x 0.70m x 3.00m (L x W x D)	Ground Level (mOD) 116.17	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704953.8 E 727155.7 N	Dates 31/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			115.97	(0.20)	MADE GROUND: Brown/grey slightly sandy gravelly Clay with some subrounded to rounded cobbles and boulders and plywood, plastic and geotextile fragments. Gravel is angular to subrounded fine to coarse.		
					0.20	Firm brown slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse.		
1.00	B			115.07	(0.90)			
					1.10	Firm brown slightly sandy gravelly slightly silty CLAY with occasional angular to subrounded cobbles and boulders. Gravel is angular to subrounded fine to coarse.		
2.00	B			114.37	1.80	Soft to firm brown sandy gravelly slightly silty CLAY with frequent subangular to rounded cobbles and boulders. Gravel is subangular to rounded fine to coarse.		
					(0.80)			
3.00	B			113.57	2.60	Light brown clayey sandy subangular to subrounded fine to coarse GRAVEL with occasional subangular to rounded cobbles and boulders.		
					(0.40)			
				113.17	3.00	Complete at 3.00m		

Plan 	Remarks Groundwater encountered at 2.60m BGL (slow seepage). Side walls spalling at 2.60m BGL. Trial pit backfilled on completion.		
	<table border="1"> <tr> <td>Scale (approx) 1:25</td> <td>Logged By MS</td> <td>Figure No. 9766-07-20.TP04</td> </tr> </table>	Scale (approx) 1:25	Logged By MS
Scale (approx) 1:25	Logged By MS	Figure No. 9766-07-20.TP04	



Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.90m x 0.70m x 3.00m (L x W x D)	Ground Level (mOD) 111.92	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705046.1 E 727252.6 N	Dates 29/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.60	B			111.37	0.55 (0.35)	MADE GROUND: Grey slightly clayey sandy angular to subangular fine to coarse Gravel with occasional angular to subangular cobbles and geotextiles. Soft to firm brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse.		
1.10	B			111.02	0.90 (0.60)	Soft to firm dark brown mottled grey slightly sandy slightly gravelly silty CLAY with some subangular to subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
2.00	B			110.42	1.50 (0.70)	Firm dark brown mottled grey slightly sandy gravelly silty CLAY with occasional subangular to rounded cobbles and boulders and sand lenses. Gravel is subangular to rounded fine to coarse.		
3.00	B			109.72	2.20 (0.50)	Medium dense brown/grey clayey gravelly fine to medium SAND with occasional subangular to rounded cobbles. Gravel is subangular to rounded fine to coarse.		
				109.22	2.70 (0.30)	Stiff dark grey slightly sandy slightly gravelly silty CLAY. Gravel is subangular to subrounded fine to coarse.		
				108.92	3.00	Complete at 3.00m		

Plan .	Remarks Groundwater encountered at 1.80m BGL (slow seepage). Side walls spalling at 1.80m BGL. Trial pit backfilled on completion.					
	<table border="1"> <tr> <td>Scale (approx)</td> <td>Logged By</td> <td>Figure No.</td> </tr> <tr> <td>1:25</td> <td>MS</td> <td>9766-07-20.TP05</td> </tr> </table>	Scale (approx)	Logged By	Figure No.	1:25	MS
Scale (approx)	Logged By	Figure No.				
1:25	MS	9766-07-20.TP05				



Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.80m x 0.70m x 3.60m (L x W x D)	Ground Level (mOD) 111.16	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705088.5 E 727294.1 N	Dates 29/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			110.96	(0.20)	MADE GROUND: Brown sandy slightly gravelly Clay with fabric fragments. Gravel is subangular to subrounded fine to coarse.		
					0.20	Soft to firm brown mottled grey slightly sandy slightly gravelly slightly silty CLAY. Gravel is subangular to subrounded fine to coarse.		
1.00	B			110.26	(0.70)			
					0.90	Soft to firm grey mottled brown slightly sandy gravelly slightly silty CLAY with occasional subangular to subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
2.10	B			109.06	(1.20)			
					2.10	Firm brown mottled grey sandy gravelly slightly silty CLAY with occasional angular to subangular cobbles. Gravel is angular to subangular fine to coarse.		
3.00	B			108.26	(0.80)			
					2.90	Stiff grey slightly sandy slightly gravelly silty CLAY with some subrounded to rounded cobbles. Gravel is subangular to rounded fine to coarse.		
					3.30	Very stiff grey/brown sandy slightly gravelly silty CLAY with some subangular to rounded cobbles. Gravel is subrounded to rounded fine to coarse.		
				107.86	(0.30)			
				107.56	3.60	Complete at 3.60m		

Plan .	Remarks Groundwater encountered at 2.80m BGL (slow seepage). Side walls spalling at 1.60m BGL. Trial pit backfilled on completion.		
		<table border="1"> <tr> <td>Scale (approx) 1:25</td> <td>Logged By MS</td> <td>Figure No. 9766-07-20.TP06</td> </tr> </table>	Scale (approx) 1:25
Scale (approx) 1:25	Logged By MS	Figure No. 9766-07-20.TP06	



Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.40m x 0.70m x 2.00m (L x W x D)	Ground Level (mOD) 111.52	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705001.9 E 727278.9 N	Dates 30/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.70	B			111.02	0.50 (0.50)	MADE GROUND: Grey/brown slightly clayey sandy angular to subangular fine to coarse Gravel with some angular to subangular cobbles.		
1.00	B			110.62	0.90 (0.40)	Firm brown slightly sandy slightly gravelly CLAY with some subangular to subrounded cobbles and some rootlets. Gravel is subangular to subrounded fine to coarse.		
1.90	B			109.82	1.70 (0.80)	Firm brown slightly sandy slightly gravelly CLAY with some subangular to subrounded cobbles, angular to subrounded boulders and some rootlets. Gravel is subangular to subrounded fine to coarse.		
				109.52	2.00 (0.30)	Medium dense clayey gravelly fine to medium SAND with occasional subangular to subrounded cobbles and boulders. Gravel is subangular to subrounded fine to coarse.		
						Complete at 2.00m		

Plan 	Remarks Groundwater encountered at 1.80m BGL. Side walls spalling at 1.80m BGL. Trial pit terminated due to confined work area. Trial pit backfilled on completion.		
	Scale (approx) 1:25	Logged By MS	Figure No. 9766-07-20.TP07



Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.40m x 0.70m x 2.80m (L x W x D)	Ground Level (mOD) 111.32	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705021.1 E 727291.3 N	Dates 30/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.60	B			110.92	0.40	MADE GROUND: Grey/brown slightly clayey sandy angular to subangular fine to coarse Gravel with some angular to subangular cobbles.		
				110.72	0.20	Firm brown mottled grey sandy gravelly slightly silty CLAY with some angular to subrounded cobbles. Gravel is subangular to rounded fine to coarse.		
1.00	B				0.60	Firm brown sandy gravelly slightly silty CLAY with occasional angular to subrounded cobbles and boulders. Gravel is angular to subrounded fine to coarse.		
2.00	B			109.32	2.00	Stiff brown sandy gravelly slightly silty CLAY with occasional angular to subrounded cobbles and boulders. Gravel is angular to subrounded fine to coarse.		
				108.72	0.60			
				108.52	2.60	Stiff brown sandy gravelly slightly silty CLAY with occasional angular to subrounded cobbles and boulders and sand lenses. Gravel is angular to subrounded fine to coarse.		
2.80	B			108.52	2.80	OBSTRUCTION at 2.80m BGL. Complete at 2.80m		

Plan .	Remarks Groundwater encountered at 0.30m BGL (slow seepage). Side walls spalling at 1.50m BGL. Trial pit terminated due to boulders. Trial pit backfilled on completion.					
	<table border="1"> <tr> <td>Scale (approx)</td> <td>Logged By</td> <td>Figure No.</td> </tr> <tr> <td>1:25</td> <td>MS</td> <td>9766-07-20.TP08</td> </tr> </table>	Scale (approx)	Logged By	Figure No.	1:25	MS
Scale (approx)	Logged By	Figure No.				
1:25	MS	9766-07-20.TP08				



Machine : 8 Tonne Tracked Excavator Method : Trial Pit	Dimensions 2.80m x 0.70m x 3.00m (L x W x D)	Ground Level (mOD) 111.13	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704967.2 E 727311.4 N	Dates 30/07/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			110.83	0.30	MADE GROUND: Grey/brown slightly clayey sandy angular to subangular fine to coarse Gravel with occasional angular to subangular cobbles.		
				110.73	0.40	Stiff brown slightly sandy slightly gravelly CLAY with some subangular to subrounded cobbles and some roots. Gravel is subangular to subrounded fine to coarse.		
1.00	B			110.33	0.80	Stiff brown slightly sandy slightly gravelly CLAY with some subangular to subrounded cobbles. Gravel is subangular to subrounded fine to coarse.		
					(1.50)	Stiff brown mottled grey slightly sandy slightly silty gravelly CLAY with occasional angular to subrounded cobbles and boulders. Gravel is subangular to subrounded fine to coarse.		
2.00	B			108.83	2.30	Medium dense brown clayey gravelly slightly silty fine to coarse SAND with occasional angular to subrounded cobbles and boulders. Gravel is subangular to subrounded fine to coarse.		
				108.13	3.00	Complete at 3.00m		

Plan .	Remarks Groundwater encountered at 2.30m BGL. Side walls spalling at 2.20m BGL. Trial pit backfilled on completion.					
	<table border="1"> <tr> <td>Scale (approx)</td> <td>Logged By</td> <td>Figure No.</td> </tr> <tr> <td>1:25</td> <td>MS</td> <td>9766-07-20.TP09</td> </tr> </table>	Scale (approx)	Logged By	Figure No.	1:25	MS
Scale (approx)	Logged By	Figure No.				
1:25	MS	9766-07-20.TP09				

APPENDIX 6 – Cable Percussion Rotary Core Records





Machine : Dando 2000 & Beretta T44	Casing Diameter 200mm cased to 6.50m 96mm cased to 15.00m	Ground Level (mOD) 111.81	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion & Rotary follow on	Location (dGPS) 705163.2 E 727230.1 N	Dates 04/08/2020- 16/09/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.50	B				111.41	(0.40) 0.40	Brown slightly sandy slightly gravelly CLAY			
1.00 1.00-1.45	B SPT(C) N=11			1,1/2,3,3,3	110.81	1.00 (0.30)	Brown mottled grey slightly sandy slightly gravelly CLAY			
2.00 2.00-2.45	B SPT(C) N=9			1,1/2,2,2,3	110.51	1.30 (0.70)	Firm brown mottled grey slightly sandy slightly gravelly CLAY with occasional subrounded cobbles			
3.00 3.00-3.32	B SPT(C) 50/165			17,20/10,17,23	109.81	2.00 (1.00)	Firm brown slightly sandy slightly gravelly CLAY			
4.00 4.00-4.44	B SPT(C) 50/285			6,10/10,15,15,10 Water strike(1) at 4.20m, rose to 4.10m in 20 mins, sealed at 4.50m.	108.81	3.00 (3.50)	Firm dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular			
5.00 5.00-5.40	B SPT(C) 50/245			7,11/11,16,18,5			Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular			
6.00 6.00-6.32	B SPT(C) 50/170			5,11/15,25,10						
6.50	TCR 20	RQD	FI		105.31	6.50 (1.50)	Poor recovery - recovery consists of: Brown/grey slightly sandy slightly clayey medium to coarse subangular to subrounded Gravel. Driller notes sandy gravelly CLAY (Very Stiff)			
8.00-8.45 8.00	33			5,6/6,7,8,8 SPT(C) N=29	103.81	8.00	Poor recovery - recovery consists of: Brown/grey slightly sandy clayey fine to coarse subangular to subrounded Gravel with occasional clay bands. Driller notes brown sandy gravelly CLAY (Very Stiff)			
9.50-9.65 9.50				21,29/50 SPT(C) 50/0						

Remarks Groundwater encountered at 4.20m BGL Rotary follow on from 6.50m BGL Complete at 15.00m BGL 50mm Standpipe installed in borehole upon completion, slotted from 15.00m BGL to 1.00m BGL, plain from 1.00m BGL to ground level with bentonite seal and raised cover.	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH01	



Machine : Dando 2000 & Beretta T44 Flush : Water Core Dia : 64 mm Method : Cable Percussion & Rotary follow on	Casing Diameter 200mm cased to 6.50m 96mm cased to 15.00m	Ground Level (mOD) 111.81	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705163.2 E 727230.1 N	Dates 04/08/2020-16/09/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
11.00-11.08 11.00	23				50/50 SPT(C) 50*/75 50/0		(6.00)				
12.50-12.65 12.50	33				22,28/50 SPT(C) 50/0						
14.00-14.23 14.00	20				15,17/50 SPT(C) 50/75	97.81	14.00	Poor recovery - recovery consists of: Brown/grey slightly sandy slightly clayey medium to coarse Gravel with many cobbles. Driller notes coarse GRAVEL with many cobbles and boulders (Dense)			
15.00	60					96.81	15.00	Complete at 15.00m			

Remarks	Scale (approx)	Logged By
	1:50	AB
Figure No. 9766-07-20.BH01		



Machine : Dando 2000 & Beretta T44	Casing Diameter 200mm cased to 7.50m 96mm cased to 15.00m	Ground Level (mOD) 112.06	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion & Rotary follow on	Location (dGPS) 705155.4 E 727216.4 N	Dates 05/08/2020- 17/09/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.50	B				111.66	(0.40)	TOPSOIL			
1.00-1.45	B SPT(C) N=14			2,4/4,3,3,4	111.06	0.40 (0.60)	Brown mottled grey slightly sandy gravelly CLAY with occasional subangular cobbles			
2.00	B			Water strike(1) at 2.00m, rose to 1.95m in 20 mins, sealed at 2.10m. 3,3/4,5,5,7	110.36 110.06	1.00 (0.70)	Firm to stiff brown mottled grey slightly sandy gravelly CLAY with occasional subangular cobbles			
2.00-2.45	SPT(C) N=21					1.70 (0.30)	Firm to stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles, gravel is fine to coarse, angular to subangular			
3.00-3.45	B SPT(C) N=26			6,6/6,6,7,7		2.00	Stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles, gravel is fine to coarse, angular to subangular			
4.00-4.39	B SPT(C) 50/240			7,7/10,12,14,14	108.06	(2.00)	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles, gravel is fine to coarse, angular to subangular			
5.00-5.39	B SPT(C) 50/235			6,9/12,13,20,5		4.00				
6.00-6.35	B SPT(C) 50/200			7,11/14,19,17		(3.50)				
7.00-7.20	B SPT(C) 50/45			15,20/20,30		7.50	Very stiff dark grey slightly sandy gravelly CLAY with some cobbles and boulders. Gravel is fine to coarse, angular to subangular			
7.50	TCR	SCR	RQD	FI	104.56	7.50				
8.00-8.30	40			12,12/17,33 SPT(C) 50/150						
8.00	100									
9.50-9.80				7,17/16,34 SPT(C) 50/150		(3.50)				
9.50										

Remarks Groundwater encountered at 2.00m BGL Rotary follow on from 7.50m BGL 50mm Standpipe installed in borehole upon completion, slotted from 7.50m BGL to 1.00m BGL, plain from 1.00m BGL to ground level, with bentonite seal and raised cover. Chiselling from 7.50m to 7.50m for 1 hour.	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH02	



Machine : Dando 2000 & Beretta T44 Flush : Water Core Dia: 64 mm Method : Cable Percussion & Rotary follow on	Casing Diameter 200mm cased to 7.50m 96mm cased to 15.00m	Ground Level (mOD) 112.06	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705155.4 E 727216.4 N	Dates 05/08/2020-17/09/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
11.00-11.45 11.00	60				8,9/10,12,14,12 SPT(C) N=48	101.06	11.00 (0.50)	Brown slightly clayey slightly gravelly fine to medium SAND			
12.50-12.80 12.50	50				8,10/16,34 SPT(C) 50/150	100.56	11.50 (1.00)	Poor recovery - recovery consists of: Grey slightly sandy slightly clayey fine to coarse angular to subangular Gravel. Driller notes Boulder Clay (Very Stiff)			
14.00-14.23 14.00	40				4,25/50 SPT(C) 50/75	99.56	12.50 (1.20)	Poor recovery - recovery consists of: Dark grey slightly sandy clayey fine to coarse angular to subangular Gravel with occasional cobbles. Driller notes Boulder Clay (Very Stiff)			
15.00	40					98.36	13.70 (1.30)	Poor recovery - recovery consists of: Grey/brown slightly clayey fine to coarse angular to subangular Gravel with occasional cobbles. Driller notes Gravel with cobbles (Dense)			
						97.06	15.00	Complete at 15.00m			

Remarks	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH02	



Machine : Dando 2000 & Beretta T47	Casing Diameter 200mm to 7.70m 98mm to 15.00m	Ground Level (mOD) 112.45	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 705146.8 E 727203.9 N	Dates 06/08/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B				112.15	(0.30) 0.30	FILL: Grey sandy fine to coarse angular Gravel (Crushed Rock Fill)		
1.00 1.00-1.45	B SPT(C) N=12			1,2/2,3,3,4	111.45	(0.70) 1.00	Brown mottled grey slightly sandy gravelly CLAY with occasional subangular cobbles, Gravel is fine to coarse, angular to subangular		
2.00 2.00-2.45	B SPT(C) N=14			Water strike(1) at 1.50m, rose to 1.40m in 20 mins, sealed at 3.40m. 2,2/2,3,4,5	110.45	(1.00) 2.00	Firm to stiff brown mottled grey slightly sandy gravelly CLAY with occasional subangular cobbles, Gravel is fine to coarse, angular to subangular		▼ ₁
3.00 3.00-3.45	B SPT(C) N=33			3,5/6,7,9,11	109.45	(1.00) 3.00	Firm to stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
4.00 4.00-4.45	B SPT(C) N=49			4,5/9,11,14,15					▼ ₂
5.00 5.00-5.43	B SPT(C) 50/275			Water strike(2) at 5.00m, rose to 4.50m in 20 mins. 6,9/11,14,16,9		(4.70)			▼ ₂
6.00 6.00-6.33	B SPT(C) 50/180			10,12/14,17,19					
7.00 7.00-7.31	B SPT(C) 50/160			14,16/17,24,9					
7.70 8.00-8.45 8.00	TCR 100 SCR RQD FI			7,9/11,11,13,14 SPT(C) N=49	104.75 104.45	7.70 (0.30) 8.00	Poor recovery - recovery consists of: Grey fine to coarse subangular Gravel of Limestone with cobble fragments. Drillers notes: Boulder CLAY (Very stiff)		
9.30-9.75 9.30	46 53			5,7/10,11,12,13 SPT(C) N=46		(3.20)	Recovery consists of: Very stiff grey/dark grey slightly sandy gravelly CLAY with occasional cobble fragments		

Remarks Groundwater encountered at 1.50m BGL and 5.00m BGL Rotary Core follow on from 7.70m BGL Borehole backfilled upon completion Chiselling from 7.70m to 7.70m for 1 hour.	Scale (approx) 1:50	Logged By AB
	Figure No. 9766-07-20.BH03	



Machine : Dando 2000 & Beretta T47 Flush : Water Core Dia : 68 mm Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 7.70m 98mm to 15.00m	Ground Level (mOD) 112.45	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705146.8 E 727203.9 N	Dates 06/08/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.30-10.75 10.30					7,10/12,11,13,14 SPT(C) N=50					
	100									
11.20-11.65 11.20					5,4/9,8,10,9 SPT(C) N=36	101.25	11.20	Poor recovery - recovery consists of: Grey clayey fine to coarse subangular to subrounded gravel of Limestone. Drillers notes: Boulder CLAY (Very stiff)		
	25									
12.70-13.15 12.70					4,6/9,7,10,8 SPT(C) N=34		(3.80)			
	26									
14.00-14.45 14.00					5,7/9,11,13,10 SPT(C) N=43					
	31									
15.00						97.45	15.00	Complete at 15.00m		
	Sample / Tests		Casing Depth (m)	Water Depth (m)						
15.00-15.45	SPT(C) N=47				7,7/11,13,10,13					

Remarks	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH03	



Machine : Dando 2000 Method : Cable Percussion	Casing Diameter 200mm cased to 10.00m	Ground Level (mOD) 113.07	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705115.4 E 727189.3 N	Dates 05/08/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B				112.87	(0.20) 0.20	TOPSOIL		
						(0.50)	Brown slightly sandy slightly gravelly CLAY with occasional rootlets		
1.00-1.45 1.00	SPT(C) N=11 B			2,3/3,2,3,3	112.37 112.07	0.70 (0.30) 1.00	Brown mottled grey slightly sandy slightly gravelly CLAY		
						(0.50)	Firm brown mottled grey slightly sandy slightly gravelly CLAY		
2.00-2.45 2.00	SPT(C) N=12 B			1,1/2,2,3,5	111.57 111.07	1.50 (0.50) 2.00	Firm brown slightly sandy gravelly CLAY with occasional subangular cobbles		
						(0.40)	Firm to stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles		
3.00-3.45 3.00	SPT(C) N=24 B			8,9/3,4,5,12	110.67 110.07	2.40 (0.60) 3.00	Firm to stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles		
						(1.00)	Stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles		
4.00-4.45 4.00	SPT(C) N=46 B			4,5/7,9,14,16	109.07	4.00	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles		
5.00-5.37 5.00	SPT(C) 50/220 B			9,11/14,14,22 Water strike(1) at 5.20m, rose to 5.00m in 20 mins, sealed at 5.60m.					▼1 ▽1
6.00-6.38 6.00	SPT(C) 50/225 B			10,14/14,16,20					
7.00-7.34 7.00	SPT(C) 50/190 B			10,10/16,20,14		(6.00)			
8.00-8.30 8.00	SPT(C) 50/145 B			11,12/17,33					
9.00-9.28 9.00	SPT(C) 50/125 B			12,16/24,26					
10.00-10.24	SPT(C) 50/85			14,22/34,16	103.07	10.00			

Remarks Groundwater encountered at 5.20m BGL Complete at 10.00m BGL Borehole backfilled upon completion	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH04	



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Site
The Quarter at Citywest, Cooldown Commons Phase 3

Borehole Number
BH04

Machine : Dando 2000 Method : Cable Percussion	Casing Diameter 200mm cased to 10.00m	Ground Level (mOD) 113.07	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705115.4 E 727189.3 N	Dates 05/08/2020	Engineer	Sheet 2/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00	B								

Remarks	Scale (approx) 1:50	Logged By AB
	Figure No. 9766-07-20.BH04	



Machine : Dando 2000 & Beretta T47	Casing Diameter 200mm to 7.00m 98mm to 15.00m	Ground Level (mOD) 113.29	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 705072.1 E 727198 N	Dates 06/08/2020-07/08/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00 1.00-1.45	B SPT(C) N=10			1,1/2,3,2,3	112.49 112.29	(0.80) 0.80 (0.20) 1.00	MADE GROUND: Brown mottled grey slightly sandy slightly gravelly Clay with fragments of concrete Brown slightly sandy slightly gravelly CLAY with occasional subangular cobbles Firm brown slightly sandy slightly gravelly CLAY with occasional subangular cobbles		
2.00 2.00-2.45	B SPT(C) N=5			2,1/1,1,1,2	111.29	2.00 (1.00)	Soft brown slightly sandy slightly gravelly CLAY with occasional subangular cobbles		
3.00 3.00-3.45	B SPT(C) N=16			Water strike(1) at 3.00m, rose to 2.80m in 20 mins, sealed at 3.30m. 2,3/4,4,4,4	110.29	3.00 (0.70)	Firm to stiff brown slightly sandy slightly gravelly CLAY with occasional subangular cobbles		▼1 ▽1
4.00 4.00-4.45	B SPT(C) N=32			5,6/7,10,7,8	109.59 109.29	3.70 (0.30) 4.00	Firm to stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
5.00 5.00-5.35	B SPT(C) 50/200			8,11/19,16,15		(3.00)	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
6.00 6.00-6.33	B SPT(C) 50/180			11,15/21,17,12					
7.00 7.00-7.21 7.00	TCR SCR RQD FI			16,23/50 B SPT(C) 50/60	106.29	7.00 (1.30)	Poor recovery - recovery consists of: Brown gravelly fine to coarse Sand. Drillers notes: Boulder CLAY (Very stiff) Rotary Core follow on from 7.00m BGL		
8.30-8.75 8.30	22			5,5/9,10,9,11 SPT(C) N=39	104.99	8.30	Poor recovery - recovery consists of: Grey fine to coarse subangular to subrounded gravel of Limestone with cobble fragments. Drillers notes: Boulder CLAY (Very stiff)		
9.40-9.85 9.40	24			2,6/7,9,9,13 SPT(C) N=38					

Remarks Groundwater encountered at 3.00m BGL Rotary Core follow on from 7.00m BGL Borehole backfilled upon completion Chiselling from 7.00m to 7.00m for 1 hour.	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH05	



Machine : Dando 2000 & Beretta T47 Flush : Core Dia : mm Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 7.00m 98mm to 15.00m Location (dGPS) 705072.1 E 727198 N	Ground Level (mOD) 113.29 Dates 06/08/2020-07/08/2020	Client DBFL Engineer	Job Number 9766-07-20 Sheet 2/2
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Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
11.10-11.55 11.10	17				1,1/5,7,9,12 SPT(C) N=33		(4.40)			
12.60-12.90 12.60	27				9,10/25,25 SPT(C) 50/150	100.59	12.70	Poor recovery - recovery consists of: Grey/brown gravelly fine to coarse Sand. Drillers notes: Boulder CLAY and Sand. (Very stiff)		
14.00-14.45 14.00	19				6,7/11,13,13,13 SPT(C) N=50		(2.30)			
15.00	30					98.29	15.00	Complete at 15.00m		
15.00-15.45	Sample / Tests SPT(C) N=50		Casing Depth (m)	Water Depth (m)	6,7/12,13,16,9					

Remarks	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH05	



Machine : Dando 2000 & Beretta T47 Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 10.00m 98mm to 18.00m Location (dGPS) 705035.2 E 727176.7 N	Ground Level (mOD) 115.93 Dates 03/09/2020- 04/09/2020	Client DBFL Engineer	Job Number 9766-07-20 Sheet 1/2
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Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=4 B			1,1/1,1,1,1		(2.70)	MADE GROUND: Brown slightly sandy slightly gravelly Clay (Stockpile)		
2.00-2.45 2.00	SPT(C) N=5 B			2,1/2,1,1,1	113.23	2.70	Soft brown slightly sandy gravelly CLAY with some subangular cobbles and rootlets. Gravel is fine to coarse, angular to subangular.		
3.00-3.45 3.00	SPT(C) N=5 B			7,2/1,1,1,2	111.93	4.00	Soft to firm brown slightly sandy gravelly CLAY with some subangular cobbles and rootlets. Gravel is fine to coarse, angular to subangular.		▼1
4.00-4.45 4.00	SPT(C) N=7 B			3,3/1,1,3,2	110.93	5.00 (0.20)	Very stiff brown slightly sandy gravelly CLAY with some subangular cobbles and rootlets. Gravel is fine to coarse, angular to subangular.		
5.00-5.45 5.00	SPT(C) N=38 B			7,9/11,9,9,9	110.73	5.20	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		▽1
6.00	B			Water strike(1) at 6.00m, rose to 4.50m in 20 mins, sealed at 8.00m.					
6.00-6.42	SPT(C) 50/265			5,13/13,13,14,10					
7.00-7.29 7.00	SPT(C) 50/135 B			14,18/18,32		(4.80)			
8.00-8.28 8.00	SPT(C) 50/125 B			16,16/25,25					
9.00-9.14 9.00	SPT(C) 46*/135 50/0 B			13,33/50					
10.00									

Remarks Groundwater encountered at 6.00m BGL Rotary Core follow on from 10.00m BGL Borehole backfilled upon completion Chiselling from 10.00m to 10.00m for 1 hour.	Scale (approx) 1:50	Logged By AB
	Figure No. 9766-07-20.BH06	



Machine : Dando 2000 & Beretta T47 Flush : Water Core Dia : 68 mm Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 10.00m 98mm to 18.00m	Ground Level (mOD) 115.93	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705035.2 E 727176.7 N	Dates 03/09/2020-04/09/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.16	17				SPT(C) 50/10 20,30/50	105.93	10.00	Poor recovery - recovery consists of: Grey/brown slightly clayey fine to coarse angular to subrounded Gravel of Mixed Lithology. Drillers notes: Boulder CLAY (Very stiff) Poor recovery - recovery consists of: Grey fine to coarse angular to subrounded Gravel of Limestone. Drillers notes: Boulder CLAY (Very stiff) Poor recovery - recovery consists of: Grey/green Cobble and Boulder fragments of Limestone and Sandstone. Drillers notes: Boulder CLAY (Very stiff)		
11.20-11.65 11.20	30			3,3/7.7,10,11 SPT(C) N=35						
12.20-12.65 12.20	29			6,7/9,9,11,10 SPT(C) N=39		(4.20)				
13.60-14.05 13.60	45			5,7/10,10,12,15 SPT(C) N=47						
14.20-14.65 14.20	20			7,9/9,11,11,13 SPT(C) N=44	101.73	14.20				
15.50-15.88 15.50	22			6,9/12,10,28 SPT(C) 50/225		(2.90)				
17.00-17.45 17.00	52			4,4/7,6,8,10 SPT(C) N=31	98.83	17.10				
18.00-18.03 18.00				25/50 SPT(C) 25*/30 50/0	97.93	18.00				
								Complete at 18.00m		

Remarks Chiselling from 10.00m to 10.00m for 1 hour.	Scale (approx) 1:50	Logged By AB
	Figure No. 9766-07-20.BH06	



Machine : Dando 2000 & Beretta T47	Casing Diameter 200mm to 11.00m 98mm to 18.00m	Ground Level (mOD) 116.04	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 705027.5 E 727197.8 N	Dates 02/09/2020- 03/09/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00 1.00-1.45	B SPT(C) N=15			1,1/2,3,5,5		(3.30)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with rootlets and fragments of plastic (Stockpile)		
2.00 2.00-2.45	B SPT(C) N=9			2,2/2,4,1,2					
3.00 3.00-3.45	B SPT(C) N=10			3,2/2,2,3,3	112.74	3.30	Firm light brown slightly sandy gravelly CLAY with some subangular cobbles and rootlets. Gravel is fine to coarse, angular to subangular.		
4.00 4.00-4.45	B SPT(C) N=8			1,2/2,2,3,1		(1.70)			
5.00 5.00-5.45	B SPT(C) N=13			3,3/3,3,3,4	111.04	5.00	Firm to stiff light brown slightly sandy gravelly CLAY with some subangular cobbles and rootlets. Gravel is fine to coarse, angular to subangular.		
6.00 6.00-6.45	B SPT(C) N=19			3,3/4,4,4,7	110.04	6.00	Stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
7.00 7.00-7.45	B SPT(C) N=34			6,8/9,9,9,7	109.04	7.00	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
8.00 8.00-8.41	B SPT(C) 50/255			11,14/10,16,10,14		(3.00)			
9.00 9.00-9.35 8.85	TCR 100	SCR	RQD	FI					
9.10	56								
9.60 10.00-10.07 10.00				50/50 SPT(C) 50*/70 50/0 B					

Remarks No groundwater encountered Rotary Core follow on from 11.00m BGL Borehole backfilled upon compleion	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH07	



Machine : Dando 2000 & Beretta T47 Flush :	Casing Diameter 200mm to 11.00m 98mm to 18.00m	Ground Level (mOD) 116.04	Client DBFL	Job Number 9766-07-20
Core Dia: mm Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 705027.5 E 727197.8 N	Dates 02/09/2020- 03/09/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water		
11.00-11.07 11.00 11.00	29				50/50 SPT(C) 50*/70 50/0 B	106.04	10.00	Poor recovery - recovery consists of: Grey fine to coarse subangular to subrounded Gravel of Mixed Lithology with occasional cobble and boulder fragments. Drillers notes: Boulder CLAY (Very stiff)				
12.10-12.55 12.10	45			5,5/9,11,11,9 SPT(C) N=40		(4.60)						
13.20-13.65 13.40	30			6,7/10,13,10,12 SPT(C) N=45								
14.20-14.23 14.20	38			25/50 SPT(C) 25*/30 50/0								
14.60	100				101.44	14.60	Poor recovery - recovery consists of: Grey fine to medium angular to subrounded Gravel of Limestone with occasional cobble fragments. Drillers notes: Boulder CLAY (Very stiff)					
16.10-16.55 16.10	13			3,3/9,9,11,13 SPT(C) N=42		(3.40)						
17.10-17.55 17.10	26			5,4/7,9,13,11 SPT(C) N=40								
18.00-18.45 18.00	50			3,6/6,8,7,9 SPT(C) N=30	98.04	18.00	Complete at 18.00m					

Remarks Chiselling from 11.00m to 11.00m for 1 hour.	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH07	



Machine : Dando 2000 & Beretta T47	Casing Diameter 200mm to 11.00m 98mm to 18.00m	Ground Level (mOD) 116.81	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 704994 E 727176.4 N	Dates 01/09/2020- 02/09/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
1.00-1.45 1.00	SPT(C) N=7 B			2,2/1,2,2,2		(2.80)	MADE GROUND: Brown slightly sandy slightly gravelly Clay with occasional subangular cobbles (Stockpile)			
2.00-2.45 2.00	SPT(C) N=6 B			3,2/1,1,2,2						
3.00-3.45 3.00	SPT(C) N=16 B			4,5/5,5,3,3	114.01 113.81	2.80 (0.20) 3.00	Soft to firm brown slightly sandy slightly gravelly CLAY			
4.00-4.45 4.00	SPT(C) N=18 B			7,6/6,3,4,5		(1.50)	Stiff brown slightly sandy slightly gravelly CLAY			
5.00-5.45 5.00	SPT(C) N=44 B			9,10/11,9,12,12	112.31 111.81	4.50 (0.50)	Stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular			
6.00-6.34 6.00	SPT(C) 50/190 B			7,7/17,19,14	111.81 111.41	5.00 (0.40)	Very stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular			
7.00-7.39 7.00	SPT(C) 50/235 B			14,15/21,16,12,1			Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular			
8.00-8.31 8.00	SPT(C) 50/160 B			19,19/23,22,5						
9.00-9.37 9.00	SPT(C) 50/220 B			3,11/15,12,23		(7.60)				
10.00-10.35	SPT(C) 50/200			16,17/21,20,9						

Remarks No groundwater encountered. Rotary Core follow on from 13.00m BGL Slotted standpipe installed from 18.00m BGL to 9.00m BGL with a pea gravel surround, with a plain standpipe installed from 9.00m BGL to GL with a betonie seal and a raised cover	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH08	



Machine : Dando 2000 & Beretta T47 Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 11.00m 98mm to 18.00m	Ground Level (mOD) 116.81	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704994 E 727176.4 N	Dates 01/09/2020-02/09/2020	Engineer	Sheet 2/2

Depth (m)	Sample / Tests		Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
10.00	B										
11.00 11.00-11.21	B SPT(C) 50/60				30,21/50						
12.00 12.00-12.27	B SPT(C) 50/115				22,24/32,18						
13.00 13.00-13.13 13.00	TCR	SCR	RQD	FI	38,50/50 B SPT(C) 88*/125 50/0	103.81	13.00	Poor recovery - recovery consists of: Dark grey clayey fine to coarse angular to subrounded Gravel of Mixed Lithology. Drillers notes: Boulder CLAY (Very stiff)			
	34						(1.20)				
14.20-14.65 14.20	46				4,7/9,9,12,10 SPT(C) N=40	102.61	14.20	Poor recovery - recovery consists of: Grey slightly clayey fine to coarse angular to subrounded Gravel of Mixed Lithology with occasional cobble and boulder fragments. Drillers notes: Boulder CLAY (Very stiff)			
15.00-15.45 15.00	19				7,9/11,13,11,10 SPT(C) N=45		(3.80)				
16.50-16.73 16.50	37				5,5/10,40 SPT(C) 50/75						
18.00-18.03 18.00					25/50 SPT(C) 25*/30 50/0	98.81	18.00	Complete at 18.00m			

Remarks	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH08	



Machine : Dando 2000 & Beretta T47	Casing Diameter 200mm to 8.10m 98mm to 15.00m	Ground Level (mOD) 114.35	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 704964.5 E 727192.5 N	Dates 10/08/2020- 11/10/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-1.45 1.00	SPT(C) N=14 B			2,3/3,3,4,4	113.35	1.00 (1.00)	Brown slightly sandy slightly gravelly CLAY Firm to stiff brown slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
2.00-2.37 2.00	SPT(C) 44/220 B			8,6/9,17,18	112.35	2.00 (0.60)	Very stiff brown slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
3.00-3.22 3.00	SPT(C) 50/70 B			12,15/50	111.75	2.60	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
4.00-4.38 4.00	SPT(C) 50/230 B			4,9/11,16,19,4		(4.10)			
5.00-5.35 5.00	SPT(C) 50/200 B			5,11/17,19,14					
6.00-6.35 6.00	SPT(C) 50/200 B			6,11/19,20,11					
7.00-7.45 7.00	SPT(C) N=16 B			4,4/4,3,4,5	107.65	6.70 (0.80)	Medium dense brown slightly clayey gravelly fine to medium SAND. Gravel is fine to coarse, angular to subangular		
8.00-8.16 8.00	SPT(C) 50/10 B			17,21/50	106.85	7.50 (2.50)	Very stiff greyish brown slightly gravelly sandy CLAY		
10.00									

Remarks No groundwater encountered Rotary Core follow on from 8.10m BGL Borehole backfilled upon compleion Chiselling from 3.20m to 3.40m for 1 hour. Chiselling from 8.10m to 8.10m for 1 hour.	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH09	



Machine : Dando 2000 & Beretta T47 Flush : Water Core Dia : 68 mm Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 8.10m 98mm to 15.00m	Ground Level (mOD) 114.35	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704964.5 E 727192.5 N	Dates 10/08/2020-11/10/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.45	30				SPT(C) N=37 5,5/9,11,9,8	104.35	10.00	Poor recovery - recovery consists of: grey/brown clayey fine to coarse angular to subrounded Gravel of Mixed Lithology with occasional cobble fragments. Drillers notes: Boulder CLAY (Stiff) Recovery consists of: Very stiff brown slightly sandy gravelly CLAY with occasional cobble and boulder fragments. Gravel is fine to coarse subangular to subrounded		
11.00-11.45 11.00	15			3,2/6,6,8,7 SPT(C) N=27		(3.20)				
12.10-12.55 12.10	38			6,7/9,11,10,9 SPT(C) N=39						
13.20-13.65 13.20	75			5,4/7,8,10,11 SPT(C) N=36	101.15	13.20				
14.20-14.65 14.20	75			6,6/9,10,10,12 SPT(C) N=41		(1.80)				
15.00	Sample / Tests		Casing Depth (m)	Water Depth (m)		99.35	15.00	Complete at 15.00m		
15.00-15.45	SPT(C) N=41				5,7/8,11,12,10					

Remarks	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH09	



Machine : Dando 2000 Method : Cable Percussion	Casing Diameter 200mm to 9.4m	Ground Level (mOD) 114.29	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704942.7 E 727211.9 N	Dates 14/08/2020- 17/08/2020	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.50	B						Stiff to very stiff brown slightly sandy slightly gravelly CLAY with occasional cobbles. Gravel is fine to coarse angular to subangular.			
1.00-1.45 1.00	SPT(C) N=25 B			3,4/5,6,7,7						
2.00-2.45 2.00	SPT(C) N=42 B			7,9/10,10,11,11		(3.80)				
3.00-3.45 3.00	SPT(C) N=43 B			5,8/10,10,11,12						
4.00	B			Water strike(1) at 3.80m, rose to 3.70m in 20 mins, sealed at 4.00m.	110.49	3.80	Very stiff brown sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.		▽1	
4.00-4.45	SPT(C) N=33			4,4/7,7,9,10						
5.00-5.45 5.00	SPT(C) N=39 B			4,6/9,8,10,12		(3.00)			▽2	
6.00-6.45 6.00	SPT(C) N=50 B			12,16/25,25						
7.00-7.45 7.00	SPT(C) N=50 B			Water strike(2) at 6.30m, rose to 5.00m in 20 mins.	107.49	6.80	Dense brown/grey slightly clayey sandy fine to coarse angular to subangular GRAVEL with frequent subangular cobbles.		▽2	
8.00-8.45 8.00	SPT(C) N=50 B			10,10/26,24		(2.60)				
9.00-9.45 9.00	SPT(C) N=50 B			16,25/50	104.89	9.40	OBSTRUCTION due to possible boulder or bedrock. Complete at 9.40m			

Remarks Groundwater encountered at 3.80m BGL and 6.30m BGL. Refusal at 9.40m BGL. Slotted standpipe installed from 9.40m BGL to 1.00m BGL with a pea gravel surround, with a plain standpipe installed from 1.00m BGL to GL with a bentonite seal and a raised cover Chiselling from 9.40m to 9.40m for 1 hour.	Scale (approx)	1:50	Logged By	AB & JMD
	Figure No.	9766-07-20.BH10		



Machine : Dando 2000 & Beretta T47	Casing Diameter 200mm to 8.10m 98mm to 15.00m	Ground Level (mOD) 113.26	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 704986.6 E 727203.1 N	Dates 12/08/2020- 13/08/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B					(1.00)	Brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.00-1.45 1.00	SPT(C) N=20 B			3,4/5,5,5,5	112.26	1.00	Stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		▼1
2.00	B			Water strike(1) at 1.90m, rose to 1.70m in 20 mins, sealed at 4.50m.		(1.80)			▽1
2.00-2.45	SPT(C) N=23			4,4/5,5,6,7					
3.00-3.35 3.00	SPT(C) 50/200 B			8,10/15,20,15	110.46	2.80	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
4.00-4.45 4.00	SPT(C) N=45 B			5,7/9,11,11,14					
5.00-5.44 5.00	SPT(C) 50/285 B			4,10/12,14,16,8					
6.00-6.37 6.00	SPT(C) 50/220 B			7,11/16,16,18					
7.00-7.32 7.00	SPT(C) 50/170 B			11,15/19,23,8		(9.00)			
8.00-8.08 8.00	SPT(C) 50*/80 50/0 B			30,20/50					

Remarks Groundwater encountered at 1.90m BGL Rotary Core follow on from 8.10m BGL Borehole backfilled upon completion Chiselling from 8.10m to 8.10m for 1 hour.	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH11	



Machine : Dando 2000 & Beretta T47 Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 8.10m 98mm to 15.00m	Ground Level (mOD) 113.26	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704986.6 E 727203.1 N	Dates 12/08/2020-13/08/2020	Engineer	Sheet 2/2

Depth (m)	Sample / Tests		Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
11.80-12.25 11.80	TCR	SCR	RQD	FI	7,7/8,10,10,9 SPT(C) N=37	101.46	11.80	Poor recovery - recovery consists of: Dark grey slightly clayey slightly sandy fine to coarse angular to subrounded Gravel of Mixed Lithology. Drillers notes: Boulder CLAY (Very stiff)		
	43						(1.00)			
12.80-12.83 12.80					25/50 SPT(C) 25*/30 50/0	100.46	12.80	Poor recovery - recovery consists of: Grey slightly clayey fine to coarse angular to rounded Gravel of Limestone with occasional cobble fragments. Drillers notes: Boulder CLAY (Stiff)		
	36						(2.20)			
13.90-14.35 13.90					3,2/5,5,7,9 SPT(C) N=26			Complete at 15.00m		
	44									
15.00	Sample / Tests		Casing Depth (m)	Water Depth (m)		98.26	15.00			
15.00-15.45	SPT(C) N=44				6,7/9,9,12,14					

Remarks	Scale (approx)	Logged By
	1:50	AB
Figure No. 9766-07-20.BH11		



Machine : Dando 2000 & Beretta T47 Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 10.00m 98mm to 15.00m Location (dGPS) 705010.1 E 727210 N	Ground Level (mOD) 112.79 Dates 11/08/2020-12/08/2020	Client DBFL Engineer	Job Number 9766-07-20 Sheet 1/2
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Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B					(1.00)	Brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.00 1.00-1.45	B SPT(C) N=12			1,2/2,3,3,4	111.79	1.00 (1.00)	Firm to stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		▼1
2.00 2.00-2.17	B SPT(C) 50/20			Water strike(1) at 1.70m, no rise after 20 mins, sealed at 4.00m. 17,27/50	110.79	2.00 (0.60)	Stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
3.00 3.00-3.45	B SPT(C) N=34			6,6/7,7,9,11	110.19	2.60	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
4.00 4.00-4.45	B SPT(C) N=50			5,7/11,11,14,14					
5.00 5.00-5.39	B SPT(C) 50/235			7,7/10,17,18,5		(6.00)			
6.00 6.00-6.36	B SPT(C) 50/210			9,14/17,19,14					
7.00 7.00-7.35	B SPT(C) 50/200			10,14/18,20,12					
8.00 8.00-8.29	B SPT(C) 50/135			10,16/23,27					▼2
9.00 9.00-9.45	B SPT(C) N=34			Water strike(2) at 8.60m, rose to 8.00m in 20 mins. 6,7/7,8,8,11	104.19	8.60 (1.40)	Dense grey sandy medium to coarse angular to subangular GRAVEL with occasional subangular cobbles.		▼2
9.70 10.00	TCR 100	SCR	RQD	FI					

Remarks Groundwater encountered at 1.70m BGL and 8.60m BGL Rotary Core follow on from 10.00m BGL Borehole backfilled upon completion Chiselling from 1.80m to 2.30m for 1 hour.	Scale (approx) 1:50	Logged By AB
	Figure No. 9766-07-20.BH12	



Machine : Dando 2000 & Beretta T47 Flush : Water Core Dia : 68 mm Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 10.00m 98mm to 15.00m	Ground Level (mOD) 112.79	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 705010.1 E 727210 N	Dates 11/08/2020-12/08/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.45	27				SPT(C) N=50 7,9/10,11,14,15	102.79	10.00	Poor recovery - recovery consists of Grey fine to coarse angular to rounded GRAVEL of Limestone with occasional cobble and boulder fragments. Drillers notes: Boulder CLAY (Stiff)		
11.10-11.55 11.10	49				7,8/10,10,12,13 SPT(C) N=45					
12.30-12.75 12.30	72				5,6/7,7,9,10 SPT(C) N=33		(5.00)			
12.90	28									
13.90-14.35 13.90	25				6,6/10,11,9,6 SPT(C) N=36					
15.00	Sample / Tests		Casing Depth (m)	Water Depth (m)		97.79	15.00	Complete at 15.00m		
15.00-15.20	SPT(C) 50/50				7,11/50					

Remarks	Scale (approx)	Logged By
	1:50	AB
Figure No. 9766-07-20.BH12		



Machine : Dando 2000 & Beretta T47	Casing Diameter 200mm to 10.00m 98mm to 15.00m	Ground Level (mOD) 112.85	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 704957.5 E 727233.4 N	Dates 13/08/2020-14/08/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B				112.75	0.10	FILL: Grey sandy coarse angular Gravel with angular cobbles (Crushed Rock Fill)		
1.00	B				112.15	0.70 (0.60)	Reddish brown slightly sandy gravelly CLAY. Gravel is fine to coarse, angular to subangular		
1.00-1.45	SPT(C) N=22			4,3/4,3,8,7	111.85	1.00	Stiff brown slightly sandy gravelly CLAY with some angular cobbles. Gravel is fine to coarse, angular to subangular		
2.00	B				110.85	2.00	Stiff brown slightly sandy gravelly CLAY with some angular cobbles. Gravel is fine to coarse, angular to subangular		
2.00-2.45	SPT(C) N=39			3,3/13,9,10,7			Very stiff brown slightly sandy gravelly CLAY with some angular cobbles. Gravel is fine to coarse, angular to subangular		▼1
3.00	B					(1.80)	Water strike(1) at 2.50m, rose to 2.30m in 20 mins, sealed at 4.00m. 6,8/9,10,10,12		▼1
3.00-3.45	SPT(C) N=41								
4.00	B				109.05	3.80	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
4.00-4.45	SPT(C) N=45			7,9/10,11,11,13					
5.00	B								
5.00-5.45	SPT(C) 50/295			6,9/11,12,12,15					
6.00	B								
6.00-6.43	SPT(C) 50/275			3,10/9,11,19,11					
7.00	B					(6.20)			
7.00-7.39	SPT(C) 50/235			6,10/12,14,19,5					
8.00	B								
8.00-8.36	SPT(C) 50/210			10,12/14,19,17					
9.00	B								
9.00-9.34	SPT(C) 50/190			7,11/16,22,12					
9.60	TCR	SCR	RQD	FI					
10.00	99			B					

Remarks Groundwater encountered at 2.50m BGL Rotary Core follow on from 10.00m BGL Borehole backfilled upon compleion	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH13	



Machine : Dando 2000 & Beretta T47 Flush : Water Core Dia : 68 mm Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 10.00m 98mm to 15.00m Location (dGPS) 704957.5 E 727233.4 N	Ground Level (mOD) 112.85 Dates 13/08/2020-14/08/2020	Client DBFL Engineer	Job Number 9766-07-20 Sheet 2/2
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Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.32	50				SPT(C) 50/170 11,13/18,26,6	102.85	10.00	Poor recovery - recovery consists of: Dark grey/grey slightly clayey fine to coarse angular to subrounded Gravel of Mixed Lithology. Drillers notes: Boulder CLAY (Very stiff)		
11.00-11.45 11.00	26				5,5/7,9,11,10 SPT(C) N=37		(2.50)			
12.50-12.95 12.50	90				6,8/11,10,13,9 SPT(C) N=43	100.35	12.50	Poor recovery - recovery consists of: Grey slightly clayey slightly sandy fine to coarse angular to subrounded GRAVEL of Mixed Lithology with some cobble and boulder fragments. Drillers notes: BOulder CLAY (very stiff)		
13.50-13.95 13.50	41				5,5/9,12,14,13 SPT(C) N=48		(2.50)			
15.00						97.85	15.00	Complete at 15.00m		
15.00-15.45	SPT(C) N=46				7,6/9,11,14,12					

Remarks	Scale (approx)	Logged By
	1:50	AB
	Figure No. 9766-07-20.BH13	



Machine : Dando 2000 & Beretta T47 Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 7.50m 98mm to 15.00m	Ground Level (mOD) 112.71	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704970.8 E 727233.2 N	Dates 20/08/2020- 21/08/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B				112.11	(0.60)	Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subangular.		
1.00-1.45 1.00	SPT(C) N=20 B			6,4/5,5,5,5		(2.00)	Stiff to very stiff brown slightly sandy slightly gravelly CLAY with occasional cobbles. Gravel is fine to coarse angular to subangular.		
2.00-2.45 2.00	SPT(C) N=28 B			4,4/6,6,7,9		2.60	Medium dense to dense brown clayey gravelly medium to coarse SAND with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.		▼1
3.00-3.45	B SPT(C) N=35			Water strike(1) at 2.60m, rose to 2.00m in 20 mins, sealed at 5.00m. 7,7/8,8,10,9	110.11	(2.80)			▼1
4.00-4.45 4.00	SPT(C) N=42 B			6,8/8,11,11,12		5.40	Very stiff dark grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subangular.		
5.00-5.45 5.00	SPT(C) N=29 B			5,5/6,6,7,10	107.31	(6.40)			
6.00-6.45 6.00	SPT(C) N=50 B			9,10/12,14,18,6			Rotary Core follow on from 7.50m BGL		
7.00-7.45 7.00	SPT(C) N=50 B			10,16/16,18,16					

Remarks Groundwater encountered at 2.60m BGL. Rotary Core follow on from 7.50m BGL Borehole backfilled on completion. Chiselling from 7.50m to 7.50m for 1 hour.	Scale (approx) 1:50	Logged By AB & JMD
	Figure No. 9766-07-20.BH14	



Machine : Dando 2000 & Beretta T47 Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 7.50m 98mm to 15.00m	Ground Level (mOD) 112.71	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704970.8 E 727233.2 N	Dates 20/08/2020- 21/08/2020	Engineer	Sheet 2/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
11.80-12.25 11.80	TCR			7,6/10,13,13,11 SPT(C) N=47	100.91	11.80	Poor recovery - recovery consists of: Grey very clayey slightly sandy fine to coarse angular to subrounded Gravel of Limestone. Drillers notes: Boulder CLAY (Very stiff)			
	SCR			25/50 SPT(C) 25*/30 50/0	99.91	12.80				Poor recovery - recovery consists of: Grey fine to coarse subangular to subrounded Gravel of Limestone and Sandstone with occasional cobble and boulder fragments. Drillers notes: Boulder CLAY (very stiff)
12.80-12.83 12.80	35			4,5/9,8,7,9 SPT(C) N=33	98.11	14.60				
13.80-14.25 13.80	37			61	97.71	15.00				Poor recovery - recovery consists of: Grey very clayey slightly sandy fine to coarse subangular to subrounded Gravel of Limestone with occasional cobble and boulder fragments. Drillers notes: Boulder CLAY (Very stiff)
15.00	Sample / Tests	Casing Depth (m)	Water Depth (m)				Complete at 15.00m			
15.00-15.45	SPT(C) N=46			7,7/11,13,10,12						

Remarks	Scale (approx)	Logged By
	1:50	AB & JMD
	Figure No.	9766-07-20.BH14



Machine : Dando 2000 & Beretta T47 Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 9.30m 98mm to 15.00m	Ground Level (mOD) 112.53	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704991.9 E 727238.8 N	Dates 17/08/2020- 18/08/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B				112.33	(0.20) 0.20	MADE GROUND: Crushed Rock Fill.		
1.00 1.00-1.45	B SPT(C) N=13			1,2/2,3,4,4			Firm to very stiff brown slightly sandy slightly gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.		
2.00 2.00-2.45	B SPT(C) N=33			3,4/6,7,9,11		(3.40)			
3.00 3.00-3.45	B SPT(C) N=39			6,7/7,10,11,11					
4.00 4.00-4.45	B SPT(C) N=44			6,8/10,10,11,13	108.93	3.60	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.		
5.00 5.00-5.45	B SPT(C) N=50			8,8/10,10,14,16					
6.00 6.00-6.45	B SPT(C) N=50			12,25/37,13		(4.40)			
7.00 7.00-7.45	B SPT(C) N=50			11,15/17,20,13					
8.00 8.00-8.45	B SPT(C) N=50			10,16/22,26,2	104.53	8.00	Very stiff dark grey/brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.		
9.00 9.00-9.45 9.30-9.33 9.30	B SPT(C) N=50 TCR SCR	RQD	FI	25/50 SPT(C) 25*/30 14,17/29,21 50/0	103.23	(1.30) 9.30	Recovery consists of: Very stiff grey slightly sandy gravelly CLAY with some cobble and boulder fragments. Gravel is fine to coarse subangular to subrounded		

Remarks No groundwater encountered. Rotary Core follow on from 9.30m BGL Borehole backfilled upon completion Chiselling from 9.30m to 9.30m for 1 hour.	Scale (approx) 1:50	Logged By AB & JMD
	Figure No. 9766-07-20.BH15	



Machine : Dando 2000 & Beretta T47 Flush : Water Core Dia : 68 mm Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 9.30m 98mm to 15.00m	Ground Level (mOD) 112.53	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704991.9 E 727238.8 N	Dates 17/08/2020-18/08/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.80-11.25 10.80	53				5,5/9,8,11,13 SPT(C) N=41	101.73	(1.50) 10.80	Poor recovery - recovery consists of: Dark grey fine to coarse angular to subrounded Gravel with some cobbles and boulders fragments of predominately Limestone. Drillers notes: Boulder CLAY (Very stiff)		
11.70-12.15 11.70	89			7,7/11,9,9,14 SPT(C) N=43						
12.70-13.15 12.70	29			6,5/9,9,12,14 SPT(C) N=44		(4.20)				
14.00-14.45 14.00	36			5,9/11,11,13,15 SPT(C) N=50						
15.00					97.53	15.00				
15.00-15.03	Sample / Tests SPT(C) 25*/30 50/0		Casing Depth (m)	Water Depth (m)	25/50			Complete at 15.00m		

Remarks	Scale (approx)	Logged By
	1:50	AB & JMD
	Figure No. 9766-07-20.BH15	



Machine : Dando 2000 Method : Cable Percussion	Casing Diameter 200mm to 1.50m	Ground Level (mOD) 112.00	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704977.2 E 727260.2 N	Dates 17/08/2020- 18/08/2020	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	B			Water strike(1) at 0.30m, rose to 0.00m in 20 mins.	111.80	(0.20) 0.20	MADE GROUND: Crushed Rock Fill. Firm to very stiff brown slightly sandy slightly gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.		∇1
1.00-1.45	SPT(C) N=13			1,2/2,3,4,4	110.50	(1.30) 1.50	OBSTRUCTION due to boulder Complete at 1.50m		

Remarks No groundwater encountered. Refusal at 1.50m BGL. Borehole backfilled on completion. Chiselling from 1.50m to 1.50m for 1 hour.	Scale (approx)	Logged By
	1:50	AB & JMD
	Figure No. 9766-07-20.BH16	



Machine : Dando 2000		Casing Diameter 200mm to 9.40m	Ground Level (mOD)	Client DBFL		Job Number 9766-07-20	
Method : Cable Percussion				Location Adjacent to BH16		Dates 19/08/2020-20/08/2020	
						Sheet 1/1	

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
1.00-1.45	SPT(C) N=13			2,2/3,4,3,3		0.30	MADE GROUND: Crushed Rock Fill.		▼1	
2.00-2.45	SPT(C) N=29			5,5/6,7,7,9		(4.50)	Firm to very stiff brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.		▼2	
3.00-3.45	SPT(C) N=50			6,11/11,14,16,9						
4.00-4.45	SPT(C) N=50			7,11/11,11,14,14						
5.00-5.45	SPT(C) N=50			6,7/12,15,23		4.80	Very stiff dark grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.		▼2	
6.00-6.45	SPT(C) N=50			7,9/14,16,16,4		(3.30)				
7.00-7.45	SPT(C) N=50			7,11/17,24,9						
8.00-8.45	SPT(C) N=50			10,14/20,30		8.10	Very stiff dark grey/brown slightly sandy gravelly CLAY with occasional cobbles. Gravel is fine to coarse angular to subangular.		▼3	
9.00-9.45	SPT(C) N=50			11,24/38,12		(1.30)				
				Water strike(3) at 9.40m, rose to 8.00m in 20 mins.		9.40	OBSTRUCTION due to possible boulder or bedrock. Complete at 9.40m		▼3	

Remarks Groundwater encountered at 0.40m BGL, 2.40m BGL and 9.40m BGL. Refusal at 9.40m BGL. Slotted standpipe installed from 9.40m BGL to 1.00m BGL with a pea gravel surround, with a plain standpipe installed from 1.00m BGL to GL with a bentonite seal and a raised cover. Standpipe damaged Chiselling from 9.40m to 9.40m for 1 hour.								Scale (approx)	Logged By
								1:50	AB & JMD
								Figure No. 9766-07-20.BH16A	



Machine : Dando 2000 & Beretta T47	Casing Diameter 200mm to 7.60m 98mm to 15.00m	Ground Level (mOD) 112.00	Client DBFL	Job Number 9766-07-20
Method : Cable Percussion with Rotary Core follow on	Location (dGPS) 704962.4 E 727273.8 N	Dates 21/08/2020- 31/08/2020	Engineer	Sheet 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.50	B				111.60	(0.40)	MADE GROUND: Crushed Rock Fill with brown Clay.			
1.00	B				111.20	0.40	Firm to stiff brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subangular.			
1.00-1.45	SPT(C) N=17			2,3/3,4,5,5		0.80	Stiff brown slightly gravelly sandy CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.			
2.00	B			Water strike(1) at 1.80m, rose to 1.60m in 20 mins, sealed at 2.90m.	110.00	2.00	Stiff light brown slightly sandy slightly gravelly CLAY with occasional cobbles. Gravel is fine to coarse angular to subangular.			
2.00-2.45	SPT(C) N=23			3,3/4,5,6,8		(0.90)				
3.00	B				109.10	2.90	Very stiff dark grey slightly sandy slightly gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse angular to subangular.			
3.00-3.45	SPT(C) N=46			7,10/10,11,11,14						
4.00	B									
4.00-4.45	SPT(C) N=50			7,7/12,13,17,8						
5.00	B									
5.00-5.45	SPT(C) N=50			6,9/14,15,19,2		(4.70)				
6.00	B									
6.00-6.45	SPT(C) N=50			12,10/15,15,20						
7.00	B									
7.00-7.45	SPT(C) N=50			14,20/23,27						
7.60	TCR	SCR	RQD	FI	104.40	7.60	Poor recovery - recovery consists of: Dark grey slightly clayey fine to coarse angular to subrounded Gravel of predominately Limestone with occasional cobble and boulder fragments. Drillers notes: Boulder CLAY (Very stiff) Rotary Core follow on from 7.60m BGL			
	49									
8.60-9.05				5,7/9,11,11,9						
8.60	40			SPT(C) N=40		(3.40)				

Remarks Groundwater encountered at 1.80m BGL. Rotary Core follow on from 7.60m BGL. Slotted standpipe installed from 15.00m BGL to 2.00m BGL with a pea gravel surround, with a plain standpipe installed from 2.00m BGL to GL with a bentonite seal and a raised cover No SPT at 11.00m BGL due to blowing Sands Chiselling from 7.60m to 7.60m for 1 hour.	Scale (approx) 1:50	Logged By AB & JMD
	Figure No. 9766-07-20.BH17	



Machine : Dando 2000 & Beretta T47 Flush : Water Core Dia : 68 mm Method : Cable Percussion with Rotary Core follow on	Casing Diameter 200mm to 7.60m 98mm to 15.00m	Ground Level (mOD) 112.00	Client DBFL	Job Number 9766-07-20
	Location (dGPS) 704962.4 E 727273.8 N	Dates 21/08/2020-31/08/2020	Engineer	Sheet 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
10.10-10.25 10.10					SPT(C) 50/0 7,14/50						
11.00	66						101.00 11.00 (1.00)	Recovery consists of: Grey/brown graded Sand into Gravel with cobble and boulder fragments at base. Drillers notes: Boulder CLAY and blowing Sand (Very stiff)			
12.00-12.38 12.00					6,6/9,11,30 SPT(C) 50/225		100.00 99.80 12.00 (0.20) 12.20 (1.30)	Recovery consists of: Grey fine to medium subrounded Gravel of Mixed Lithology. Drillers notes: Boulder CLAY (Very stiff) Recovery consists of: Very stiff brown slightly sandy gravelly CLAY with some cobble and boulder fragments.			
13.50-13.95 13.50					7,5/9,11,11,13 SPT(C) N=44		98.50 13.50 (1.50)	Poor recovery - recovery consists of: Dark grey slightly clayey fine to coarse angular to subrounded Gravel of Limestone with occasional cobble fragments. Drillers notes: Boulder CLAY (very stiff)			
15.00							97.00 15.00	Complete at 15.00m			
15.00-15.45					4,6/8,8,10,10						
	Sample / Tests		Casing Depth (m)	Water Depth (m)							
	SPT(C) N=36										

Remarks	Scale (approx)	Logged By
	1:50	AB & JMD
	Figure No. 9766-07-20.BH17	

APPENDIX 7 – Laboratory Testing



Ground Investigations Ireland

Catherinestown House □

Hazelhatch Road □

Newcastle □

Co. Dublin □

Ireland □



Attention : Diarmaid MagLochlainn

Date : 17th August, 2020

Your reference : 9766-07-20

Our reference : Test Report 20/10462 Batch 1

Location : The Quarter, Citywest, Phase 3

Date samples received : 7th August, 2020

Status : Final report

Issue : 1

Nineteen samples were received for analysis on 7th August, 2020 of which nineteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. □

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

Authorised By:



Bruce Leslie

Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

Report : Solid

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.			
	Sample ID	WS05	WS05	WS05	WS06	WS06	WS07	WS07	WS07	WS08				WS08		
Depth	0.70	1.70	2.70	0.70	1.70	0.70	1.70	2.70	0.70	1.70	Please see attached notes for all abbreviations and acronyms					
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020						
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	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020						
Antimony	1	1	1	1	<1	<1	1	1	2	2				<1	mg/kg	TM30/PM15
Arsenic #	7.5	15.2	7.7	12.9	12.9	6.5	13.6	15.0	17.4	12.5				<0.5	mg/kg	TM30/PM15
Barium #	32	43	56	41	28	15	49	42	77	56				<1	mg/kg	TM30/PM15
Cadmium #	1.8	1.4	1.3	2.0	1.0	1.0	1.6	2.1	2.0	1.9	<0.1	mg/kg	TM30/PM15			
Chromium #	19.5	22.4	21.6	27.5	15.4	16.8	25.3	26.9	27.8	30.2	<0.5	mg/kg	TM30/PM15			
Copper #	21	24	19	27	14	13	24	27	33	27	<1	mg/kg	TM30/PM15			
Lead #	10	19	13	19	11	7	17	15	38	21	<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 #	1.5	1.6	1.5	1.8	0.9	1.1	1.7	2.4	2.5	2.6	<0.1	mg/kg	TM30/PM15			
Nickel #	29.2	29.7	25.3	38.8	17.8	18.1	32.8	29.8	39.4	38.8	<0.7	mg/kg	TM30/PM15			
Selenium #	<1	<1	1	<1	<1	<1	<1	<1	1	1	<1	mg/kg	TM30/PM15			
Zinc #	73	92	75	97	53	43	92	87	138	103	<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	<0.03	<0.03	<0.03	0.14	<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	<0.03	<0.03	<0.03	<0.03	0.06	0.15	<0.03	mg/kg	TM4/PM8			
Pyrene #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.13	<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	0.07	0.08	<0.06	mg/kg	TM4/PM8			
Chrysene #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.05	0.06	<0.02	mg/kg	TM4/PM8			
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.08	0.10	<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	0.05	<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	0.30	<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	0.71	<0.64	mg/kg	TM4/PM8			
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.07	<0.05	mg/kg	TM4/PM8			
Benzo(k)fluoranthene	<0.02	<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(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8			
PAH Surrogate % Recovery	102	92	97	101	93	102	99	97	96	93	<0	%	TM4/PM8			
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16			

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

Report : Solid

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS05	WS05	WS05	WS06	WS06	WS07	WS07	WS07	WS08	WS08			
Depth	0.70	1.70	2.70	0.70	1.70	0.70	1.70	2.70	0.70	1.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 #	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	3.7	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TMS/PM8/PM16/PM12/PM15
>C6-C10	4.0	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TMS/PM8/PM16/PM12/PM15
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	mg/kg	TMS/PM8/PM16/PM12/PM15
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5	128	<5	<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
o-Xylene #	<5	<5	<5	<5	<5	<5	<5	<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

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

Report : Solid

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS05	WS05	WS05	WS06	WS06	WS07	WS07	WS07	WS08	WS08			
Depth	0.70	1.70	2.70	0.70	1.70	0.70	1.70	2.70	0.70	1.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	LOD/LOR	Units	Method No.
Natural Moisture Content	8.4	12.3	9.6	13.1	8.6	10.7	12.6	11.5	17.0	14.0	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	7.7	11.0	8.8	11.6	7.9	9.7	11.2	10.3	14.5	12.3	<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
Chromium III	19.5	22.4	21.6	27.5	15.4	16.8	25.3	26.9	27.8	30.2	<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	0.18	0.27	0.24	0.17	0.17	0.09	0.16	0.29	1.72	0.36	<0.02	%	TM21/PM24
pH #	8.65	8.68	8.89	8.37	8.86	8.64	8.78	8.67	7.92	8.24	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.096	0.1022	0.1003	0.1037	0.1012	0.1007	0.1008	0.102	0.1379	0.1025		kg	NONE/PM17
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

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

Report : Solid

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57				
Sample ID	WS08	WS09	WS09	WS09	WS10	WS13	WS13	WS13	WS17				
Depth	2.70	0.70	1.70	2.70	0.70	0.70	1.70	2.70	0.70				
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				
Sample Date	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020				
										LOD/LOR	Units	Method No.	
Antimony	2	2	1	2	1	1	<1	2	2	<1	mg/kg	TM30/PM15	
Arsenic #	8.9	10.2	12.4	15.6	12.9	7.2	6.5	8.4	8.6	<0.5	mg/kg	TM30/PM15	
Barium #	47	42	117	55	47	33	27	74	68	<1	mg/kg	TM30/PM15	
Cadmium #	1.2	1.0	1.8	2.5	1.8	1.4	1.0	0.8	2.0	<0.1	mg/kg	TM30/PM15	
Chromium #	47.0	47.0	26.1	36.5	32.6	18.0	19.1	40.4	22.4	<0.5	mg/kg	TM30/PM15	
Copper #	26	21	22	21	27	20	15	26	26	<1	mg/kg	TM30/PM15	
Lead #	21	14	19	18	29	12	11	12	12	<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	mg/kg	TM30/PM15	
Molybdenum #	1.4	2.3	2.1	1.8	2.2	1.7	0.9	0.7	2.2	<0.1	mg/kg	TM30/PM15	
Nickel #	38.3	30.4	34.7	40.1	40.4	19.6	19.4	47.3	47.6	<0.7	mg/kg	TM30/PM15	
Selenium #	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM30/PM15	
Zinc #	93	87	79	433	108	56	60	87	81	<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	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	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	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	mg/kg	TM4/PM8	
Phenanthrene #	0.08	<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	mg/kg	TM4/PM8	
Fluoranthene #	0.11	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8	
Pyrene #	0.08	<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 #	0.08	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8	
Chrysene #	0.06	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8	
Benzo(bk)fluoranthene #	0.11	<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 #	0.05	<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	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	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	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	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	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	mg/kg	TM4/PM8	
Benzo(b)fluoranthene	0.08	<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	mg/kg	TM4/PM8	
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8	
PAH Surrogate % Recovery	100	99	96	92	96	94	95	96	96	<0	%	TM4/PM8	
Mineral Oil (C10-C40)	<30	<30	<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: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

Report : Solid

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57				
Sample ID	WS08	WS09	WS09	WS09	WS10	WS13	WS13	WS13	WS17				
Depth	2.70	0.70	1.70	2.70	0.70	0.70	1.70	2.70	0.70				
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				
Sample Date	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020				
										LOD/LOR	Units	Method No.	
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12	
>C6-C8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12	
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12	
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/IPM8/PM16	
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/IPM8/PM16	
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/IPM8/PM16	
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/IPM8/PM16	
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/IPM8/PM16	
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TMS/IPM8/PM16/PM12/PM15	
>C6-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12	
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/IPM8/PM16	
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/IPM8/PM16	
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12	
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12	
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12	
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/IPM8/PM16	
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/IPM8/PM16	
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/IPM8/PM16	
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/IPM8/PM16	
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/IPM8/PM16	
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TMS/IPM8/PM16/PM12/PM15	
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	mg/kg	TMS/IPM8/PM16/PM12/PM15	
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12	
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/IPM8/PM16	
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/IPM8/PM16	
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12	
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12	
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12	
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12	
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12	
o-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12	
PCB 28 #	<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	ug/kg	TM17/PM8	
PCB 101 #	<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	ug/kg	TM17/PM8	
PCB 138 #	<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	ug/kg	TM17/PM8	
PCB 180 #	<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	ug/kg	TM17/PM8	

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

Report : Solid

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57				
Sample ID	WS08	WS09	WS09	WS09	WS10	WS13	WS13	WS13	WS17				
Depth	2.70	0.70	1.70	2.70	0.70	0.70	1.70	2.70	0.70				
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				
Sample Date	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020				
											LOD/LOR	Units	Method No.
Natural Moisture Content	18.5	22.0	14.6	11.3	17.7	9.0	7.1	7.0	9.8		<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	15.6	18.1	12.7	10.1	15.0	8.3	6.7	6.6	8.9		<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	mg/kg	TM38/PM20
Chromium III	47.0	47.0	26.1	36.5	32.6	18.0	19.1	40.4	22.4		<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	0.64	0.35	0.14	0.21	0.46	0.36	0.13	0.10	0.31		<0.02	%	TM21/PM24
pH #	7.70	8.29	8.45	8.59	8.00	8.60	8.72	8.82	8.70		<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1024	0.1118	0.1037	0.1015	0.101	0.0966	0.0983	0.0989	0.0987			kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09			kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS05	WS05	WS05	WS06	WS06	WS07	WS07	WS07	WS08	WS08			
Depth	0.70	1.70	2.70	0.70	1.70	0.70	1.70	2.70	0.70	1.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	LOD/LOR	Units	Method No.
Dissolved Antimony #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0028	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.028	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.016	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.16	<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	0.004	0.009	0.008	0.008	0.003	0.005	0.014	0.029	0.013	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.03	0.04	0.09	0.08	0.08	0.03	0.05	0.14	0.29	0.13	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.006	<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	0.06	<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	0.004	0.004	0.004	0.004	0.004	0.003	0.006	0.004	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	0.04	0.04	0.04	0.04	0.04	<0.03	0.06	0.04	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	0.4	<0.3	0.3	0.3	0.4	<0.3	0.3	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	4	<3	3	3	4	<3	<3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	0.6	1.3	1.2	<0.5	<0.5	<0.5	1.0	0.6	<0.5	<0.5	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	6	13	12	<5	<5	<5	10	6	<5	<5	<5	mg/kg	TM38/PM0
Chloride #	<0.3	0.7	1.1	0.7	0.8	1.0	0.8	0.7	3.8	1.1	<0.3	mg/l	TM38/PM0
Chloride #	<3	7	11	7	8	10	8	7	38	11	<3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2	<2	4	5	4	3	3	3	51	4	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	<20	40	50	40	30	30	30	510	40	<20	mg/kg	TM60/PM0
pH	8.36	8.60	8.75	8.55	7.89	8.27	8.57	8.89	8.19	8.53	<0.01	pH units	TM73/PM0
Total Dissolved Solids #	50	47	<35	36	44	47	41	<35	210	40	<35	mg/l	TM20/PM0
Total Dissolved Solids #	500	470	<350	360	440	470	410	<350	2101	400	<350	mg/kg	TM20/PM0

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57				
Sample ID	WS08	WS09	WS09	WS09	WS10	WS13	WS13	WS13	WS17				
Depth	2.70	0.70	1.70	2.70	0.70	0.70	1.70	2.70	0.70				
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				
Sample Date	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020				
										LOD/LOR	Units	Method No.	
Dissolved Antimony #	0.004	0.003	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17	
Dissolved Antimony (A10) #	0.04	0.03	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17	
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17	
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17	
Dissolved Barium #	0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17	
Dissolved Barium (A10) #	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<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	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	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	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	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	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	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	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	mg/kg	TM30/PM17	
Dissolved Molybdenum #	0.013	0.006	0.007	0.003	0.013	0.004	0.004	0.006	0.006	<0.002	mg/l	TM30/PM17	
Dissolved Molybdenum (A10) #	0.13	0.06	0.07	0.03	0.13	0.04	0.04	0.06	0.06	<0.02	mg/kg	TM30/PM17	
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	0.003	<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	0.03	<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	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	mg/kg	TM30/PM17	
Dissolved Zinc #	0.004	0.005	<0.003	0.005	<0.003	<0.003	<0.003	<0.003	0.004	<0.003	mg/l	TM30/PM17	
Dissolved Zinc (A10) #	0.04	0.05	<0.03	0.05	<0.03	<0.03	<0.03	<0.03	0.04	<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	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	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	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	mg/kg	TM26/PM0	
Fluoride	<0.3	0.5	0.3	<0.3	0.3	<0.3	<0.3	1.1	0.4	<0.3	mg/l	TM173/PM0	
Fluoride	<3	5	3	<3	<3	<3	<3	11	4	<3	mg/kg	TM173/PM0	
Sulphate as SO4 #	1.1	0.5	1.4	0.5	0.9	0.7	0.6	0.7	0.9	<0.5	mg/l	TM38/PM0	
Sulphate as SO4 #	11	<5	14	<5	9	7	6	7	9	<5	mg/kg	TM38/PM0	
Chloride #	0.9	1.1	0.6	0.8	1.2	0.6	0.5	0.5	0.5	<0.3	mg/l	TM38/PM0	
Chloride #	9	11	6	8	12	6	5	5	5	<3	mg/kg	TM38/PM0	
Dissolved Organic Carbon	5	5	3	5	8	3	<2	<2	4	<2	mg/l	TM60/PM0	
Dissolved Organic Carbon	50	50	30	50	80	30	<20	<20	40	<20	mg/kg	TM60/PM0	
pH	8.41	8.48	8.38	8.50	8.44	8.64	8.87	8.94	8.55	<0.01	pH units	TM73/PM0	
Total Dissolved Solids #	77	70	51	<35	90	<35	<35	35	<35	<35	mg/l	TM20/PM0	
Total Dissolved Solids #	770	700	510	<350	900	<350	<350	350	<350	<350	mg/kg	TM20/PM0	

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30						
Sample ID	WS05	WS05	WS05	WS06	WS06	WS07	WS07	WS07	WS08	WS08						
Depth	0.70	1.70	2.70	0.70	1.70	0.70	1.70	2.70	0.70	1.70						
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1	1	1	1	Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Date of Receipt	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020						
Solid Waste Analysis																
Total Organic Carbon #	0.18	0.27	0.24	0.17	0.17	0.09	0.16	0.29	1.72	0.36	3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.128	<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	<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	<0.22	<0.22	<0.22	<0.22	0.30	-	-	-	<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	0.71	100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																
Arsenic #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.028	<0.025	0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.16	<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	0.04	0.09	0.08	0.08	0.03	0.05	0.14	0.29	0.13	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	0.06	<0.02	0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03	<0.03	0.04	0.04	0.04	0.04	0.04	<0.03	0.06	0.04	4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	500	470	<350	360	440	470	410	<350	2101	400	4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	<20	<20	40	50	40	30	30	30	510	40	500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.096	0.1022	0.1003	0.1037	0.1012	0.1007	0.1008	0.102	0.1379	0.1025	-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	93.7	88.5	89.6	87.1	89.0	89.0	89.5	88.5	65.5	88.2	-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.894	0.888	0.89	0.887	0.889	0.889	0.889	0.888	0.853	0.888	-	-	-		l	NONE/PM17
Eluate Volume	0.85	0.86	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	-	-	-		l	NONE/PM17
pH #	8.65	8.68	8.89	8.37	8.86	8.64	8.78	8.67	7.92	8.24	-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	4	<3	3	3	4	<3	<3	<3	<3	-	-	-	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	6	13	12	<5	<5	<5	10	6	<5	<5	1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	<3	7	11	7	8	10	8	7	38	11	800	15000	25000	<3	mg/kg	TM38/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10462

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57							
Sample ID	WS08	WS09	WS09	WS09	WS10	WS13	WS13	WS13	WS17							
Depth	2.70	0.70	1.70	2.70	0.70	0.70	1.70	2.70	0.70							
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							
Sample Date	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1	1	1	1							
Date of Receipt	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020	07/08/2020							
										Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.	
Solid Waste Analysis																
Total Organic Carbon #	0.64	0.35	0.14	0.21	0.46	0.36	0.13	0.10	0.31		3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025		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		1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	<30	<30	<30	<30	<30	<30	<30		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	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		100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																
Arsenic #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025		0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<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		0.04	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		0.5	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		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		0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.13	0.06	0.07	0.03	0.13	0.04	0.04	0.06	0.06		0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02	<0.02	<0.02	0.03	<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		0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	0.04	0.03	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02		0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	0.04	0.05	<0.03	0.05	<0.03	<0.03	<0.03	<0.03	0.04		4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	770	700	510	<350	900	<350	<350	350	<350		4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	50	50	30	50	80	30	<20	<20	40		500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1024	0.1118	0.1037	0.1015	0.101	0.0966	0.0983	0.0989	0.0987		-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	88.3	80.6	87.0	88.5	89.1	93.3	92.0	91.5	91.4		-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.888	0.878	0.887	0.888	0.889	0.894	0.892	0.892	0.892		-	-	-		l	NONE/PM17
Eluate Volume	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8		-	-	-		l	NONE/PM17
pH #	7.70	8.29	8.45	8.59	8.00	8.60	8.72	8.82	8.70		-	-	-	<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		1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	5	3	<3	<3	<3	<3	11	4		-	-	-	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	11	<5	14	<5	9	7	6	7	9		1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	9	11	6	8	12	6	5	5	5		800	15000	25000	<3	mg/kg	TM38/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/10462	1	WS05	0.70	1-3	No interpretation possible
20/10462	1	WS05	1.70	4-6	No interpretation possible
20/10462	1	WS05	2.70	7-9	No interpretation possible
20/10462	1	WS06	0.70	10-12	No interpretation possible
20/10462	1	WS06	1.70	13-15	No interpretation possible
20/10462	1	WS07	0.70	16-18	No interpretation possible
20/10462	1	WS07	1.70	19-21	No interpretation possible
20/10462	1	WS07	2.70	22-24	No interpretation possible
20/10462	1	WS08	0.70	25-27	No interpretation possible
20/10462	1	WS08	1.70	28-30	No interpretation possible
20/10462	1	WS08	2.70	31-33	No interpretation possible
20/10462	1	WS09	0.70	34-36	No interpretation possible
20/10462	1	WS09	1.70	37-39	No interpretation possible
20/10462	1	WS09	2.70	40-42	No interpretation possible
20/10462	1	WS10	0.70	43-45	No interpretation possible
20/10462	1	WS13	0.70	46-48	No interpretation possible
20/10462	1	WS13	1.70	49-51	No interpretation possible
20/10462	1	WS13	2.70	52-54	No interpretation possible
20/10462	1	WS17	0.70	55-57	No interpretation possible

Client Name: Ground Investigations Ireland
Reference: 20/07/9766
Location: The Quarter, Citywest, Phase 3
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). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

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

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/10462	1	WS05	0.70	2	11/08/2020	General Description (Bulk Analysis)	soil.stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS05	1.70	5	11/08/2020	General Description (Bulk Analysis)	soil.stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS05	2.70	8	11/08/2020	General Description (Bulk Analysis)	soil.stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS06	0.70	11	11/08/2020	General Description (Bulk Analysis)	soil/stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS06	1.70	14	11/08/2020	General Description (Bulk Analysis)	soil/stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS07	0.70	17	11/08/2020	General Description (Bulk Analysis)	soil/stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS07	1.70	20	11/08/2020	General Description (Bulk Analysis)	Soil/Stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD

Client Name: Ground Investigations Ireland
Reference: 20/07/9766
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/10462	1	WS07	1.70	20	11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS07	2.70	23	11/08/2020	General Description (Bulk Analysis)	Soil/Stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS08	0.70	26	11/08/2020	General Description (Bulk Analysis)	Soil/Stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS08	1.70	29	11/08/2020	General Description (Bulk Analysis)	soil.stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS08	2.70	32	11/08/2020	General Description (Bulk Analysis)	soil.stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS09	0.70	35	11/08/2020	General Description (Bulk Analysis)	soil.stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS09	1.70	38	11/08/2020	General Description (Bulk Analysis)	Soil/Stone
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS09	2.70	41	11/08/2020	General Description (Bulk Analysis)	Soil/Stone
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS10	0.70	44	11/08/2020	General Description (Bulk Analysis)	Soil/Stone
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS13	0.70	47	11/08/2020	General Description (Bulk Analysis)	Soil/Stone
					11/08/2020	Asbestos Fibres	NAD

Client Name: Ground Investigations Ireland
Reference: 20/07/9766
Location: The Quarter, Citywest, Phase 3
Contact: Diarmaid MagLochlainn

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/10462	1	WS13	0.70	47	11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS13	1.70	50	11/08/2020	General Description (Bulk Analysis)	Soil/Stone
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS13	2.70	53	11/08/2020	General Description (Bulk Analysis)	soil/stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD
20/10462	1	WS17	0.70	56	11/08/2020	General Description (Bulk Analysis)	soil/stones
					11/08/2020	Asbestos Fibres	NAD
					11/08/2020	Asbestos ACM	NAD
					11/08/2020	Asbestos Type	NAD
					11/08/2020	Asbestos Level Screen	NAD

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/10462

SOILS

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.

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.

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

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

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

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

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

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

WATERS

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

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

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

BLANKS

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

NOTE

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

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

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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.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	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

EMT Job No: 20/10462

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

EMT Job No: 20/10462

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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	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	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	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	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 (comparabl	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 (comparabl	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
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

EMT Job No: 20/10462

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	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	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.			AR	
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	

Ground Investigations Ireland

Catherinestown House □

Hazelhatch Road □

Newcastle □

Co. Dublin □

Ireland □



Attention : Diarmaid MagLochlainn

Date : 18th August, 2020

Your reference : 9766-07-20

Our reference : Test Report 20/10583 Batch 1

Location : The Quater, Citywest, Phase 3

Date samples received : 10th August, 2020

Status : Final report

Issue : 1

Twenty samples were received for analysis on 10th August, 2020 of which twenty were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. □

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

Authorised By:



Bruce Leslie

Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

Report : Solid

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	Please see attached notes for all abbreviations and acronyms		
	Sample ID	WS01	WS01	WS02	WS02	WS03	WS03	WS04	WS04	WS11			
Depth	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	LOD/LOR	Units	Method No.
Antimony	4	2	2	2	2	1	2	2	1	2	<1	mg/kg	TM30/PM15
Arsenic #	8.6	9.7	11.2	10.7	16.2	9.3	11.3	12.6	8.4	9.4	<0.5	mg/kg	TM30/PM15
Barium #	40	64	106	54	69	32	48	46	28	38	<1	mg/kg	TM30/PM15
Cadmium #	1.8	1.8	3.3	2.1	2.6	2.0	2.0	1.6	1.8	1.6	<0.1	mg/kg	TM30/PM15
Chromium #	28.1	19.7	45.5	20.7	64.5	17.3	35.3	23.7	51.9	43.1	<0.5	mg/kg	TM30/PM15
Copper #	24	25	31	27	25	22	23	21	19	22	<1	mg/kg	TM30/PM15
Lead #	15	14	15	14	18	14	15	19	15	16	<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 #	2.6	2.2	2.4	2.3	1.8	1.6	1.4	2.1	1.6	1.4	<0.1	mg/kg	TM30/PM15
Nickel #	35.4	34.7	50.7	36.4	59.9	30.1	33.4	30.7	27.5	29.1	<0.7	mg/kg	TM30/PM15
Selenium #	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM30/PM15
Zinc #	77	86	90	85	103	74	85	85	79	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 #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
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	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<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
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 #	<0.02	<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(bk)fluoranthene #	<0.07	<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 #	<0.04	<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	<0.05	<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	<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	88	102	99	96	92	98	96	95	96	98	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

Report : Solid

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS01	WS01	WS02	WS02	WS03	WS03	WS04	WS04	WS11	WS11			
Depth	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TMS/PM8/PM16/PM12/PM15
>C6-C10	0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TMS/PM8/PM16/PM12/PM15
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	mg/kg	TMS/PM8/PM16/PM12/PM15
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
o-Xylene #	<5	<5	<5	<5	<5	<5	<5	<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

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

Report : Solid

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS01	WS01	WS02	WS02	WS03	WS03	WS04	WS04	WS11	WS11			
Depth	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	LOD/LOR	Units	Method No.
Natural Moisture Content	9.8	13.2	13.0	14.1	14.6	14.7	13.4	12.2	8.4	9.4	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	8.9	11.6	11.5	12.4	12.7	12.8	11.8	10.9	7.7	8.6	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	28.1	19.7	45.5	20.7	64.5	17.3	35.3	23.7	51.9	43.1	<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	0.19	0.29	0.26	0.50	0.34	0.16	0.21	0.14	0.22	0.16	<0.02	%	TM21/PM24
pH #	8.65	8.45	8.65	8.48	8.54	8.75	8.57	8.59	8.75	8.81	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.113	0.102	0.1028	0.102	0.1022	0.1002	0.1053	0.1033	0.098	0.0999		kg	NONE/PM17
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

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

Report : Solid

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS11	WS12	WS12	WS12	WS14	WS14	WS14	WS15	WS16	WS18			
Depth	2.70	0.70	1.70	2.70	0.70	1.70	2.70	0.70	0.70	0.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	LOD/LOR	Units	Method No.
Antimony	<1	2	1	2	2	2	2	2	1	2	<1	mg/kg	TM30/PM15
Arsenic #	6.7	13.1	7.7	11.0	18.5	8.9	8.3	16.4	6.7	9.1	<0.5	mg/kg	TM30/PM15
Barium #	21	50	30	48	267	46	40	131	173	40	<1	mg/kg	TM30/PM15
Cadmium #	1.1	2.1	1.2	1.5	2.8	1.7	1.8	1.5	1.4	2.0	<0.1	mg/kg	TM30/PM15
Chromium #	25.0	27.5	28.6	25.0	86.7	46.7	43.7	45.5	33.8	34.0	<0.5	mg/kg	TM30/PM15
Copper #	13	31	15	20	26	16	20	22	9	25	<1	mg/kg	TM30/PM15
Lead #	25	16	13	18	26	18	13	21	7	14	<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 #	1.9	2.8	1.0	1.9	7.3	1.8	3.3	3.0	2.4	3.4	<0.1	mg/kg	TM30/PM15
Nickel #	20.4	43.6	21.5	30.1	40.1	24.0	41.0	40.4	16.2	29.4	<0.7	mg/kg	TM30/PM15
Selenium #	<1	1	<1	<1	3	<1	<1	<1	1	<1	<1	mg/kg	TM30/PM15
Zinc #	58	104	63	82	163	84	77	93	39	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 #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
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	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<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
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 #	<0.02	<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(bk)fluoranthene #	<0.07	<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 #	<0.04	<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	<0.05	<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	<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	97	94	97	82	96	95	91	80	91	95	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

Report : Solid

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS11	WS12	WS12	WS12	WS14	WS14	WS14	WS15	WS16	WS18			
Depth	2.70	0.70	1.70	2.70	0.70	1.70	2.70	0.70	0.70	0.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 #	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	4.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TMS/PM8/PM16/PM12/PM15
>C6-C10	4.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TMS/PM8/PM16/PM12/PM15
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	mg/kg	TMS/PM8/PM16/PM12/PM15
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM36/PM12
o-Xylene #	<5	<5	<5	<5	<5	<5	<5	<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

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

Report : Solid

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS11	WS12	WS12	WS12	WS14	WS14	WS14	WS15	WS16	WS18			
Depth	2.70	0.70	1.70	2.70	0.70	1.70	2.70	0.70	0.70	0.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	LOD/LOR	Units	Method No.
Natural Moisture Content	8.3	14.8	10.0	10.3	21.0	8.8	12.0	17.8	22.7	9.4	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	7.7	12.9	9.1	9.4	17.4	8.1	10.7	15.1	18.5	8.6	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	25.0	27.5	28.6	25.0	86.7	46.7	43.7	45.5	33.8	34.0	<0.5	mg/kg	NONE/NONE
Total Organic Carbon #	0.15	0.39	0.14	0.18	0.70	0.28	0.29	0.24	0.13	0.21	<0.02	%	TM21/PM24
pH #	8.84	8.51	8.89	8.76	7.86	8.72	8.60	8.48	8.41	8.71	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1	0.1122	0.099	0.1011	0.1018	0.0971	0.0978	0.1122	0.1046	0.0977		kg	NONE/PM17
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

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

Report : CEN 10:1 1 Batch

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS01	WS01	WS02	WS02	WS03	WS03	WS04	WS04	WS11	WS11			
Depth	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	LOD/LOR	Units	Method No.
Dissolved Antimony #	0.003	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.03	<0.02	<0.02	<0.02	0.03	<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	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	<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 Barium (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 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 #	0.006	0.009	0.007	0.003	0.005	0.006	0.005	0.006	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.06	0.09	0.07	0.03	0.05	0.06	0.05	0.06	<0.02	<0.02	<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	0.5	0.3	0.5	0.3	0.4	0.3	0.6	0.3	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	5	3	5	3	4	<3	6	3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	0.5	0.6	<0.5	0.6	<0.5	<0.5	2.5	2.3	0.7	0.7	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	5	6	<5	6	<5	<5	25	23	7	7	<5	mg/kg	TM38/PM0
Chloride #	0.3	0.3	<0.3	0.3	0.4	0.4	0.3	<0.3	<0.3	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	3	3	<3	3	4	4	3	<3	<3	<3	<3	mg/kg	TM38/PM0
Dissolved Organic Carbon	3	2	3	<2	4	<2	3	2	<2	3	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30	20	30	<20	40	<20	30	20	<20	30	<20	mg/kg	TM60/PM0
pH	8.13	8.39	8.24	8.22	8.40	8.36	8.26	8.43	8.31	8.11	<0.01	pH units	TM73/PM0
Total Dissolved Solids #	41	43	<35	37	44	<35	67	55	42	46	<35	mg/l	TM20/PM0
Total Dissolved Solids #	410	430	<350	370	440	<350	670	550	420	460	<350	mg/kg	TM20/PM0

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	WS11	WS12	WS12	WS12	WS14	WS14	WS14	WS15	WS16	WS18			
Depth	2.70	0.70	1.70	2.70	0.70	1.70	2.70	0.70	0.70	0.70			
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020			
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	LOD/LOR	Units	Method No.
Dissolved Antimony #	0.003	<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) #	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	<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 Barium (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 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 #	0.002	<0.002	0.003	0.004	<0.002	0.007	0.006	0.002	0.004	0.008	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.02	<0.02	0.03	0.04	<0.02	0.07	0.06	0.02	0.04	0.08	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<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	0.004	<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	0.04	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	0.5	0.5	0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	<3	<3	<3	5	5	3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	0.7	1.3	0.8	0.5	<0.5	<0.5	<0.5	0.9	1.0	<0.5	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	7	13	8	5	<5	<5	<5	9	10	<5	<5	mg/kg	TM38/PM0
Chloride #	<0.3	0.5	0.3	<0.3	0.4	0.4	0.4	0.7	0.5	0.3	<0.3	mg/l	TM38/PM0
Chloride #	<3	5	<3	<3	4	4	4	7	5	3	<3	mg/kg	TM38/PM0
Dissolved Organic Carbon	3	3	<2	<2	3	<2	<2	<2	<2	2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30	30	<20	<20	30	<20	<20	<20	<20	20	<20	mg/kg	TM60/PM0
pH	8.48	8.12	8.64	8.42	7.91	8.41	8.51	8.32	7.76	8.30	<0.01	pH units	TM73/PM0
Total Dissolved Solids #	47	42	42	43	39	45	38	71	65	47	<35	mg/l	TM20/PM0
Total Dissolved Solids #	470	420	420	430	390	450	380	710	650	470	<350	mg/kg	TM20/PM0

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

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

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30						
Sample ID	WS01	WS01	WS02	WS02	WS03	WS03	WS04	WS04	WS11	WS11						
Depth	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70	0.70	1.70						
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	1	1	1	1	1	1	1	1	1	1	Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Date of Receipt	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020						
Solid Waste Analysis																
Total Organic Carbon #	0.19	0.29	0.26	0.50	0.34	0.16	0.21	0.14	0.22	0.16	3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	<30	<30	<30	<30	<30	<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	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<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/PM10
Molybdenum #	0.06	0.09	0.07	0.03	0.05	0.06	0.05	0.06	<0.02	<0.02	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 #	0.03	<0.02	<0.02	<0.02	0.03	<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	<0.03	<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 #	410	430	<350	370	440	<350	670	550	420	460	4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	30	20	30	<20	40	<20	30	20	<20	30	500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.113	0.102	0.1028	0.102	0.1022	0.1002	0.1053	0.1033	0.098	0.0999	-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	79.4	88.1	87.5	88.1	87.7	89.5	85.5	87.3	92.2	89.6	-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.877	0.888	0.887	0.888	0.887	0.889	0.885	0.887	0.892	0.89	-	-	-		l	NONE/PM17
Eluate Volume	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	-	-	-		l	NONE/PM17
pH #	8.65	8.45	8.65	8.48	8.54	8.75	8.57	8.59	8.75	8.81	-	-	-	<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	5	3	4	<3	6	3	<3	<3	-	-	-	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	5	6	<5	6	<5	<5	25	23	7	7	1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	3	3	<3	3	4	4	3	<3	<3	<3	800	15000	25000	<3	mg/kg	TM38/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn
EMT Job No: 20/10583

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

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60						
Sample ID	WS11	WS12	WS12	WS12	WS14	WS14	WS14	WS15	WS16	WS18						
Depth	2.70	0.70	1.70	2.70	0.70	1.70	2.70	0.70	0.70	0.70						
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	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020	28/07/2020						
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	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	10/08/2020	Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Solid Waste Analysis																
Total Organic Carbon #	0.15	0.39	0.14	0.18	0.70	0.28	0.29	0.24	0.13	0.21	3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	<30	<30	<30	<30	<30	<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	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<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 #	0.02	<0.02	0.03	0.04	<0.02	0.07	0.06	0.02	0.04	0.08	0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	<0.03	<0.03	4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	470	420	420	430	390	450	380	710	650	470	4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	30	30	<20	<20	30	<20	<20	<20	<20	20	500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1	0.1122	0.099	0.1011	0.1018	0.0971	0.0978	0.1122	0.1046	0.0977	-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	89.6	80.5	91.2	88.7	88.1	92.7	91.6	80.3	86.4	91.8	-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.89	0.878	0.891	0.889	0.888	0.893	0.892	0.878	0.886	0.892	-	-	-		l	NONE/PM17
Eluate Volume	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	-	-	-		l	NONE/PM17
pH #	8.84	8.51	8.89	8.76	7.86	8.72	8.60	8.48	8.41	8.71	-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	<3	<3	<3	<3	<3	<3	5	5	3	-	-	-	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	7	13	8	5	<5	<5	<5	9	10	<5	1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	<3	5	<3	<3	4	4	4	7	5	3	800	15000	25000	<3	mg/kg	TM38/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/10583	1	WS01	0.70	1-3	No interpretation possible
20/10583	1	WS01	1.70	4-6	No interpretation possible
20/10583	1	WS02	0.70	7-9	No interpretation possible
20/10583	1	WS02	1.70	10-12	No interpretation possible
20/10583	1	WS03	0.70	13-15	No interpretation possible
20/10583	1	WS03	1.70	16-18	No interpretation possible
20/10583	1	WS04	0.70	19-21	No interpretation possible
20/10583	1	WS04	1.70	22-24	No interpretation possible
20/10583	1	WS11	0.70	25-27	No interpretation possible
20/10583	1	WS11	1.70	28-30	No interpretation possible
20/10583	1	WS11	2.70	31-33	No interpretation possible
20/10583	1	WS12	0.70	34-36	No interpretation possible
20/10583	1	WS12	1.70	37-39	No interpretation possible
20/10583	1	WS12	2.70	40-42	No interpretation possible
20/10583	1	WS14	0.70	43-45	No interpretation possible
20/10583	1	WS14	1.70	46-48	No interpretation possible
20/10583	1	WS14	2.70	49-51	No interpretation possible
20/10583	1	WS15	0.70	52-54	No interpretation possible
20/10583	1	WS16	0.70	55-57	No interpretation possible
20/10583	1	WS18	0.70	58-60	No interpretation possible

Client Name: Ground Investigations Ireland
Reference: 20/07/9766
Location: The Quater, Citywest, Phase 3
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). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

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

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/10583	1	WS01	0.70	2	12/08/2020	General Description (Bulk Analysis)	Soil/Stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS01	1.70	5	12/08/2020	General Description (Bulk Analysis)	Soil/Stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS02	0.70	8	12/08/2020	General Description (Bulk Analysis)	Soil/Stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS02	1.70	11	12/08/2020	General Description (Bulk Analysis)	soil-stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS03	0.70	14	12/08/2020	General Description (Bulk Analysis)	soil.stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS03	1.70	17	12/08/2020	General Description (Bulk Analysis)	soil.stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS04	0.70	20	12/08/2020	General Description (Bulk Analysis)	Soil/Stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD

Client Name: Ground Investigations Ireland
Reference: 20/07/9766
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/10583	1	WS04	0.70	20	12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS04	1.70	23	12/08/2020	General Description (Bulk Analysis)	Soil/Stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS11	0.70	26	12/08/2020	General Description (Bulk Analysis)	soil.stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS11	1.70	29	12/08/2020	General Description (Bulk Analysis)	soil.stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS11	2.70	32	12/08/2020	General Description (Bulk Analysis)	soil.stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS12	0.70	35	12/08/2020	General Description (Bulk Analysis)	Soil/Stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS12	1.70	38	12/08/2020	General Description (Bulk Analysis)	soil.stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS12	2.70	41	12/08/2020	General Description (Bulk Analysis)	soil.stones
					12/08/2020	Asbestos Fibres	NAD
					12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS14	0.70	44	13/08/2020	General Description (Bulk Analysis)	soil-stones
					13/08/2020	Asbestos Fibres	NAD
					13/08/2020	Asbestos ACM	NAD
					13/08/2020	Asbestos Type	NAD
					13/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS14	1.70	47	12/08/2020	General Description (Bulk Analysis)	soil.stones
					12/08/2020	Asbestos Fibres	NAD

Client Name: Ground Investigations Ireland
Reference: 20/07/9766
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/10583	1	WS14	1.70	47	12/08/2020	Asbestos ACM	NAD
					12/08/2020	Asbestos Type	NAD
					12/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS14	2.70	50	13/08/2020	General Description (Bulk Analysis)	soil-stones
					13/08/2020	Asbestos Fibres	NAD
					13/08/2020	Asbestos ACM	NAD
					13/08/2020	Asbestos Type	NAD
					13/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS15	0.70	53	13/08/2020	General Description (Bulk Analysis)	soil-stones
					13/08/2020	Asbestos Fibres	NAD
					13/08/2020	Asbestos ACM	NAD
					13/08/2020	Asbestos Type	NAD
					13/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS16	0.70	56	13/08/2020	General Description (Bulk Analysis)	Soil/Stones
					13/08/2020	Asbestos Fibres	NAD
					13/08/2020	Asbestos ACM	NAD
					13/08/2020	Asbestos Type	NAD
					13/08/2020	Asbestos Level Screen	NAD
20/10583	1	WS18	0.70	59	13/08/2020	General Description (Bulk Analysis)	Soil/Stones
					13/08/2020	Asbestos Fibres	NAD
					13/08/2020	Asbestos ACM	NAD
					13/08/2020	Asbestos Type	NAD
					13/08/2020	Asbestos Level Screen	NAD

Client Name: Ground Investigations Ireland
Reference: 9766-07-20
Location: The Quater, Citywest, Phase 3
Contact: Diarmaid MagLochlainn

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
20/10583	1	WS01	0.70	1-3	GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS01	1.70	4-6	GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS02	0.70	7-9	GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS02	1.70	10-12	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS03	0.70	13-15	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS03	1.70	16-18	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS04	0.70	19-21	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS04	1.70	22-24	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS11	0.70	25-27	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS11	1.70	28-30	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS11	2.70	31-33	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS12	0.70	34-36	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS12	1.70	37-39	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS12	2.70	40-42	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS14	0.70	43-45	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS14	1.70	46-48	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS14	2.70	49-51	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS15	0.70	52-54	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS16	0.70	55-57	EPH, GRO, PAH, PCB	Sample holding time exceeded
20/10583	1	WS18	0.70	58-60	EPH, GRO, PAH, PCB	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.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/10583

SOILS

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.

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.

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

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

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

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

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

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

WATERS

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

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

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

BLANKS

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

NOTE

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

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

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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.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	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

EMT Job No: 20/10583

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

EMT Job No: 20/10583

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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	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	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	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	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 (comparabl	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 (comparabl	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
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

EMT Job No: 20/10583

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	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	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.			AR	
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 8 – HazWasteOnLine™ Report



Waste Classification Report



Q4D28-ZN7S7-P9ZCL

Job name

The Quarter Citywest Batch 1

Description/Comments

Project

9766-07-20

Site

The Quarter Citywest

Related Documents

#	Name	Description
1	EMT-20-10462-Batch-1-File-1.hwol	.hwol file used to create the Job

Waste Stream Template

Example waste stream template for contaminated soils

Classified by

Name:
Nicholas Morgan

Company:
Ground Investigations Ireland Ltd

HazWasteOnline™ Training Record:

Date:
02 Sep 2020 09:10 GMT
Telephone:

Course	Date
Hazardous Waste Classification	-
Advanced Hazardous Waste Classification	-

Report

Created by: Nicholas Morgan
Created date: 02 Sep 2020 09:10 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS05-28/07/2020-0.70m		Non Hazardous		3
2	WS05-28/07/2020-1.70m		Non Hazardous		6
3	WS05-28/07/2020-2.70m		Non Hazardous		9
4	WS06-28/07/2020-0.70m		Non Hazardous		12
5	WS06-28/07/2020-1.70m		Non Hazardous		15
6	WS07-28/07/2020-0.70m		Non Hazardous		18
7	WS07-28/07/2020-1.70m		Non Hazardous		21
8	WS07-28/07/2020-2.70m		Non Hazardous		24
9	WS08-28/07/2020-0.70m		Non Hazardous		27
10	WS08-28/07/2020-1.70m		Non Hazardous		30
11	WS08-28/07/2020-2.70m		Non Hazardous		33
12	WS09-28/07/2020-0.70m		Non Hazardous		36
13	WS09-28/07/2020-1.70m		Non Hazardous		39



#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS09-28/07/2020-2.70m		Non Hazardous		42
15	WS10-28/07/2020-0.70m		Non Hazardous		45
16	WS13-28/07/2020-0.70m		Non Hazardous		48
17	WS13-28/07/2020-1.70m		Non Hazardous		51
18	WS13-28/07/2020-2.70m		Non Hazardous		54
19	WS17-28/07/2020-0.70m		Non Hazardous		57

Appendices					Page
Appendix A: Classifier defined and non CLP determinands					60
Appendix B: Rationale for selection of metal species					61
Appendix C: Version					62

Classification of sample: WS05-28/07/2020-0.70m

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

Sample details

Sample Name: WS05-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 7.7% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 7.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.105 mg/kg	0.00011 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				7.5 mg/kg	1.32	9.14 mg/kg	0.000914 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.8 mg/kg	1.142	1.898 mg/kg	0.00019 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				19.5 mg/kg	1.462	26.306 mg/kg	0.00263 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	21.823 mg/kg	0.00218 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	10 mg/kg	1.56	14.397 mg/kg	0.000923 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.5 mg/kg	1.5	2.077 mg/kg	0.000208 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				29.2 mg/kg	2.976	80.215 mg/kg	0.00802 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				73 mg/kg	1.245	83.868 mg/kg	0.00839 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.65 pH		8.65 pH	8.65 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 }				32 mg/kg	1.117	32.977 mg/kg	0.0033 %	✓	
		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:								0.0326 %		

Key

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

Classification of sample: WS05-28/07/2020-1.70m

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

Sample details

Sample Name: WS05-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 11% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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

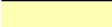



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.065 mg/kg	0.000107 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				15.2 mg/kg	1.32	17.861 mg/kg	0.00179 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.4 mg/kg	1.142	1.423 mg/kg	0.000142 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				22.4 mg/kg	1.462	29.138 mg/kg	0.00291 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				24 mg/kg	1.126	24.049 mg/kg	0.0024 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	19 mg/kg	1.56	26.376 mg/kg	0.00169 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.6 mg/kg	1.5	2.136 mg/kg	0.000214 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				29.7 mg/kg	2.976	78.672 mg/kg	0.00787 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				92 mg/kg	1.245	101.917 mg/kg	0.0102 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.68 pH		8.68 pH	8.68 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 }				43 mg/kg	1.117	42.729 mg/kg	0.00427 %	✓	
		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:								0.0373 %		



Key

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

Classification of sample: WS05-28/07/2020-2.70m

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

Sample details

Sample Name: WS05-28/07/2020-2.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 8.8% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.092 mg/kg	0.000109 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				7.7 mg/kg	1.32	9.272 mg/kg	0.000927 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.3 mg/kg	1.142	1.354 mg/kg	0.000135 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				21.6 mg/kg	1.462	28.791 mg/kg	0.00288 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				19 mg/kg	1.126	19.509 mg/kg	0.00195 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	13 mg/kg	1.56	18.493 mg/kg	0.00119 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.5 mg/kg	1.5	2.052 mg/kg	0.000205 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				25.3 mg/kg	2.976	68.673 mg/kg	0.00687 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1 mg/kg	2.554	2.329 mg/kg	0.000233 %	✓	
	034-002-00-8									
12	zinc { zinc oxide }				75 mg/kg	1.245	85.138 mg/kg	0.00851 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.89 pH		8.89 pH	8.89 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 }				56 mg/kg	1.117	57.022 mg/kg	0.0057 %	✓	
		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:								0.0342 %		

Key

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

Classification of sample: WS06-28/07/2020-0.70m

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

Sample details

Sample Name: WS06-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 11.6% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.058 mg/kg	0.000106 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				12.9 mg/kg	1.32	15.056 mg/kg	0.00151 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2 mg/kg	1.142	2.02 mg/kg	0.000202 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				27.5 mg/kg	1.462	35.53 mg/kg	0.00355 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	26.873 mg/kg	0.00269 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	19 mg/kg	1.56	26.199 mg/kg	0.00168 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.8 mg/kg	1.5	2.387 mg/kg	0.000239 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				38.8 mg/kg	2.976	102.084 mg/kg	0.0102 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				97 mg/kg	1.245	106.732 mg/kg	0.0107 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.37 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 }				41 mg/kg	1.117	40.467 mg/kg	0.00405 %	✓	
		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:								0.0406 %		



Key

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

Classification of sample: WS06-28/07/2020-1.70m

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

Sample details

Sample Name: WS06-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 7.9% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 7.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197 mg/kg	<0.00012 %		<LOD
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				12.9 mg/kg	1.32	15.687 mg/kg	0.00157 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1 mg/kg	1.142	1.052 mg/kg	0.000105 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				15.4 mg/kg	1.462	20.73 mg/kg	0.00207 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				14 mg/kg	1.126	14.517 mg/kg	0.00145 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	11 mg/kg	1.56	15.802 mg/kg	0.00101 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				0.9 mg/kg	1.5	1.244 mg/kg	0.000124 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				17.8 mg/kg	2.976	48.792 mg/kg	0.00488 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				53 mg/kg	1.245	60.758 mg/kg	0.00608 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.86 pH		8.86 pH	8.86 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 }				28 mg/kg	1.117	28.792 mg/kg	0.00288 %	✓	
		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:								0.026 %		

Key

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

Classification of sample: WS07-28/07/2020-0.70m

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

Sample details

Sample Name: WS07-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 9.7% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 9.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197 mg/kg	<0.00012 %			<LOD
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				6.5 mg/kg	1.32	7.75 mg/kg	0.000775 %		✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				1 mg/kg	1.142	1.032 mg/kg	0.000103 %		✓	
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				16.8 mg/kg	1.462	22.172 mg/kg	0.00222 %		✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %			<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	copper { dicopper oxide; copper (I) oxide }				13 mg/kg	1.126	13.217 mg/kg	0.00132 %		✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	7 mg/kg	1.56	9.86 mg/kg	0.000632 %		✓	
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	molybdenum { molybdenum(VI) oxide }				1.1 mg/kg	1.5	1.49 mg/kg	0.000149 %		✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				18.1 mg/kg	2.976	48.645 mg/kg	0.00486 %		✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %			<LOD
	034-002-00-8										
12	zinc { zinc oxide }				43 mg/kg	1.245	48.331 mg/kg	0.00483 %		✓	
	030-013-00-7	215-222-5	1314-13-2								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %			<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.64 pH		8.64 pH	8.64 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 }				15 mg/kg	1.117	15.123 mg/kg	0.00151 %	✓	
		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:								0.0222 %		



Key

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

Classification of sample: WS07-28/07/2020-1.70m

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

Sample details

Sample Name: WS07-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 11.2% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 11.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.063 mg/kg	0.000106 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				13.6 mg/kg	1.32	15.945 mg/kg	0.00159 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.6 mg/kg	1.142	1.623 mg/kg	0.000162 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				25.3 mg/kg	1.462	32.836 mg/kg	0.00328 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				24 mg/kg	1.126	23.995 mg/kg	0.0024 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	17 mg/kg	1.56	23.547 mg/kg	0.00151 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.7 mg/kg	1.5	2.265 mg/kg	0.000226 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				32.8 mg/kg	2.976	86.688 mg/kg	0.00867 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				92 mg/kg	1.245	101.688 mg/kg	0.0102 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.78 pH		8.78 pH	8.78 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 }				49 mg/kg	1.117	48.581 mg/kg	0.00486 %	✓	
		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:								0.0387 %		

Key

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

Classification of sample: WS07-28/07/2020-2.70m

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

Sample details

Sample Name: WS07-28/07/2020-2.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 10.3% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.074 mg/kg	0.000107 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				15 mg/kg	1.32	17.765 mg/kg	0.00178 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2.1 mg/kg	1.142	2.152 mg/kg	0.000215 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				26.9 mg/kg	1.462	35.266 mg/kg	0.00353 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	27.268 mg/kg	0.00273 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	15 mg/kg	1.56	20.987 mg/kg	0.00135 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.4 mg/kg	1.5	3.23 mg/kg	0.000323 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				29.8 mg/kg	2.976	79.557 mg/kg	0.00796 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				87 mg/kg	1.245	97.136 mg/kg	0.00971 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.67 pH		8.67 pH	8.67 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 }				42 mg/kg	1.117	42.063 mg/kg	0.00421 %	✓	
		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:								0.0376 %		



Key

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

Classification of sample: WS08-28/07/2020-0.70m

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

Sample details

Sample Name: WS08-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 14.5% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 14.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	antimony { antimony trioxide }				2	mg/kg	1.197	2.047	mg/kg	0.000205 %	✓	
	051-005-00-X	215-175-0	1309-64-4									
2	arsenic { arsenic trioxide }				17.4	mg/kg	1.32	19.642	mg/kg	0.00196 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				2	mg/kg	1.142	1.953	mg/kg	0.000195 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				27.8	mg/kg	1.462	34.74	mg/kg	0.00347 %	✓	
		215-160-9	1308-38-9									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	copper { dicopper oxide; copper (I) oxide }				33	mg/kg	1.126	31.767	mg/kg	0.00318 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
7	lead { lead chromate }			1	38	mg/kg	1.56	50.678	mg/kg	0.00325 %	✓	
	082-004-00-2	231-846-0	7758-97-6									
8	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
9	molybdenum { molybdenum(VI) oxide }				2.5	mg/kg	1.5	3.207	mg/kg	0.000321 %	✓	
	042-001-00-9	215-204-7	1313-27-5									
10	nickel { nickel chromate }				39.4	mg/kg	2.976	100.261	mg/kg	0.01 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1	mg/kg	2.554	2.183	mg/kg	0.000218 %	✓	
	034-002-00-8											
12	zinc { zinc oxide }				138	mg/kg	1.245	146.864	mg/kg	0.0147 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
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				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				0.128 mg/kg		0.109 mg/kg	0.0000109 %	✓	
	601-021-00-3	203-625-9	108-88-3							
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				7.92 pH		7.92 pH	7.92 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				0.06 mg/kg		0.0513 mg/kg	0.00000513 %	✓	
		205-912-4	206-44-0							
27	pyrene				0.06 mg/kg		0.0513 mg/kg	0.00000513 %	✓	
		204-927-3	129-00-0							
28	benzo[a]anthracene				0.07 mg/kg		0.0598 mg/kg	0.00000599 %	✓	
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				0.05 mg/kg		0.0428 mg/kg	0.00000428 %	✓	
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				0.06 mg/kg		0.0513 mg/kg	0.00000513 %	✓	
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				0.02 mg/kg		0.0171 mg/kg	0.00000171 %	✓	
	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 }				77 mg/kg	1.117	73.505 mg/kg	0.00735 %	✓	
		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:								0.0503 %		

Key

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

CLP: Note 1 Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Sample in solid state not liquid phase.


Hazard Statements hit:

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

Because of determinand:

toluene: (conc.: 0.00001%)

Classification of sample: WS08-28/07/2020-1.70m

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

Sample details

Sample Name: WS08-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 12.3% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.1	mg/kg	0.00021 %	✓	
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				12.5 mg/kg	1.32	14.474	mg/kg	0.00145 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				1.9 mg/kg	1.142	1.903	mg/kg	0.00019 %	✓	
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				30.2 mg/kg	1.462	38.71	mg/kg	0.00387 %	✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	copper { dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	26.66	mg/kg	0.00267 %	✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	21 mg/kg	1.56	28.727	mg/kg	0.00184 %	✓	
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	molybdenum { molybdenum(VI) oxide }				2.6 mg/kg	1.5	3.421	mg/kg	0.000342 %	✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				38.8 mg/kg	2.976	101.275	mg/kg	0.0101 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1 mg/kg	2.554	2.24	mg/kg	0.000224 %	✓	
	034-002-00-8										
12	zinc { zinc oxide }				103 mg/kg	1.245	112.436	mg/kg	0.0112 %	✓	
	030-013-00-7	215-222-5	1314-13-2								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52	mg/kg	<0.0052 %		<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.24 pH		8.24 pH	8.24 pH		
			PH							
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				0.14 mg/kg		0.123 mg/kg	0.0000123 %	✓	
		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				0.15 mg/kg		0.132 mg/kg	0.0000132 %	✓	
		205-912-4	206-44-0							
27	pyrene				0.13 mg/kg		0.114 mg/kg	0.0000114 %	✓	
		204-927-3	129-00-0							
28	benzo[a]anthracene				0.08 mg/kg		0.0702 mg/kg	0.00000702 %	✓	
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				0.06 mg/kg		0.0526 mg/kg	0.00000526 %	✓	
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				0.07 mg/kg		0.0614 mg/kg	0.00000614 %	✓	
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				0.03 mg/kg		0.0263 mg/kg	0.00000263 %	✓	
	601-036-00-5	205-916-6	207-08-9							
32	benzo[a]pyrene; benzo[def]chrysene				0.05 mg/kg		0.0439 mg/kg	0.00000439 %	✓	
	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 }				56 mg/kg	1.117	54.834 mg/kg	0.00548 %	✓	
		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:								0.0431 %		



Key

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

Classification of sample: WS08-28/07/2020-2.70m

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

Sample details

Sample Name: WS08-28/07/2020-2.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 15.6% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





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

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	antimony { antimony trioxide }				2	mg/kg	1.197	2.021	mg/kg	0.000202 %	✓	
	051-005-00-X	215-175-0	1309-64-4									
2	arsenic { arsenic trioxide }				8.9	mg/kg	1.32	9.918	mg/kg	0.000992 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				1.2	mg/kg	1.142	1.157	mg/kg	0.000116 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				47	mg/kg	1.462	57.977	mg/kg	0.0058 %	✓	
		215-160-9	1308-38-9									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	copper { dicopper oxide; copper (I) oxide }				26	mg/kg	1.126	24.706	mg/kg	0.00247 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
7	lead { lead chromate }			1	21	mg/kg	1.56	27.646	mg/kg	0.00177 %	✓	
	082-004-00-2	231-846-0	7758-97-6									
8	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
9	molybdenum { molybdenum(VI) oxide }				1.4	mg/kg	1.5	1.773	mg/kg	0.000177 %	✓	
	042-001-00-9	215-204-7	1313-27-5									
10	nickel { nickel chromate }				38.3	mg/kg	2.976	96.208	mg/kg	0.00962 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1	mg/kg	2.554	2.155	mg/kg	0.000216 %	✓	
	034-002-00-8											
12	zinc { zinc oxide }				93	mg/kg	1.245	97.7	mg/kg	0.00977 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
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				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
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				7.7 pH		7.7 pH	7.7 pH		
			PH							
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				0.08 mg/kg		0.0675 mg/kg	0.00000675 %	✓	
		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		0.0928 mg/kg	0.00000928 %	✓	
		205-912-4	206-44-0							
27	pyrene				0.08 mg/kg		0.0675 mg/kg	0.00000675 %	✓	
		204-927-3	129-00-0							
28	benzo[a]anthracene				0.08 mg/kg		0.0675 mg/kg	0.00000675 %	✓	
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				0.06 mg/kg		0.0506 mg/kg	0.00000506 %	✓	
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				0.08 mg/kg		0.0675 mg/kg	0.00000675 %	✓	
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				0.03 mg/kg		0.0253 mg/kg	0.00000253 %	✓	
	601-036-00-5	205-916-6	207-08-9							
32	benzo[a]pyrene; benzo[def]chrysene				0.05 mg/kg		0.0422 mg/kg	0.00000422 %	✓	
	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 }				47 mg/kg	1.117	44.29 mg/kg	0.00443 %	✓	
		215-127-9	1304-28-5							
38	coronene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7	191-07-1							
39	benzo[j]fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-035-00-X	205-910-3	205-82-3							
Total:								0.041 %		

Key

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

Classification of sample: WS09-28/07/2020-0.70m

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

Sample details

Sample Name: WS09-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 18.1% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18.1% Wet Weight Moisture Correction applied (MC)





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	1.961 mg/kg	0.000196 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				10.2 mg/kg	1.32	11.03 mg/kg	0.0011 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1 mg/kg	1.142	0.936 mg/kg	0.0000936 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				47 mg/kg	1.462	56.26 mg/kg	0.00563 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	19.364 mg/kg	0.00194 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	14 mg/kg	1.56	17.885 mg/kg	0.00115 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.3 mg/kg	1.5	2.826 mg/kg	0.000283 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				30.4 mg/kg	2.976	74.102 mg/kg	0.00741 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				87 mg/kg	1.245	88.69 mg/kg	0.00887 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.29 pH		8.29 pH	8.29 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 }				42 mg/kg	1.117	38.406 mg/kg	0.00384 %	✓	
		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:								0.0362 %		



Key

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

Classification of sample: WS09-28/07/2020-1.70m

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

Sample details

Sample Name: WS09-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 12.7% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 12.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.045 mg/kg	0.000105 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				12.4 mg/kg	1.32	14.293 mg/kg	0.00143 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.8 mg/kg	1.142	1.795 mg/kg	0.00018 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				26.1 mg/kg	1.462	33.302 mg/kg	0.00333 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	21.624 mg/kg	0.00216 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	19 mg/kg	1.56	25.873 mg/kg	0.00166 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.1 mg/kg	1.5	2.75 mg/kg	0.000275 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				34.7 mg/kg	2.976	90.16 mg/kg	0.00902 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				79 mg/kg	1.245	85.844 mg/kg	0.00858 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.45 pH		8.45 pH	8.45 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 }				117 mg/kg	1.117	114.041 mg/kg	0.0114 %	✓	
		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:								0.0438 %		

Key

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

Classification of sample: WS09-28/07/2020-2.70m

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

Sample details

Sample Name: WS09-28/07/2020-2.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 10.1% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.152 mg/kg	0.000215 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				15.6 mg/kg	1.32	18.517 mg/kg	0.00185 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2.5 mg/kg	1.142	2.567 mg/kg	0.000257 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				36.5 mg/kg	1.462	47.959 mg/kg	0.0048 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	21.256 mg/kg	0.00213 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	18 mg/kg	1.56	25.241 mg/kg	0.00162 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.8 mg/kg	1.5	2.428 mg/kg	0.000243 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				40.1 mg/kg	2.976	107.294 mg/kg	0.0107 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				433 mg/kg	1.245	484.526 mg/kg	0.0485 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.59 pH		8.59 pH	8.59 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 }				55 mg/kg	1.117	55.206 mg/kg	0.00552 %	✓	
		215-127-9	1304-28-5							
38	coronene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7	191-07-1							
39	benzo[j]fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-035-00-X	205-910-3	205-82-3							
Total:								0.0815 %		



Key

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

Classification of sample: WS10-28/07/2020-0.70m

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

Sample details

Sample Name: WS10-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 15% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.018 mg/kg	0.000102 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				12.9 mg/kg	1.32	14.477 mg/kg	0.00145 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.8 mg/kg	1.142	1.748 mg/kg	0.000175 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				32.6 mg/kg	1.462	40.5 mg/kg	0.00405 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	25.839 mg/kg	0.00258 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	29 mg/kg	1.56	38.449 mg/kg	0.00246 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.2 mg/kg	1.5	2.805 mg/kg	0.000281 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				40.4 mg/kg	2.976	102.205 mg/kg	0.0102 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				108 mg/kg	1.245	114.265 mg/kg	0.0114 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8 pH		8 pH	8pH		
			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 }				47 mg/kg	1.117	44.604 mg/kg	0.00446 %	✓	
		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:								0.0429 %		

Key

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

Classification of sample: WS13-28/07/2020-0.70m

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

Sample details

Sample Name: WS13-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 8.3% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

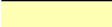



Moisture content: 8.3% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.098 mg/kg	0.00011 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				7.2 mg/kg	1.32	8.717 mg/kg	0.000872 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.4 mg/kg	1.142	1.467 mg/kg	0.000147 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				18 mg/kg	1.462	24.124 mg/kg	0.00241 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				20 mg/kg	1.126	20.649 mg/kg	0.00206 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	12 mg/kg	1.56	17.164 mg/kg	0.0011 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.7 mg/kg	1.5	2.339 mg/kg	0.000234 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				19.6 mg/kg	2.976	53.493 mg/kg	0.00535 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				56 mg/kg	1.245	63.919 mg/kg	0.00639 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.6 pH		8.6 pH	8.6 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 }				33 mg/kg	1.117	33.787 mg/kg	0.00338 %	✓	
		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:								0.0278 %		



Key

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

Classification of sample: WS13-28/07/2020-1.70m

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

Sample details

Sample Name: WS13-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 6.7% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 6.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197 mg/kg	<0.00012 %		<LOD
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				6.5 mg/kg	1.32	8.007 mg/kg	0.000801 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1 mg/kg	1.142	1.066 mg/kg	0.000107 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				19.1 mg/kg	1.462	26.045 mg/kg	0.0026 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				15 mg/kg	1.126	15.757 mg/kg	0.00158 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	11 mg/kg	1.56	16.008 mg/kg	0.00103 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				0.9 mg/kg	1.5	1.26 mg/kg	0.000126 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				19.4 mg/kg	2.976	53.871 mg/kg	0.00539 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				60 mg/kg	1.245	69.679 mg/kg	0.00697 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.72 pH		8.72 pH	8.72 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 }				27 mg/kg	1.117	28.126 mg/kg	0.00281 %	✓	
		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:								0.0272 %		

Key

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

Classification of sample: WS13-28/07/2020-2.70m

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

Sample details

Sample Name: WS13-28/07/2020-2.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 6.6% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.6% Wet Weight Moisture Correction applied (MC)

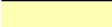



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.236 mg/kg	0.000224 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				8.4 mg/kg	1.32	10.359 mg/kg	0.00104 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				0.8 mg/kg	1.142	0.854 mg/kg	0.0000854 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				40.4 mg/kg	1.462	55.15 mg/kg	0.00551 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				26 mg/kg	1.126	27.341 mg/kg	0.00273 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	12 mg/kg	1.56	17.482 mg/kg	0.00112 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				0.7 mg/kg	1.5	0.981 mg/kg	0.0000981 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				47.3 mg/kg	2.976	131.486 mg/kg	0.0131 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				87 mg/kg	1.245	101.143 mg/kg	0.0101 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.82 pH		8.82 pH	8.82 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 }				74 mg/kg	1.117	77.168 mg/kg	0.00772 %	✓	
		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:								0.0475 %		



Key

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

Classification of sample: WS17-28/07/2020-0.70m

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

Sample details

Sample Name: WS17-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 8.9% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 8.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.181 mg/kg	0.000218 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				8.6 mg/kg	1.32	10.344 mg/kg	0.00103 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2 mg/kg	1.142	2.081 mg/kg	0.000208 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				22.4 mg/kg	1.462	29.825 mg/kg	0.00298 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				26 mg/kg	1.126	26.668 mg/kg	0.00267 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	12 mg/kg	1.56	17.052 mg/kg	0.00109 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.2 mg/kg	1.5	3.007 mg/kg	0.000301 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				47.6 mg/kg	2.976	129.062 mg/kg	0.0129 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc oxide }				81 mg/kg	1.245	91.849 mg/kg	0.00918 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.7 pH		8.7 pH	8.7 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 }				68 mg/kg	1.117	69.165 mg/kg	0.00692 %	✓	
		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:								0.0432 %		

Key

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

Appendix A: Classifier defined and non CLP determinands

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

Conversion factor: 1.462

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

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

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

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

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

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

CLP index number: 601-023-00-4

Description/Comments:

Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 06 Aug 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 06 Aug 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Acute Tox. 4 H302

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

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

▫ **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 Chronic 1 H410 , Aquatic Acute 1 H400

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

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.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
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)

Conversion factor: 1.117
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) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (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 {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (edit as required)

zinc {zinc oxide}

Cr VI not detected.

barium {barium oxide}

Cr VI not detected.

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018

HazWasteOnline Classification Engine Version: 2020.241.4455.8692 (28 Aug 2020)

HazWasteOnline Database: 2020.241.4455.8692 (28 Aug 2020)

This classification utilises the following guidance and legislation:

WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004

1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010

2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report



9XXFG-62QFY-CMPGG

Job name

The Quarter Citywest Batch 2

Description/Comments

Project

9766-07-20

Site

The Quarter Citywest

Related Documents

#	Name	Description
1	EMT-20-10583-Batch-1-File-1.hwol	.hwol file used to create the Job

Waste Stream Template

Example waste stream template for contaminated soils

Classified by

Name:
Nicholas Morgan

Company:
Ground Investigations Ireland Ltd

HazWasteOnline™ Training Record:

Date:
02 Sep 2020 09:14 GMT
Telephone:

Course	Date
Hazardous Waste Classification	-
Advanced Hazardous Waste Classification	-

Report

Created by: Nicholas Morgan
Created date: 02 Sep 2020 09:14 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01-28/07/2020-0.70m		Non Hazardous		3
2	WS01-28/07/2020-1.70m		Non Hazardous		6
3	WS02-28/07/2020-0.70m		Non Hazardous		9
4	WS02-28/07/2020-1.70m		Non Hazardous		12
5	WS03-28/07/2020-0.70m		Non Hazardous		15
6	WS03-28/07/2020-1.70m		Non Hazardous		18
7	WS04-28/07/2020-0.70m		Non Hazardous		21
8	WS04-28/07/2020-1.70m		Non Hazardous		24
9	WS11-28/07/2020-0.70m		Non Hazardous		27
10	WS11-28/07/2020-1.70m		Non Hazardous		30
11	WS11-28/07/2020-2.70m		Non Hazardous		33
12	WS12-28/07/2020-0.70m		Non Hazardous		36
13	WS12-28/07/2020-1.70m		Non Hazardous		39



#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS12-28/07/2020-2.70m		Non Hazardous		42
15	WS14-28/07/2020-0.70m		Non Hazardous		45
16	WS14-28/07/2020-1.70m		Non Hazardous		48
17	WS14-28/07/2020-2.70m		Non Hazardous		51
18	WS15-28/07/2020-0.70m		Non Hazardous		54
19	WS16-28/07/2020-0.70m		Non Hazardous		57
20	WS18-28/07/2020-0.70m		Non Hazardous		60

Appendices					Page
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Appendix B: Rationale for selection of metal species					64
Appendix C: Version					65

Classification of sample: WS01-28/07/2020-0.70m

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

Sample details

Sample Name: WS01-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 8.9% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 8.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				4 mg/kg	1.197	4.362 mg/kg	0.000436 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				8.6 mg/kg	1.32	10.344 mg/kg	0.00103 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.8 mg/kg	1.142	1.873 mg/kg	0.000187 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				28.1 mg/kg	1.462	37.415 mg/kg	0.00374 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				24 mg/kg	1.126	24.616 mg/kg	0.00246 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	15 mg/kg	1.56	21.315 mg/kg	0.00137 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.6 mg/kg	1.5	3.553 mg/kg	0.000355 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				35.4 mg/kg	2.976	95.983 mg/kg	0.0096 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				77 mg/kg	2.774	194.598 mg/kg	0.0195 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.65 pH		8.65 pH	8.65 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 }				40 mg/kg	1.117	40.685 mg/kg	0.00407 %	✓	
		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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS01-28/07/2020-1.70m

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

Sample details

Sample Name: WS01-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 11.6% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.116 mg/kg	0.000212 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				9.7 mg/kg	1.32	11.322 mg/kg	0.00113 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.8 mg/kg	1.142	1.818 mg/kg	0.000182 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				19.7 mg/kg	1.462	25.453 mg/kg	0.00255 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				25 mg/kg	1.126	24.882 mg/kg	0.00249 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	14 mg/kg	1.56	19.304 mg/kg	0.00124 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.2 mg/kg	1.5	2.918 mg/kg	0.000292 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				34.7 mg/kg	2.976	91.296 mg/kg	0.00913 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				86 mg/kg	2.774	210.902 mg/kg	0.0211 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.45 pH		8.45 pH	8.45 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:								0.0503 %		



Key

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

Classification of sample: **WS02-28/07/2020-0.70m**

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

Sample details

Sample Name: WS02-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 11.5% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.119 mg/kg	0.000212 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				11.2 mg/kg	1.32	13.087 mg/kg	0.00131 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				3.3 mg/kg	1.142	3.336 mg/kg	0.000334 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				45.5 mg/kg	1.462	58.853 mg/kg	0.00589 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				31 mg/kg	1.126	30.889 mg/kg	0.00309 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	15 mg/kg	1.56	20.707 mg/kg	0.00133 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.4 mg/kg	1.5	3.186 mg/kg	0.000319 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				50.7 mg/kg	2.976	133.544 mg/kg	0.0134 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				90 mg/kg	2.774	220.961 mg/kg	0.0221 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.65 pH		8.65 pH	8.65 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 }				106 mg/kg	1.117	104.739 mg/kg	0.0105 %	✓	
		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:								0.0641 %		

Key

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

Classification of sample: WS02-28/07/2020-1.70m

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

Sample details

Sample Name: WS02-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 12.4% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.097 mg/kg	0.00021 %	✓		
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				10.7 mg/kg	1.32	12.376 mg/kg	0.00124 %	✓		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				2.1 mg/kg	1.142	2.101 mg/kg	0.00021 %	✓		
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				20.7 mg/kg	1.462	26.503 mg/kg	0.00265 %	✓		
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD	
	024-001-00-0	215-607-8	1333-82-0								
6	copper { dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	26.63 mg/kg	0.00266 %	✓		
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	14 mg/kg	1.56	19.13 mg/kg	0.00123 %	✓		
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD	
	080-010-00-X	231-299-8	7487-94-7								
9	molybdenum { molybdenum(VI) oxide }				2.3 mg/kg	1.5	3.023 mg/kg	0.000302 %	✓		
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				36.4 mg/kg	2.976	94.902 mg/kg	0.00949 %	✓		
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				2 mg/kg	2.554	4.474 mg/kg	0.000447 %	✓		
	034-002-00-8										
12	zinc { zinc chromate }				85 mg/kg	2.774	206.563 mg/kg	0.0207 %	✓		
	024-007-00-3	236-878-9	13530-65-9								
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
	603-181-00-X	216-653-1	1634-04-4								



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.48 pH		8.48 pH	8.48 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 }				54 mg/kg	1.117	52.815 mg/kg	0.00528 %	✓	
		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:								0.0498 %		



Key

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

Classification of sample: WS03-28/07/2020-0.70m

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

Sample details

Sample Name: WS03-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 12.7% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 12.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.09 mg/kg	0.000209 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				16.2 mg/kg	1.32	18.673 mg/kg	0.00187 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2.6 mg/kg	1.142	2.593 mg/kg	0.000259 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				64.5 mg/kg	1.462	82.298 mg/kg	0.00823 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				25 mg/kg	1.126	24.573 mg/kg	0.00246 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	18 mg/kg	1.56	24.511 mg/kg	0.00157 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.8 mg/kg	1.5	2.357 mg/kg	0.000236 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				59.9 mg/kg	2.976	155.637 mg/kg	0.0156 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				103 mg/kg	2.774	249.448 mg/kg	0.0249 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.54 pH		8.54 pH	8.54 pH		
			PH							
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		201-581-5	85-01-8							
25	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1	120-12-7							
26	fluoranthene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-912-4	206-44-0							
27	pyrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		204-927-3	129-00-0							
28	benzo[a]anthracene				<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
29	chrysene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
30	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
31	benzo[k]fluoranthene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
32	benzo[a]pyrene; benzo[def]chrysene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
33	indeno[123-cd]pyrene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2	193-39-5							
34	dibenz[a,h]anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
35	benzo[ghi]perylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8	191-24-2							
36	polychlorobiphenyls; PCB				<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
	602-039-00-4	215-648-1	1336-36-3							
37	barium { barium oxide }				69 mg/kg	1.117	67.255 mg/kg	0.00673 %	✓	
		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:								0.0678 %		

Key

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

Classification of sample: WS03-28/07/2020-1.70m

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

Sample details

Sample Name: WS03-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 12.8% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.044 mg/kg	0.000104 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				9.3 mg/kg	1.32	10.707 mg/kg	0.00107 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2 mg/kg	1.142	1.992 mg/kg	0.000199 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				17.3 mg/kg	1.462	22.048 mg/kg	0.0022 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	21.599 mg/kg	0.00216 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	14 mg/kg	1.56	19.042 mg/kg	0.00122 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.6 mg/kg	1.5	2.093 mg/kg	0.000209 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				30.1 mg/kg	2.976	78.119 mg/kg	0.00781 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				74 mg/kg	2.774	179.01 mg/kg	0.0179 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.75 pH		8.75 pH	8.75 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 }				32 mg/kg	1.117	31.155 mg/kg	0.00312 %	✓	
		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:								0.0417 %		



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

Classification of sample: WS04-28/07/2020-0.70m

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

Sample details

Sample Name: WS04-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 11.8% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4	2 mg/kg	1.197	2.112 mg/kg	0.000211 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	11.3 mg/kg	1.32	13.159 mg/kg	0.00132 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	2 mg/kg	1.142	2.015 mg/kg	0.000202 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	35.3 mg/kg	1.462	45.505 mg/kg	0.00455 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	23 mg/kg	1.126	22.84 mg/kg	0.00228 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	15 mg/kg	1.56	20.636 mg/kg	0.00132 %	✓	
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	1.4 mg/kg	1.5	1.852 mg/kg	0.000185 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	33.4 mg/kg	2.976	87.677 mg/kg	0.00877 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			<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	207.978 mg/kg	0.0208 %	✓	
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



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.57 pH		8.57 pH	8.57 pH		
			PH							
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1	208-96-8							
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5	86-73-7							
24	phenanthrene				<0.03 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 }				48 mg/kg	1.117	47.268 mg/kg	0.00473 %	✓	
		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:								0.0501 %		

Key

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

Classification of sample: WS04-28/07/2020-1.70m

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

Sample details

Sample Name: WS04-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 10.9% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.133 mg/kg	0.000213 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				12.6 mg/kg	1.32	14.823 mg/kg	0.00148 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.6 mg/kg	1.142	1.629 mg/kg	0.000163 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				23.7 mg/kg	1.462	30.863 mg/kg	0.00309 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	21.066 mg/kg	0.00211 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	19 mg/kg	1.56	26.406 mg/kg	0.00169 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.1 mg/kg	1.5	2.807 mg/kg	0.000281 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				30.7 mg/kg	2.976	81.412 mg/kg	0.00814 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				85 mg/kg	2.774	210.1 mg/kg	0.021 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.59 pH		8.59 pH	8.59 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 }				46 mg/kg	1.117	45.761 mg/kg	0.00458 %	✓	
		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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS11-28/07/2020-0.70m

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

Sample details

Sample Name: WS11-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 7.7% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 7.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4	1 mg/kg	1.197	1.105 mg/kg	0.00011 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	8.4 mg/kg	1.32	10.237 mg/kg	0.00102 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	1.8 mg/kg	1.142	1.898 mg/kg	0.00019 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	51.9 mg/kg	1.462	70.014 mg/kg	0.007 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	19 mg/kg	1.126	19.745 mg/kg	0.00197 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	15 mg/kg	1.56	21.596 mg/kg	0.00138 %	✓	
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	1.6 mg/kg	1.5	2.215 mg/kg	0.000222 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	27.5 mg/kg	2.976	75.545 mg/kg	0.00755 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			<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	79 mg/kg	2.774	202.282 mg/kg	0.0202 %	✓	
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



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.75 pH		8.75 pH	8.75 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 }				28 mg/kg	1.117	28.855 mg/kg	0.00289 %	✓	
		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:								0.0483 %		

Key

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

Classification of sample: WS11-28/07/2020-1.70m

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

Sample details

Sample Name: WS11-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 8.6% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.188 mg/kg	0.000219 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				9.4 mg/kg	1.32	11.344 mg/kg	0.00113 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.6 mg/kg	1.142	1.671 mg/kg	0.000167 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				43.1 mg/kg	1.462	57.576 mg/kg	0.00576 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	22.639 mg/kg	0.00226 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	16 mg/kg	1.56	22.811 mg/kg	0.00146 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.4 mg/kg	1.5	1.92 mg/kg	0.000192 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				29.1 mg/kg	2.976	79.161 mg/kg	0.00792 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				80 mg/kg	2.774	202.846 mg/kg	0.0203 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.81 pH		8.81 pH	8.81 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 }				38 mg/kg	1.117	38.778 mg/kg	0.00388 %	✓	
		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:								0.049 %		



Key

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

Classification of sample: WS11-28/07/2020-2.70m

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

Sample details

Sample Name: WS11-28/07/2020-2.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 7.7% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 7.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197 mg/kg	<0.00012 %		<LOD
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				6.7 mg/kg	1.32	8.165 mg/kg	0.000817 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.1 mg/kg	1.142	1.16 mg/kg	0.000116 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				25 mg/kg	1.462	33.725 mg/kg	0.00337 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				13 mg/kg	1.126	13.51 mg/kg	0.00135 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	25 mg/kg	1.56	35.993 mg/kg	0.00231 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.9 mg/kg	1.5	2.631 mg/kg	0.000263 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				20.4 mg/kg	2.976	56.041 mg/kg	0.0056 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				58 mg/kg	2.774	148.511 mg/kg	0.0149 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.84 pH		8.84 pH	8.84 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 }				21 mg/kg	1.117	21.641 mg/kg	0.00216 %	✓	
		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:								0.0367 %		

Key

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

Classification of sample: WS12-28/07/2020-0.70m

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

Sample details

Sample Name: WS12-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 12.9% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.085 mg/kg	0.000209 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				13.1 mg/kg	1.32	15.065 mg/kg	0.00151 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2.1 mg/kg	1.142	2.089 mg/kg	0.000209 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				27.5 mg/kg	1.462	35.008 mg/kg	0.0035 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				31 mg/kg	1.126	30.4 mg/kg	0.00304 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	16 mg/kg	1.56	21.738 mg/kg	0.00139 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				2.8 mg/kg	1.5	3.659 mg/kg	0.000366 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				43.6 mg/kg	2.976	113.025 mg/kg	0.0113 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1 mg/kg	2.554	2.224 mg/kg	0.000222 %	✓	
	034-002-00-8									
12	zinc { zinc chromate }				104 mg/kg	2.774	251.293 mg/kg	0.0251 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.51 pH		8.51 pH	8.51 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 }				50 mg/kg	1.117	48.624 mg/kg	0.00486 %	✓	
		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:								0.0572 %		



Key

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

Classification of sample: WS12-28/07/2020-1.70m

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

Sample details

Sample Name: WS12-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 9.1% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.088 mg/kg	0.000109 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				7.7 mg/kg	1.32	9.241 mg/kg	0.000924 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.2 mg/kg	1.142	1.246 mg/kg	0.000125 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				28.6 mg/kg	1.462	37.997 mg/kg	0.0038 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				15 mg/kg	1.126	15.351 mg/kg	0.00154 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	13 mg/kg	1.56	18.432 mg/kg	0.00118 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1 mg/kg	1.5	1.364 mg/kg	0.000136 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				21.5 mg/kg	2.976	58.167 mg/kg	0.00582 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				63 mg/kg	2.774	158.867 mg/kg	0.0159 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.89 pH		8.89 pH	8.89 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 }				30 mg/kg	1.117	30.447 mg/kg	0.00304 %	✓	
		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:								0.0383 %		

Key

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

Classification of sample: WS12-28/07/2020-2.70m

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

Sample details

Sample Name: WS12-28/07/2020-2.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 9.4% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.4% Wet Weight Moisture Correction applied (MC)





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.169 mg/kg	0.000217 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				11 mg/kg	1.32	13.158 mg/kg	0.00132 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.5 mg/kg	1.142	1.552 mg/kg	0.000155 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				25 mg/kg	1.462	33.104 mg/kg	0.00331 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				20 mg/kg	1.126	20.401 mg/kg	0.00204 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	18 mg/kg	1.56	25.437 mg/kg	0.00163 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.9 mg/kg	1.5	2.582 mg/kg	0.000258 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				30.1 mg/kg	2.976	81.165 mg/kg	0.00812 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				82 mg/kg	2.774	206.097 mg/kg	0.0206 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.76 pH		8.76 pH	8.76 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 }				48 mg/kg	1.117	48.555 mg/kg	0.00486 %	✓	
		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:								0.0482 %		



Key

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

Classification of sample: WS14-28/07/2020-0.70m

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

Sample details

Sample Name: WS14-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 17.4% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 17.4% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4	2 mg/kg	1.197	1.978 mg/kg	0.000198 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	18.5 mg/kg	1.32	20.176 mg/kg	0.00202 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	2.8 mg/kg	1.142	2.642 mg/kg	0.000264 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	86.7 mg/kg	1.462	104.668 mg/kg	0.0105 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	26 mg/kg	1.126	24.18 mg/kg	0.00242 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	26 mg/kg	1.56	33.499 mg/kg	0.00215 %	✓	
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	7.3 mg/kg	1.5	9.046 mg/kg	0.000905 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	40.1 mg/kg	2.976	98.582 mg/kg	0.00986 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			3 mg/kg	2.554	6.328 mg/kg	0.000633 %	✓	
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9	163 mg/kg	2.774	373.506 mg/kg	0.0374 %	✓	
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




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				7.86 pH		7.86 pH	7.86 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 }				267 mg/kg	1.117	246.236 mg/kg	0.0246 %	✓	
		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:								0.0963 %		

Key

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

Classification of sample: WS14-28/07/2020-1.70m

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

Sample details

Sample Name: WS14-28/07/2020-1.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 8.1% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.1% Wet Weight Moisture Correction applied (MC)

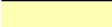



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.2 mg/kg	0.00022 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				8.9 mg/kg	1.32	10.799 mg/kg	0.00108 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				1.7 mg/kg	1.142	1.785 mg/kg	0.000178 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				46.7 mg/kg	1.462	62.726 mg/kg	0.00627 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				16 mg/kg	1.126	16.555 mg/kg	0.00166 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	18 mg/kg	1.56	25.802 mg/kg	0.00165 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				1.8 mg/kg	1.5	2.482 mg/kg	0.000248 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				24 mg/kg	2.976	65.644 mg/kg	0.00656 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				84 mg/kg	2.774	214.153 mg/kg	0.0214 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.72 pH		8.72 pH	8.72 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 }				46 mg/kg	1.117	47.199 mg/kg	0.00472 %	✓	
		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:								0.0497 %		



Key

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

Classification of sample: WS14-28/07/2020-2.70m

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

Sample details

Sample Name: WS14-28/07/2020-2.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 10.7% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4	2 mg/kg	1.197	2.138 mg/kg	0.000214 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	8.3 mg/kg	1.32	9.786 mg/kg	0.000979 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	1.8 mg/kg	1.142	1.836 mg/kg	0.000184 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	43.7 mg/kg	1.462	57.036 mg/kg	0.0057 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	20 mg/kg	1.126	20.108 mg/kg	0.00201 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	13 mg/kg	1.56	18.108 mg/kg	0.00116 %	✓	
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	4.421 mg/kg	0.000442 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	41 mg/kg	2.976	108.97 mg/kg	0.0109 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			<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	190.753 mg/kg	0.0191 %	✓	
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



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.6 pH		8.6 pH	8.6 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 }				40 mg/kg	1.117	39.882 mg/kg	0.00399 %	✓	
		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:								0.0504 %		

Key

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

Classification of sample: WS15-28/07/2020-0.70m

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

Sample details

Sample Name: WS15-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 15.1% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15.1% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.033 mg/kg	0.000203 %	✓		
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				16.4 mg/kg	1.32	18.384 mg/kg	0.00184 %	✓		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				1.5 mg/kg	1.142	1.455 mg/kg	0.000145 %	✓		
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				45.5 mg/kg	1.462	56.459 mg/kg	0.00565 %	✓		
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD	
	024-001-00-0	215-607-8	1333-82-0								
6	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	21.029 mg/kg	0.0021 %	✓		
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	21 mg/kg	1.56	27.81 mg/kg	0.00178 %	✓		
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD	
	080-010-00-X	231-299-8	7487-94-7								
9	molybdenum { molybdenum(VI) oxide }				3 mg/kg	1.5	3.821 mg/kg	0.000382 %	✓		
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				40.4 mg/kg	2.976	102.085 mg/kg	0.0102 %	✓		
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD	
	034-002-00-8										
12	zinc { zinc chromate }				93 mg/kg	2.774	219.038 mg/kg	0.0219 %	✓		
	024-007-00-3	236-878-9	13530-65-9								
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				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
	603-181-00-X	216-653-1	1634-04-4								



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.48 pH		8.48 pH	8.48 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 }				131 mg/kg	1.117	124.177 mg/kg	0.0124 %	✓	
		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:								0.0623 %		



Key

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

Classification of sample: WS16-28/07/2020-0.70m

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

Sample details

Sample Name: WS16-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 18.5% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands





Moisture content: 18.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used		
	CLP index number	EC Number	CAS Number									
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4	1	mg/kg	1.197	0.976 mg/kg	0.0000976 %	✓		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	6.7	mg/kg	1.32	7.21 mg/kg	0.000721 %	✓		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	1.4	mg/kg	1.142	1.303 mg/kg	0.00013 %	✓		
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	33.8	mg/kg	1.462	40.261 mg/kg	0.00403 %	✓		
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<0.3	mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	9	mg/kg	1.126	8.258 mg/kg	0.000826 %	✓		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	7	mg/kg	1.56	8.899 mg/kg	0.000571 %	✓	
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	2.934 mg/kg	0.000293 %	✓		
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	16.2	mg/kg	2.976	39.296 mg/kg	0.00393 %	✓		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			1	mg/kg	2.554	2.081 mg/kg	0.000208 %	✓		
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9	39	mg/kg	2.774	88.176 mg/kg	0.00882 %	✓		
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	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.41 pH		8.41 pH	8.41 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 }				173 mg/kg	1.117	157.422 mg/kg	0.0157 %	✓	
		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:								0.0408 %		

Key

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

Classification of sample: WS18-28/07/2020-0.70m

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

Sample details

Sample Name: WS18-28/07/2020-0.70m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 8.6% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	antimony { antimony trioxide }				2 mg/kg	1.197	2.188 mg/kg	0.000219 %	✓	
	051-005-00-X	215-175-0	1309-64-4							
2	arsenic { arsenic trioxide }				9.1 mg/kg	1.32	10.982 mg/kg	0.0011 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				2 mg/kg	1.142	2.088 mg/kg	0.000209 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				34 mg/kg	1.462	45.419 mg/kg	0.00454 %	✓	
		215-160-9	1308-38-9							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	copper { dicopper oxide; copper (I) oxide }				25 mg/kg	1.126	25.727 mg/kg	0.00257 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead chromate }			1	14 mg/kg	1.56	19.959 mg/kg	0.00128 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	molybdenum { molybdenum(VI) oxide }				3.4 mg/kg	1.5	4.662 mg/kg	0.000466 %	✓	
	042-001-00-9	215-204-7	1313-27-5							
10	nickel { nickel chromate }				29.4 mg/kg	2.976	79.977 mg/kg	0.008 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	zinc { zinc chromate }				89 mg/kg	2.774	225.666 mg/kg	0.0226 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
			TPH							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
19	pH				8.71 pH		8.71 pH	8.71 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 }				40 mg/kg	1.117	40.819 mg/kg	0.00408 %	✓	
		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:								0.0507 %		



Key

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

Appendix A: Classifier defined and non CLP determinands

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

Conversion factor: 1.462

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

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

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

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

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

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

CLP index number: 601-023-00-4

Description/Comments:

Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 06 Aug 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 06 Aug 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Acute Tox. 4 H302

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

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

▪ **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 Chronic 1 H410 , Aquatic Acute 1 H400

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

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.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
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)

Conversion factor: 1.117
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) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (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 {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (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: **WM3 1st Edition v1.1, May 2018**
 HazWasteOnline Classification Engine Version: 2020.241.4455.8692 (28 Aug 2020)
 HazWasteOnline Database: 2020.241.4455.8692 (28 Aug 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

APPENDIX 9 – WAC Summary Data



APPENDIX 10 – Whole Waste Body Assessment



Whole Waste Classification: The Quarter Citywest, July, 2020

Rank (r)	r-1	CumB	DOC
1	0	0.000	20
2	1	0.000	20
3	2	0.000	20
4	3	0.000	20
5	4	0.000	20
6	5	0.000	20
7	6	0.000	20
8	7	0.000	20
9	8	0.000	20
10	9	0.001	20
11	10	0.002	20
12	11	0.005	20
13	12	0.012	20
14	13	0.027	20
15	14	0.054	20
16	15	0.100	20
17	16	0.168	30
18	17	0.261	30
19	18	0.375	30
20	19	0.500	30
21	20	0.625	30
22	21	0.739	30
23	22	0.832	30
24	23	0.900	30
25	24	0.946	30
Minimum number of samples which must pass the limit (WAC limit) test and average concentration be within the limit			
26	25	0.973	30
27	26	0.988	30
28	27	0.995	30
29	28	0.998	40
30	29	0.999	40
31	30	1.000	40
32	31	1.000	40
33	32	1.000	40
34	33	1.000	50
35	34	1.000	50
36	35	1.000	50
37	36	1.000	50
38	37	1.000	80
39	38	1.000	510

where CumB <0.05

where CumB >0.95

Average (mean) concentration	54.23
Average (mean) concentration Pass/Fail	Pass
Inert WAC	500
Max Allowable Failures of Inert WAC	14
No of Samples Above Inert WAC	1
No of Samples Above Inert WAC (Pass/Fail)	Pass
X50	20
X50 Level (median Concentration)	30

* Where result is the LOD that limit has been assigned as the test values (red text)

Non-Parametric Statistical Test Limit - Sample Number Check

Rank	DOC		
1	20		
2	20		
3	20	WAC Limit	DOC
4	20	Median Conc	500.00
5	20	Precision	30.00
6	20		470.00
7	20		
8	20	s (standard deviation)	Site Data
9	20		80.38
10	20	d (precision)	470.00
11	20	Samples Required = $4.4 \times (s/d)^2$	0.1
12	20		
13	20	Samles Collected	39
14	20		
15	20		
16	20		
17	30		
18	30		
19	30		
20	30		
21	30		
22	30		
23	30		
24	30		
25	30		
26	30		
27	30		
28	30		
29	40		
30	40		
31	40		
32	40		
33	40		
34	50		
35	50		
36	50		
37	50		
38	80		
39	510		
No of Samples	39		
Minimum	20.00		
Maximum	510		
Median	20.0		
Mean	54.23		
Stand Dev	80.38		
Lower Con	20		
Upper Con	30		
Inert Limit	500.00		
Median Concentration	30		
Precision	470.00		

APPENDIX 11 – Suitable 4 Waste Data



S4UL - Metals (Residential with homegrown produce), The Quarter Citywest

Sample ID	WS01	WS01	WS02	WS02	WS03	WS03	WS04	WS04	WS05	WS05	Max Level Detected	Units	Residential with homegrown produce
Sample Depth (m)	0.7	1.7	0.7	1.7	0.7	1.7	0.7	1.7	0.7	1.7			
Antimony	4	2	2	2	2	1	2	2	1	1	4	mg/kg	ne
Arsenic	8.6	9.7	11.2	10.7	16.2	9.3	11.3	12.6	7.5	15.2	16.2	mg/kg	37
Barium	40	64	106	54	69	32	48	46	32	43	106	mg/kg	ne
Cadmium	1.8	1.8	3.3	2.1	2.6	2	2	1.6	1.8	1.4	3.3	mg/kg	11
Chromium	28.1	19.7	45.5	20.7	64.5	17.3	35.3	23.7	19.5	22.4	64.5	mg/kg	910
Copper	24	25	31	27	25	22	23	21	21	24	31	mg/kg	2,400
Lead	15	14	15	14	18	14	15	19	10	19	19	mg/kg	ne
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0	mg/kg	1.2
Molybdenum	2.6	2.2	2.4	2.3	1.8	1.6	1.4	2.1	1.5	1.6	2.6	mg/kg	ne
Nickel	35.4	34.7	50.7	36.4	59.9	30.1	33.4	30.7	29.2	29.7	59.9	mg/kg	130
Selenium	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	2	mg/kg	250
Zinc	77	86	90	85	103	74	85	85	73	92	103	mg/kg	3,700
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0	mg/kg	6*

S4UL - Metals (Residential with homegrown produce), The Quarter Citywest

Sample ID	WS05	WS06	WS06	WS07	WS07	WS07	WS08	WS08	WS08	WS09	Max Level Detected	Units	Residential with homegrown produce
Sample Depth (m)	2.7	0.7	1.7	0.7	1.7	2.7	0.7	1.7	2.7	0.7			
Antimony	1	1	<1	<1	1	1	2	2	2	2	2	mg/kg	ne
Arsenic	7.7	12.9	12.9	6.5	13.6	15	17.4	12.5	8.9	10.2	17.4	mg/kg	37
Barium	56	41	28	15	49	42	77	56	47	42	77	mg/kg	ne
Cadmium	1.3	2	1	1	1.6	2.1	2	1.9	1.2	1	2.1	mg/kg	11
Chromium	21.6	27.5	15.4	16.8	25.3	26.9	27.8	30.2	47	47	47	mg/kg	910
Copper	19	27	14	13	24	27	33	27	26	21	33	mg/kg	2,400
Lead	13	19	11	7	17	15	38	21	21	14	38	mg/kg	ne
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0	mg/kg	1.2
Molybdenum	1.5	1.8	0.9	1.1	1.7	2.4	2.5	2.6	1.4	2.3	2.6	mg/kg	ne
Nickel	25.3	38.8	17.8	18.1	32.8	29.8	39.4	38.8	38.3	30.4	39.4	mg/kg	130
Selenium	1	<1	<1	<1	<1	<1	1	1	1	<1	1	mg/kg	250
Zinc	75	97	53	43	92	87	138	103	93	87	138	mg/kg	3,700
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0	mg/kg	6*

S4UL - Metals (Residential with homegrown produce), The Quarter Citywest

Sample ID	WS09	WS09	WS10	WS11	WS11	WS11	WS12	WS12	WS12	WS13	Max Level Detected	Units	Residential with homegrown produce
Sample Depth (m)	1.7	2.7	0.7	0.7	1.7	2.7	0.7	1.7	2.7	0.7			
Antimony	1	2	1	1	2	<1	2	1	2	1	2	mg/kg	ne
Arsenic	12.4	15.6	12.9	8.4	9.4	6.7	13.1	7.7	11	7.2	15.6	mg/kg	37
Barium	117	55	47	28	38	21	50	30	48	33	117	mg/kg	ne
Cadmium	1.8	2.5	1.8	1.8	1.6	1.1	2.1	1.2	1.5	1.4	2.5	mg/kg	11
Chromium	26.1	36.5	32.6	51.9	43.1	25	27.5	28.6	25	18	51.9	mg/kg	910
Copper	22	21	27	19	22	13	31	15	20	20	31	mg/kg	2,400
Lead	19	18	29	15	16	25	16	13	18	12	29	mg/kg	ne
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0	mg/kg	1.2
Molybdenum	2.1	1.8	2.2	1.6	1.4	1.9	2.8	1	1.9	1.7	2.8	mg/kg	ne
Nickel	34.7	40.1	40.4	27.5	29.1	20.4	43.6	21.5	30.1	19.6	43.6	mg/kg	130
Selenium	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	1	mg/kg	250
Zinc	79	433	108	79	80	58	104	63	82	56	433	mg/kg	3,700
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0	mg/kg	6*

S4UL - Metals (Residential with homegrown produce), The Quarter Citywest

Sample ID	WS13	WS13	WS14	WS14	WS14	WS15	WS16	WS17	WS18
Sample Depth (m)	1.7	2.7	0.7	1.7	2.7	0.7	0.7	0.7	0.7
Antimony	<1	2	2	2	2	2	1	2	2
Arsenic	6.5	8.4	18.5	8.9	8.3	16.4	6.7	8.6	9.1
Barium	27	74	267	46	40	131	173	68	40
Cadmium	1	0.8	2.8	1.7	1.8	1.5	1.4	2	2
Chromium	19.1	40.4	86.7	46.7	43.7	45.5	33.8	22.4	34
Copper	15	26	26	16	20	22	9	26	25
Lead	11	12	26	18	13	21	7	12	14
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	0.9	0.7	7.3	1.8	3.3	3	2.4	2.2	3.4
Nickel	19.4	47.3	40.1	24	41	40.4	16.2	47.6	29.4
Selenium	<1	<1	3	<1	<1	<1	1	<1	<1
Zinc	60	87	163	84	77	93	39	81	89
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3

Max Level Detected	Units	Residential with homegrown produce
2	mg/kg	ne
18.5	mg/kg	37
267	mg/kg	ne
2.8	mg/kg	11
86.7	mg/kg	910
26	mg/kg	2,400
26	mg/kg	ne
0	mg/kg	1.2
7.3	mg/kg	ne
47.6	mg/kg	130
3	mg/kg	250
163	mg/kg	3,700
0	mg/kg	6*

S4UL - Organic Compounds (Residential with Homegrown Produce), The Quarter Citywest

Residential	Residential with homegrown produce										Max Level Detected	Units	LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]				
	WS01	WS01	WS02	WS02	WS03	WS03	WS04	WS04	WS05	WS05			1 % SOM	2.5 % SOM	6 % SOM		
	0.7	1.7	0.7	1.7	0.7	1.7	0.7	1.7	0.7	1.7							
Aliphatics																	
>C5-C6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.10	mg/kg	42	78	160	
>C6-C8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	0.30	mg/kg	100	230	530	
>C8-C10	0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	3.7	<0.1	3.70	mg/kg	27	65	150	
>C10-C12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.00	mg/kg	130	330	760	
>C12-C16	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0.00	mg/kg	1,100	2,400	4,300	
>C16-C21	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne	
>C21-C35	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne	
>C16-C35	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	0.00	mg/kg	65000	92000	110000	
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne	
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	4.00	mg/kg	ne	ne	ne	
>C6-C10	0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	4	<0.1	0.00	mg/kg	ne	ne	ne	
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne	
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne	
Aromatics																	
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	70	140	300	
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	130	290	660	
>EC8-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	34	83	190	
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.00	mg/kg	74	180	380	
>EC12-EC16	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0.00	mg/kg	140	330	660	
>EC16-EC21	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	260	540	930	
>EC21-EC35	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	1,100	1,500	1,700	
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne	
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	0.00	mg/kg	ne	ne	ne	
Total aliphatics and aromatics (C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	0.00	mg/kg	ne	ne	ne	
>EC6-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	ne	ne	ne	
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne	
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne	
BTEX																	
MTBE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	ne	ne	ne	
Benzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	0.087	0.17	0.37	
Toluene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	130	290	660	
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	47	110	260	
m/p-Xylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	56	130	310	
o-Xylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	mg/kg	60	140	330	
TOC	0.19	0.29	0.26	0.5	0.34	0.16	0.21	0.14	0.18	0.27			%				
SOM (Note 1)	0.33	0.50	0.45	0.86	0.59	0.28	0.36	0.24	0.31	0.47							

Note 1 - TOC * 1.724

S4UL - Organic Compounds (Residential with Homegrown Produce), The Quarter Citywest

Residential	Residential with homegrown produce										Max Level Detected	Units	LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]				
	WS05	WS06	WS06	WS07	WS07	WS07	WS08	WS08	WS08	WS09			1 % SOM	2.5 % SOM	6 % SOM		
	2.7	0.7	1.7	0.7	1.7	2.7	0.7	1.7	2.7	0.7							
Aliphatics																	
>C5-C6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	42	78	160		
>C6-C8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	100	230	530		
>C8-C10	0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	0.60	mg/kg	27	65	150		
>C10-C12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.00	mg/kg	130	330	760		
>C12-C16	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0.00	mg/kg	1,100	2,400	4,300		
>C16-C21	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne		
>C21-C35	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne		
>C16-C35	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	0.00	mg/kg	65000	92000	110000		
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne		
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	0.60	mg/kg	ne	ne	ne		
>C6-C10	0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	ne	ne	ne		
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne		
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne		
Aromatics																	
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	70	140	300		
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	130	290	660		
>EC8-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	34	83	190		
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.00	mg/kg	74	180	380		
>EC12-EC16	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0.00	mg/kg	140	330	660		
>EC16-EC21	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	260	540	930		
>EC21-EC35	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	1,100	1,500	1,700		
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne		
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	0.00	mg/kg	ne	ne	ne		
Total aliphatics and aromatics (C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	0.00	mg/kg	ne	ne	ne		
>EC6-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	ne	ne	ne		
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne		
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne		
BTEX																	
MTBE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	ne	ne	ne		
Benzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	0.087	0.17	0.37		
Toluene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	130	290	660		
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	47	110	260		
m/p-Xylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	56	130	310		
o-Xylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	mg/kg	60	140	330		
TOC	0.24	0.17	0.17	0.09	0.16	0.29	1.72	0.36	0.64	0.35		%					
SOM (Note 1)	0.41	0.29	0.29	0.16	0.28	0.50	2.97	0.62	1.10	0.60							

Note 1 - TOC * 1.724

S4UL - Organic Compounds (Residential with Homegrown Produce), The Quarter Citywest

Residential	Residential with homegrown produce										Max Level Detected	Units	LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]				
	WS09	WS09	WS10	WS11	WS11	WS11	WS12	WS12	WS12	WS13			1 % SOM	2.5 % SOM	6 % SOM		
	1.7	2.7	0.7	0.7	1.7	2.7	0.7	1.7	2.7	0.7							
Aliphatics																	
>C5-C6	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.10	mg/kg	42	78	160		
>C6-C8	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	0.30	mg/kg	100	230	530		
>C8-C10	<0.1	<0.1	<0.1	<0.1	0.3	4.1	<0.1	<0.1	<0.1	<0.1	4.10	mg/kg	27	65	150		
>C10-C12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.00	mg/kg	130	330	760		
>C12-C16	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0.00	mg/kg	1,100	2,400	4,300		
>C16-C21	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne		
>C21-C35	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne		
>C16-C35	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	0.00	mg/kg	65000	92000	110000		
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne		
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	4.40	mg/kg	ne	ne	ne		
>C6-C10	<0.1	<0.1	<0.1	<0.1	0.3	4.4	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	ne	ne	ne		
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne		
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne		
Aromatics																	
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	70	140	300		
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	130	290	660		
>EC8-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	34	83	190		
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.00	mg/kg	74	180	380		
>EC12-EC16	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	0.00	mg/kg	140	330	660		
>EC16-EC21	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	260	540	930		
>EC21-EC35	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	1,100	1,500	1,700		
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	0.00	mg/kg	ne	ne	ne		
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	0.00	mg/kg	ne	ne	ne		
Total aliphatics and aromatics (C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	0.00	mg/kg	ne	ne	ne		
>EC6-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.00	mg/kg	ne	ne	ne		
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne		
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.00	mg/kg	ne	ne	ne		
BTEX																	
MTBE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	ne	ne	ne		
Benzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	0.087	0.17	0.37		
Toluene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	130	290	660		
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	47	110	260		
m/p-Xylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00	mg/kg	56	130	310		
o-Xylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	mg/kg	60	140	330		
TOC	0.14	0.21	0.46	0.22	0.16	0.15	0.39	0.14	0.18	0.36		%					
SOM (Note 1)	0.24	0.36	0.79	0.38	0.28	0.26	0.67	0.24	0.31	0.62							

Note 1 - TOC * 1.724

S4UL - Organic Compounds (Residential with Homegrown Produce), The Quarter Citywest

Residential	WS13	WS13	WS14	WS14	WS14	WS15	WS16	WS17	WS18
	0.7	2.7	0.7	1.7	2.7	0.7	0.7	0.7	0.7
Aliphatics									
>C5-C6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>C6-C8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
>C10-C12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
>C12-C16	<4	<4	<4	<4	<4	<4	<4	<4	<4
>C16-C21	<7	<7	<7	<7	<7	<7	<7	<7	<7
>C21-C35	<7	<7	<7	<7	<7	<7	<7	<7	<7
>C16-C35	<14	<14	<14	<14	<14	<14	<14	<14	<14
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26
>C6-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aromatics									
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC8-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC10-EC12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
>EC12-EC16	<4	<4	<4	<4	<4	<4	<4	<4	<4
>EC16-EC21	<7	<7	<7	<7	<7	<7	<7	<7	<7
>EC21-EC35	<7	<7	<7	<7	<7	<7	<7	<7	<7
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52
>EC6-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10
BTEX									
MTBE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Benzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
m/p-Xylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
o-Xylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TOC	0.13	0.1	0.7	0.28	0.29	0.24	0.13	0.31	0.21
SOM (Note 1)	0.22	0.17	1.21	0.48	0.50	0.41	0.22	0.53	0.36

Note 1 - TOC * 1.724

Max Level Detected	Units	Residential with homegrown produce		
		LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]		
		1 % SOM	2.5 % SOM	6 % SOM
0.00	mg/kg	42	78	160
0.00	mg/kg	100	230	530
0.10	mg/kg	27	65	150
0.00	mg/kg	130	330	760
0.00	mg/kg	1,100	2,400	4,300
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	65000	92000	110000
0.00	mg/kg	ne	ne	ne
0.10	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	70	140	300
0.00	mg/kg	130	290	660
0.00	mg/kg	34	83	190
0.00	mg/kg	74	180	380
0.00	mg/kg	140	330	660
0.00	mg/kg	260	540	930
0.00	mg/kg	1,100	1,500	1,700
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	0.087	0.17	0.37
0.00	mg/kg	130	290	660
0.00	mg/kg	47	110	260
0.00	mg/kg	56	130	310
0.000	mg/kg	60	140	330
	%			

S4UL - PAHs (Residential with Homegrown Produce), The Quarter Citywest

	S4UL - PAHs (Residential with Homegrown Produce), The Quarter Citywest										Residential with homegrown produce				
	WS01	WS01	WS02	WS02	WS03	WS03	WS04	WS04	WS05	WS05	Max Level Detected	Units	LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]		
	0.7	1.7	0.7	1.7	0.7	1.7	0.7	1.7	0.7	1.7			1 % SOM	2.5 % SOM	6 % SOM
Naphthalene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	2.3	5.6	13
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	170	420	920
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	mg/kg	210	510	1,100
Fluorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	170	400	860
Phenanthrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	95	220	440
Anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	2,400	5,400	11,000
Fluoranthene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	280	560	890
Pyrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	620	1,200	2,000
Benzo(a)anthracene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.00	mg/kg	7.2	11	13
Chrysene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.00	mg/kg	15	22	27
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.00	mg/kg	ne	ne	ne
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	2.2	2.7	3
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	27	36	41
Dibenzo(ah)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	0.24	0.28	0.3
Benzo(ghi)perylene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	320	340	350
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	ne	ne	ne
PAH 6 Total	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.00	mg/kg	ne	ne	ne
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	0.00	mg/kg	ne	ne	ne
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	mg/kg	2.6	3.3	3.7
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.00	mg/kg	77	93	100
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.00	mg/kg	ne	ne	ne
TOC	0.19	0.29	0.26	0.5	0.34	0.16	0.21	0.14	0.18	0.27		%			
SOM (Note 1)	0.33	0.50	0.45	0.86	0.59	0.28	0.36	0.24	0.31	0.47					

Note 1 - TOC * 1.724

S4UL - PAHs (Residential with Homegrown Produce), The Quarter Citywest

	S4UL - PAHs (Residential with Homegrown Produce), The Quarter Citywest										Residential with homegrown produce				
	WS05	WS06	WS06	WS07	WS07	WS07	WS08	WS08	WS08	WS09	Max Level Detected	Units	LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]		
	2.7	0.7	1.7	0.7	1.7	2.7	0.7	1.7	2.7	0.7			1 % SOM	2.5 % SOM	6 % SOM
Naphthalene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	2.3	5.6	13
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	170	420	920
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	mg/kg	210	510	1,100
Fluorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	170	400	860
Phenanthrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.14	0.08	<0.03	0.14	mg/kg	95	220	440
Anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	2,400	5,400	11,000
Fluoranthene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.15	0.11	<0.03	0.15	mg/kg	280	560	890
Pyrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.13	0.08	<0.03	0.13	mg/kg	620	1,200	2,000
Benzo(a)anthracene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.07	0.08	0.08	<0.06	0.08	mg/kg	7.2	11	13
Chrysene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.05	0.06	0.06	<0.02	0.06	mg/kg	15	22	27
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.08	0.1	0.11	<0.07	0.11	mg/kg	ne	ne	ne
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	0.05	<0.04	0.05	mg/kg	2.2	2.7	3
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	27	36	41
Dibenzo(ah)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	0.24	0.28	0.3
Benzo(ghi)perylene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	320	340	350
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	ne	ne	ne
PAH 6 Total	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.3	0.27	<0.22	0.30	mg/kg	ne	ne	ne
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	0.71	<0.64	<0.64	0.71	mg/kg	ne	ne	ne
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.07	0.08	<0.05	0.08	mg/kg	2.6	3.3	3.7
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.03	0.03	<0.02	0.03	mg/kg	77	93	100
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.00	mg/kg	ne	ne	ne
TOC	0.24	0.17	0.17	0.09	0.16	0.29	1.72	0.36	0.64	0.35		%			
SOM (Note 1)	0.41	0.29	0.29	0.16	0.28	0.50	2.97	0.62	1.10	0.60					

Note 1 - TOC * 1.724

S4UL - PAHs (Residential with Homegrown Produce), The Quarter Citywest

	S4UL - PAHs (Residential with Homegrown Produce), The Quarter Citywest										Residential with homegrown produce				
	WS09	WS09	WS10	WS11	WS11	WS11	WS12	WS12	WS12	WS13	Max Level Detected	Units	LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]		
	1.7	2.7	0.7	0.7	1.7	2.7	0.7	1.7	2.7	0.7			1 % SOM	2.5 % SOM	6 % SOM
Naphthalene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	2.3	5.6	13
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	170	420	920
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	mg/kg	210	510	1,100
Fluorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	170	400	860
Phenanthrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	95	220	440
Anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	2,400	5,400	11,000
Fluoranthene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	280	560	890
Pyrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.00	mg/kg	620	1,200	2,000
Benzo(a)anthracene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.00	mg/kg	7.2	11	13
Chrysene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.00	mg/kg	15	22	27
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.00	mg/kg	ne	ne	ne
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	2.2	2.7	3
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	27	36	41
Dibenzo(ah)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	0.24	0.28	0.3
Benzo(ghi)perylene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	320	340	350
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.00	mg/kg	ne	ne	ne
PAH 6 Total	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.00	mg/kg	ne	ne	ne
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	0.00	mg/kg	ne	ne	ne
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.00	mg/kg	2.6	3.3	3.7
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.00	mg/kg	77	93	100
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.00	mg/kg	ne	ne	ne
TOC	0.14	0.21	0.46	0.22	0.16	0.15	0.39	0.14	0.18	0.36		%			
SOM (Note 1)	0.24	0.36	0.79	0.38	0.28	0.26	0.67	0.24	0.31	0.62					

Note 1 - TOC * 1.724

S4UL - PAHs (Residential with Homegrown Produce), The Quarter Citywest

	WS13	WS13	WS14	WS14	WS14	WS15	WS16	WS17	WS18
	1.7	2.7	0.7	1.7	2.7	0.7	0.7	0.7	0.7
Naphthalene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Phenanthrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Fluoranthene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Pyrene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Benzo(a)anthracene	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Chrysene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(bk)fluoranthene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Benzo(a)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Dibenzo(ah)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Benzo(ghi)perylene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
PAH 6 Total	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1
TOC	0.13	0.1	0.7	0.28	0.29	0.24	0.13	0.31	0.21
SOM (Note 1)	0.22	0.17	1.21	0.48	0.50	0.41	0.22	0.53	0.36

Note 1 - TOC * 1.724

Residential with homegrown produce

Max Level Detected	Units	LQM/CIEH Suitable 4 Use Levels (S4ULs) [mg/kg DW]		
		1 % SOM	2.5 % SOM	6 % SOM
0.00	mg/kg	2.3	5.6	13
0.00	mg/kg	170	420	920
0.00	mg/kg	210	510	1,100
0.00	mg/kg	170	400	860
0.00	mg/kg	95	220	440
0.00	mg/kg	2,400	5,400	11,000
0.00	mg/kg	280	560	890
0.00	mg/kg	620	1,200	2,000
0.00	mg/kg	7.2	11	13
0.00	mg/kg	15	22	27
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	2.2	2.7	3
0.00	mg/kg	27	36	41
0.00	mg/kg	0.24	0.28	0.3
0.00	mg/kg	320	340	350
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	ne	ne	ne
0.00	mg/kg	2.6	3.3	3.7
0.00	mg/kg	77	93	100
0.00	mg/kg	ne	ne	ne
	%			

APPENDIX 12 – Potential Material Outlets



Waste Category	Classification Criteria	Potential Outlets
Category A Unlined Soil Recovery Facilities	Soil and Stone only which are free from ⁹ anthropogenic materials such as concrete, brick timber. Soil must be free from "contamination" e.g. PAHs, Hydrocarbons.	Soil Recovery Facilities, Waste Facility Permitted Sites, COR Sites or potential by-product if deemed not to be a waste and complying with requirements under Article 27 of European Waste Directive Regulations (2011). ¹⁰
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 application.	Integrated Materials Solutions Limited Partnership (IMS), Naul, County Dublin W0129-02 Walshestown Landfill Walshestown, Blackhall, Tipperkevin & Bawnoge, Naas, County Kildare W0254-01
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*	Integrated Materials Solutions Limited Partnership (IMS), Naul, County Dublin W0129-02 Walshestown Landfill Walshestown, Blackhall, Tipperkevin & Bawnoge, Naas, County Kildare W0254-01 ¹¹
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.	Walshestown Landfill Walshestown, Blackhall, Tipperkevin & Bawnoge, Naas, County Kildare W0254-01 ¹² Ballynagran Landfill, Co. Wicklow. W165-02 Drehid Landfill, Co. Kildare. W0201-01 East Galway Landfill, Co. Galway. W0178-02 Knockharley Landfill, Co. Meath. W0146-02
Category C 1 Non-Haz Landfill	As Category C but containing < 0.001% w/w asbestos fibres.	RILTA Environmental LTD. W0192-03 Enva Portlaoise.

⁹ Free from equates to less than 2%.

¹⁰ S.I. No. 126/2011 - European Communities (Waste Directive) Regulations 2011 (Article 27).

¹¹ Licenced to accept Category B2 material for recovery.

¹² Licenced to accept Category C material for recovery.

		W0184-02
Category C 2 Non-Haz Landfill	As Category C but containing >0.001% and <0.01% w/w asbestos fibres	RILTA Environmental LTD. W0192-03 Enva Portlaoise. W0184-02
Category C 3 Non-Haz Landfill	As Category C but containing >0.01% and <0.1% w/w asbestos fibres.	RILTA Environmental LTD. W0192-03 Enva Portlaoise. W0184-02
Category D Hazardous Treatment	Results found to be hazardous using HWOL Application.	RILTA Environmental LTD. W0192-03 Enva Portlaoise. W0184-02
Category D 1 Hazardous Treatment	Results found to be hazardous due to the presence of asbestos (>0.1%).	RILTA Environmental LTD. W0192-03