



GROUND INVESTIGATIONS IRELAND

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Ground Investigations Ireland

Cornamaddy Athlone Northern Site

Glenveagh Properties

Waste Classification Report

December 2022





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DOCUMENT CONTROL SHEET

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Project No	12205-09-22
Document Title	Waste Classification Report

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Ground Investigations Ireland Ltd. present the results of the fieldworks and laboratory testing in accordance with the specification and related documents provided by or on behalf of the client. The possibility of variation in the ground and/or groundwater conditions between or below exploratory locations or due to the investigation techniques employed must be taken into account when this report and the appendices inform designs or decisions where such variation may be considered relevant. Ground and/or groundwater conditions may vary due to seasonal, man-made or other activities not apparent during the fieldworks and no responsibility can be taken for such variation. The data presented and the recommendations included in this report and associated appendices are intended for the use of the client and the client's geotechnical representative only and any duty of care to others is excluded unless approved in writing.



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1.0 Preamble

Ground Investigations Ireland (GII) was appointed by AKM Design on behalf of Glenveagh Properties to carry out a waste classification assessment for a proposed residential development in Athlone, Co. Westmeath. All site investigation works were carried out under the supervision of a GII Geo-Environmental Engineer. The site investigation works were completed in October 2022.

2.0 Purpose & Scope

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

The purpose of the waste classification exercise was as follows.

- Assess the site in terms of historical use; and
- Classification, in terms of waste management and final disposal outlets, of material that may require disposal following excavation during the construction phase.

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

- Site walkover;
- Historical desk study;
- Excavation of nineteen (19 No.) trial pits;
- Collection of subsoil samples for chemical analysis;
- Environmental laboratory testing; and
- Waste classification.

The additional scope of the geotechnical investigation included the following:

- Carry out 3 No. Soakaways to determine a soil infiltration value to BRE Digest 365;
- Carry out 2 No. Percussive Boreholes to recover soil sample and to determine soil strength;
- Carry out 48 No. Dynamic Probes to determine soil strength/density characteristics;
- Carry out 24 No. Plate bearing tests to determine the modulus of subgrade reaction and equivalent CBR values; and
- Geotechnical laboratory testing.

The geotechnical site investigation is discussed in the GII Ground Investigation Report Dated December 2022.¹

3.0 Limitations

¹ Ground Investigations Ireland, Cornamaddy Athlone Northern Site, Ground Investigation Report, December 2022.

GII has prepared this report for the sole use of Glenveagh Properties. 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 in October 2022, this report is based on the conditions encountered and the information available during that period. The scope of this Report and the services are accordingly factually limited by these circumstances.

Site investigation locations were selected by the consultant engineer.

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

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

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

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

4.0 Site Location and Layout

The site is located at Cornamaddy, Athlone, Co. Westmeath (Figure 1 Appendix 1). At the time of the site investigation the site was predominantly greenfield however the southern portion of the site was previously used as a compound for a neighbouring development. There was also a public water treatment system located in the north of the site.

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 the 6-Inch map. Multiple

presumed-artificial water/drainage channels are present intersecting and bordering the site on the 25-Inch and Cassini maps.

Based on a review of the OSI and Google Imagery aerial photograph records, the housing estate in the south of the site was constructed sometime between 2005 and 2008. The site has been in its current state of development since at least 2013.

6.0 Subsurface Exploration

6.1. General

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

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

6.2. Trial Pits

The trial pits were excavated using a 14T tracked excavator at the locations shown in Figures 5 and 6. The locations were checked using a CAT scan to minimise the potential for encountering services during the excavation. The trial pits were sampled, logged and photographed by a Geotechnical Engineer/Engineering Geologist prior to backfilling with arisings. Notes were made of any services, inclusions, pit stability, groundwater encountered and the characteristics of the strata encountered and are presented on the trial pit logs which are provided in Appendix 2 of this Report.

6.3. Surveying

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

7.0 Ground Conditions

7.1. General

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

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

- Topsoil / Peat
- Made Ground / Possible Made Ground
- Cohesive Deposits
- Granular Deposits

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TOPSOIL: Topsoil was encountered in many of the exploratory holes and was present to a maximum depth of 0.40m BGL.

PEAT: Peat was encountered from ground level in most of the exploratory holes and was generally described as *dark brown slightly gravelly clayey pseudo fibrous PEAT*. At the locations of the trial pits and boreholes, the thickness of peat varied from 0.20m to 4.60m BGL. The results of the dynamic probes indicate the peat may extend to depths of over 6.00m BGL.

MADE GROUND: Made Ground deposits were encountered in exploratory holes TP-01, TP-02, TP-11, and TP-12, and were present to depths ranging from 0.50m to 1.20m BGL. These deposits were described generally as *greyish brown / brown slightly sandy gravelly silty Clay with occasional cobbles and boulders* and contained *rare fragments of plastic*. TP-01 had the most anthropogenic material with *occasional fragments of metal, timber, concrete, and steel* noted. In addition to this, possible made ground deposits were noted to a maximum depth of 1.50m BGL. No anthropogenic material was observed within the possible made ground deposits.

COHESIVE DEPOSITS: Cohesive deposits were encountered beneath the Peat and were described typically as *grey / grey mottled brown slightly sandy slightly gravelly silty CLAY or a Grey slightly sandy slightly gravelly clayey SILT with occasional to many cobbles and boulders*. The secondary sand and gravel constituents varied across the site and with depth, with granular lenses occasionally present in the glacial till matrix. These deposits had occasional (<5%), some (5%-20%) or many (20%-50%) cobble and boulder content, where noted on the exploratory hole logs.

GRANULAR DEPOSITS: Granular deposits were encountered beneath the cohesive deposits at TP-09, TP-11, TP-18, and TP-19. These were typically described as *grey slightly sandy slightly clayey slightly silty subangular to subrounded fine to coarse GRAVEL with many cobbles or grey / greyish brown slightly gravelly clayey silty fine to coarse SAND*. The secondary sand/gravel and fines constituents varied across the site and with depth, while occasional (<5%), some (5%-20%) or many (20%-50%) cobble and boulder content was also present, where noted on the exploratory hole logs. 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.

8.0 Laboratory Analysis

8.1. Analysis Suite

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

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

In line with the requirement of Council Decision 2003/33/EC a leachate was generated from the solid samples which was in turn analysed for antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, chloride, fluoride, soluble sulphate, sulphide, phenols, dissolved organic carbon (DOC) and total dissolved solids (TDS). The 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 3.

8.2. Asbestos

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

9.0 Waste Classification

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

1. 17-05-03* (soil and stone containing dangerous substances, classified as hazardous) or 17-05-04 (soil and stone other than those mentioned in 17-05-03, not hazardous); or

² Formerly European Waste Catalogue Codes (EWC Codes)

2. 17-09-03* (other construction and demolition wastes (including mixed wastes) containing hazardous substances) or 17-09-04 (mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03).

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

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

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

The conclusions presented in the report are based on GII's professional opinion. **It should be noted that the environmental regulator (in this case the EPA) and the waste acceptor (in this case a landfill operator) shall decide whether a waste is hazardous or non-hazardous and suitable for disposal at their facility.**

9.1. HazWasteOnLine™ Results

In total, twelve (12 No.) samples were assessed using the HazWasteOnLine™ Tool. All samples were classified as being non-hazardous. The complete HazWasteOnLine™ report for all samples is included in Appendix 4.

The specific LoW code which should be applied to the material at each SI location is summarised in Table 2 below. The assigning of the LoW code is based on observations recorded in the trial pits, an estimation of the % of anthropogenic material present and the results of the HazWasteOnline™ output. The final LoW codes applied at the time of disposal may vary due to variations in % of anthropogenic material observed in the excavation phase. Where there is in excess of 2%³ anthropogenic material observed the LoW code 17 09 04 may be applied.

9.2. Landfill Waste Acceptance Criteria

Waste Acceptance Criteria (WAC) have been agreed by the EU (Council Decision 2003/33/EC) and are only applicable to material if it is to be disposed of as a waste at a landfill facility. Each individual member

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

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 Walshestown and Integrated Materials Solutions (IMS) Landfills. The Walshestown and IMS landfills have higher limits for a range of parameters while still operating under an inert landfill licence. The WAC data considered in combination with the waste classification outlined in Section 9.0 allows the most suitable waste category to be applied to the material tested. The potentially applicable waste categories are summarised in Table 1. A summary of the WAC data is presented in Appendix 5. The waste category assigned to each sample is summarised in Table 2.

Table 1 Potential Waste Categories for Disposal/Recovery

Waste Category	Classification Criteria
Category A Unlined 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 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	Results found to be hazardous using HWOL Application.

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.

Waste Category	Classification Criteria
Hazardous Treatment	
Category D 1 Hazardous Disposal	Results found to be hazardous due to the presence of asbestos (>0.1%).

9.3. Final Waste Categorisation

All samples were assessed in terms of waste classification using the HazWasteOnLine™ tool and also the WAC set out in Council Decision 2003/33/EC and the Walshestown/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 2.

Table 2 Individual Sample Waste Category

Sample ID	Sample Depth (m)	Material Type	Sample Date	LoW Code	Waste Category
TP-01	0.00-0.60	Made Ground	24/10/2022	17 05 04	Category B1
TP-02	0.00-0.90	Made Ground	24/10/2022	17 05 04	Category B1
TP-03	1.40-2.10	Cohesive	21/10/2022	17 05 04	Category B2
TP-06	1.00-2.70	Cohesive	21/10/2022	17 05 04	Category B2
TP-07	1.10-2.30	Cohesive	20/10/2022	17 05 04	Category B2
TP-10	0.20-0.80	Cohesive	20/10/2022	17 05 04	Category A
TP-11	0.20-0.50	Made Ground	20/10/2022	17 05 04	Category B1
TP-13	0.75-2.00	Cohesive	20/10/2022	17 05 04	Category B2
TP-15	0.30-0.70	Cohesive	20/10/2022	17 05 04	Category A
TP-17	0.20-1.40	Cohesive	20/10/2022	17 05 04	Category A
TP-18	0.50-1.10	Granular	20/10/2022	17 05 04	Category A
TP-19	0.70-1.40	Cohesive	20/10/2022	17 05 04	Category A

10.0 Conclusions & Recommendations

The conclusions and recommendations given and opinions expressed in this report are based on the findings of the site investigation works and laboratory testing undertaken. Where any opinion is expressed on the classification of material between site investigation locations, this is for guidance only and no liability can be accepted for its accuracy. No responsibility can be accepted for conditions which have not been revealed by the findings at the site investigation locations.

10.1. Conclusions

10.1.1. Waste Classification

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

10.1.2. Asbestos

Asbestos was not detected in the soil samples.

10.1.3. Waste Categories

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

10.2. Recommendations

10.2.1. Waste Transfer

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

The material on site if excavated should be removed to the most appropriate facility under the waste categories and LoW codes identified in Table 2. Potential outlets for the various waste categories are presented in Appendix 6, this list is not exhaustive and applicable at the time of the writing this report.

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

11.0 References

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

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

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

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

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

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*.

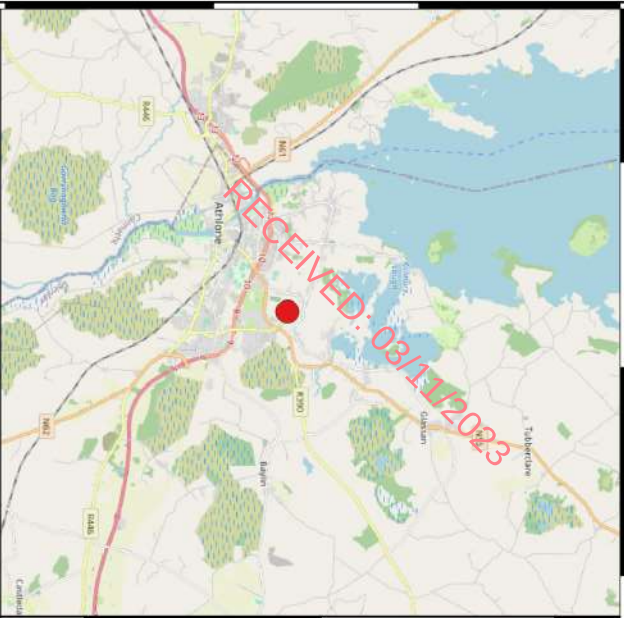
Association of Geotechnical and Geoenvironmental Specialists (2019). *Waste Classification for Soils – A Practitioners Guide*.

APPENDIX 1 - Figures

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● Site Location
□ Indicative Site Boundary

Client:

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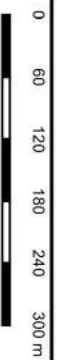
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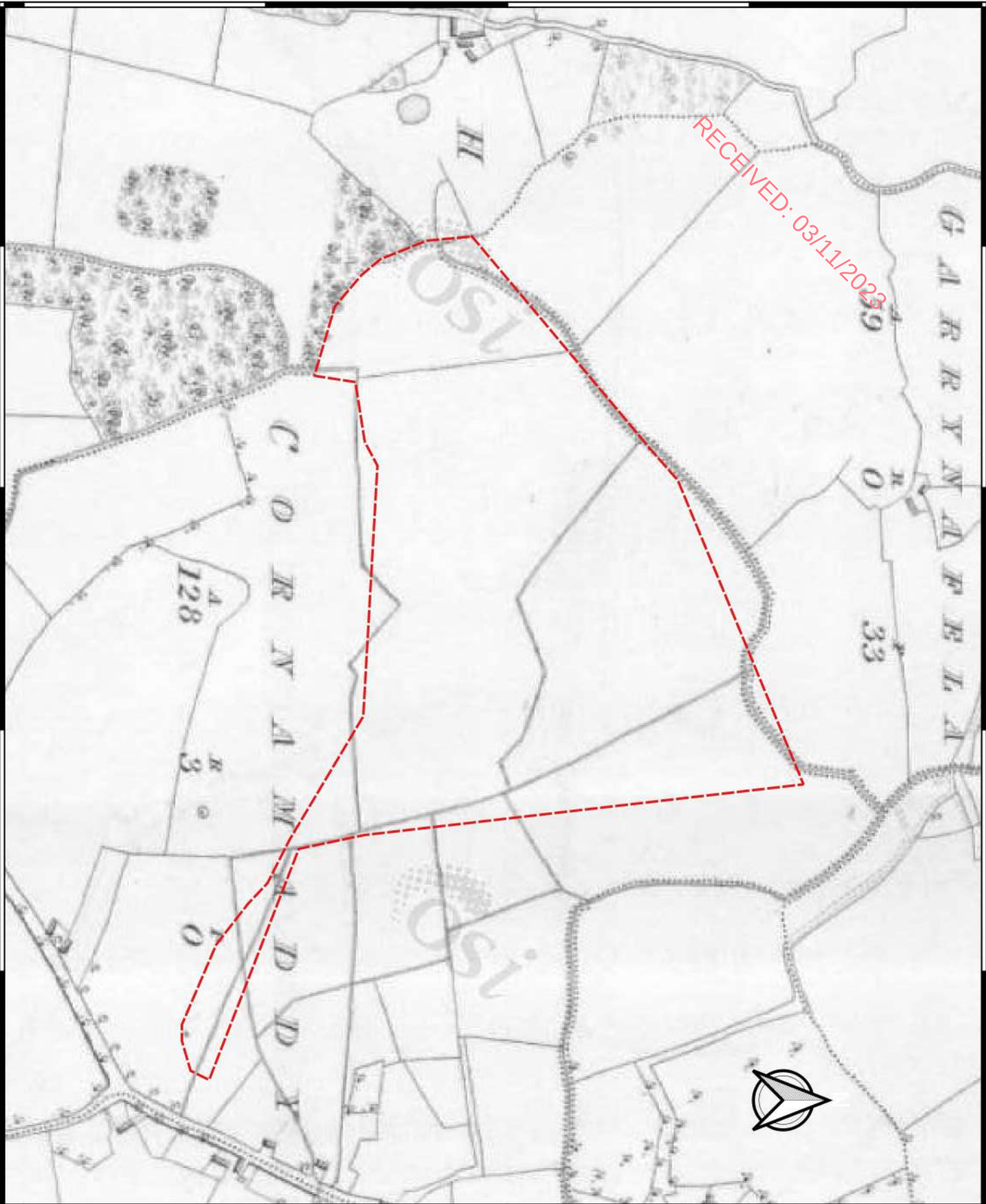
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Drawing Title:
Figure 1 Site Location


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 Indicative Site Location

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Figure 2 OSI 6-Inch Map



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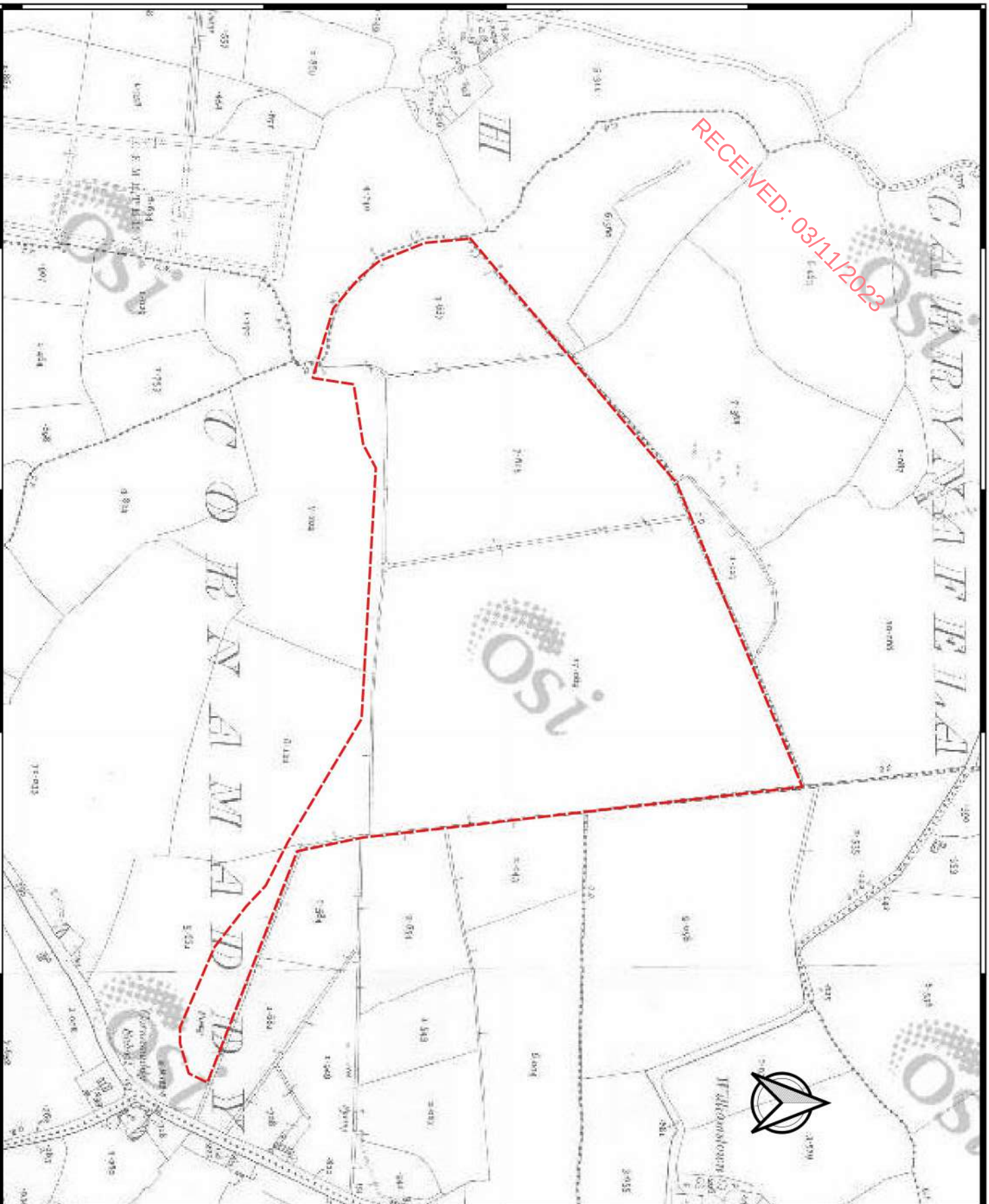
Drawn By:

JC

Date:

13-12-2022

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Figure 3 OSI 25-Inch Map



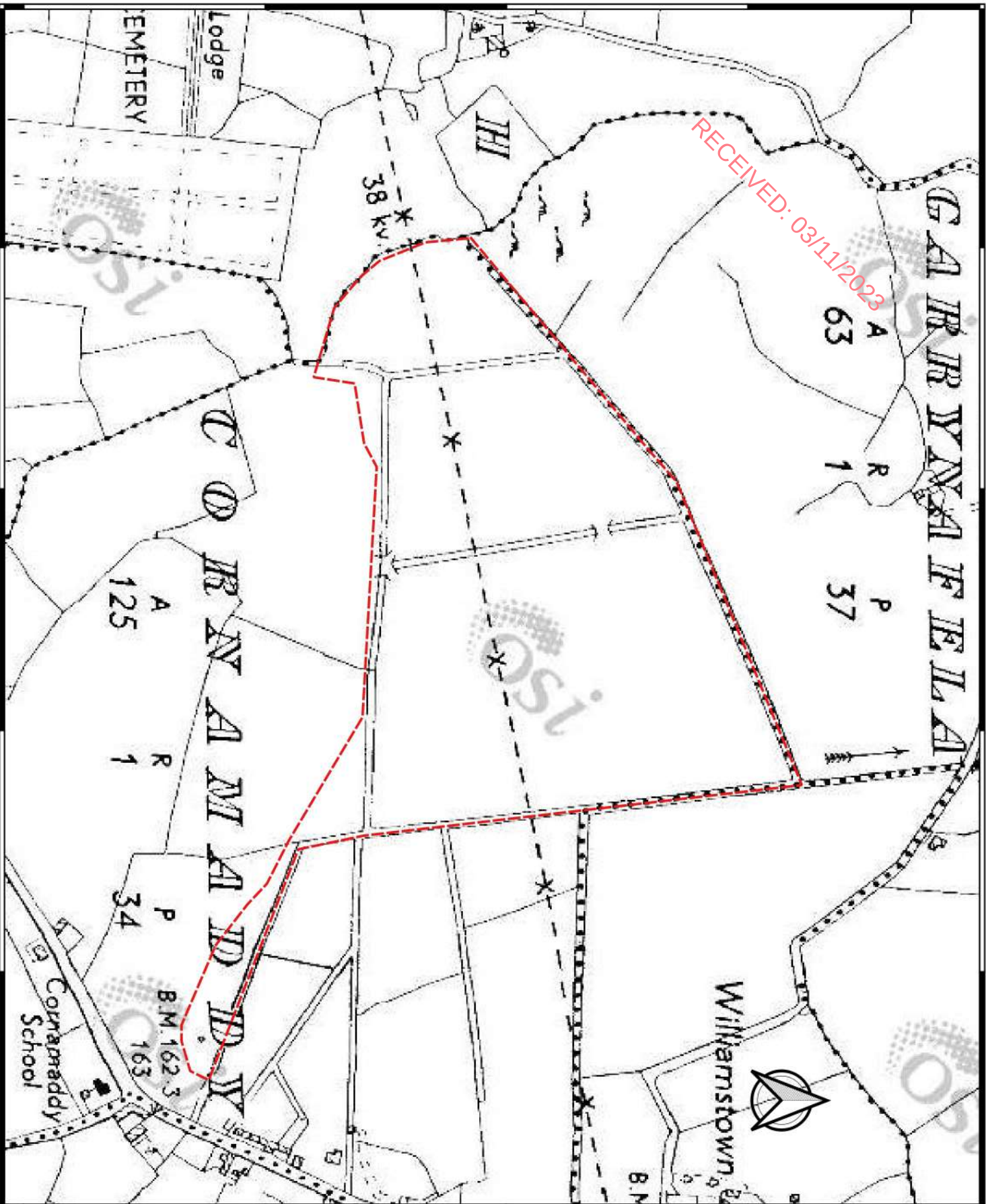
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Figure 4 OSI Cassini Map



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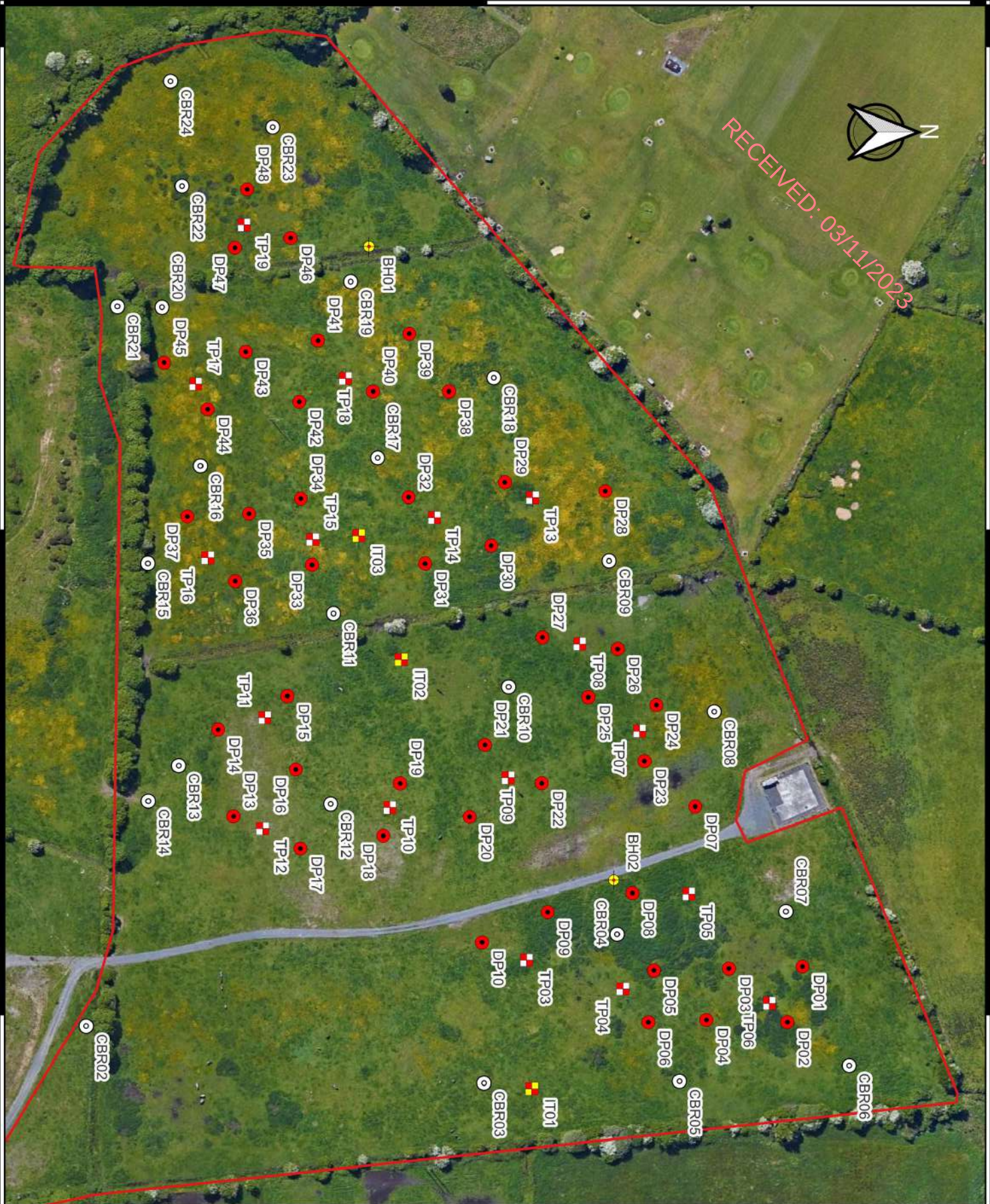
605800E

606000E

606200E

743200N

743400N



- Indicative Site Boundary
- Trial Pit
- Soakaway Pit
- Dynamic Probe
- CBR
- Borehole

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Project Code:
12205-09-22

Project Title:
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Drawing Title:
Figure 5
Site Investigation Points 1 of 2



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606200E

606400E

Indicative Site Boundary

Trial Pit

Soakaway Pit

Dynamic Probe

CBR

Borehole

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Site

Drawing Title:
Figure 6
Site Investigation Points 2 of 2

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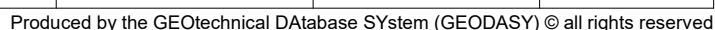
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APPENDIX 2 – Trial Pit Records

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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-02

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 4.90m 1.80m x 3.00m (L x W x D)	Ground Level (mOD) 42.46	Client AKM Design	Job Number 12205-09-22
	Location 606337.1 E 742950.2 N	Dates 24/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00-0.90	ES					MADE GROUND: Greyish brown slightly sandy slightly gravelly silty Clay with occasional cobbles and boulders and with rare fragments of plastic		
0.50	B				(0.90)			
			Seepage(1) at 0.90m.	41.56	0.90	Very soft dark brown clayey SILT		▽1
				41.36	(0.20)			
					1.10	Firm to stiff grey mottled brown slightly sandy slightly gravelly silty CLAY		
1.50	B				(1.20)			
				40.16	2.30	Stiff grey slightly sandy slightly gravelly silty CLAY with occasional cobbles and boulders		
					(0.70)			
				39.46	3.00	Complete at 3.00m		

Plan .					Remarks Groundwater encountered at 0.90m BGL; Seepage Trial pit stable Trial pit backfilled upon completion			
					Scale (approx) 1:25	Logged By CMP	Figure No. 12205-09-22.TP-02	



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-03

Machine : 14T Tracked excavator		Dimensions 5.10m x 1.80m x 3.00m (L x W x D)		Ground Level (mOD) 40.50		Client AKM Design		Job Number 12205-09-22	
Method : Trial Pit		Location 606177.4 E 743216.1 N		Dates 21/10/2022		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.40-2.10	ES		Fast Ingress(1) at 1.50m.	39.10	1.40	Very soft dark brown slightly gravelly clayey pseudo fibrous PEAT with occasional boulders		V1
					(0.70)	Very soft grey slightly gravelly clayey SILT with occasional organic fibres		
2.00	B			38.40	2.10	Very soft light grey slightly gravelly clayey SILT with occasional organic fibres		
				38.00	2.50	Firm to stiff grey slightly sandy slightly gravelly silty CLAY with many cobbles and boulders		
				37.50	3.00	Complete at 3.00m		

Plan					Remarks			
.	.	.	.	.	Groundwater encountered at 1.50m BGL; Fast Ingress Trial pit unstable; side walls spalling Trial pit backfilled upon completion			
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					Scale (approx)	Logged By	Figure No.	
					1:25	CMP RH	12205-09-22.TP-03	



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-04

Machine : 14T tracked excavator		Dimensions 5.00m x 1.80m x 1.50m (L x W x D)		Ground Level (mOD) 40.41		Client AKM Design		Job Number 12205-09-22	
Method : Trial Pit		Location 606189.4 E 743255.9 N		Dates 21/10/2022		Engineer		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						Possible MADE GROUND: Dark brown slightly gravelly clayey pseudo fibrous Peat with many cobbles and boulders		
				39.91	0.50 (0.30)	Possible MADE GROUND: Orangish brown slightly sandy slightly gravelly silty Clay with occasional cobbles and boulders		
			Fast Ingress(1) at 0.70m.	39.61	0.80 (0.70)	Soft grey slightly sandy gravelly clayey SILT with many cobbles and boulders		
				38.91	1.50	Terminated at 1.50m		

Plan					Remarks			
.	.	.	.	.	Groundwater encountered at 0.70m BGL; Fast Ingress Trial pit unstable; side walls spalling Trial pit backfilled upon completion Trial pit terminated due to groundwater obscuring view			
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					Scale (approx) 1:25		Logged By CMP RH	Figure No. 12205-09-22.TP-04



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-05

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.20m x 1.80m x 2.70m (L x W x D)	Ground Level (mOD) 40.34	Client AKM Design	Job Number 12205-09-22
	Location 606150.1 E 743283.1 N	Dates 21/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.30-2.00	ES		Fast Ingress(1) at 1.20m.	39.59	0.75	MADE GROUND: Dark brown slightly gravelly clayey pseudo fibrous Peat with rare fragments of timber and plastic		
1.50	B			39.04	1.30	Very soft light grey slightly gravelly SILT with occasional cobbles and boulders		
				38.34	2.00	Very soft grey slightly sandy slightly gravelly silty CLAY with occasional cobbles and boulders		
2.50	B			37.64	2.70	Very soft slightly sandy gravelly clayey SILT with many cobbles and boulders		
						Complete at 2.70m		

Plan .					Remarks Groundwater encountered at 1.20m BGL; Fast Ingress Trial pit unstable; side walls spalling Trial pit backfilled upon completion			
					Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-05	



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-06

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.40m x 1.80m x 3.40m (L x W x D)	Ground Level (mOD) 40.15	Client AKM Design	Job Number 12205-09-22
	Location 606195.3 E 743316.4 N	Dates 21/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.00-2.70	ES		Fast Ingress(1) at 1.20m.	39.15	1.00	Very soft dark brown slightly gravelly clayey pseudo fibrous PEAT		
					(1.00)			
					1.00	Very soft light grey clayey SILT with organic fibres		∇1
					(1.70)			
					2.70	Very soft slightly sandy slightly gravelly silty CLAY with occasional cobbles and boulders		
					(0.70)			
3.40	B			36.75	3.40	Complete at 3.40m		

Plan .	Remarks Groundwater encountered at 1.20m BGL; Fast Ingress Trial pit stable Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-06



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-07

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.50m x 1.80m x 3.00m (L x W x D)	Ground Level (mOD) 40.32	Client AKM Design	Job Number 12205-09-22
	Location 606082.8 E 743262.8 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.70	B		Medium Ingress(1) at 0.70m.		(1.10)	Very soft dark brown slightly gravelly clayey pseudo fibrous PEAT		∇ ₁
1.10-2.30	ES		Medium Ingress(2) at 1.30m.	39.22	1.10	Very soft light grey clayey SILT with organic fibres		∇ ₂
1.70	B				(1.20)			
				38.02	2.30	Firm grey silty CLAY with occasional cobbles and rare boulders		
2.70	B				(0.70)			
				37.32	3.00	Complete at 3.00m		

Plan .	Remarks Groundwater encountered at 0.70m BGL and 1.30m BGL; Medium Ingress Trial pit stable Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-07



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-08

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.00m x 1.80m x 1.70m (L x W x D)	Ground Level (mOD) 40.46	Client AKM Design	Job Number 12205-09-22
	Location 606046.8 E 743238.1 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.50	B		Fast Ingress(1) at 0.80m.		(0.75)	Very soft dark brown slightly gravelly clayey pseudo fibrous PEAT		
				39.71	0.75 (0.35)	Soft to firm orangish brown slightly sandy gravelly silty CLAY with many cobbles and boulders		Σ1
				39.36	1.10 (0.30)	Soft to firm grey slightly sandy slightly gravelly clayey SILT with occasional cobbles and rare boulders		
				39.06	1.40 (0.30)	Firm grey slightly sandy slightly gravelly clayey SILT with occasional cobbles and rare boulders		
				38.76	1.70	Terminated at 1.70m		

Plan .	Remarks Groundwater encountered 0.80m BGL; Fast Ingress Trial pit unstable; side walls collapsed Trial pit backfilled upon completion Trial pit terminated due to groundwater obscuring view		
	Scale (approx) 1:25		
	Logged By CMP RH		
	Figure No. 12205-09-22.TP-08		



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-09

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.10m x 1.80m x 2.80m (L x W x D)	Ground Level (mOD) 40.68	Client AKM Design	Job Number 12205-09-22
	Location 606102.1 E 743208.5 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.50	B			40.48	(0.20)	Peaty TOPSOIL		
					0.20	Very soft dark brown slightly gravelly clayey pseudo fibrous PEAT		
2.50	B		Medium Ingress(1) at 1.00m.	39.48	(0.20)	Soft to firm grey mottled brown slightly sandy slightly gravelly clayey SILT with occasional cobbles and boulders		V1
					0.40			
					(0.80)			
					1.20			
2.50	B			38.38	(1.10)	Firm grey slightly sandy gravelly silty CLAY with many cobbles and boulders		
					2.30	Medium dense grey slightly gravelly clayey silty fine to coarse SAND with many cobbles and boulders		
					(0.50)			
				37.88	2.80	Complete at 2.80m		

Plan .	Remarks Groundwaer encountered at 1.00m BGL; Medium Ingress Trial pit unstable; side walls collapsed Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-09



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-10

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.00m x 1.80m x 2.70m (L x W x D)	Ground Level (mOD) 42.26	Client AKM Design	Job Number 12205-09-22
	Location 606114.4 E 743159.7 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.20-0.80	ES			42.06	(0.20) 0.20	Peaty TOPSOIL		
0.50	B			41.46	(0.60) 0.80	Possible MADE GROUND: Grey mottled brown sandy slightly gravelly silty Clay		
				40.76	(0.70) 1.50	Firm grey mottled brown slightly sandy slightly gravelly clayey SILT with occasional cobbles and boulders		
2.00	B			39.56	(1.20) 2.70	Firm greyish brown slightly sandy gravelly silty CLAY with many cobbles and boulders		
						Complete at 2.70m		

Plan 	Remarks No groundwater encountered Trial pit unstable; side walls spalling Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-10



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Site
Cornamaddy Athlone Northern Site
Trial Pit Number
TP-11

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.40m x 1.80m x 2.70m (L x W x D)	Ground Level (mOD) 41.00	Client AKM Design	Job Number 12205-09-22
	Location 606077.3 E 743108 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.20-0.50	ES			40.80	(0.20) 0.20	Peaty TOPSOIL		
				40.50	(0.30) 0.30	MADE GROUND: Brown slightly sandy gravelly silty Clay. (Reworked)		
				40.20	(0.30) 0.50	Possible MADE GROUND: Dark brown slightly gravelly clayey pseudo fibrous PEAT with occasional fragments of wood		
1.00	B		Fast Ingress(1) at 0.80m.	39.30	(0.80) 1.70	Very soft grey silty CLAY with occasional cobbles and rare boulders		∇1
				38.65	(0.65) 2.35	Firm grey silty CLAY with occasional cobbles and rare boulders		
2.50	B			38.30	(0.35) 2.70	Medium dense grey slightly sandy silty clayey subangular to subrounded fine to coarse GRAVEL		
						Complete at 2.70m		

Plan	Remarks Groundwater encountered at 0.80m BGL; Fast Ingress Trial pit unstable; side walls spalling Trial pit backfilled upon completion		
	Scale (approx)	Logged By	Figure No.
	1:25	CMP RH	12205-09-22.TP-11



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-12

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.00m x 1.80m x 3.00m (L x W x D)	Ground Level (mOD) 43.29	Client AKM Design	Job Number 12205-09-22
	Location 606123.1 E 743107.2 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.20-1.20	ES			43.09	(0.20) 0.20	Peaty TOPSOIL		
0.70	B				(1.00)	MADE GROUND: Brown slightly sandy slightly gravelly silty Clay with rare fragments of plastic.		
				42.09	1.20	Firm brown slightly sandy slightly gravelly silty CLAY with occasional cobbles and boulders		
				41.49	1.80	Stiff brown slightly sandy gravelly silty CLAY with many cobbles and boulders		
2.50	B				(1.20)			
				40.29	3.00	Complete at 3.00m		

Plan .	Remarks No groundwater encountered Trial pit stable Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-12



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-13

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.50m x 1.80m x 2.60 (L x W x D)	Ground Level (mOD) 40.22	Client AKM Design	Job Number 12205-09-22
	Location 605986.4 E 743218.6 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.75-2.00	ES		Fast Ingress(1) at 0.60m.			Very soft dark brown slightly gravelly clayey pseudo fibrous PEAT with rootlets		V1
				39.62	0.60	Very soft orangish brown slightly sandy gravelly silty CLAY with many cobbles and boulders		
1.00	B			39.47	0.15 0.75	Very soft grey clayey SILT with rare cobbles		
					(1.25)			
				38.22	2.00	Very soft slightly sandy gravelly clayey SILT with many cobbles and boulders		
2.30	B				(0.60)			
				37.62	2.60	Complete at 2.60m		

Plan .	Remarks Groundwater encountered at 0.60m BGL; Fast Ingress Trial pit unstable; side walls spalling Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-13



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-14

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.40m x 1.80m 3.00m (L x W x D)	Ground Level (mOD) 41.82	Client AKM Design	Job Number 12205-09-22
	Location 605994.6 E 743178.1 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	B			41.42	0.40	TOPSOIL		
					(0.40)			
					0.40	Firm grey mottled brown slightly sandy slightly gravelly silty CLAY with occasional cobbles and boulders		
					(0.90)			
1.50	B			40.52	1.30	Firm grey mottled brown slightly sandy gravelly silty CLAY with many cobbles and boulders		
					(1.20)			
				39.32	2.50	Firm to stiff grey mottled brown slightly sandy gravelly silty CLAY with many cobbles and boulders		
					(0.50)			
				38.82	3.00	Complete at 3.00m		

Plan .	Remarks No groundwater encountered Trial pit unstable; side walls spalling Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-14



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-15

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.50m x 1.80m x 3.00m (L x W x D)	Ground Level (mOD) 41.92	Client AKM Design	Job Number 12205-09-22
	Location 606003.6 E 743127.9 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.30-0.70	ES			41.62	0.30	TOPSOIL		
0.50	B			41.22	0.70	Soft greyish brown slightly sandy gravelly silty CLAY with occasional cobbles and rare boulders		
				40.42	1.50	Firm grey mottled brown slightly sandy gravelly clayey SILT with many cobbles and boulders		
				39.72	2.20	Firm greyish brown slightly sandy gravelly silty CLAY with many cobbles and boulders		
3.00	B			38.92	3.00	Complete at 3.00m		

Plan 					Remarks No groundwater encountered Trial pit unstable; side walls spalling Trial pit backfilled upon completion		
					Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-15



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-16

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.30m x 1.80m x 2.40m (L x W x D)	Ground Level (mOD) 40.43	Client AKM Design	Job Number 12205-09-22
	Location 606011.3 E 743084.5 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
1.70	B		Fast Ingress(1) at 0.50m.	39.93	(0.50)	Very soft dark brown slightly gravelly clayey pseudo fibrous PEAT		V1	
					0.50	Very soft light grey slightly sandy slightly gravelly silty CLAY with occasional cobbles			
					(0.70)				
					39.23	1.20	Very soft grey silty CLAY with occasional cobbles		
					(1.00)				
				38.23	2.20	Firm grey slightly sandy slightly gravelly silty CLAY with many cobbles and boulders			
				38.03	2.40	Terminated at 2.40m			

Plan .	Remarks Groundwater encountered at 0.50m BGL; Fast Ingress Trial pit unstable; side walls collapsed Trial pit backfilled upon completion Terminated due to trial pit collapse		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-16



**Trial Pit
Number**
TP-17

Job Number	12205-09-22
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Sheet
1/1

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Description

Plan 	Remarks Groundwater encountered at 3.00m BGL; Seepage Trial pit unstable; side walls spalling Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-17



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-18

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.00m x 1.80m x 3.00m (L x W x D)	Ground Level (mOD) 43.08	Client AKM Design	Job Number 12205-09-22
	Location 605937.1 E 743141.4 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50-1.10	ES			42.88	(0.20) 0.20	TOPSOIL		
				42.58	(0.30) 0.30	Soft brown slightly sandy slightly gravelly CLAY		
1.00	B			41.98	(0.60) 0.60	Medium dense greyish brown slightly clayey gravelly silty fine to coarse SAND with occasional cobbles and boulders		
				41.38	(1.30) 1.30	Firm to stiff grey mottled brown slightly sandy slightly gravelly silty CLAY with many cobbles and boulders		
2.00	B			40.08	(1.30) 1.30	Stiff grey sandy gravelly slightly clayey SILT with many cobbles and boulders		
					3.00	Complete at 3.00m		

Plan .	Remarks No groundwater encountered Trial pit stable Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-18



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Site
Cornamaddy Athlone Northern Site

Trial Pit Number
TP-19

Machine : 14T tracked excavator Method : Trial Pit	Dimensions 5.50m x 1.80m x 2.70m (L x W x D)	Ground Level (mOD) 40.61	Client AKM Design	Job Number 12205-09-22
	Location 605873.7 E 743099.5 N	Dates 20/10/2022	Engineer	Sheet 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.70-1.40	ES		Seepage(1) at 0.60m.	39.91	0.70	Very soft dark brown slightly gravelly clayey pseudo fibrous PEAT with occasional fragments of wood		V1
1.00	B				(0.70)	Very soft light grey slightly sandy slightly gravelly clayey SILT with many cobbles and boulders		
				39.21	1.40	Soft dark grey slightly sandy slightly gravelly clayey SILT with many cobbles and boulders		V2
			Fast Ingress(2) at 1.50m.		(0.50)			
				38.71	1.90	Stiff to very stiff dark grey slightly sandy slightly gravelly clayey SILT with many cobbles and boulders		
2.00	B				(0.40)			
				38.31	2.30	Medium dense dark grey slightly sandy slightly clayey slightly silty subangular to subrounded fine to coarse GRAVEL with many cobbles and boulders		
					(0.40)			
				37.91	2.70	Complete at 2.70m		

Plan .	Remarks Groundwater encountered at 0.60m and 1.50m BGL; Seepage and Fast Ingress Trial pit unstable; side walls spalling Trial pit backfilled upon completion		
	Scale (approx) 1:25	Logged By CMP RH	Figure No. 12205-09-22.TP-19

Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-01



TP-01



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-01



TP-01



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-01



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-02



TP-02



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-02



TP-02



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-02



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-03



TP-03



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-03



TP-03



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-03



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-04



TP-04



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-04



TP-04



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-04



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-05



TP-05



Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-06



TP-06



Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-08



TP-08



Cornamaddy Athlone Northern Site – Trial Pit Photographs

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TP-08



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-08



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-09



RECEIVED 03/11/2023

TP-09



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-09



TP-09



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-09



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-10



TP-10



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-10



TP-10



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-10



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-11



TP-11



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-11



TP-11



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-11



Cornamaddy Athlone Northern Site – Trial Pit Photographs

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TP-12



Cornamaddy Athlone Northern Site – Trial Pit Photographs

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TP-12



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-12



Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

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Cornamaddy Athlone Northern Site – Trial Pit Photographs

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TP-14



Cornamaddy Athlone Northern Site – Trial Pit Photographs

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TP-14



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-14



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-15



TP-15



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-15



TP-15



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-15



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-16



TP-16



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-16



TP-16



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-16



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-17



TP-17



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-17



TP-17



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-17



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-18



TP-18



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-18



TP-18



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-18



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-19



TP-19



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-19



TP-19



Cornamaddy Athlone Northern Site – Trial Pit Photographs

TP-19



APPENDIX 3 – Laboratory Testing

REMOVED: 03/11/2023



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Ground Investigations Ireland
Catherinestown House
Hazelhatch Road
Newcastle
Co. Dublin
Ireland



Attention : James Cashen
Date : 10th November, 2022
Your reference : 12205-09-22
Our reference : Test Report 22/17822 Batch 1
Location : Cornamaddy Athlone Northern Site
Date samples received : 28th October, 2022
Status : Final Report
Issue : 1

Fourteen samples were received for analysis on 28th October, 2022 of which twelve 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: 12205-09-22
Location: Cornamaddy Athlone Northern Site
Contact: James Cashen
EMT Job No: 22/17822

Report : Solid

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

EMT Sample No.	1-4	5-8	9-12	17-20	21-24	25-28	29-32	37-40	41-44	45-48	Please see attached notes for all abbreviations and acronyms		
Sample ID	TP-01	TP-02	TP-03	TP-06	TP-07	TP-10	TP-11	TP-13	TP-15	TP-17			
Depth	0.00-0.60	0.00-0.90	1.40-2.10	1.00-2.70	1.10-2.30	0.20-0.80	0.20-0.50	0.75-2.00	0.30-0.70	0.20-1.40			
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	24/10/2022	24/10/2022	21/10/2022	21/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022			
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	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{sv}	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{sv}	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{sv}	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL) #	<0.2	<0.2	<0.2	<0.2	119.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 (EH_CU_1D_AL) #	<4	<4	<4	<4	101	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>C16-C21 (EH_CU_1D_AL) #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C21-C35 (EH_CU_1D_AL) #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C35-C40 (EH_1D_AL)	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-40 (EH+HS_1D_AL)	<26	<26	<26	<26	221	<26	<26	<26	<26	<26	<26	mg/kg	TMS/PM8/PM16/PM12/PM15
>C6-C10 (HS_1D_AL)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{sv}	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_1D_AL)	<10	<10	<10	<10	299	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
>C25-C35 (EH_1D_AL)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{sv}	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{sv}	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{sv}	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR) #	<0.2	<0.2	<0.2	<0.2	30.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR) #	<4	<4	<4	<4	24	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR) #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR) #	<7	<7	<7	25	40	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC35-EC40 (EH_1D_AR)	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-40 (EH+HS_1D_AR)	<26	<26	<26	<26	95	<26	<26	<26	<26	<26	<26	mg/kg	TMS/PM8/PM16/PM12/PM15
Total aliphatics and aromatics(C5-40) (EH+HS_CU_1D_Total)	<52	<52	<52	<52	316	<52	<52	<52	<52	<52	<52	mg/kg	TMS/PM8/PM16/PM12/PM15
>EC6-EC10 (HS_1D_AR) #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{sv}	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_1D_AR)	<10	<10	<10	<10	71	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
>EC25-EC35 (EH_1D_AR)	<10	<10	<10	23	29	<10	<10	<10	<10	<10	<10	mg/kg	TMS/PM8/PM16
MTBE #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM36/PM12
Benzene #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM36/PM12
Toluene #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM36/PM12
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM36/PM12
o-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM36/PM12
PCB 28 #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	<5	<5	<5	<5 ^{sv}	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	<35	<35	<35	<35 ^{sv}	<35	<35	<35	ug/kg	TM17/PM8

Client Name: Ground Investigations Ireland
Reference: 12205-09-22
Location: Cornamaddy Athlone Northern Site
Contact: James Cashen
EMT Job No: 22/17822

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

Please see attached notes for all abbreviations and acronyms

QF-PM 3.1.2 v11

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 12205-09-22
Location: Cornamaddy Athlone Northern Site
Contact: James Cashen
EMT Job No: 22/17822

Report : CEN 10:1 1 Batch

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

EMT Sample No.	1-4	5-8	9-12	17-20	21-24	25-28	29-32	37-40	41-44	45-48	Please see attached notes for all abbreviations and acronyms		
Sample ID	TP-01	TP-02	TP-03	TP-06	TP-07	TP-10	TP-11	TP-13	TP-15	TP-17			
Depth	0.00-0.60	0.00-0.90	1.40-2.10	1.00-2.70	1.10-2.30	0.20-0.80	0.20-0.50	0.75-2.00	0.30-0.70	0.20-1.40			
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	24/10/2022	24/10/2022	21/10/2022	21/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022			
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	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	LOD/LOR	Units	Method No.
Dissolved Antimony [#]	<0.002	<0.002	0.016	0.017	0.015	<0.002	<0.002	0.016	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) [#]	<0.02	<0.02	0.16	0.17	0.15	<0.02	<0.02	0.16	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic [#]	0.0026	<0.0025	0.0064	0.0041	0.0087	<0.0025	<0.0025	0.0049	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) [#]	0.026	<0.025	0.064	0.041	0.087	<0.025	<0.025	0.049	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium [#]	0.008	0.004	0.021	0.032	0.032	<0.003	<0.003	0.023	<0.003	0.005	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) [#]	0.08	0.04	0.21	0.32	0.32	<0.03	<0.03	0.23	<0.03	0.05	<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	0.003	0.031	0.028	0.100	<0.002	<0.002	0.074	<0.002	0.002	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) [#]	0.03	0.03	0.31	0.28	1.00	<0.02	<0.02	0.74	<0.02	0.02	<0.02	mg/kg	TM30/PM17
Dissolved Nickel [#]	<0.002	<0.002	0.003	0.007	0.004	<0.002	<0.002	0.024	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) [#]	<0.02	<0.02	0.03	0.07	0.04	<0.02	<0.02	0.24	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium [#]	<0.003	<0.003	0.008	0.008	0.007	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) [#]	<0.03	<0.03	0.08	0.08	0.07	<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	0.004	<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	0.04	<0.03	<0.03	<0.03	0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVA [#]	<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 CVA [#]	<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	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	mg/l	TM173/PM0
Fluoride	5	<3	<3	<3	<3	<3	<3	<3	<3	4	<3	mg/kg	TM173/PM0
Sulphate as SO ₄ [#]	1.3	0.8	23.1	53.9	46.3	0.7	<0.5	20.9	0.5	0.8	<0.5	mg/l	TM38/PM0
Sulphate as SO ₄ [#]	13	8	231	539	463	7	<5	209	<5	8	<5	mg/kg	TM38/PM0
Chloride [#]	0.8	<0.3	0.7	1.1	1.2	0.4	<0.3	12.4	<0.3	0.4	<0.3	mg/l	TM38/PM0
Chloride [#]	8	<3	7	11	12	4	<3	124	<3	4	<3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2	<2	8	10	9	<2	3	3	<2	<2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	<20	80	100	90	<20	30	30	<20	<20	<20	mg/kg	TM60/PM0
pH	8.40	8.56	8.38	8.36	8.28	8.29	8.52	8.32	9.15	8.33	<0.01	pH units	TM73/PM0
Total Dissolved Solids [#]	48	<35	131	177	174	<35	63	130	<35	36	<35	mg/l	TM20/PM0
Total Dissolved Solids [#]	480	<350	1310	1769	1740	<350	630	1300	<350	360	<350	mg/kg	TM20/PM0

Client Name: Ground Investigations Ireland
Reference: 12205-09-22
Location: Cornamaddy Athlone Northern Site
Contact: James Cashen
EMT Job No: 22/17822

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

Please see attached notes for all abbreviations and acronyms

[illegible]

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 12205-09-22
Location: Cornamaddy Athlone Northern Site
Contact: James Cashen
EMT Job No: 22/17822

Report : EN12457_2

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

RECEIVED: 03/11/2023

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-4	5-8	9-12	17-20	21-24	25-28	29-32	37-40	41-44	45-48						
Sample ID	TP-01	TP-02	TP-03	TP-06	TP-07	TP-10	TP-11	TP-13	TP-15	TP-17						
Depth	0.00-0.60	0.00-0.90	1.40-2.10	1.00-2.70	1.10-2.30	0.20-0.80	0.20-0.50	0.75-2.00	0.30-0.70	0.20-1.40						
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	24/10/2022	24/10/2022	21/10/2022	21/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022						
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	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022	28/10/2022						
Solid Waste Analysis																
Total Organic Carbon #	0.33	0.14	0.55	2.70	0.96	0.12	0.31	0.52	0.06	0.20	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 ^{SV}	<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 ^{SV}	<0.035	<0.035	1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	<30	<30	221	<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 #	0.026	<0.025	0.064	0.041	0.087	<0.025	<0.025	0.049	<0.025	<0.025	0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.08	0.04	0.21	0.32	0.32	<0.03	<0.03	0.23	<0.03	0.05	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	0.03	0.31	0.28	1.00	<0.02	<0.02	0.74	<0.02	0.02	0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02	0.03	0.07	0.04	<0.02	<0.02	0.24	<0.02	<0.02	0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	<0.02	<0.02	0.16	0.17	0.15	<0.02	<0.02	0.16	<0.02	<0.02	0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	<0.03	<0.03	0.08	0.08	0.07	<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	0.04	<0.03	<0.03	<0.03	0.03	4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	480	<350	1310	1769	1740	<350	630	1300	<350	360	4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	<20	<20	80	100	90	<20	30	30	<20	<20	500	800	1000	<20	mg/kg	TM60/PM0
Dry Matter Content Ratio	85.0	89.0	64.1	58.5	61.6	85.4	90.0	75.7	90.0	85.5	-	-	-	<0.1	%	NONE/PM4
Moisture Content 105C (% Dry Weight)	17.7	12.3	55.9	70.8	62.3	17.1	11.1	32.1	11.1	17.0	-	-	-	<0.1	%	PM4/PM0
pH #	8.19	8.35	8.04	7.73	7.66	8.75	8.47	8.10	8.95	8.63	-	-	-	<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	<3	<3	<3	<3	<3	<3	<3	4	10	150	500	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	13	8	231	539	463	7	<5	209	<5	8	1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	8	<3	7	11	12	4	<3	124	<3	4	800	15000	25000	<3	mg/kg	TM38/PM0

Client Name:	Ground Investigations Ireland
Reference:	12205-09-22
Location:	Cornamaddy Athlone Northern Site
Contact:	James Cashen
EMT Job No:	22/17822

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

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Please see attached notes for abbreviations and acronyms.

[illegible]

Matrix : Solid

Matrix :

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Interpretation

Matrix :

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Interpretation

Client Name: Ground Investigations Ireland
Reference: 12205-09-22
Location: Cornamaddy Athlone Northern Site
Contact: James Cashen

Note:

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

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

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

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

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analyst Name	Date Of Analysis	Analysis	Result
22/17822	1	TP-01	0.00-0.60	4	Simon Postlewhite	08/11/2022	General Description (Bulk Analysis)	Brown soil/stones
					Simon Postlewhite	08/11/2022	Asbestos Fibres	NAD
					Simon Postlewhite	08/11/2022	Asbestos ACM	NAD
					Simon Postlewhite	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-02	0.00-0.90	8	Matthew Turner	08/11/2022	General Description (Bulk Analysis)	Brown soil/Stone
					Matthew Turner	08/11/2022	Asbestos Fibres	NAD
					Matthew Turner	08/11/2022	Asbestos ACM	NAD
					Matthew Turner	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-03	1.40-2.10	12	Matthew Turner	08/11/2022	General Description (Bulk Analysis)	Brown soil/Stone
					Matthew Turner	08/11/2022	Asbestos Fibres	NAD
					Matthew Turner	08/11/2022	Asbestos ACM	NAD
					Matthew Turner	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-06	1.00-2.70	20	Matthew Turner	08/11/2022	General Description (Bulk Analysis)	Brown soil/Stone
					Matthew Turner	08/11/2022	Asbestos Fibres	NAD
					Matthew Turner	08/11/2022	Asbestos ACM	NAD
					Matthew Turner	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-07	1.10-2.30	24	Simon Postlewhite	08/11/2022	General Description (Bulk Analysis)	Brown soil/stones
					Simon Postlewhite	08/11/2022	Asbestos Fibres	NAD
					Simon Postlewhite	08/11/2022	Asbestos ACM	NAD
					Simon Postlewhite	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-10	0.20-0.80	28	Matthew Turner	08/11/2022	General Description (Bulk Analysis)	Brown soil/Stone
					Matthew Turner	08/11/2022	Asbestos Fibres	NAD
					Matthew Turner	08/11/2022	Asbestos ACM	NAD
					Matthew Turner	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-11	0.20-0.50	32	Anthony Carman	08/11/2022	General Description (Bulk Analysis)	Brown Soil/Stones
					Anthony Carman	08/11/2022	Asbestos Fibres	NAD
					Anthony Carman	08/11/2022	Asbestos ACM	NAD
					Anthony Carman	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-13	0.75-2.00	40	Simon Postlewhite	08/11/2022	General Description (Bulk Analysis)	Brown soil/stones
					Simon Postlewhite	08/11/2022	Asbestos Fibres	NAD
					Simon Postlewhite	08/11/2022	Asbestos ACM	NAD
					Simon Postlewhite	08/11/2022	Asbestos Type	NAD

Client Name: Ground Investigations Ireland
Reference: 12205-09-22
Location: Cornamaddy Athlone Northern Site
Contact: James Cashen

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EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analyst Name	Date Of Analysis	Analysis	Result
22/17822	1	TP-15	0.30-0.70	44	Anthony Carman	08/11/2022	General Description (Bulk Analysis)	Brown Soil/Stones
					Anthony Carman	08/11/2022	Asbestos Fibres	NAD
					Anthony Carman	08/11/2022	Asbestos ACM	NAD
					Anthony Carman	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-17	0.20-1.40	48	Anthony Carman	08/11/2022	General Description (Bulk Analysis)	Brown Soil/Stones
					Anthony Carman	08/11/2022	Asbestos Fibres	NAD
					Anthony Carman	08/11/2022	Asbestos ACM	NAD
					Anthony Carman	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-18	0.50-1.10	52	Matthew Turner	08/11/2022	General Description (Bulk Analysis)	Brown soil/Stone
					Matthew Turner	08/11/2022	Asbestos Fibres	NAD
					Matthew Turner	08/11/2022	Asbestos ACM	NAD
					Matthew Turner	08/11/2022	Asbestos Type	NAD
22/17822	1	TP-19	0.70-1.40	56	Matthew Turner	08/11/2022	General Description (Bulk Analysis)	Brown soil/Stone
					Matthew Turner	08/11/2022	Asbestos Fibres	NAD
					Matthew Turner	08/11/2022	Asbestos ACM	NAD
					Matthew Turner	08/11/2022	Asbestos Type	NAD

Client Name: Ground Investigations Ireland

Matrix : Solid

Reference: 12205-09-22

12205-09-22

Location: Cornamaddy Athlone Northern Site

~~Cornamaddy~~ Athlone Northern Site

Contact: James Cashen

James Cashen

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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.: 22/17822

SOILS and ASH

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

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

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

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

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

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

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

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

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

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

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

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

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

WATERS

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

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

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

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

STACK EMISSIONS

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

BLANKS

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

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.

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

REPORTS FROM THE SOUTH AFRICA LABORATORY

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

Measurement Uncertainty

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

Customer Provided Information

Sample ID and depth is information provided by the customer.

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.
*	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

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HWOL ACRONYMS AND OPERATORS USED

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

RECEIVED: 03/11/2023

EMT Job No: 22/17822

22/11/2023

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 GC/FID. 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 GC/FID. 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 GC/FID. 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

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Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM29	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009; SOILS by Modified USEP 6010B, Rev.2, Dec 1996; Modified EPA Method 3050B, Rev.2, Dec 1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009; SOILS by Modified USEP 6010B, Rev.2, Dec 1996; Modified EPA Method 3050B, Rev.2, Dec 1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009; SOILS by Modified USEP 6010B, Rev.2, Dec 1996; Modified EPA Method 3050B, Rev.2, Dec 1996	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2-1996, Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID, MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014, Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2-1996, Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID, MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014, Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser, Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 20131	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser, Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 20131	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	TCTOC 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: 22/17822

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Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM63	Asbestos Bulk Identification method based on HSG 248 Second edition (2021)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			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 4 – HazWasteOnLine™ Report

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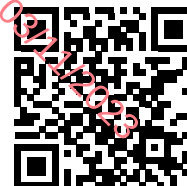
www.gii.ie

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Waste Classification Report

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

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



ZO4P9-PVD47-EWJWB

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

Job name

Cornamaddy Athlone

Description/Comments

Project

12205-09-22

Site

Cornamaddy Athlone Northern Site

Classified by

Name: **James Cashen** Company: **Ground Investigations Ireland Ltd**
Date: **12 Dec 2022 14:58 GMT**
Telephone:

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

HazWasteOnline™ Certification:

CERTIFIED

Course

Hazardous Waste Classification

Date

06 Aug 2020

Next 3 year Refresher due by Aug 2023

Purpose of classification

7 - Disposal of Waste

Address of the waste

Cornamaddy, Athlone, Co. Westmeath

Post Code **N/A**

Description of industry/producer giving rise to the waste

Residential development

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

Excavation for earthworks and foundations on proposed residential development

Description of the waste

Soil and stone

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Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP-01-24/10/2022-0.00-0.60m		Non Hazardous		3
2	TP-02-24/10/2022-0.00-0.90m		Non Hazardous		5
3	TP-03-21/10/2022-1.40-2.10m		Non Hazardous		7
4	TP-06-21/10/2022-1.00-2.70m		Non Hazardous		9
5	TP-07-20/10/2022-1.10-2.30m		Non Hazardous		11
6	TP-10-20/10/2022-0.20-0.80m		Non Hazardous		14
7	TP-11-20/10/2022-0.20-0.50m		Non Hazardous		16
8	TP-13-20/10/2022-0.75-2.00m		Non Hazardous		18
9	TP-15-20/10/2022-0.30-0.70m		Non Hazardous		20
10	TP-17-20/10/2022-0.20-1.40m		Non Hazardous		22
11	TP-18-20/10/2022-0.50-1.10m		Non Hazardous		24
12	TP-19-20/10/2022-0.70-1.40m		Non Hazardous		26

Related documents

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

Report

Created by: James Cashen

Created date: 12 Dec 2022 14:58 GMT

Appendices	Page
Appendix A: Classifier defined and non EU CLP determinands	28
Appendix B: Rationale for selection of metal species	29
Appendix C: Version	30

Classification of sample: TP-01-24/10/2022-0.00-0.60m

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

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Sample details

Sample name:	LoW Code:
TP-01-24/10/2022-0.00-0.60m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15.5% (wet weight correction)	

Hazard properties

None identified

Determinands

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

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.012	mg/kg	0.000101 %	✓	
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				7.5 mg/kg	1.32	8.368	mg/kg	0.000837 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				1.1 mg/kg	1.142	1.062	mg/kg	0.000106 %	✓	
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				57.3 mg/kg	1.462	70.766	mg/kg	0.00708 %	✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				15 mg/kg	1.126	14.271	mg/kg	0.00143 %	✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	10 mg/kg	1.56	13.18	mg/kg	0.000845 %	✓	
	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 }				3.3 mg/kg	1.5	4.183	mg/kg	0.000418 %	✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				32.4 mg/kg	2.976	81.484	mg/kg	0.00815 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				57 mg/kg	2.774	133.617	mg/kg	0.0134 %	✓	
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52	mg/kg	<0.0052 %		<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3								



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MCM Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.19 pH		8.19 pH	8.19 pH			
			PH								
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		205-917-1	208-96-8								
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		201-695-5	86-73-7								
24	phenanthrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		201-581-5	85-01-8								
25	anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		204-371-1	120-12-7								
26	fluoranthene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		205-912-4	206-44-0								
27	pyrene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		204-927-3	129-00-0								
28	benzo[a]anthracene				<0.06 mg/kg		<0.06 mg/kg	<0.000006 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
29	chrysene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
30	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
31	benzo[k]fluoranthene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
32	benzo[a]pyrene; benzo[def]chrysene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
33	indeno[123-cd]pyrene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		205-893-2	193-39-5								
34	dibenz[a,h]anthracene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
35	benzo[ghi]perylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		205-883-8	191-24-2								
36	polychlorobiphenyls; PCB				<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %			<LOD
	602-039-00-4	215-648-1	1336-36-3								
37	barium { barium sulphide }				45 mg/kg	1.233	46.904 mg/kg	0.00469 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0427 %		

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: TP-02-24/10/2022-0.00-0.90m

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

RECEIVED: 03/11/2023

Sample details

Sample name:	LoW Code:
TP-02-24/10/2022-0.00-0.90m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
13.2% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 13.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197	mg/kg	<0.00012 %		<LOD
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				5.7 mg/kg	1.32	6.532	mg/kg	0.000653 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.9 mg/kg	1.142	0.892	mg/kg	0.0000892 %	✓	
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				41.1 mg/kg	1.462	52.141	mg/kg	0.00521 %	✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				15 mg/kg	1.126	14.659	mg/kg	0.00147 %	✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	10 mg/kg	1.56	13.539	mg/kg	0.000868 %	✓	
	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	3.125	mg/kg	0.000313 %	✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				30.1 mg/kg	2.976	77.76	mg/kg	0.00778 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				50 mg/kg	2.774	120.398	mg/kg	0.012 %	✓	
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52	mg/kg	<0.0052 %		<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3								



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MCM Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.35 pH		8.35 pH	8.35 pH			
			PH								
20	naphthalene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
21	acenaphthylene				<0.03 mg/kg		<0.03 mg/kg	<0.000003 %			<LOD
		205-917-1	208-96-8								
22	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
23	fluorene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %			<LOD
		201-695-5	86-73-7								
24	phenanthrene				<0.03 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 sulphide }				35 mg/kg	1.233	37.474 mg/kg	0.00375 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.038 %		

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: TP-03-21/10/2022-1.40-2.10m

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

RECEIVED: 03/11/2023

Sample details

Sample name:	LoW Code:
TP-03-21/10/2022-1.40-2.10m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
24.7% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 24.7% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used		
		EU CLP index number	EC Number	CAS Number									
1		antimony { antimony trioxide }				1	mg/kg	1.197	0.901	mg/kg	0.0000901 %	✓	
		051-005-00-X	215-175-0	1309-64-4									
2		arsenic { arsenic trioxide }				2.3	mg/kg	1.32	2.287	mg/kg	0.000229 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
3		cadmium { cadmium oxide }				0.5	mg/kg	1.142	0.43	mg/kg	0.000043 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				107.7	mg/kg	1.462	118.529	mg/kg	0.0119 %	✓	
			215-160-9	1308-38-9									
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3	mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
		024-017-00-8											
6		copper { dicopper oxide; copper (I) oxide }				6	mg/kg	1.126	5.087	mg/kg	0.000509 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
7		lead { lead chromate }			1	<5	mg/kg	1.56	<7.799	mg/kg	<0.0005 %		<LOD
		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 }				6.4	mg/kg	1.5	7.23	mg/kg	0.000723 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
10		nickel { nickel chromate }				14.2	mg/kg	2.976	31.824	mg/kg	0.00318 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
11		selenium { nickel selenate }				1	mg/kg	2.554	1.923	mg/kg	0.000192 %	✓	
		028-031-00-5	239-125-2	15060-62-5									
12		zinc { zinc chromate }				23	mg/kg	2.774	48.045	mg/kg	0.0048 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
13		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									
14		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
15		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
16		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									



GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

HazWasteOnline™

Report created by James Cashin on 12 Dec 2022

RECEIVED: 05/11/2023

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	CMC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.04 pH		8.04 pH	8.04 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 sulphide }				17 mg/kg	1.233	15.79 mg/kg	0.00158 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0292 %		

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: TP-06-21/10/2022-1.00-2.70m

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

RECEIVED: 03/11/2023

Sample details

Sample name:	LoW Code:
TP-06-21/10/2022-1.00-2.70m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
43.9% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 43.9% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used		
		EU CLP index number	EC Number	CAS Number									
1		antimony { antimony trioxide }				1	mg/kg	1.197	0.672	mg/kg	0.0000672 %	✓	
		051-005-00-X	215-175-0	1309-64-4									
2		arsenic { arsenic trioxide }					6.3	mg/kg	1.32	4.666	mg/kg	0.000467 %	✓
		033-003-00-0	215-481-4	1327-53-3									
3		cadmium { cadmium oxide }					1.3	mg/kg	1.142	0.833	mg/kg	0.0000833 %	✓
		048-002-00-0	215-146-2	1306-19-0									
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }					59.1	mg/kg	1.462	48.458	mg/kg	0.00485 %	✓
			215-160-9	1308-38-9									
5		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }					<0.3	mg/kg	2.27	<0.681	mg/kg	<0.0000681 %	
		024-017-00-8											
6		copper { dicopper oxide; copper (I) oxide }				1	17	mg/kg	1.126	10.738	mg/kg	0.00107 %	✓
		029-002-00-X	215-270-7	1317-39-1									
7		lead { lead chromate }					10	mg/kg	1.56	8.751	mg/kg	0.000561 %	✓
		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 %	
		080-010-00-X	231-299-8	7487-94-7									
9		molybdenum { molybdenum(VI) oxide }					3.4	mg/kg	1.5	2.861	mg/kg	0.000286 %	✓
		042-001-00-9	215-204-7	1313-27-5									
10		nickel { nickel chromate }					37.1	mg/kg	2.976	61.945	mg/kg	0.00619 %	✓
		028-035-00-7	238-766-5	14721-18-7									
11		selenium { nickel selenate }					1	mg/kg	2.554	1.433	mg/kg	0.000143 %	✓
		028-031-00-5	239-125-2	15060-62-5									
12		zinc { zinc chromate }					74	mg/kg	2.774	115.166	mg/kg	0.0115 %	✓
		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 %	
				TPH									
14		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane					<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %	
		603-181-00-X	216-653-1	1634-04-4									
15		benzene					<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %	
		601-020-00-8	200-753-7	71-43-2									
16		toluene					<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %	
		601-021-00-3	203-625-9	108-88-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MCM Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				7.73 pH		7.73 pH	7.73 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 sulphide }				60 mg/kg	1.233	41.519 mg/kg	0.00415 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0348 %		

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: TP-07-20/10/2022-1.10-2.30m

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

RECEIVED: 03/11/2023

Sample details

Sample name:	LoW Code:
TP-07-20/10/2022-1.10-2.30m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
30% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 30% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }	051-005-00-X	215-175-0	1309-64-4	<1 mg/kg	1.197	<1.197	mg/kg	<0.00012 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	9 mg/kg	1.32	8.318	mg/kg	0.000832 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	0.8 mg/kg	1.142	0.64	mg/kg	0.000064 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		38.3 mg/kg	1.462	39.184	mg/kg	0.00392 %	✓	
5	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8			<0.3 mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	8 mg/kg	1.126	6.305	mg/kg	0.00063 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	6 mg/kg	1.56	6.551	mg/kg	0.00042 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	<0.1 mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
9	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5	3 mg/kg	1.5	3.15	mg/kg	0.000315 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	19.1 mg/kg	2.976	39.793	mg/kg	0.00398 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5	<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9	35 mg/kg	2.774	67.967	mg/kg	0.0068 %	✓	
13	TPH (C6 to C40) petroleum group			TPH	316 mg/kg		221.2	mg/kg	0.0221 %	✓	
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
15	benzene	601-020-00-8	200-753-7	71-43-2	<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16	toluene	601-021-00-3	203-625-9	108-88-3	<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MCM Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				7.66 pH		7.66 pH	7.66 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 sulphide }				27 mg/kg	1.233	23.313 mg/kg	0.00233 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.042 %		

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 Solid Waste Without Liquid Phase

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0221%)

RECEIVED: 03/11/2023

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Classification of sample: TP-10-20/10/2022-0.20-0.80m

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

Sample details

Sample name:	LoW Code:
TP-10-20/10/2022-0.20-0.80m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
14% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				1 mg/kg	1.197	1.03	mg/kg	0.000103 %	✓	
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				5.6 mg/kg	1.32	6.359	mg/kg	0.000636 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.7 mg/kg	1.142	0.688	mg/kg	0.0000688 %	✓	
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				94 mg/kg	1.462	118.152	mg/kg	0.0118 %	✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				8 mg/kg	1.126	7.746	mg/kg	0.000775 %	✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	8 mg/kg	1.56	10.732	mg/kg	0.000688 %	✓	
	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 }				5.6 mg/kg	1.5	7.225	mg/kg	0.000722 %	✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				27.5 mg/kg	2.976	70.389	mg/kg	0.00704 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				44 mg/kg	2.774	104.974	mg/kg	0.0105 %	✓	
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52	mg/kg	<0.0052 %		<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.75 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 sulphide }				13 mg/kg	1.233	13.79 mg/kg	0.00138 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0394 %		

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

RECEIVED: 03/11/2023

Classification of sample: TP-11-20/10/2022-0.20-0.50m

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

Sample details

Sample name:	LoW Code:
TP-11-20/10/2022-0.20-0.50m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
9.5% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 9.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				<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 }				4.5 mg/kg	1.32	5.377 mg/kg	0.000538 %	✓		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.7 mg/kg	1.142	0.724 mg/kg	0.0000724 %	✓		
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				48.8 mg/kg	1.462	64.548 mg/kg	0.00645 %	✓		
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %			<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				7 mg/kg	1.126	7.133 mg/kg	0.000713 %	✓		
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	<5 mg/kg	1.56	<7.799 mg/kg	<0.0005 %			<LOD
	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	4.073 mg/kg	0.000407 %	✓		
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				16.4 mg/kg	2.976	44.174 mg/kg	0.00442 %	✓		
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %			<LOD
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				28 mg/kg	2.774	70.297 mg/kg	0.00703 %	✓		
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %			<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-021-00-3	203-625-9	108-88-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.47 pH		8.47 pH	8.47 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 sulphide }				16 mg/kg	1.233	17.861 mg/kg	0.00179 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0277 %		

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

RECEIVED: 03/11/2023

Classification of sample: TP-13-20/10/2022-0.75-2.00m

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

Sample details

Sample name:	LoW Code:
TP-13-20/10/2022-0.75-2.00m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
20.7% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 20.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				<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 }				14.9 mg/kg	1.32	15.601 mg/kg	0.00156 %		✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				1.8 mg/kg	1.142	1.631 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) }				42.6 mg/kg	1.462	49.374 mg/kg	0.00494 %		✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %			<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				26 mg/kg	1.126	23.214 mg/kg	0.00232 %		✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	16 mg/kg	1.56	19.791 mg/kg	0.00127 %		✓	
	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	4.045 mg/kg	0.000404 %		✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				58.5 mg/kg	2.976	138.07 mg/kg	0.0138 %		✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				3 mg/kg	2.554	6.076 mg/kg	0.000608 %		✓	
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				104 mg/kg	2.774	228.789 mg/kg	0.0229 %		✓	
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %			<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-021-00-3	203-625-9	108-88-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.1 pH		8.1 pH	8.1 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 sulphide }				45 mg/kg	1.233	44.017 mg/kg	0.0044 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
38	coronene				0.09 mg/kg		0.0714 mg/kg	0.00000714 %		✓	
		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:									0.0579 %		

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

RECEIVED: 03/11/2023

Classification of sample: TP-15-20/10/2022-0.30-0.70m

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

Sample details

Sample name:	LoW Code:
TP-15-20/10/2022-0.30-0.70m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
6% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197	mg/kg	<0.00012 %		<LOD
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				3.2 mg/kg	1.32	3.972	mg/kg	0.000397 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.5 mg/kg	1.142	0.537	mg/kg	0.0000537 %	✓	
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				43.8 mg/kg	1.462	60.175	mg/kg	0.00602 %	✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				6 mg/kg	1.126	6.35	mg/kg	0.000635 %	✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	<5 mg/kg	1.56	<7.799	mg/kg	<0.0005 %		<LOD
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	molybdenum { molybdenum(VI) oxide }				2.7 mg/kg	1.5	3.807	mg/kg	0.000381 %	✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				13.1 mg/kg	2.976	36.65	mg/kg	0.00366 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				17 mg/kg	2.774	44.331	mg/kg	0.00443 %	✓	
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52	mg/kg	<0.0052 %		<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.95 pH		8.95 pH	8.95 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 sulphide }				15 mg/kg	1.233	17.392 mg/kg	0.00174 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0236 %		

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

RECEIVED: 03/11/2023

Classification of sample: TP-17-20/10/2022-0.20-1.40m

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

Sample details

Sample name:	LoW Code:
TP-17-20/10/2022-0.20-1.40m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
14.5% (wet weight correction)	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
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197 mg/kg	<0.00012 %			<LOD
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				20 mg/kg	1.32	22.578 mg/kg	0.00226 %		✓	
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				1.2 mg/kg	1.142	1.172 mg/kg	0.000117 %		✓	
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				37.2 mg/kg	1.462	46.486 mg/kg	0.00465 %		✓	
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %			<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				18 mg/kg	1.126	17.327 mg/kg	0.00173 %		✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	11 mg/kg	1.56	14.67 mg/kg	0.00094 %		✓	
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				0.1 mg/kg	1.353	0.116 mg/kg	0.0000116 %		✓	
	080-010-00-X	231-299-8	7487-94-7								
9	molybdenum { molybdenum(VI) oxide }				3.5 mg/kg	1.5	4.489 mg/kg	0.000449 %		✓	
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				53.6 mg/kg	2.976	136.396 mg/kg	0.0136 %		✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %			<LOD
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				75 mg/kg	2.774	177.892 mg/kg	0.0178 %		✓	
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %			<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-021-00-3	203-625-9	108-88-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.63 pH		8.63 pH	8.63 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 sulphide }				69 mg/kg	1.233	72.77 mg/kg	0.00728 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0547 %		

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

RECEIVED: 03/11/2023

Classification of sample: TP-18-20/10/2022-0.50-1.10m

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

Sample details

Sample name:	LoW Code:
TP-18-20/10/2022-0.50-1.10m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
8.9% (wet weight correction)	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
	EU CLP index number	EC Number	CAS Number								
1	antimony { antimony trioxide }				<1 mg/kg	1.197	<1.197 mg/kg	<0.00012 %			<LOD
	051-005-00-X	215-175-0	1309-64-4								
2	arsenic { arsenic trioxide }				2.9 mg/kg	1.32	3.488 mg/kg	0.000349 %	✓		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.7 mg/kg	1.142	0.728 mg/kg	0.0000728 %	✓		
	048-002-00-0	215-146-2	1306-19-0								
4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				50.1 mg/kg	1.462	66.707 mg/kg	0.00667 %	✓		
		215-160-9	1308-38-9								
5	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3 mg/kg	2.27	<0.681 mg/kg	<0.0000681 %			<LOD
	024-017-00-8										
6	copper { dicopper oxide; copper (I) oxide }				3 mg/kg	1.126	3.077 mg/kg	0.000308 %	✓		
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead chromate }			1	<5 mg/kg	1.56	<7.799 mg/kg	<0.0005 %			<LOD
	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	4.1 mg/kg	0.00041 %	✓		
	042-001-00-9	215-204-7	1313-27-5								
10	nickel { nickel chromate }				13 mg/kg	2.976	35.248 mg/kg	0.00352 %	✓		
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %			<LOD
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				21 mg/kg	2.774	53.072 mg/kg	0.00531 %	✓		
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				<52 mg/kg		<52 mg/kg	<0.0052 %			<LOD
			TPH								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								
15	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
16	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
	601-021-00-3	203-625-9	108-88-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				8.87 pH		8.87 pH	8.87 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 sulphide }				10 mg/kg	1.233	11.237 mg/kg	0.00112 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0241 %		

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

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Classification of sample: TP-19-20/10/2022-0.70-1.40m

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

Sample details

Sample name:	LoW Code:
TP-19-20/10/2022-0.70-1.40m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
49.8% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 49.8% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used		
		EU CLP index number	EC Number	CAS Number									
1		antimony { antimony trioxide }				1	mg/kg	1.197	0.601	mg/kg	0.0000601 %	✓	
		051-005-00-X	215-175-0	1309-64-4									
2		arsenic { arsenic trioxide }				12.9	mg/kg	1.32	8.55	mg/kg	0.000855 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
3		cadmium { cadmium oxide }				1.2	mg/kg	1.142	0.688	mg/kg	0.0000688 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
4		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				57.9	mg/kg	1.462	42.481	mg/kg	0.00425 %	✓	
			215-160-9	1308-38-9									
5		chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.3	mg/kg	2.27	<0.681	mg/kg	<0.0000681 %		<LOD
		024-017-00-8											
6		copper { dicopper oxide; copper (I) oxide }				16	mg/kg	1.126	9.043	mg/kg	0.000904 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
7		lead { lead chromate }			1	9	mg/kg	1.56	7.047	mg/kg	0.000452 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
8		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
9		molybdenum { molybdenum(VI) oxide }				3.8	mg/kg	1.5	2.862	mg/kg	0.000286 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
10		nickel { nickel chromate }				55.4	mg/kg	2.976	82.772	mg/kg	0.00828 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
11		selenium { nickel selenate }				4	mg/kg	2.554	5.128	mg/kg	0.000513 %	✓	
		028-031-00-5	239-125-2	15060-62-5									
12		zinc { zinc chromate }				56	mg/kg	2.774	77.987	mg/kg	0.0078 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
13		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									
14		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
15		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
16		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.000005 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
19	pH				7.6 pH		7.6 pH	7.6 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 sulphide }				39 mg/kg	1.233	24.149 mg/kg	0.00241 %		✓	
	016-002-00-X	244-214-4	21109-95-5								
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:									0.0313 %		

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

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Appendix A: Classifier defined and non EU CLP determinands

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 17 Jul 2015

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

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

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

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

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

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

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

Description/Comments:

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

Reason for additional Hazards Statement(s):

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

■ pH (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 06 Aug 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 06 Aug 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 17 Jul 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 21 Aug 2015

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

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

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

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

Data source date: 21 Aug 2015

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

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

Description/Comments: Data from C&L Inventory Database

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

Data source date: 06 Aug 2015

Hazard Statements: Carc. 2; H351

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

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

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

Data source date: 23 Jul 2015

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

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

EU CLP index number: 602-039-00-4

Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.

Additional Hazard Statement(s): Carc. 1A; H350

Reason for additional Hazards Statement(s):

29 Sep 2015 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

▪ **barium sulphide** (EC Number: 244-214-4, CAS Number: 21109-95-5)

EU CLP index number: 016-002-00-X

Description/Comments:

Additional Hazard Statement(s): EUH031 >= 0.8 %

Reason for additional Hazards Statement(s):

14 Dec 2015 - EUH031 >= 0.8 % hazard statement sourced from: WM3, Table C12.2

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

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC - Group 3, not carcinogenic.

Data source: <http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en>

Data source date: 16 Jun 2014

Hazard Statements: STOT SE 2; H371

Appendix B: Rationale for selection of metal species

antimony {antimony trioxide}

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

arsenic {arsenic trioxide}

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

cadmium {cadmium oxide}

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

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

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

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

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

copper {dicopper oxide; copper (I) oxide}

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

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lead {lead chromate}

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

mercury {mercury dichloride}

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

molybdenum {molybdenum(VI) oxide}

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

nickel {nickel chromate}

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

selenium {nickel selenate}

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

zinc {zinc chromate}

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

barium {barium sulphide}

No Cr VI detected

Appendix C: Version

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

HazWasteOnline Classification Engine Version: 2022.325.5408.10064 (21 Nov 2022)

HazWasteOnline Database: 2022.325.5408.10064 (21 Nov 2022)

This classification utilises the following guidance and legislation:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020

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

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

APPENDIX 5 - WAC Summary Data

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Waste Categorisation Summary Table

Coramaddy Athlone Northern Site, December 2022



Sample ID	TP-01	TP-02	TP-03	TP-06	TP-07	TP-10	TP-11	TP-13	TP-16	TP-17	TP-18	TP-19			
Sample Depth (m)	0.00-0.40	0.00-0.90	1.40-2.10	1.00-2.70	1.10-2.30	0.20-0.90	0.20-0.90	0.75-2.00	0.30-0.70	0.20-1.40	0.90-1.10	0.70-1.40			
Material Description	Made Ground	Made Ground	Cohesive	Cohesive	Cohesive	Cohesive	Made Ground	Cohesive	Cohesive	Cohesive	Granular	Cohesive			
Sample Date	24/10/2022	24/10/2022	21/10/2022	21/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022			
LOI Code	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04	17 05 04			
Waste Category	Category B1	Category B1	Category B2	Category B2	Category B2	Category A	Category B1	Category B2	Category A	Category A	Category A	Category A			
Metals															
Antimony	1	<1	1	1	<1	1	<1	<1	<1	<1	<1	1	-	-	-
Arsenic	7.5	5.7	2.3	6.3	9	5.8	4.5	14.9	3.2	20	2.9	12.9	-	-	-
Barium	45	35	17	80	27	13	16	45	15	89	10	39	-	-	-
Cadmium	1.1	0.9	0.5	1.3	0.8	0.7	0.7	1.8	0.5	1.2	0.7	1.2	-	-	-
Chromium	57.3	41.1	107.7	59.1	36.3	94	48.8	42.6	43.8	37.2	50.1	57.9	-	-	-
Copper	15	15	6	17	8	9	7	26	6	18	3	16	-	-	-
Lead	10	10	<5	10	6	8	<5	18	<5	11	<5	9	-	-	-
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	-	-	-
Molybdenum	3.3	2.4	6.4	3.4	3	5.6	3	3.4	2.7	3.5	3.0	3.8	-	-	-
Nickel	32.4	30.1	14.2	37.1	19.1	27.5	16.4	58.5	13.1	53.6	13.0	55.4	-	-	-
Selenium	<1	<1	1	1	<1	<1	3	<1	<1	4	<1	4	-	-	-
Zinc	57	50	23	74	35	44	28	104	17	75	21	56	-	-	-
Hexavalent Chromium	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	-
pH (solid sample)	8.19	8.35	8.04	7.73	7.66	8.75	8.47	8.1	8.95	8.63	8.87	7.60	-	-	-
alkal reserve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos															
Asbestos (Dry Weight)	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	-	-	-
Asbestos (Moisture Corrected Weight)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ACM Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAHs															
Naphthalene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	-	-	-
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-
Fluorene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-
Phenanthrene	<0.03	<0.03	<0.03	<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	<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	<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	<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	<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	<0.02	<0.02	<0.02	-	-	-
Benzo(b)fluoranthene	<0.07	<0.07	<0.07	<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	<0.04	<0.04	<0.04	-	-	-
Indeno(1,2,3-cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-
Dibenz(a,h)anthracene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-
Benzo(g,h,i)perylene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-	-	-
PAH 6 Total	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	100	100	-
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	<0.05	-	-	-
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	<0.02	-	-	-
Benzo(i)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-
Hydrocarbons															
TPH (C5-40)	<52	<52	<52	<52	316	<52	<52	<52	<52	<52	<52	<52	-	-	-
MTBE	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-
Benzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-
Toluene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-
m,p-Xylene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-
o-Xylene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	-	-
Total 7 PCBs	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	1,000	1,000	-
WAC** Solid Sample Summary															
Total Organic Carbon*	0.33	0.14	0.55	2.7	0.98	0.12	0.31	0.52	0.06	0.2	0.06	2.33	3	6	-
Sum of BTEX	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	6	6	-
Sum of 7 PCBs	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	1	1	-
Mineral Oil	<30	<30	<30	<30	221	<30	<30	<30	<30	<30	<30	<30	500	500	-
PAH Sum of 6	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	-	-	-
PAH Sum of 17	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	100	100	-
WAC** Leachate Data															
Arsenic	0.026	<0.025	0.064	0.041	0.067	<0.025	<0.025	0.049	<0.025	<0.025	<0.025	<0.025	0.5	1.5	-
Barium	0.06	0.04	0.21	0.32	0.32	<0.03	<0.03	0.23	<0.03	0.05	<0.03	0.16	20	20	-
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.04	0.04	-
Chromium	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.5	0.5	-
Copper	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	2	2	-
Mercury	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.01	0.01	-
Molybdenum	0.03	0.03	0.31	0.26	1.00	<0.02	<0.02	0.74	<0.02	0.02	<0.02	0.12	0.5	1.5	-
Nickel	<0.02	<0.02	0.03	0.07	0.04	<0.02	<0.02	0.24	<0.02	<0.02	<0.02	0.06	0.4	0.4	-
Lead	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.5	0.5	-
Antimony	<0.02	<0.02	0.16	0.17	0.15	<0.02	<0.02	0.16	<0.02	<0.02	<0.02	0.06	0.18	0.18	-
Selenium	<0.03	<0.03	0.08	0.08	0.07	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.1	0.3	-
Zinc	<0.03	<0.03	0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	4	4	-
Total Dissolved Solids	460	<350	1310	1769	1740	<350	630	1300	<350	360	<350	2670	4000	12,000	-
Dissolved Organic Carbon	<20	<20	80	100	90	<20	30	30	<20	<20	<20	60	500	500	-
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1	1	-
Fluoride	5	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	10	10	-
Sulphate as SO4	13	8	231	539	463	7	<5	209	<5	8	<5	886	1000	3,000	-
Chloride	8	<3	7	11	12	4	<3	124	<3	4	<3	14	800	2,400	-

NAD: no asbestos detected

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

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

APPENDIX 6 – Potential Material Outlets

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Waste Category	Classification Criteria	Potential Outlets
Category A Unlined Soil Recovery Facilities	Soil and Stone only which are free from ⁷ anthropogenic materials such as concrete, brick, timber. Soil must be free from "contamination" e.g. PAHs, Hydrocarbons ⁸ .	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). ⁹
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 ¹⁰
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 ¹¹ 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

⁷ Free from equates to less than 2%.

⁸ Total BTEX 0.05mg/kg, Mineral Oil 50mg/kg, Total PAHs 1mg/kg, Total PCBs 0.05mg/kg and Asbestos No Asbestos Detected – EPA Guidance on Waste Acceptance Criteria at Authorised Soil Recovery Facilities, 2020.

⁹ S.I. No. 126/2011 - European Communities (Waste Directive) Regulations 2011 (Article 27).

¹⁰ Licenced to accept Category B2 material for recovery.

¹¹ Licenced to accept Category C material for recovery.

		Enva Portlaoise. 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

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