PHASE 2 REPORT ON A SITE INVESTIGATION

Site — **LAND AT BROOK HILL,
COWFOLD,
WEST SUSSEX RH13 8AH**

Client — **ABINGWORTH DEVELOPMENTS LTD**

Consulting Engineer — **PRICE & MYERS**

Report Ref
24/12521/A/JAM

Issued
JULY 2024

ALBURY S.I. LTD

Geotechnical and Environmental Consultants
Miltons Yard, Petworth Road,
Witley, Surrey GU8 5LH

T: 01428 684 836
info@alburysi.co.uk
www.alburysi.co.uk







REPORT REF: 24/12521/A/JAM
CONTRACT: BROOK HILL, COWFOLD

TABLE OF CONTENTS

1 INTRODUCTION 1
2 FIELDWORKS 1
3 GROUND CONDITIONS 2
3.1 Geology 2
3.2 Stratigraphy 2
3.3 Groundwater 2
3.4 In Situ Testing 2
4 LABORATORY TESTING 2
4.1 Water Content 3
4.2 Index Properties 3
4.3 Chemical Testing – Soluble Sulphates & pH 3
4.4 Geochemical Testing 3
5 GEOTECHNICAL DISCUSSION 4
5.1 Foundations 4
5.2 Stability of Excavations 4
5.3 Groundwater 5
5.4 Ground Floor Slabs 5
5.5 Buried Concrete 5
6 GROUND CONTAMINATION 5
6.1 Human Health 6
6.2 Vegetation 6
6.3 Preliminary Waste Assessment 6
REFERENCES
LIST OF ABBREVIATIONS

FIGURES

1 Site Layout Plan

APPENDICES

1 Exploratory Records
2 Laboratory Test Results
3 Desiccation
4 Waste

1 INTRODUCTION

The client proposes to construct 35 no. dwellings on land at Brook Hill, Cowfold ("the site"). A Phase 1 Desk Study was carried out by Albury S.I Ltd in December 2022, report reference 22/12521/GO. Subsequently, a Phase 2 site investigation has been undertaken in order to ascertain the nature and engineering properties of the soils underlying the proposed development site and to obtain data which will assist in the formulation of a safe and economical foundation solution. In addition, a geo-environmental appraisal of the site has also been carried out.

The programme of this investigation comprised the construction of ten trial pits using a machine excavator supplied by the client. During this work samples were recovered for further examination and laboratory testing. In addition, a number of in-situ hand shear vane tests were also performed. This report describes the work undertaken, presents the information obtained and discusses the ground conditions with respect to foundation design, construction and potential contamination.

2 FIELDWORKS

The trial pits were constructed on 11th July 2024 at the approximate locations shown on the site plan, drawing no. 24/12521/A/1, which is presented as Figure 1. The scope and location of the exploratory positions were predetermined by the consulting engineer's representative.

The depths and descriptions of the strata encountered in the trial pits are given on the records which comprise Appendix 1 to this report. These records note the depths at which samples were taken, the results of in-situ tests and any groundwater observations noted at the time of the fieldworks.

Photographs giving a general impression of the site at the time of the fieldworks are below.





3 GROUND CONDITIONS

3.1 Geology

Reference has been made to the Desk Study Report and the published 1:50,000 scale British Geological Survey (BGS) digital mapping of the area, sheet no. 308. The site is indicated as being underlain by the Weald Clay Formation of Cretaceous age.

3.2 Stratigraphy

Consideration of the exploratory records indicates that grass covering made ground or a "topsoil" layer extended across the site with a thickness between 0.15m and 0.40m. The made ground comprised brown to dark brown silty loam with roots and rare brick fragments within trial pit 9.

Brown and grey slightly gravelly, silty clay, the gravel consisting of sandstone and rare siltstone, was revealed beneath the made ground. In trial pit 3 this stratigraphy becomes red-brown and grey in colour at 2.10m depth. Bands of sandstone were present at varying depths across the trial pits. The stratigraphy is indicative of the Weald Clay Formation of Cretaceous age and was proved to the concluding depths of the trial pits at between 2.50m and 3.00m.

3.3 Groundwater

No groundwater strikes were recorded during the construction of the exploratory positions and the trial pits were noted to be dry prior to backfilling.

3.4 In Situ Testing

Hand shear vane tests were performed using the Geonor Shear Vane test equipment. Shear strengths of between 90kPa and >260kPa were recorded, reflecting a stiff to very stiff in-situ condition for a cohesive soil.

4 LABORATORY TESTING

A programme of laboratory testing has been undertaken and the results are presented as Appendix 2 to this report. The geotechnical soil testing was undertaken by Albury S.I. Ltd, whilst representative samples were submitted for geochemical testing at the UKAS accredited laboratories operated by i2 Analytical Ltd. Each type of test is summarised below and the results obtained have been used to assist in the formulation of the discussion.

4.1 Water Content

The water contents of samples of the soils encountered at this site have been determined. Water contents within the range 10.6% to 25.5% have been recorded.

4.2 Index Properties

The liquid and plastic limits of samples of the clay soils have been determined. The results of this work indicate that the samples tested can generally be described as inorganic clays of intermediate to high plasticity and of low to medium volume change potential.

4.3 Chemical Testing – Soluble Sulphates & pH

Samples of the soils encountered at this site have been submitted to the UKAS accredited laboratories operated by i2 Analytical Ltd and subjected to chemical analyses in order to determine their soluble sulphate contents and pH values. Under the conditions of this work low concentrations of soluble sulphate have been recorded in association with pH values between 7.6 and 8.6. The results are summarised in tabular form below.

Table 1 - Summary of Chemical Tests

BH/TP No.	Sample		Concentration of Sulphates expressed as SO_4		pH
	Depth m	Soil Type	2:1 Water : Soil Extract mg/l	Groundwater mg/l	
1	1.50	Slightly gravelly, silty clay	3.89		8.3
2	0.50	Silty clay	6.22		7.6
4	1.00	Slightly gravelly, silty clay	19.9		8.4
5	2.00	Slightly gravelly, silty clay	41.2		8.3
7	1.00	Slightly gravelly, silty clay	10.7		8.3
9	2.00	Slightly gravelly, silty clay	21.3		8.3
10	2.50	Silty clay with rare sandstone fragments	47.4		8.6

4.4 Geochemical Testing

Selected samples of the made ground from 0.10m depth have been submitted to the UKAS accredited laboratories operated by i2 Analytical Ltd. The testing comprises a suite of typical inorganic and organic priority contaminants including metals, PAH, TPH CWG and an asbestos screen.

5 GEOTECHNICAL DISCUSSION

5.1 Foundations

The client proposes to construct a 35 no. residential dwellings and the proposed layout is shown within the site plan in Figure 1. At the time of the preparation of this report the anticipated structural loads were not known.

It cannot be recommended that major structural foundations be located within the made ground revealed by this investigation. Soils of this origin are frequently present in a weak and variable condition such that unacceptable settlement could occur even under the action of light loading intensities. Therefore, it will be necessary to continue foundation excavations through these undesirable materials where they are of less than 1.00m in thickness to this minimum depth in order to avoid that zone of soil which is subject to normal seasonal moisture variation or frost action.

It is known that a number of trees, including oaks, are present in the vicinity of the proposed structures. A discussion of the causes, effects and classification of desiccation in clay soils is included in Appendix 3 to this report. Consideration of the results of the laboratory testing indicates that moisture deficiency is present within the Weald Clay Formation. However, it is considered that the appearance of desiccation is a result of the lithology of the soils as opposed to the activity of tree roots. The exception is trial pit 9 at 1.00m, which has a reduced water content thought to be due to tree root action. Hence, a nominal founding depth of 1.50m is suggested in this area of the site below any major tree roots. Nevertheless, NHBC criteria should be adopted in the design of foundations taking into account the proximity of any trees on the basis that the soils are of medium volume change potential.

Interpretation of the data derived from this investigation indicates that strip or spread foundations, constructed at a minimum depth of 1.00m and in accordance with NHBC criteria can be designed to accept a maximum increase in load of 150kPa. At this loading intensity a factor of safety of 3 against general shear failure will be operative. Moreover, settlements should remain within tolerable limits for the type of structures proposed.

5.2 Stability of Excavations

Excavations of less than 1.00m depth should not require temporary support to their sides. However, where foundation excavations are to be extended below this level, then adequate temporary support or shoring should be provided in order to comply with current statutory safety regulations and to maintain the stability of the excavation sides.

5.3 Groundwater

No groundwater was observed at the time of the fieldworks and problems in this regard are not expected. Any minor groundwater seepages encountered or surface water run-off can be dealt with by the construction of sumps from which water can be pumped.

It should be appreciated that the cohesive soils revealed are susceptible to rapid softening in the unconfined state. Where any foundation excavations are to be left open for extended periods then a blinding layer of leanmix concrete should be applied to the bases to prevent this deterioration occurring.

5.4 Ground Floor Slabs

The thickness of made ground encountered suggests that ground bearing floor slabs could be adopted provided the made ground is removed and replaced with suitably compacted granular material. Alternatively, a system of fully suspended floor slabs should be incorporated within the proposed structures in accordance with NHBC criteria.

5.5 Buried Concrete

The information obtained from this investigation has been compared with the criteria proposed in BRE Special Digest 1, 2005 Edition, Concrete in Aggressive Ground. Using the information in Table C1 (natural ground) of this publication the Aggressive Chemical Environment for Concrete Classification (ACEC) is AC-1s, which coincides with a Design Sulphate Class DS-1. The ACEC Class above can be used to determine the Design Chemical Class for concrete for general cast-in-situ use as required in Part D of the Digest.

6 GROUND CONTAMINATION

A Conceptual Site Model (CSM) was formulated for this site as part of the Phase 1 Desk Study, which informed the current Phase 2 intrusive investigation. The CSM produced as part of the Desk Study has been reviewed and updated and is presented in tabular form below.

Table 2 - Conceptual Site Model

Source(s)	Potential Pathway(s)	Receptor(s)	Risk Level
Potentially infilled ponds within 250m of the site *- ground gases: carbon dioxide and methane*	Migration, ingress and accumulation	Proposed buildings	Negligible

6.1 Human Health

A generic assessment of the chronic or long-term risk to human health from soil contamination has been made using the available generic screening criteria. The screening values include the Category 4 Screening Levels [C4SLs] (DEFRA, 2014) and Suitable for Use Levels [S4ULs] (LQM/CIEH, 2014) derived using the CLEA software. It should be appreciated that these do not consider the short-term or acute risks, such as to construction workers or SI personnel.

The results of the testing have been compared against the generic assessment criteria (GAC) for the Residential (with home-grown produce) category. A study of the results demonstrates that there are no elevated levels of any contaminants and the soils are suitable for use, hence, a remedial strategy is not required at this site.

6.2 Vegetation

The metals boron, copper, nickel and zinc are phytotoxic at certain levels, with their availability being dependent upon soil pH. These levels may not pose a significant long-term health risk to humans, but could be detrimental to plant growth or function. The results obtained suggest that problems in this regard are not expected.

6.3 Preliminary Waste Assessment

It is likely that, if excavated soils cannot be re-used or retained on site, these surplus materials will require off-site disposal. It may be possible to divert the unwanted material to a soil treatment hub where it can be recycled. Where material cannot be re-used or recycled then disposal at a licensed landfill site can be considered. It will then be necessary to classify the spoil as inert, non-hazardous or hazardous. A discussion of the current regime for the classification and treatment of waste soils is included in Appendix 4.

An initial assessment of the geochemical results obtained from this investigation has been carried out to provide a preliminary classification of the surplus materials. The HazWaste Online tool determines whether waste soil should be classified as being non-hazardous or hazardous. The output from the HazWaste assessment is located in Appendix 4. Asbestos was not detected in any of the samples screened. Based on the output waste soil arisings from this site have been tentatively identified as being non-hazardous waste. The underlying natural soils are considered to be inert for disposal purposes.

This assessment is preliminary and based upon the information obtained from the investigation. Where made ground is excavated then these materials should be stockpiled and segregated. Further sampling, testing and characterisation to accurately classify waste

soil arisings may be required. Given that no exceedances of human health soil guidance values were recorded, it is likely that material can be retained and re-used on site.

It should be appreciated that it is the responsibility of the waste producer to sufficiently characterise their waste. Moreover, the agreement of the waste acceptor should be sought.

REFERENCES

- British Standards (2016). Methods of test for soils for civil engineering purposes, BS 1377-1:2016. *British Standard Institution, London.*

- British Standards (2011). Investigation of potentially contaminated sites. Code of Practice. BS 10175+A2:2017. *British Standard Institution, London.*

- British Standards (2013). Guidance on investigations for ground gas. Permanent gases and Volatile Organic Compounds (VOCs). BS 8576. *British Standard Institution, London.*

- British Standards (2015). Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings. BS 8485+A1:2019. *British Standard Institution, London.*

- British Standards (2015). Code of practice for ground investigations, BS 5930:2015. *British Standard Institution, London.*

- Building Research Establishment [BRE] (2004). *Cover systems for land regeneration: Thickness of cover systems for contaminated land (BR 465)*. BRE Watford, UK.

- Building Research Establishment [BRE] (2005). *Concrete in aggressive ground: Special Digest 1* (3rd Ed.). BRE Watford, UK.

- Building Research Establishment [BRE] (2015). *Guidance on protective measures for new buildings. (BR 212)*. BRE Watford, UK.

- Contaminated land: Applications in Real Environments. (2013). *SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination – Final Project Report.*

- Chartered Institute of Environmental Health and Contaminated Land: Applications in Real Environments (2008). *The Guidance on Comparing Soil Contamination Data with Critical Concentration.* London, UK.

- Environment Agency (2004). *Model Procedures for the Management of Contaminated Land.* Contaminated Land Report (CLR) 11, SC02000028, Environment Agency, Bristol, UK.

- Environment Agency (2015). Interpretation of the definition and classification of hazardous waste. 1st edition. Technical Guidance WM3. *Environment Agency, UK.*

- Nathanail, C.P., McCaffrey, C., Gillett, A.G., Ogden, R.C. and Nathanail, J.F. (2015). *The LQM/CIEH S4ULs for Human Health Risk Assessment.* Land Quality Press, Nottingham. Publication Number S4UL3073.

- Stroud, M. A. (1974). The standard penetration test in insensitive clays and soft rocks. *Proceedings of the European Symposium on Penetration Testing, Stockholm*, *2*, 367-375.

LIST OF ABBREVIATIONS

AOD	-	Above Ordnance Datum
ACM	-	Asbestos-containing Material
AST	-	Above-ground Storage Tank
BGS	-	British Geological Survey
BH	-	Borehole
BRE	-	Building Research Establishment
BSI	-	British Standards Institution
BS	-	British Standard
C4SL	-	Category Four Screening Level
CIRIA	-	Construction Industry Research and Information Association
CP	-	Cable Percussive
DPH	-	Dynamic Probing Heavy
DPSH	-	Dynamic Probing Super Heavy
EA	-	Environment Agency
GAC	-	Generic Assessment Criteria
LL	-	Liquid Limit
mAOD	-	Metres Above Ordnance Datum
mBGL	-	Metres Below Ground Level
mOD	-	Metres Ordnance Datum
OS	-	Ordnance Survey
PAH	-	Polycyclic Aromatic Hydrocarbons
PCB	-	Polychlorinated Biphenyl
PID	-	Photo Ionisation Detector
PL	-	Plastic Limit
PSD	-	Particle Size Distribution
SGV	-	Soil Guideline Value
SOM	-	Soil Organic Matter
SPT	-	Standard Penetration Test
SPZ	-	Source Protection Zone
SVOC	-	Semi-volatile Organic Compounds
TPH	-	Total Petroleum Hydrocarbon
UST	-	Underground Storage Tank
UXB	-	Unexploded Bombs
UXO	-	Unexploded Ordnance
VOC	-	Volatile Organic Compound

FIGURE 1

SITE LAYOUT PLAN



Legend:

Trial Pit Location

Site Boundary

Title:	Site Layout Plan
Dwg No:	24/12521/A/1
Drawn by:	JAM
Client:	Abingworth Developments Ltd
Contract:	Brook Hill, Cowfold
Job Ref:	24/12521/A/JAM
Scale:	NTS
Revision:	0
Issue Date:	31/07/2024

ALBURY S.I. LTD

Miltons Yard, Petworth Road,
Witley, Surrey GU8 5LH
www.alburysi.co.uk

APPENDIX 1

EXPLORATORY RECORDS

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH				TRIAL PIT	TP1
Contract	Brook Hill, Cowfold			Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd			Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH			Ground Level	
Type of excavator	Machine Excavator	Water level after completion, m	dry		

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	2.00-2.30
2		Breadth	0.45	Moderate	GL-2.00	Very hard	2.30-2.50

Remarks

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10		0.20		MADE GROUND (dark brown silty LOAM with roots)
D	0.30				Stiff brown and grey slightly gravelly, very silty CLAY with roots. Gravel consists of sandstone. Band of sandstone at 1.40m.
D	0.50				
D	1.00	120			
D	1.50	130	1.40		Stiff becoming very stiff brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone fragments
D	2.00	>260			
D	2.50		2.50		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	TP2
Contract	Brook Hill, Cowfold	Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd	Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH	Ground Level	

Type of excavator	Machine Excavator	Water level after completion, m	dry

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	2.00-2.50
2		Breadth	0.45	Moderate	GL-2.00	Very hard	

Remarks

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brown silty LOAM with roots)
D	0.30		0.40		
D	0.50				Brown and grey silty CLAY with roots. Band of sandstone at 0.90m
			0.90		
D	1.00	100			Stiff becoming very stiff brown and grey slightly gravelly, silty CLAY with sandstone cobbles at 1.00m and roots to 1.50m. Gravel consists of sandstone fragments. Thin band of sandstone at 2.40m
D	1.50	150			
D	2.00	180			
D	2.50		2.50		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	TP3
Contract	Brook Hill, Cowfold	Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd	Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH	Ground Level	

Type of excavator	Machine Excavator	Water level after completion, m	dry

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	
2		Breadth	0.45	Moderate	GL-2.10	Very hard	2.10-2.50

Remarks

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brown silty LOAM with roots)
D	0.30		0.30		
D	0.50				Stiff becoming very stiff brown and grey slightly gravelly, silty CLAY with roots to 0.50m. Gravel consists of sandstone fragments
D	1.00	120			
D	1.50	160			
D	2.00	200			
			2.10		Red-brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone and siltstone fragments
D	2.50		2.50		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	TP4
Contract	Brook Hill, Cowfold	Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd	Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH	Ground Level	

Type of excavator	Machine Excavator	Water level after completion, m	dry

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	1.80-2.30
2		Breadth	0.45	Moderate	GL-1.80	Very hard	2.30-2.50

Remarks
*Sandstone sample

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10		0.20		MADE GROUND (dark brown silty LOAM with roots)
D	0.30				Very stiff brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone fragments. Band of sandstone at 0.60m
D	0.50				
D*	0.60				
D	1.00	200			
D	1.50	200			
D	2.00	230			
D	2.50		2.50		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	TP5
Contract	Brook Hill, Cowfold	Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd	Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH	Ground Level	

Type of excavator	Machine Excavator	Water level after completion, m	dry

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	1.50-2.30
2		Breadth	0.45	Moderate	GL-1.50	Very hard	2.30-2.50

Remarks

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brown silty LOAM with roots)
D	0.30		0.30		
D	0.50				Very stiff brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone fragments. Thin band of sandstone at 0.30m
D	1.00	180			
D	1.50	260			
			1.80		
D	2.00	>260			Very stiff brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone and rare siltstone fragments
D	2.50		2.50		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	TP6
Contract	Brook Hill, Cowfold	Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd	Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH	Ground Level	

Type of excavator	Machine Excavator	Water level after completion, m	dry

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	GL-2.50
2		Breadth	0.45	Moderate	GL-2.00	Very hard	

Remarks
*Sandstone sample

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10		0.20		MADE GROUND (brown silty LOAM with roots)
D	0.30				Very stiff brown and grey slightly gravelly silty CLAY with roots to 0.50m. Gravel consists of sandstone fragments. Band of sandstone at 2.30m
D	0.50				
D	1.00	170			
D	1.50	200			
D	2.00	190			
D*	2.30				
D	2.50		2.50		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH				TRIAL PIT	TP7
Contract	Brook Hill, Cowfold			Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd			Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH			Ground Level	
Type of excavator	Machine Excavator		Water level after completion, m	dry	
Water strikes, m	Pit Dimensions, m		Ease of excavation, m		
1 none	Length	2.00	Very easy	Difficult	2.00-2.70
2	Breadth	0.45	Moderate GL-1.70, 1.70-2.00	Very hard	1.70, 2.70+

Remarks
*Sandstone sample

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10		0.15		MADE GROUND (dark brown silty LOAM with roots)
D	0.30				Stiff brown and grey slightly gravelly, silty CLAY with roots to 1.00m. Gravel consists of sandstone. Band of sandstone at 1.70m
D	0.50				
D	1.00	90			
D	1.50	120			
D	1.70*				
D	2.00	160	2.00		Very stiff brown and grey silty CLAY with rare sandstone fragments, becoming slightly gravelly with depth
D	2.50				
D	2.70		2.70		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	TP8
Contract	Brook Hill, Cowfold	Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd	Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH	Ground Level	

Type of excavator	Machine Excavator	Water level after completion, m	dry

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	GL-2.50
2		Breadth	0.45	Moderate	GL-2.00	Very hard	

Remarks
*Sandstone sample

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10		0.20		MADE GROUND (brown silty LOAM with roots)
D	0.30				Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone fragments. Thin band of sandstone at 0.90m
D	0.50				
D	1.00	140	1.00		
D*	1.10				Stiff becoming very stiff brown and grey slightly gravelly, silty CLAY with roots to 2.00m. Gravel consists of sandstone and siltstone fragments. Band of sandstone at 1.10m
D	1.50	160			
D	2.00	200			
D	2.50		2.50		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	TP9
Contract	Brook Hill, Cowfold	Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd	Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH	Ground Level	

Type of excavator	Machine Excavator	Water level after completion, m	dry

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	2.00-2.30
2		Breadth	0.45	Moderate	GL-2.00	Very hard	2.30-2.50

Remarks
*Sandstone sample

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brown silty LOAM with rare brick fragments and roots)
D	0.30		0.30		
D	0.50				Very stiff brown and grey slightly gravelly, silty CLAY with roots to 2.50m. Gravel consists of sandstone fragments. Thin band of sandstone at 0.40m. Band of sandstone at 2.40m
D	1.00	160			
D	1.50	220			
D	2.00	200			
D*	2.40				
D	2.50		2.50		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH				TRIAL PIT	TP10
Contract	Brook Hill, Cowfold			Report Ref	24/12521/A/JAM
Client	Abingworth Developments Ltd			Date	11/07/2024
Site Address	Land at Brook Hill, Cowfold, West Sussex RH13 8AH			Ground Level	
Type of excavator	Machine Excavator		Water level after completion, m	dry	

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	none	Length	2.00	Very easy		Difficult	1.50-2.60
2		Breadth	0.45	Moderate	GL-1.50	Very hard	2.60-3.00

Remarks
*Sandstone sample

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10		0.20		MADE GROUND (brown silty LOAM with roots and rare gravel)
D	0.30				Stiff brown and grey slightly gravelly, silty CLAY with roots to 1.50m. Gravel consists of sandstone. Thin band of sandstone at 1.40m
D	0.50				
D	1.00	180			
D	1.50	230			
D	2.00	250	2.00		Very stiff brown and grey silty CLAY with rare sandstone fragments. Band of sandstone at 2.70m
D	2.50				
D	2.70*				
D	3.00		3.00		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

APPENDIX 2

LABORATORY TEST RESULTS

INDEX PROPERTIES AND WATER CONTENTS

BS 1377 : Part 2 and BS EN ISO 17892: Part 1 and Part 12: 5.3 and 6.1

Report Ref	24/12521/A/JAM	**Contract**	Brook Hill, Cowfold	***Sheet 1 of 4***

BH/TP No.	**Sample**		**Water Content W %**	**Liquid Limit W_L %**	**Plastic Limit W_P %**	**Plasticity Index IP %**	**Passing 425 µm Sieve %**	**Modified Plasticity Index IPc %**	**Atterberg Classification**	**NHBC Classification VCP**	**Sample Preparation**	**Remarks**
	Depth m	Description										
1	1.00	Brown and grey slightly gravelly, very silty CLAY with roots. Gravel consists of sandstone	18.3	29	17	12	86	10	CL	Low	S	
	1.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	17.6									
	2.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	16.9									
	2.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	21.5	45	25	20	98	20	CI	Medium	S	
2	1.00	Brown and grey slightly gravelly, silty CLAY with roots and sandstone cobbles. Gravel consists of sandstone	19.1	48	22	26	67	17	CI	Low	S	
	1.50	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone	18.5									
	2.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	20.2	45	22	23	97	22	CI	Medium	S	
	2.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	22.4									
3	1.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	22.2									
	1.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	20.5	49	22	27	96	26	CI	Medium	S	
	2.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	19.5									

Liquid Limit determined by one-point fall cone method using 80g 30° cone and correction factors after Clayton and Jukes (1978) unless otherwise stated above

KEY: *Soil Type:* **C** - Clay **M** - Silt **O** - Organic **NP** - Non Plastic

Plasticity: **L** - Low **I** - Intermediate **H** - High **V** - Very High **E** - Extremely High

Sample Preparation: **A** - As Received **H** - Particles >425µm removed by hand picking **S** - Particles >425µm removed by washing and wet sieving with oven drying

INDEX PROPERTIES AND WATER CONTENTS

BS 1377 : Part 2 and BS EN ISO 17892: Part 1 and Part 12: 5.3 and 6.1

Report Ref	24/12521/A/JAM	**Contract**	Brook Hill, Cowfold	***Sheet 2 of 4***

BH/TP No.	Sample		Water Content W %	Liquid Limit W_L %	Plastic Limit W_P %	Plasticity Index IP %	Passing 425 µm Sieve %	Modified Plasticity Index IPc %	Atterberg Classification	NHBC Classification VCP	Sample Preparation	Remarks
	Depth m	Description										
3	2.50	Red-brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone and rare siltstones	21.3	44	24	20	99	20	CI	Medium	S	
4	1.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	10.6									
	1.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	19.3	42	21	21	91	19	CI	Low	S	
	2.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	22.9									
	2.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	21.6									
5	1.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	22.9	57	25	32	86	28	CH	Medium	S	
	1.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	17.6									
	2.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone and rare siltstones	19.6									
	2.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone and rare siltstones	22.3	49	23	26	97	25	CI	Medium	S	
6	1.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	25.5	58	24	34	96	33	CH	Medium	S	
	1.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	22.1									

Liquid Limit determined by one-point fall cone method using 80g 30° cone and correction factors after Clayton and Jukes (1978) unless otherwise stated above

KEY: *Soil Type:* **C** - Clay **M** - Silt **O** - Organic **NP** - Non Plastic

Plasticity: **L** - Low **I** - Intermediate **H** - High **V** - Very High **E** - Extremely High

Preparation: **A** - As Received **H** - Particles >425µm removed by hand picking **S** - Particles >425µm removed by washing and wet sieving with oven drying

INDEX PROPERTIES AND WATER CONTENTS

BS 1377 : Part 2 and BS EN ISO 17892: Part 1 and Part 12: 5.3 and 6.1

Report Ref	24/12521/A/JAM	**Contract**	Brook Hill, Cowfold	***Sheet 3 of 4***

BH/TP No.	**Sample**		**Water Content W %**	**Liquid Limit W_L %**	**Plastic Limit W_P %**	**Plasticity Index IP %**	**Passing 425 µm Sieve %**	**Modified Plasticity Index IPc %**	**Atterberg Classification**	**NHBC Classification VCP**	**Sample Preparation**	**Remarks**
	Depth m	Description										
6	2.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	21.6	45	24	21	99	21	CI	Medium	S	
	2.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	21.6									
7	1.00	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	20.6									
	1.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	25.3									
	2.00	Brown and grey silty CLAY with rare sandstone fragments	25.2	48	22	26	100	26	CI	Medium	A	
	2.50	Brown and grey silty CLAY with rare sandstone fragments	22.3									
	2.70	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone	20.2	48	22	26	87	23	CI	Medium	S	
8	1.00	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone and siltstone fragments	17.4	46	22	24	100	24	CI	Medium	A	
	1.50	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone and siltstone fragments	17.9									
	2.00	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone and siltstone fragments	19.1	49	23	26	97	25	CI	Medium	S	
	2.50	Brown and grey slightly gravelly, silty CLAY. Gravel consists of sandstone abd siltstone fragments	21.0									

Liquid Limit determined by one-point fall cone method using 80g 30° cone and correction factors after Clayton and Jukes (1978) unless otherwise stated above

KEY:

Soil Type: **C** - Clay; **M** - Silt; **O** - Organic; **NP** - Non Plastic

Plasticity: **L** - Low; **I** - Intermediate; **H** - High; **V** - Very High; **E** - Extremely High

Preparation: **A** - As Received; **H** - Particles >425µm removed by hand picking; **S** - Particles >425µm removed by washing and wet sieving with oven drying

INDEX PROPERTIES AND WATER CONTENTS

BS 1377 : Part 2 and BS EN ISO 17892: Part 1 and Part 12: 5.3 and 6.1

Report Ref	24/12521/A/JAM	**Contract**	Brook Hill, Cowfold	***Sheet 4 of 4***

BH/TP No.	Sample		Water Content W %	Liquid Limit W_L %	Plastic Limit W_P %	Plasticity Index IP %	Passing 425 µm Sieve %	Modified Plasticity Index IPc %	Atterberg Classification	NHBC Classification VCP	Sample Preparation	Remarks
	Depth m	Description										
9	1.00	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone	14.9									
	1.50	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone	18.2	50	23	27	93	25	CI/CH	Medium	S	
	2.00	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone	21.8									
	2.50	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone	18.7	50	20	30	96	29	CI/CH	Medium	S	
10	1.00	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone	19.7	53	24	29	86	25	CH	Medium	S	
	1.50	Brown and grey slightly gravelly, silty CLAY with roots. Gravel consists of sandstone	20.0									
	2.00	Brown and grey silty CLAY with rare sandstone fragments	21.9	50	26	24	100	24	CI/CH	Medium	S	
	2.50	Brown and grey silty CLAY with rare sandstone fragments	19.5									

Liquid Limit determined by one-point fall cone method using 80g 30° cone and correction factors after Clayton and Jukes (1978) unless otherwise stated above

Soil Type: **C** - Clay **M** - Silt **O** - Organic **NP** - Non Plastic

Plasticity: **L** - Low **I** - Intermediate **H** - High **V** - Very High **E** - Extremely High

Sample Preparation: **A** - As Received **H** - Particles >425µm removed by hand picking **S** - Particles >425µm removed by washing and wet sieving with oven drying

Albury SI Ltd
Miltons Yard
Petworth Road
Witley
Surrey
GU8 5LH

e: [redacted]
lab@alburysi.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-031257

Project / Site name:	Brook Hill Cowfold	**Samples received on:**	18/07/2024
Your job number:	24-12521-A-JAM	**Samples instructed on/ Analysis started on:**	18/07/2024
Your order number:	15277	**Analysis completed by:**	24/07/2024
Report Issue Number:	1	**Report issued on:**	24/07/2024
Samples Analysed:	7 soil samples		

Signed: [redacted]

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-031257
Project / Site name: Brook Hill Cowfold
Your Order No: 15277

Lab Sample Number				259911	259912	259913	259914	259915
Sample Reference				BH1	BH2	BH4	BH5	BH7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	0.50	1.00	2.00	1.00
Date Sampled				12/07/2024	12/07/2024	12/07/2024	12/07/2024	12/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	17.6	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	13	14	14	15
Total mass of sample received	kg	0.1	NONE	0.5	0.4	0.5	0.6	0.5
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	8.3	7.6	8.4	8.3	8.3
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	7.8	12	40	82	21
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	3.89	6.22	19.9	41.2	10.7

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-031257
Project / Site name: Brook Hill Cowfold
Your Order No: 15277

Lab Sample Number				259916	259917
Sample Reference				BH9	BH10
Sample Number				None Supplied	None Supplied
Depth (m)				2.00	2.50
Date Sampled				12/07/2024	12/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	12
Total mass of sample received	kg	0.1	NONE	0.6	0.5
General Inorganics					
pH (L099)	pH Units	N/A	MCERTS	8.3	8.6
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	43	95
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	21.3	47.4

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 24-031257
Project / Site name: Brook Hill Cowfold

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
259911	BH1	None Supplied	1.5	Brown clay and sand with gravel and stones
259912	BH2	None Supplied	0.5	Brown clay and sand with gravel and vegetation
259913	BH4	None Supplied	1	Brown clay and sand with gravel and vegetation
259914	BH5	None Supplied	2	Brown clay and sand with gravel and vegetation
259915	BH7	None Supplied	1	Brown clay and sand with gravel
259916	BH9	None Supplied	2	Brown clay and sand with gravel
259917	BH10	None Supplied	2.5	Brown clay and sand with gravel

Analytical Report Number : 24-031257
Project / Site name: Brook Hill Cowfold

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Albury SI Ltd
Miltons Yard
Petworth Road
Witley
Surrey
GU8 5LH

e: [redacted]

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-030483

Project / Site name:	Brook Hill Cowfold	**Samples received on:**	15/07/2024
Your job number:	24-12521-A-JAM	**Samples instructed on/ Analysis started on:**	15/07/2024
Your order number:	15267	**Analysis completed by:**	18/07/2024
Report Issue Number:	1	**Report issued on:**	18/07/2024
Samples Analysed:	10 soil samples		

Signed: [redacted]

Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-030483
Project / Site name: Brook Hill Cowfold
Your Order No: 15267

Lab Sample Number				255449	255450	255451	255452	255453
Sample Reference				1	2	3	4	5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				11/07/2024	11/07/2024	11/07/2024	11/07/2024	11/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	17	16	12	11
Total mass of sample received	kg	0.1	NONE	0.9	0.8	0.9	0.8	0.9
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO	DSO	DSO	DSO
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	6.1	5.8	6.3	6.7	7.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Sulphate as SO_4	mg/kg	50	MCERTS	710	650	490	440	330
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	12	8.2	5.7	9.1	8.5
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	5.95	4.08	2.85	4.54	4.23
Sulphide	mg/kg	1	MCERTS	6.1	< 1.0	1.5	< 1.0	< 1.0
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3	2.6	1.7	1.8	1.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.1	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.09	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.06	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-030483
Project / Site name: Brook Hill Cowfold
Your Order No: 15267

Lab Sample Number				255449	255450	255451	255452	255453
Sample Reference				1	2	3	4	5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				11/07/2024	11/07/2024	11/07/2024	11/07/2024	11/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	12	13	12	13
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.3	1.1	1	1.1	1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	0.7	0.9	0.6	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	31	26	24	27	24
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	31	26	24	27	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	18	17	17	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	43	37	42	37	31
Manganese (aqua regia extractable)	mg/kg	1	MCERTS	890	440	1400	2200	2600
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	17	19	19	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1.5	1.8	2.1
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	48	41	37	43	39
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	81	68	63	65	63
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC40 $_{EH_CU_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aliphatic >EC35 - EC44 $_{EH_CU_1D_AL}$	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC44 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC40 $_{EH_CU_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC35 - EC44 $_{EH_CU_1D_AR}$	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC44 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Total >EC6 - EC40 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
Petroleum Range Organics (EC6 - EC10) $_{HS_1D_TOTAL}$	mg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (EC10 - EC40) $_{EH_CU_1D_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-030483
Project / Site name: Brook Hill Cowfold
Your Order No: 15267

Lab Sample Number				255449	255450	255451	255452	255453
Sample Reference				1	2	3	4	5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				11/07/2024	11/07/2024	11/07/2024	11/07/2024	11/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-030483
Project / Site name: Brook Hill Cowfold
Your Order No: 15267

Lab Sample Number				255454	255455	255456	255457	255458
Sample Reference				6	7	8	9	10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				11/07/2024	11/07/2024	11/07/2024	11/07/2024	11/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	27	11	11	21
Total mass of sample received	kg	0.1	NONE	0.8	0.9	0.8	0.9	0.8
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO	DSO	DSO	DSO
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	6.5	6.6	6.3	6.7	6.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Sulphate as SO_4	mg/kg	50	MCERTS	470	610	430	520	670
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	11	22	12	18	23
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	5.71	10.8	5.82	9.12	11.7
Sulphide	mg/kg	1	MCERTS	< 1.0	1	3.1	1.7	< 1.0
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.2	4.3	1.7	2.4	2.9
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.24	< 0.05	< 0.05	< 0.05	0.09
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.57	< 0.05	0.09	0.1	0.21
Pyrene	mg/kg	0.05	MCERTS	0.51	< 0.05	0.09	0.08	0.19
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.26	< 0.05	< 0.05	0.06	0.1
Chrysene	mg/kg	0.05	MCERTS	0.3	< 0.05	< 0.05	0.07	0.14
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.31	< 0.05	< 0.05	0.08	0.16
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.13	< 0.05	< 0.05	0.07	0.07
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.32	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.16	< 0.05	< 0.05	0.06	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	0.06	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.98	< 0.80	< 0.80	< 0.80	0.95

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-030483
Project / Site name: Brook Hill Cowfold
Your Order No: 15267

Lab Sample Number				255454	255455	255456	255457	255458
Sample Reference				6	7	8	9	10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				11/07/2024	11/07/2024	11/07/2024	11/07/2024	11/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	13	11	11	12
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	1.2	1	0.98	1.3
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	1.3	0.4	0.7	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.4	0.4	0.6
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	26	29	24	26	29
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	29	24	26	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	22	22	17	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	43	45	36	36	43
Manganese (aqua regia extractable)	mg/kg	1	MCERTS	1400	880	2200	1400	1100
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	23	19	18	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.5	< 1.0	1.4	1.5	1.2
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	42	45	39	41	47
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	75	93	64	72	86
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC40 $_{EH_CU_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aliphatic >EC35 - EC44 $_{EH_CU_1D_AL}$	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC44 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC40 $_{EH_CU_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC35 - EC44 $_{EH_CU_1D_AR}$	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC44 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Total >EC6 - EC40 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	10	< 10	< 10	< 10	< 10
Petroleum Range Organics (EC6 - EC10) $_{HS_1D_TOTAL}$	mg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (EC10 - EC40) $_{EH_CU_1D_TOTAL}$	mg/kg	10	MCERTS	10	< 10	< 10	< 10	< 10

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-030483
Project / Site name: Brook Hill Cowfold
Your Order No: 15267

Lab Sample Number				255454	255455	255456	255457	255458
Sample Reference				6	7	8	9	10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				11/07/2024	11/07/2024	11/07/2024	11/07/2024	11/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 24-030483
Project / Site name: Brook Hill Cowfold

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
255449	1	None Supplied	0.1	Brown loam and clay with vegetation
255450	2	None Supplied	0.1	Brown loam and clay with vegetation
255451	3	None Supplied	0.1	Brown loam and clay with vegetation
255452	4	None Supplied	0.1	Brown loam and clay with vegetation
255453	5	None Supplied	0.1	Brown loam and clay with vegetation
255454	6	None Supplied	0.1	Brown loam and clay with vegetation
255455	7	None Supplied	0.1	Brown loam and clay with vegetation
255456	8	None Supplied	0.1	Brown loam with vegetation
255457	9	None Supplied	0.1	Brown loam with gravel and vegetation
255458	10	None Supplied	0.1	Brown loam and clay with gravel and vegetation

Analytical Report Number : 24-030483
Project / Site name: Brook Hill Cowfold

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Elemental sulphur in soil	Determination of elemental sulphur in soil by extraction in acetonitrile followed by HPLC	In-house method based on Secondsite Property Holdings Guidance for Assessing and Managing Potential	L021B	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
TPH Chromatogram in soil	TPH Chromatogram in soil	In-house method	L064B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Chromium III in soil	In-house method by calculation from total Cr and Cr VI	In-house method by calculation	L080	W	NONE

Analytical Report Number : 24-030483
Project / Site name: Brook Hill Cowfold

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil (low level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
Thiocyanate in soil	Determination of thiocyanate in soil by extraction in water followed by acidification followed by addition of ferric nitrate followed by discrete analyser (spectrophotometer)	In-house method	L082B	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

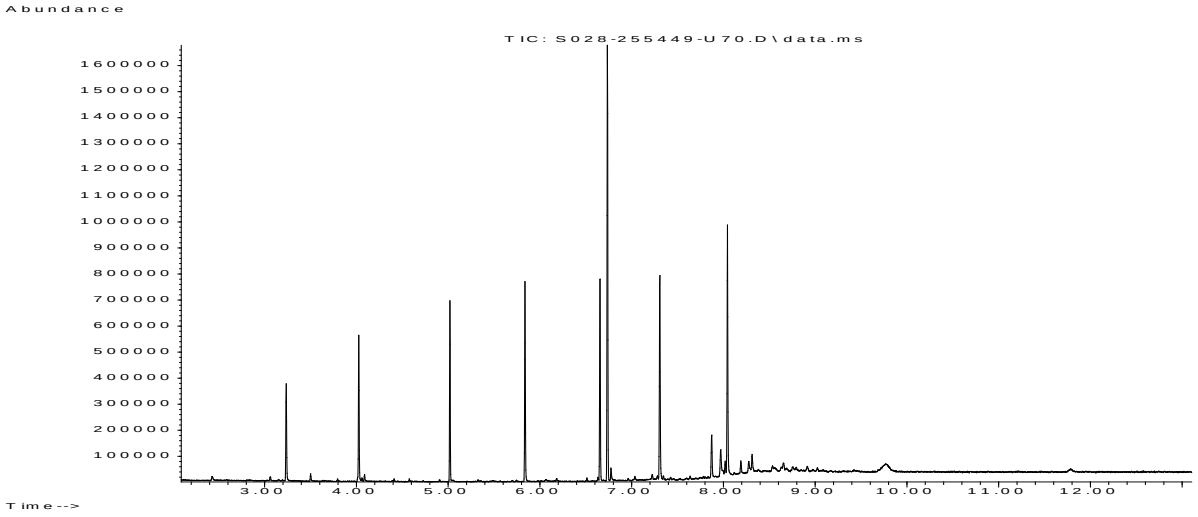
For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

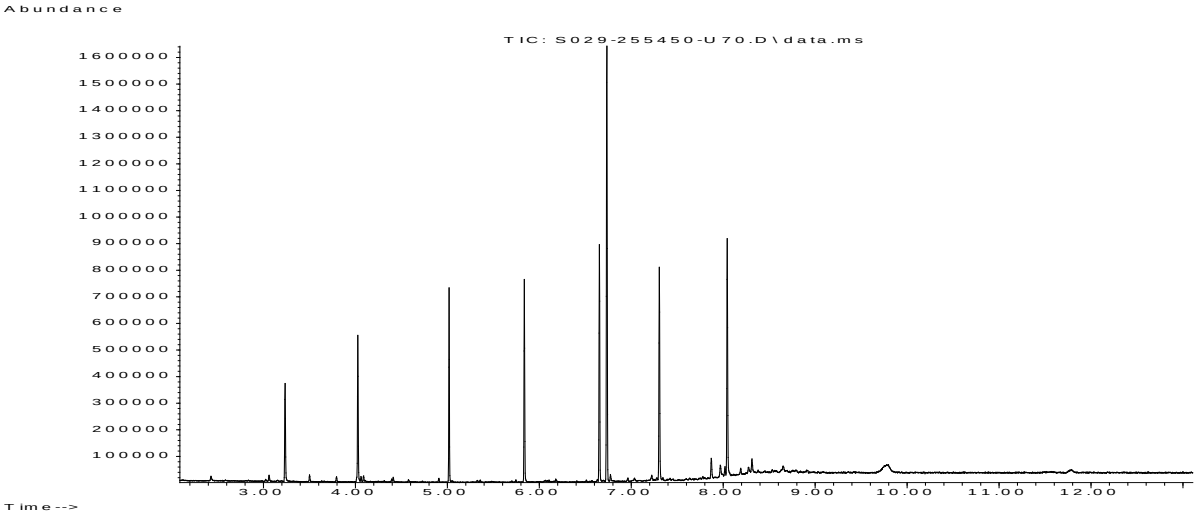
Information in Support of Analytical Results

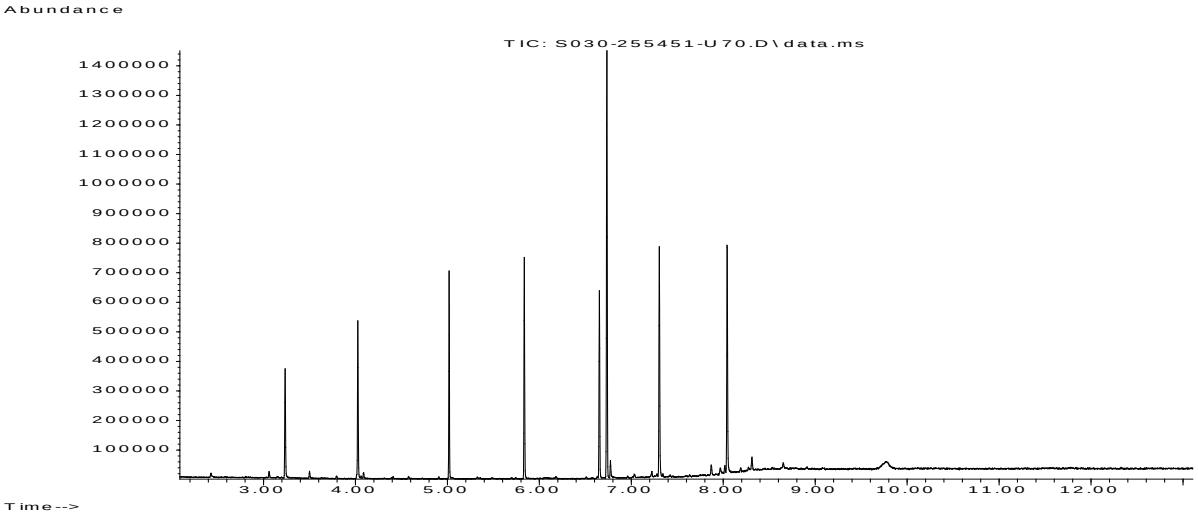
List of HWOL Acronyms and Operators

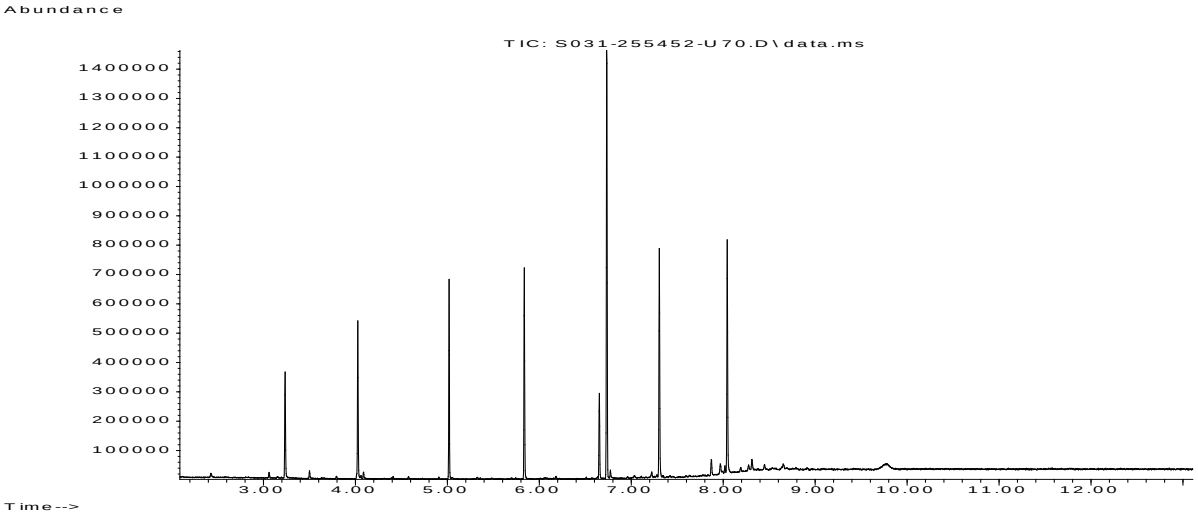
Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_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

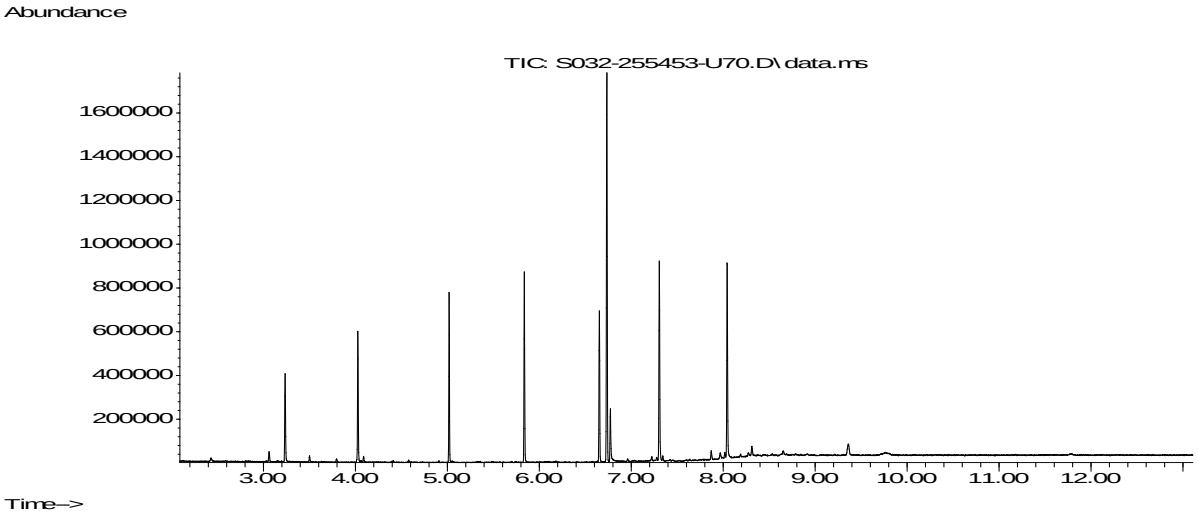
Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

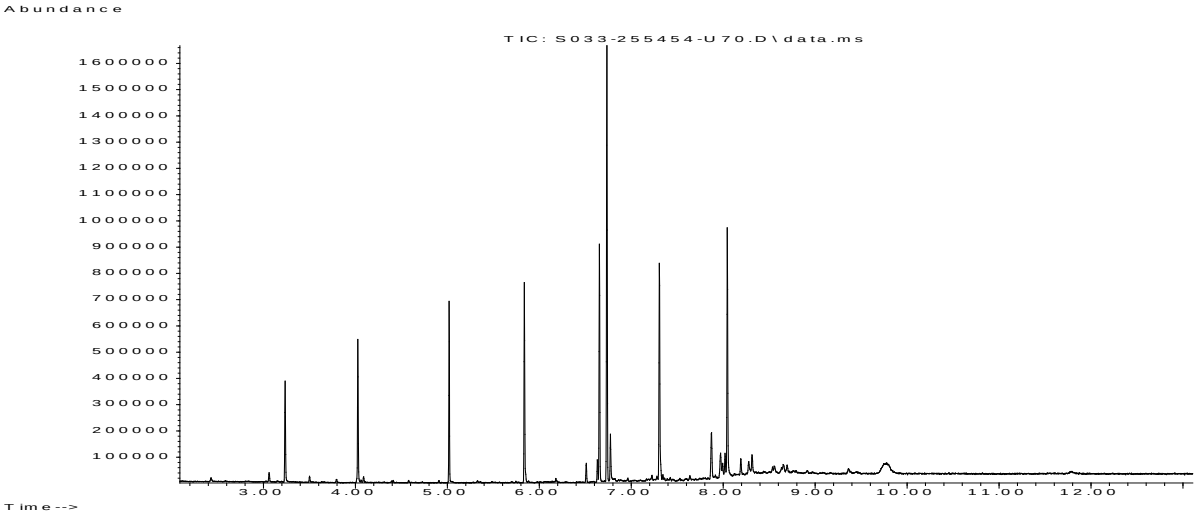

Abundance
TIC: S028-255449-U70.D\data.ms
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->

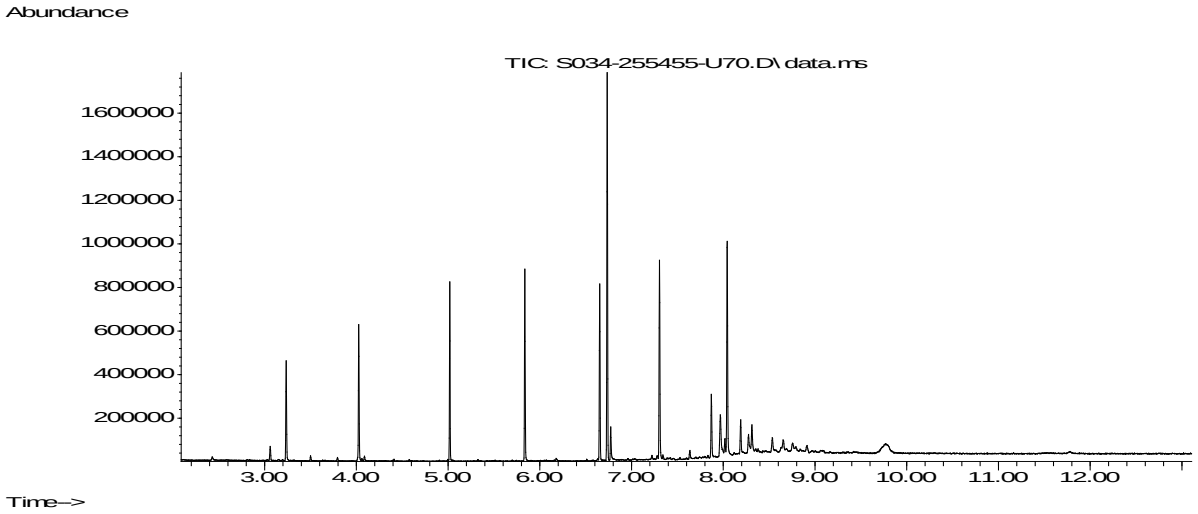

Abundance
TIC: S029-255450-U70.D\data.ms
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->

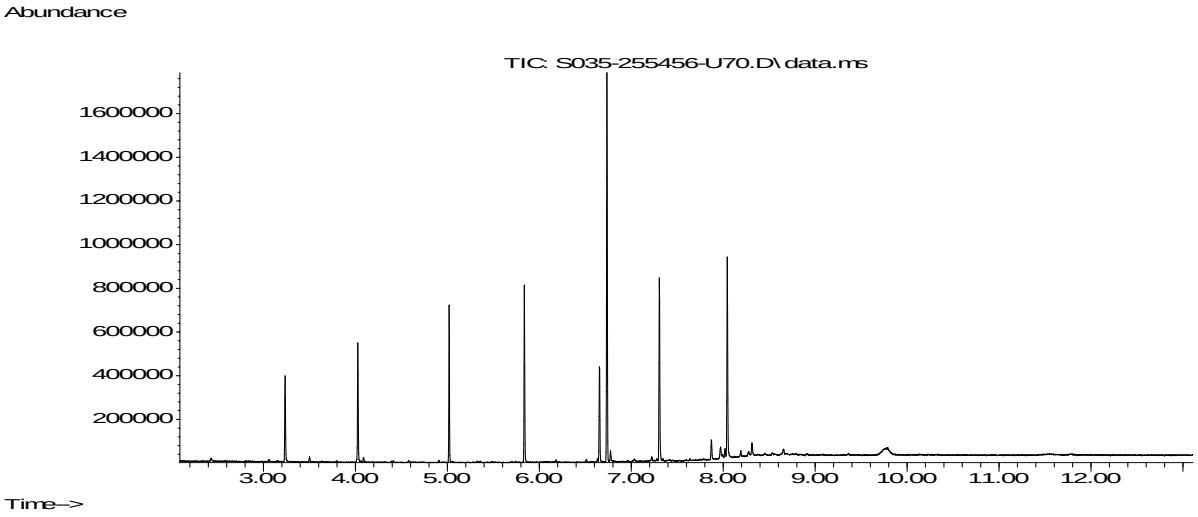

Abundance
TIC: S030-255451-U70.D\data.ms
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->

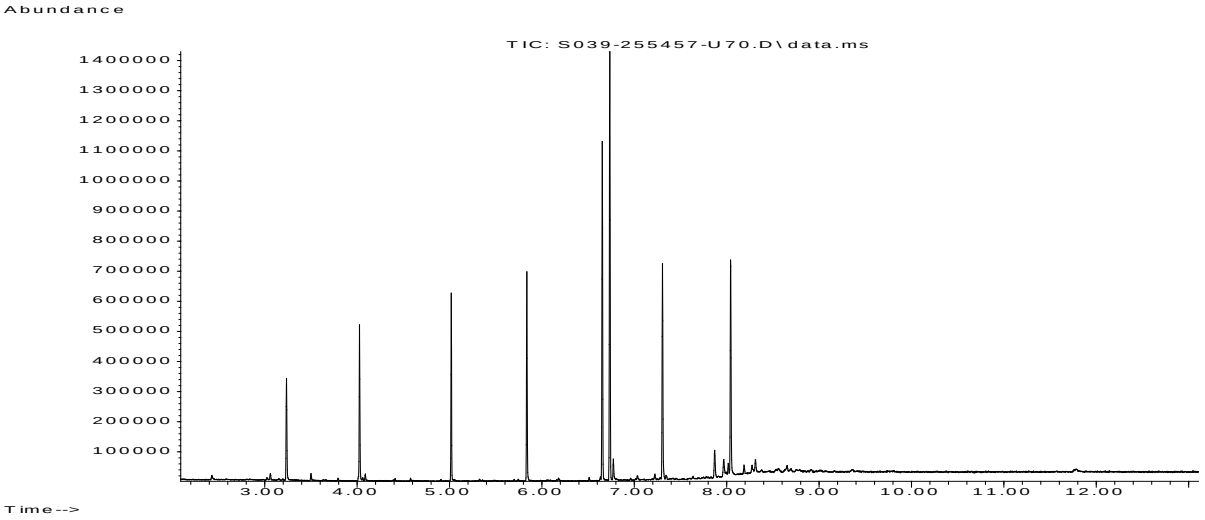

Abundance
TIC: S031-255452-U70.D\data.ms
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->

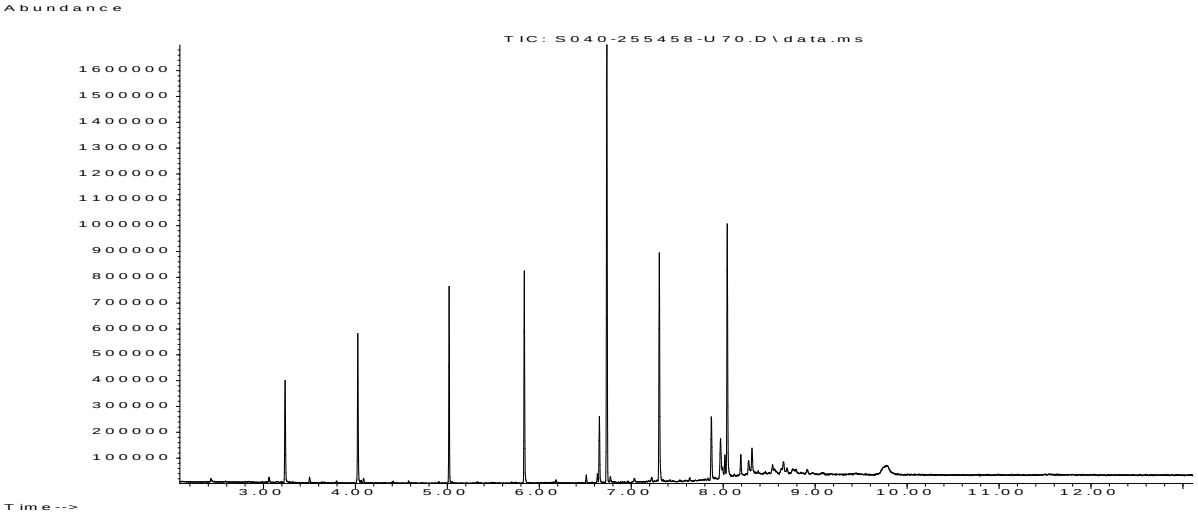

Abundance
TIC: S032-255453-U70.D\data.ms
1600000
1400000
1200000
1000000
800000
600000
400000
200000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->


Abundance
TIC: S033-255454-U70.D\data.ms
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->


Abundance
TIC: S034-255455-U70.D\ data.ms
1600000
1400000
1200000
1000000
800000
600000
400000
200000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->


Abundance
TIC: S035-255456-U70.D\data.ms
1600000
1400000
1200000
1000000
800000
600000
400000
200000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->


Abundance
TIC: S039-255457-U70.D\data.ms
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->


Abundance
TIC: S040-255458-U70.D\data.ms
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
Time-->

APPENDIX 3

DESICCATION

DESICCATION

Classification

The removal of moisture from a soil as a result of external influences with a constant stress regime, results in shrinkage or settlement of the soil. The magnitude of shrinkage is dependent upon the geological stress history of the soil, its clay content and the composition of the clay minerals. Under normal climatic conditions, there is a seasonal cyclic variation in soil moisture and, hence, volume change, which extends to depths of approximately 1m. When the soil moisture deficit attains a critical value, the shrinkage of the soil can become significant. In these circumstances, the soil can be regarded as being present in a desiccated state.

Causes

A common cause of desiccation consists of the reduction in soil moisture by tree root action. In the absence of a water table at shallow depth, root action of trees will reduce the soil moisture level in order to maintain growth. In general terms, the increase in rainfall which occurs during winter periods will allow for some replacement of the moisture content of the soil, particularly where isolated or immature trees are concerned.

However, when drought summer conditions or limited winter rainfall occurs, desiccated zones will develop within the zone of influence of tree roots. In woodland, desiccation develops as it is not possible for rainfall to overcome the soil moisture deficit. Other causes of desiccation, which have created problems to structures, include incorrectly installed and insulated heating pipes or ducts and industrial processes, ie furnaces or brick kilns.

Effects

The development of desiccation in clay soils will result in an increase in strength of the material. In addition, negative pore water pressure or soil suction will develop. Any foundation system located within soil which is subject to a reduction in soil moisture can experience structural distress, which results from the loss in volume or shrinkage of the ground. Also, if the source of the desiccation is removed, there will be heave of the soils as a result of an increase in equilibrium water content

It is evident, therefore, that foundation systems founded in soils which are actively experiencing an increase or decrease in soil moisture, will be subject to either heave or settlement, which can induce stresses within the structure. It should also be appreciated that a desiccated soil, which is experiencing an increase in equilibrium water content, will attempt to increase its volume in a horizontal as well as vertical plane. It is important, therefore, to ensure that horizontal movements do not apply differential stresses to structural elements, by incorporating collapsible membranes within remedial works.

Identification

A soil in a state of equilibrium is present in a semi-solid state. At the onset of desiccation, the condition of the soil moves towards the boundary between a solid and semi-solid state, this boundary being defined as the plastic limit of the soil. It follows, therefore, that when the natural water content of a soil lies close to, or falls below, the value of the plastic limit, the soil can be considered to be desiccated.

An alternative proposal was made by Driscoll (1983), who related the soil suction induced by desiccation to a function of the liquid limit of the soil. In general terms, desiccation is assumed to be present when the moisture content falls below a level of 40% liquid limit. The arbitrary factor of 0.4 relates to a soil suction value proposed by Croney (1977) and may vary with the composition and mineralogy of different soil types. This approach is only considered to be valid over a limited depth range as the overburden effect will result in a natural reduction in soil moisture and result in the development of negative pore pressures.

A further approach, which considers the shear strength of the clay, Pugh et al (1995), recognises the fact that a reduction in soil moisture will result in an increase in undrained shear strength as well as the development of negative pore pressures. Whilst this approach has a considerable amount of merit, care is required in establishing the value of the soil's in situ shear strength, particularly if it is not possible to obtain representative "undisturbed" samples from cable percussion boreholes. The proposal made in the Pugh paper that the simple pocket penetrometer will provide accurate consistent results should be treated with care, as the pocket penetrometer can take no account of the effects of disturbance and remoulding that are inevitable when completing a trial pit with a mechanical excavator. It is for this reason that this Company attempts to establish the shear strength of clay soils by using the Geonor Field Vane. With this test equipment the appropriate-sized vane is pushed into the side of the pit, through the thin disturbed zone which is caused by the teeth of the bucket during excavation. Furthermore, by use of the 'blank' probe, it is possible to take account of any skin friction which builds up on the shaft of the vane and thus provide a more accurate assessment of the shear strength of the soils.

Hence, a combination of the methods discussed above should be considered in order to confirm whether the development of soil moisture reduction to achieve a desiccated state has occurred within a particular site. The data for affected areas should, where possible, be compared with soils which lie outside the influence of tree root bulbs and may, therefore, be considered to be present in a stable and equilibrium state.

References

Croney D (1977)	The Design and Performance of Road Pavements London HMSO pp 674
Driscoll R (1983)	The Influence of Vegetation on the Swelling and Shrinking of Clay Soils in Britain Geotechnique 33.4 pp 93-105
Pugh RS, Parnell PG and Parks RD (1995)	A rapid and reliable on site method of assessing desiccation in clay soils Geotechnical Engineering 13 Jan 1995 pp 25—30

APPENDIX 4

WASTE

WASTE CLASSIFICATION

The European Waste Framework Directive is implemented in the UK by the 2002 Landfill Regulations, together with a number of other acts and regulations. A key part of this process is to establish the hazardous properties of potential waste. The classification and definition of hazardous waste is interpreted within the Environment Agency guidance WM3 and all wastes require classifying in accordance with the European Waste Catalogue [EWC]. The EWC is a detailed list of typical industry waste types and each has a 6 digit code. Typically the appropriate EWC codes for excavated soil being disposed off site are:

17 05 03* soil and stones containing dangerous substances, or
17 05 04 soil and stones other than those mentioned in 17 05 03

If excavated soils are to be discarded or exported from site then they would be considered controlled waste and require classification. However, if soils can be re-used on site then they are not considered to be controlled waste. A Desk Study, soil descriptions, laboratory chemical analysis and risk assessment can all contribute to basic waste characterisation. Depending upon the chemical composition or levels of contaminants in the waste (e.g. metals, TPH, asbestos), soil and stones can either be hazardous or non-hazardous. Waste Acceptance Criteria [WAC] test results are used to determine the suitability of the waste intended for disposal against the acceptance criteria for a particular class of landfill site. WAC tests are not used for the classification of waste soils and are only required for inert or hazardous excavated material which is destined for landfill.

Wastes containing asbestos with a concentration of >0.10% weight/weight (w/w) are generally considered to be hazardous. While waste with <0.10% w/w of asbestos are considered non-hazardous. Where free fibres or fibrous asbestos is present at concentrations of >0.001% then these are considered to pose a risk to human health and are deemed hazardous waste. These waste materials also require a suitably licensed company to handle them.

Waste Treatment

It is a requirement of the 2002 Landfill Regulations that all wastes must undergo some form of pre-treatment prior to disposal at an appropriately licensed landfill. Treatment is defined using a 'three-point test' and can include physical, chemical, biological or thermal processes, which must change the characteristics of the waste in order to:

- reduce its volume, or
- reduce its hazardous nature, or
- facilitate its handling, or
- enhance its recovery.

The exceptions to this are:

- inert waste for which treatment is not technically feasible.
- it is waste other than inert waste and treatment would not reduce its quantity or its hazards to human health or the environment.

The waste producer should either treat their own waste or ensure that the waste will be treated by a subsequent handler. The waste producer should record the type and amount of pre-treatment undertaken prior to disposal.

Examples of treatment include mechanical segregation or sorting, compositing, soil treatment hubs and incineration. This can include physical sorting of waste soil types into separate stockpiles at the producer site, e.g. topsoil, made ground and natural clay, sand or gravels.

Waste Classification Report

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

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

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

OGDKI-8MVK0-7KOBC

Job name

24_12521_A_JAM

Description/Comments

Project

24/12521/A/JAM

Site

Brook Hill, Cowfold

Classified by

Name:
James Marrs
Date:
31 Jul 2024 11:13 GMT
Telephone:

Company:
Albury SI Ltd
Miltons Yard, Petworth Rd
Witley
GU8 5LH

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

HazWasteOnline™ Certification: CERTIFIED

Course	Date
Hazardous Waste Classification	08 Jun 2023

Next 3 year Refresher due by Jun 2026

Purpose of classification

2 - Material Characterisation

Address of the waste

Land at Brook Hill, Cowfold, West Sussex **Post Code** RH13 8AH

SIC for the process giving rise to the waste

Description of industry/producer giving rise to the waste

Development of previously agricultural land for 35no. dwellings

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

Waste created during foundation excavations

Description of the waste

Granular made ground

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	1--11072024-0.10		Non Hazardous		3
2	2--11072024-0.10		Non Hazardous		6
3	3--11072024-0.10		Non Hazardous		9
4	4--11072024-0.10		Non Hazardous		12
5	5--11072024-0.10		Non Hazardous		15
6	6--11072024-0.10		Non Hazardous		18
7	7--11072024-0.10		Non Hazardous		21
8	8--11072024-0.10		Non Hazardous		24
9	9--11072024-0.10		Non Hazardous		27
10	10--11072024-0.10		Non Hazardous		30

Related documents

#	Name	Description
1	24-030483_HWOL.hwol	i2 Analytical .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 Marrs

Created date: 31 Jul 2024 11:13 GMT

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

Classification of sample: 1--11072024-0.10

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

Sample details

Sample name:
1--11072024-0.10
Moisture content:
17%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13	mg/kg	1.32	14.246	mg/kg	0.00142 %	✓	
2		beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.3	mg/kg	2.775	2.995	mg/kg	0.000299 %	✓	
3		boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.9	mg/kg	3.22	2.405	mg/kg	0.000241 %	✓	
4		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		31	mg/kg	1.462	45.308	mg/kg	0.00453 %		
6		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				<1.2	mg/kg	2.27	<2.724	mg/kg	<0.000272 %		<LOD
7		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23	mg/kg	1.126	21.493	mg/kg	0.00215 %	✓	
8		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	43	mg/kg	1.56	55.67	mg/kg	0.00357 %	✓	
9		manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		890	mg/kg	2.749	2030.364	mg/kg	0.203 %	✓	
10		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
11		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		24	mg/kg	2.976	59.287	mg/kg	0.00593 %	✓	
12		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
13		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		81	mg/kg	2.774	186.506	mg/kg	0.0187 %	✓	
14		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15		confirm TPH has NOT arisen from diesel or petrol					☑							
16		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		6.1	pH		6.1	pH	6.1 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		0.1	mg/kg		0.083	mg/kg	0.0000083 %	✓	
30		pyrene		204-927-3	129-00-0		0.09	mg/kg		0.0747	mg/kg	0.00000747 %	✓	
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
32		chrysene	601-048-00-0	205-923-4	218-01-9		0.06	mg/kg		0.0498	mg/kg	0.00000498 %	✓	
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
36		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		48	mg/kg	1.785	71.122	mg/kg	0.00711 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.249 %		

Key

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

Classification of sample: 2--11072024-0.10

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

Sample details

Sample name:
2--11072024-0.10
Moisture content:
17%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12 mg/kg	1.32	13.15 mg/kg	0.00132 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.1 mg/kg	2.775	2.534 mg/kg	0.000253 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.7 mg/kg	3.22	1.871 mg/kg	0.000187 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26 mg/kg	1.462	38 mg/kg	0.0038 %		
6	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				<1.2 mg/kg	2.27	<2.724 mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	16.821 mg/kg	0.00168 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	37 mg/kg	1.56	47.902 mg/kg	0.00307 %	✓	
9	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		440 mg/kg	2.749	1003.776 mg/kg	0.1 %	✓	
10	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		17 mg/kg	2.976	41.995 mg/kg	0.0042 %	✓	
12	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
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		68 mg/kg	2.774	156.573 mg/kg	0.0157 %	✓	
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	confirm TPH has NOT arisen from diesel or petrol					☑					
16	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		5.8	pH		5.8	pH	5.8 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
32		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
36		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		41	mg/kg	1.785	60.75	mg/kg	0.00607 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.139 %		

Key

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

Classification of sample: 3--11072024-0.10

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

Sample details

Sample name:
3--11072024-0.10
Moisture content:
16%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 16% Wet Weight Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13	mg/kg	1.32	14.418	mg/kg	0.00144 %	✓	
2		beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1	mg/kg	2.775	2.331	mg/kg	0.000233 %	✓	
3		boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.9	mg/kg	3.22	2.434	mg/kg	0.000243 %	✓	
4		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24	mg/kg	1.462	35.077	mg/kg	0.00351 %		
6		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				<1.2	mg/kg	2.27	<2.724	mg/kg	<0.000272 %		<LOD
7		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		17	mg/kg	1.126	16.078	mg/kg	0.00161 %	✓	
8		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	42	mg/kg	1.56	55.03	mg/kg	0.00353 %	✓	
9		manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		1400	mg/kg	2.749	3232.311	mg/kg	0.323 %	✓	
10		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
11		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19	mg/kg	2.976	47.501	mg/kg	0.00475 %	✓	
12		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1.5	mg/kg	2.554	3.218	mg/kg	0.000322 %	✓	
13		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		63	mg/kg	2.774	146.808	mg/kg	0.0147 %	✓	
14		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15		confirm TPH has NOT arisen from diesel or petrol					☑							
16		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		6.3	pH		6.3	pH	6.3 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
32		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
36		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		37	mg/kg	1.785	55.484	mg/kg	0.00555 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.361 %		

Key

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

Classification of sample: 4--11072024-0.10

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

Sample details

Sample name:
4--11072024-0.10
Moisture content:
12%
(wet weight correction)

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

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12 mg/kg	1.32	13.943 mg/kg	0.00139 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.1 mg/kg	2.775	2.687 mg/kg	0.000269 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.6 mg/kg	3.22	1.7 mg/kg	0.00017 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		27 mg/kg	1.462	39.462 mg/kg	0.00395 %		
6	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				<1.2 mg/kg	2.27	<2.724 mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		17 mg/kg	1.126	16.843 mg/kg	0.00168 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	37 mg/kg	1.56	50.788 mg/kg	0.00326 %	✓	
9	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		2200 mg/kg	2.749	5321.22 mg/kg	0.532 %	✓	
10	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19 mg/kg	2.976	49.763 mg/kg	0.00498 %	✓	
12	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1.8 mg/kg	2.554	4.045 mg/kg	0.000405 %	✓	
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		65 mg/kg	2.774	158.681 mg/kg	0.0159 %	✓	
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	confirm TPH has NOT arisen from diesel or petrol					☑					
16	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
17		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
18		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
19		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
20		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]									
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
		006-007-00-5											
22		pH				6.7	pH		6.7	pH	6.7 pH		
				PH									
23		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
24		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
25		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
26		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
27		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
28		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
29		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
30		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
31		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
32		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
33		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
34		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
35		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
36		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
37		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
38		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
39		monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
				P1186									
40		vanadium { divanadium pentaoxide; vanadium pentoxide }				43	mg/kg	1.785	67.551	mg/kg	0.00676 %	✓	
		023-001-00-8	215-239-8	1314-62-1									
41		sulfur { sulfur }				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		016-094-00-1	231-722-6	7704-34-9									
										Total:	0.573 %		

Key

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

Classification of sample: 5--11072024-0.10

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

Sample details

Sample name:
5--11072024-0.10
Moisture content:
11%
(wet weight correction)

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

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	15.276 mg/kg	0.00153 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1 mg/kg	2.775	2.47 mg/kg	0.000247 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.8 mg/kg	3.22	2.293 mg/kg	0.000229 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24 mg/kg	1.462	35.077 mg/kg	0.00351 %		
6	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				<1.2 mg/kg	2.27	<2.724 mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		15 mg/kg	1.126	15.031 mg/kg	0.0015 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	31 mg/kg	1.56	43.035 mg/kg	0.00276 %	✓	
9	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		2600 mg/kg	2.749	6360.177 mg/kg	0.636 %	✓	
10	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20 mg/kg	2.976	52.978 mg/kg	0.0053 %	✓	
12	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		2.1 mg/kg	2.554	4.773 mg/kg	0.000477 %	✓	
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		63 mg/kg	2.774	155.546 mg/kg	0.0156 %	✓	
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	confirm TPH has NOT arisen from diesel or petrol					☑					
16	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		7.2	pH		7.2	pH	7.2 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
32		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
36		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		39	mg/kg	1.785	61.964	mg/kg	0.0062 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.676 %		

Key

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

Classification of sample: 6--11072024-0.10

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

Sample details

Sample name:
6--11072024-0.10
Moisture content:
17%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14 mg/kg	1.32	15.342 mg/kg	0.00153 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.1 mg/kg	2.775	2.534 mg/kg	0.000253 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.7 mg/kg	3.22	1.871 mg/kg	0.000187 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26 mg/kg	1.462	38 mg/kg	0.0038 %		
6	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				<1.2 mg/kg	2.27	<2.724 mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19 mg/kg	1.126	17.755 mg/kg	0.00178 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	43 mg/kg	1.56	55.67 mg/kg	0.00357 %	✓	
9	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		1400 mg/kg	2.749	3193.831 mg/kg	0.319 %	✓	
10	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20 mg/kg	2.976	49.406 mg/kg	0.00494 %	✓	
12	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1.5 mg/kg	2.554	3.18 mg/kg	0.000318 %	✓	
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		75 mg/kg	2.774	172.691 mg/kg	0.0173 %	✓	
14	TPH (C6 to C40) petroleum group			TPH		10 mg/kg		8.3 mg/kg	0.00083 %	✓	
15	confirm TPH has NOT arisen from diesel or petrol					☑					
16	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		6.5	pH		6.5	pH	6.5 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		0.24	mg/kg		0.199	mg/kg	0.0000199 %	✓	
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		0.57	mg/kg		0.473	mg/kg	0.0000473 %	✓	
30		pyrene		204-927-3	129-00-0		0.51	mg/kg		0.423	mg/kg	0.0000423 %	✓	
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.26	mg/kg		0.216	mg/kg	0.0000216 %	✓	
32		chrysene	601-048-00-0	205-923-4	218-01-9		0.3	mg/kg		0.249	mg/kg	0.0000249 %	✓	
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.31	mg/kg		0.257	mg/kg	0.0000257 %	✓	
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.13	mg/kg		0.108	mg/kg	0.0000108 %	✓	
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.32	mg/kg		0.266	mg/kg	0.0000266 %	✓	
36		indeno[123-cd]pyrene		205-893-2	193-39-5		0.16	mg/kg		0.133	mg/kg	0.0000133 %	✓	
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		0.17	mg/kg		0.141	mg/kg	0.0000141 %	✓	
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		42	mg/kg	1.785	62.232	mg/kg	0.00622 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.361 %		

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because Waste is not a liquid

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00083%)

Classification of sample: 7--11072024-0.10

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

Sample details

Sample name:
7--11072024-0.10
Moisture content:
27%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 27% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	12.53 mg/kg	0.00125 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.2 mg/kg	2.775	2.431 mg/kg	0.000243 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1.3 mg/kg	3.22	3.056 mg/kg	0.000306 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		29 mg/kg	1.462	42.385 mg/kg	0.00424 %		
6	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				<1.2 mg/kg	2.27	<2.724 mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	18.082 mg/kg	0.00181 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	45 mg/kg	1.56	51.24 mg/kg	0.00329 %	✓	
9	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		880 mg/kg	2.749	1765.677 mg/kg	0.177 %	✓	
10	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		23 mg/kg	2.976	49.971 mg/kg	0.005 %	✓	
12	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
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		93 mg/kg	2.774	188.337 mg/kg	0.0188 %	✓	
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	confirm TPH has NOT arisen from diesel or petrol					☑					
16	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		6.6	pH		6.6	pH	6.6 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
32		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
36		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		45	mg/kg	1.785	58.643	mg/kg	0.00586 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.22 %		

Key

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

Classification of sample: 8--11072024-0.10

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

Sample details

Sample name:
8--11072024-0.10
Moisture content:
11%
(wet weight correction)

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

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11 mg/kg	1.32	12.926 mg/kg	0.00129 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1 mg/kg	2.775	2.47 mg/kg	0.000247 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.4 mg/kg	3.22	1.146 mg/kg	0.000115 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.4 mg/kg	1.142	0.407 mg/kg	0.0000407 %	✓	
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24 mg/kg	1.462	35.077 mg/kg	0.00351 %		
6	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				<1.2 mg/kg	2.27	<2.724 mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	22.045 mg/kg	0.0022 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	36 mg/kg	1.56	49.976 mg/kg	0.0032 %	✓	
9	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		2200 mg/kg	2.749	5381.688 mg/kg	0.538 %	✓	
10	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19 mg/kg	2.976	50.329 mg/kg	0.00503 %	✓	
12	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1.4 mg/kg	2.554	3.182 mg/kg	0.000318 %	✓	
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		64 mg/kg	2.774	158.015 mg/kg	0.0158 %	✓	
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	confirm TPH has NOT arisen from diesel or petrol					☑					
16	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		6.3	pH		6.3	pH	6.3 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		0.09	mg/kg		0.0801	mg/kg	0.00000801 %	✓	
30		pyrene		204-927-3	129-00-0		0.09	mg/kg		0.0801	mg/kg	0.00000801 %	✓	
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
32		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
36		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		39	mg/kg	1.785	61.964	mg/kg	0.0062 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.578 %		

Key

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

Classification of sample: 9--11072024-0.10

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

Sample details

Sample name:
9--11072024-0.10
Moisture content:
11%
(wet weight correction)

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

Hazard properties

None identified

Determinands

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

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11	mg/kg	1.32	12.926	mg/kg	0.00129 %	✓	
2		beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.98	mg/kg	2.775	2.421	mg/kg	0.000242 %	✓	
3		boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.7	mg/kg	3.22	2.006	mg/kg	0.000201 %	✓	
4		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.4	mg/kg	1.142	0.407	mg/kg	0.0000407 %	✓	
5		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26	mg/kg	1.462	38	mg/kg	0.0038 %		
6		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				<1.2	mg/kg	2.27	<2.724	mg/kg	<0.000272 %		<LOD
7		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		17	mg/kg	1.126	17.035	mg/kg	0.0017 %	✓	
8		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	36	mg/kg	1.56	49.976	mg/kg	0.0032 %	✓	
9		manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		1400	mg/kg	2.749	3424.711	mg/kg	0.342 %	✓	
10		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
11		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18	mg/kg	2.976	47.68	mg/kg	0.00477 %	✓	
12		selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1.5	mg/kg	2.554	3.409	mg/kg	0.000341 %	✓	
13		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		72	mg/kg	2.774	177.767	mg/kg	0.0178 %	✓	
14		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
15		confirm TPH has NOT arisen from diesel or petrol					☑							
16		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		6.7	pH		6.7	pH	6.7 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		0.1	mg/kg		0.089	mg/kg	0.0000089 %	✓	
30		pyrene		204-927-3	129-00-0		0.08	mg/kg		0.0712	mg/kg	0.00000712 %	✓	
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.06	mg/kg		0.0534	mg/kg	0.00000534 %	✓	
32		chrysene	601-048-00-0	205-923-4	218-01-9		0.07	mg/kg		0.0623	mg/kg	0.00000623 %	✓	
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.08	mg/kg		0.0712	mg/kg	0.00000712 %	✓	
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.07	mg/kg		0.0623	mg/kg	0.00000623 %	✓	
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
36		indeno[123-cd]pyrene		205-893-2	193-39-5		0.06	mg/kg		0.0534	mg/kg	0.00000534 %	✓	
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		0.06	mg/kg		0.0534	mg/kg	0.00000534 %	✓	
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		41	mg/kg	1.785	65.141	mg/kg	0.00651 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.385 %		

Key

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

Classification of sample: 10--11072024-0.10

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

Sample details

Sample name:
10--11072024-0.10
Moisture content:
21%
(wet weight correction)

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

Hazard properties

None identified

Determinands

Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12 mg/kg	1.32	12.517 mg/kg	0.00125 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.3 mg/kg	2.775	2.85 mg/kg	0.000285 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1.2 mg/kg	3.22	3.052 mg/kg	0.000305 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6 mg/kg	1.142	0.541 mg/kg	0.0000541 %	✓	
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		29 mg/kg	1.462	42.385 mg/kg	0.00424 %		
6	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				<1.2 mg/kg	2.27	<2.724 mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	19.568 mg/kg	0.00196 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	43 mg/kg	1.56	52.987 mg/kg	0.0034 %	✓	
9	manganese { manganese sulphate }	025-003-00-4	232-089-9	7785-87-7		1100 mg/kg	2.749	2388.502 mg/kg	0.239 %	✓	
10	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
11	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		23 mg/kg	2.976	54.079 mg/kg	0.00541 %	✓	
12	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		1.2 mg/kg	2.554	2.421 mg/kg	0.000242 %	✓	
13	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		86 mg/kg	2.774	188.476 mg/kg	0.0188 %	✓	
14	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
15	confirm TPH has NOT arisen from diesel or petrol					☑					
16	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
17		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
19		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
21		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
22		pH			PH		6.9	pH		6.9	pH	6.9 pH		
23		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		phenanthrene		201-581-5	85-01-8		0.09	mg/kg		0.0711	mg/kg	0.00000711 %	✓	
28		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		0.21	mg/kg		0.166	mg/kg	0.0000166 %	✓	
30		pyrene		204-927-3	129-00-0		0.19	mg/kg		0.15	mg/kg	0.000015 %	✓	
31		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.1	mg/kg		0.079	mg/kg	0.0000079 %	✓	
32		chrysene	601-048-00-0	205-923-4	218-01-9		0.14	mg/kg		0.111	mg/kg	0.0000111 %	✓	
33		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.16	mg/kg		0.126	mg/kg	0.0000126 %	✓	
34		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.07	mg/kg		0.0553	mg/kg	0.00000553 %	✓	
35		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
36		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
37		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
38		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
39		monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
40		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		47	mg/kg	1.785	66.284	mg/kg	0.00663 %	✓	
41		sulfur { sulfur }	016-094-00-1	231-722-6	7704-34-9		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
											Total:	0.284 %		

Key

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

Appendix A: Classifier defined and non GB MCL 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

- **confirm TPH has NOT arisen from diesel or petrol**

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

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

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

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

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **pH** (CAS Number: PH)

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

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

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

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

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

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

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

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

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

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

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

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

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

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

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

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

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

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

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

- **monohydric phenols** (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)
Data source: CLP combined data
Data source date: 26 Mar 2019
Hazard Statements: Muta. 2; H341 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301 , STOT RE 2; H373 , Skin Corr. 1B; H314 , Skin Corr. 1B; H314 >= 3 % , Skin Irrit. 2; H315 1 <= conc. < 3 % , Eye Irrit. 2; H319 1 <= conc. < 3 % , Aquatic Chronic 2; H411

Appendix B: Rationale for selection of metal species

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)

beryllium {beryllium oxide}

Reasonable case CLP species based on hazard statements/molecular weight. Industrial sources include: most common (non alloy) form, used in ceramics (edit as required)

boron {diboron trioxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

cadmium {cadmium oxide}

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

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

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

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

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

copper {dicopper oxide; copper (I) oxide}

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

lead {lead chromate}

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

manganese {manganese sulphate}

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)

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)

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

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

vanadium {divanadium pentaoxide; vanadium pentoxide}

worst case

sulfur {sulfur}

worst case

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2024.158.6092.11254 (06 Jun 2024)
HazWasteOnline Database: 2024.158.6092.11254 (06 Jun 2024)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 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
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024