Appendix 2: Preliminary Risk Classification

BWB RISK ASSESSMENT CLASSIFICATION (REFERENCE CIRIA C552, *CONTAMINATED LAND RISK ASSESSMENT: A GUIDE TO GOOD PRACTICE*, 2001)

CIRIA C552, *Contaminated Land Risk Assessment A Guide to Good Practice*, 2001 sets out a methodology for estimating risk. The methodology for risk evaluation is a qualitative method for interpreting the output for the risk estimation stage of the assessment. It involves the classification of the:

- Magnitude of the potential consequence (severity) of risk occurring; and
- Magnitude of the probability (likelihood) of the risk occurring.

The classification of consequence and probability are replicated in **Table 1** and **Table 2**, respectively.

Table 1: Classification of Consequence

Classification	Definition	Examples
Severe (Sv)	Short term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA. Short term risk of pollution of sensitive water resource. Catastrophic damage to buildings/ property. A short-term risk to a particular ecosystem, or organism forming part of such ecosystem.	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Medium (Md)	Chronic damage to Human Health ("significant harm"). Pollution of sensitive water resources. A significant change in a particular ecosystem, or organism forming part of such ecosystem.	Concentrations of a contaminant from site exceeding the generic or site-specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer. Death of species within a designated nature reserve.
Mild (Mi)	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services. Damage to sensitive buildings/structures/services or the environment.	Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability).
Minor (Mr)	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by measures such as protective clothing etc.). Easily repairable effects of damage to buildings, structures and services.	The presence of contaminants at such concentration that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discolouration of concrete.

The classification of consequence does not take into account the probability of the consequence being realised. Therefore, there may be more than one consequence for a particular pollutant linkage. Both a severe and medium classification can result in death.

Severe relates to short term (acute) risk while medium relates to long term (chronic) risk. Mild relates to significant harm but to less sensitive receptors. Minor classification relates to harm which is not significant but could have a financial cost.

Table 2: Classification of Probability

Classification	Definition
High likelihood (Hi)	There is a pollutant linkage and an event that either appears very likely in the short term and almost inevitable in the long term, or there is evidence at the receptor of harm or pollution.
Likely (Li)	There is a pollutant linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low likelihood (Lw)	There is a pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term.
Unlikely (Ul)	There is a pollutant linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

The classification gives a guide as to the severity and consequence of identified risk when compared with other risk presented on the site. It should be noted that if a risk is identified it cannot be classified as "no risk" but as "very low risk". Differing stakeholders may have a different view on the acceptability of a risk.

Once the consequence and probability have been classified these can be compared using a matrix to identify an overall risk category, as shown in **Table 3**. These categories and the actions required are categorised in **Table 4**.

Table 3: Risk Evaluation Matrix

	Consequence	Severe (Sv)	Medium (Md)	Mild (Mi)	Minor (Mr)
Probability	**High likelihood (Hi)**	Very High Risk (VH)	High Risk (H)	Moderate Risk (M)	Mod/Low Risk (M/L)
	Likely (Li)	High Risk (H)	Moderate Risk (M)	Mod/Low Risk (M/L)	Low Risk (L)
	Low likelihood (Lw)	Moderate Risk (M)	Mod/Low Risk (M/L)	Low Risk (L)	Very Low Risk (VL)
	Unlikely (Ul)	Mod/Low Risk (M/L)	Low Risk (L)	Very Low Risk (VL)	Very Low Risk (VL)

Table 4: Risk Categorisations

Very High Risk (VH)	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High Risk (H)	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short-term and are likely over the longer-term.
Moderate Risk (M)	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer-term.
Low Risk (L)	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low Risk (VL)	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Reference:

CIRIA C552 *Contaminated land risk assessment. A guide to good practice*. Rudland, D J, Lancefield, R M, Mayell, P N, 2001.

Appendix 3: Factual Ground Investigation Report

EXPLORATION
& TESTING ASSOCIATES

Factual Ground Investigation Report

Ellesmere, Shropshire

BWB Consulting Limited

June 2021

Factual Ground Investigation Report

Ellesmere,
Shropshire

Contract: N10010
Reference: N10010-FGIR-01

BWB Consulting Limited
5th Floor
Waterfront House
Station Street
Nottingham
NG2 3DQ

Exploration & Testing Associates Limited
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Coventry, CV3 4FJ
T: 024 7688 0452, E: enquiries@explorationtesting.uk

Prepared by:	Checked by:	Approved by:
Olivia Gatehouse MSci (Hons)	Jennifer Mullen BSc(Hons), MRes, PhD, FGS	Anthony Owen MESci(Hons), MRes, FGS

Issue:	Date:	Description:
01	29/06/21	First issue

EXECUTIVE SUMMARY

Site Address	Scotland Street, Ellsmere SY12 0EW
Proposed Development	Unknown
Current Site Use	The site comprises of a residential dwelling with associated outbuildings, a garden and two grassed fields.
Published Geology	The published geology indicates the site to be underlain by Alluvium and Glaciofluvial Deposits, underlain by the Wilmslow Sandstone Formation.
Intrusive Works	Intrusive works comprised of five dynamic sample boreholes and nine excavated trial pits.
Sampling and Testing	Chemical and geotechnical laboratory testing was carried out on selected samples as scheduled by BWB Consulting Ltd.
Disclaimer. This Executive Summary should be read in conjunction with Exploration & Testing Associates Limited's Ground Investigation Report, reference N10010-FGIR-01, of which it forms part.	

EXPLORATION
& TESTING ASSOCIATES

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APPENDICES

1.0 INTRODUCTION

1.1 Introduction

Exploration & Testing Associates Limited (Exploration) were instructed by BWB Consulting Limited (the Client), to undertake an investigation to establish ground conditions, the presence of contamination and determine the geotechnical properties of the site.

The proposed development is unknown.

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The information contained within this report is based on conditions at the time of investigation and there may be site factors which have not been disclosed within this document. It should be noted that groundwater levels may vary due to seasonal or other conditions.

1.2 Scope of Work

The Scope of Work was set out by BWB at tender stage, comprising of the following:

a) One day dynamic sample boreholes with associated sampling and in situ testing
b) The installation of gas and groundwater monitoring wells
c) One day trial pitting with associated samples and in situ testing
d) Gas and groundwater monitoring
e) Geotechnical laboratory testing
f) Chemical laboratory testing

This document is intended to provide a factual account of the work undertaken and present the data obtained.

2.0 SITE DESCRIPTION

2.1 Site Location

The site is located to the west of Ellesmere, Shropshire and may be located by National Grid Reference SJ389341.

A Site Location Plan is appended in Appendix 1, Drawing N10010.SLP_1.

2.2 Site Description

The site is triangular in shape, with the topography gently sloping to the south, comprising of an area of approximately 1 hectare.

At the time of the investigation the site comprised of a residential dwelling, with associated out-buildings to the southeast and a garden to the north, with a grassed area beyond. A gate on the western perimeter of the garden led into a larger grassed field. A barn was present on the south-eastern border of the site with a small stockpile located just to the west of the barn.

Small wooden fences and shrubs with scattered trees formed the site boundaries.

The site was accessed to the north off the A495 via a private road which hugged the easter boundary leading up the property in the south.

2.3 Published Geology

The published geology for the site, based on records provided by the BGS, indicates the site to be underlain by Glaciofluvial Deposits comprising of sand and gravel in the central and northern part of the site, with Alluvium to the west, east and south. The superficial deposits are underlain by fine to medium grained sandstone of the Wimslow Sandstone Formation.

Made Ground is unlikely to be widespread across the site. However, it may be encountered near the buildings towards the south.

The nearest boreholes are located over 0.5km to the east of the site and record medium to dense sands and gravels to 3.00m depth.

3.0 GROUND INVESTIGATION

3.1 Intrusive Investigation

The intrusive investigation was carried out on the 20th May 2021.

The investigation was undertaken in general accordance with published guidance; BS 5930:2015+A1:2020 and BS 10175:2011+A2:2017.

The work undertaken comprised the following:

a) Service clearance of all locations
b) Five (5 No.) dynamic sample boreholes, with in situ testing
c) Nine (9 No.) machine excavated trial pits
d) The installation of five (5 No.) gas and groundwater monitoring wells
e) Representative sampling for laboratory testing.

The exploratory hole locations were set out based on an indicative plan issued in advance by BWB. An Exploratory Hole Location Plan is provided in Appendix 1, Drawing N10010.EHLP_1.

The depths of the exploratory holes, descriptions of strata encountered and comments on groundwater conditions are provided in Appendix 2.

Representative disturbed samples were taken at the depths shown on the exploratory hole records. Samples for contamination testing were collected in appropriate containers and retained in cool boxes prior to dispatch to the laboratory.

Gas and groundwater monitoring visits were undertaken on two occasions, at broadly weekly intervals following installation.

3.2 Sampling Strategy

Representative samples were obtained in order provide suitable material for laboratory testing to establish:

a) Baseline conditions of commonly occurring contaminants; and
b) The geotechnical properties of the underlying soils.

4.0 LABORATORY TESTING

4.1 Testing Strategy

The geotechnical laboratory testing was scheduled by BWB based on material descriptions, taking into consideration the proposed development.

The chemical laboratory testing was scheduled by BWB based on material descriptions, taking into consideration the presence of visual or olfactory evidence of contamination and the site's history.

4.2 Geotechnical Laboratory Testing

All soil samples were prepared in accordance with BS 1377-1:2016 by a UKAS accredited laboratory, with representative sub-samples taken for testing as necessary.

The following tests carried out were:

a) Eight (8 No.) moisture contents
b) Four (4 No.) Atterberg Limits
c) Six (6 No.) particle size distributions by wet sieve

The test results are provided in Appendix 3 as Test Report L21-232.

4.3 Chemical Laboratory Testing

The soil testing was carried out by a UKAS accredited laboratory, in accordance with the MCERTS performance standard, with representative sub-samples taken for testing as necessary.

The following tests were carried out:

a) Eight (8 No.) BWB Standard Suites: - arsenic, barium, beryllium, cadmium, chromium (total & hexavalent), copper, lead, mercury, nickel, selenium, vanadium, zinc, boron, sulphur (total), sulphate, cyanide, pH, organic matter, PAH, phenols and TPH
b) Four (4 No.) Asbestos screen
c) Four (4 No.) BWB Leachate Suites: - arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, vanadium, zinc, boron, sulphate (as SO_4) and pH
d) Two (2 No.) TPHCWG
e) Three (3 No.) LC Pesticide Suite (Carbamates, Urons,Triazines)
f) Three (3 No.) LC Acid Herbicide Suite
g) Three (3 No.) GC Pesticide Suite (OCP, OPP, ONP, Pyrethroids)
h) Six (6 No.) BRE SD1 Suite C: - pH, sulphate (water soluble), magnesium, nitrate & chloride

The results are provided in Appendix 4 as Test Reports 21-77432-1 & 21-79772-1.

REFERENCES

BS 5930:2015+A1:2020 *'Code of practice for ground investigations.*' British Standards Institute, 2020.

BS 6297:2007+A1:2008 *'Code of practice for the design and installation of drainage fields for use in wastewater treatment'*. British Standards Institute, 2008

BS 10175:2011+A2:2017 'Investigation of potentially contaminated sites. Code of practice', British Standards Institute, 2017

BS 1377-1:2016, '*Methods of test for soils for civil engineering purposes — Part 1: General requirements and sample preparation*', British Standards Institute, 2016

British Geological Survey, Sheet No. 138, 'Wern', solid, 1:50 000 scale, published 1990.

EXPLORATION
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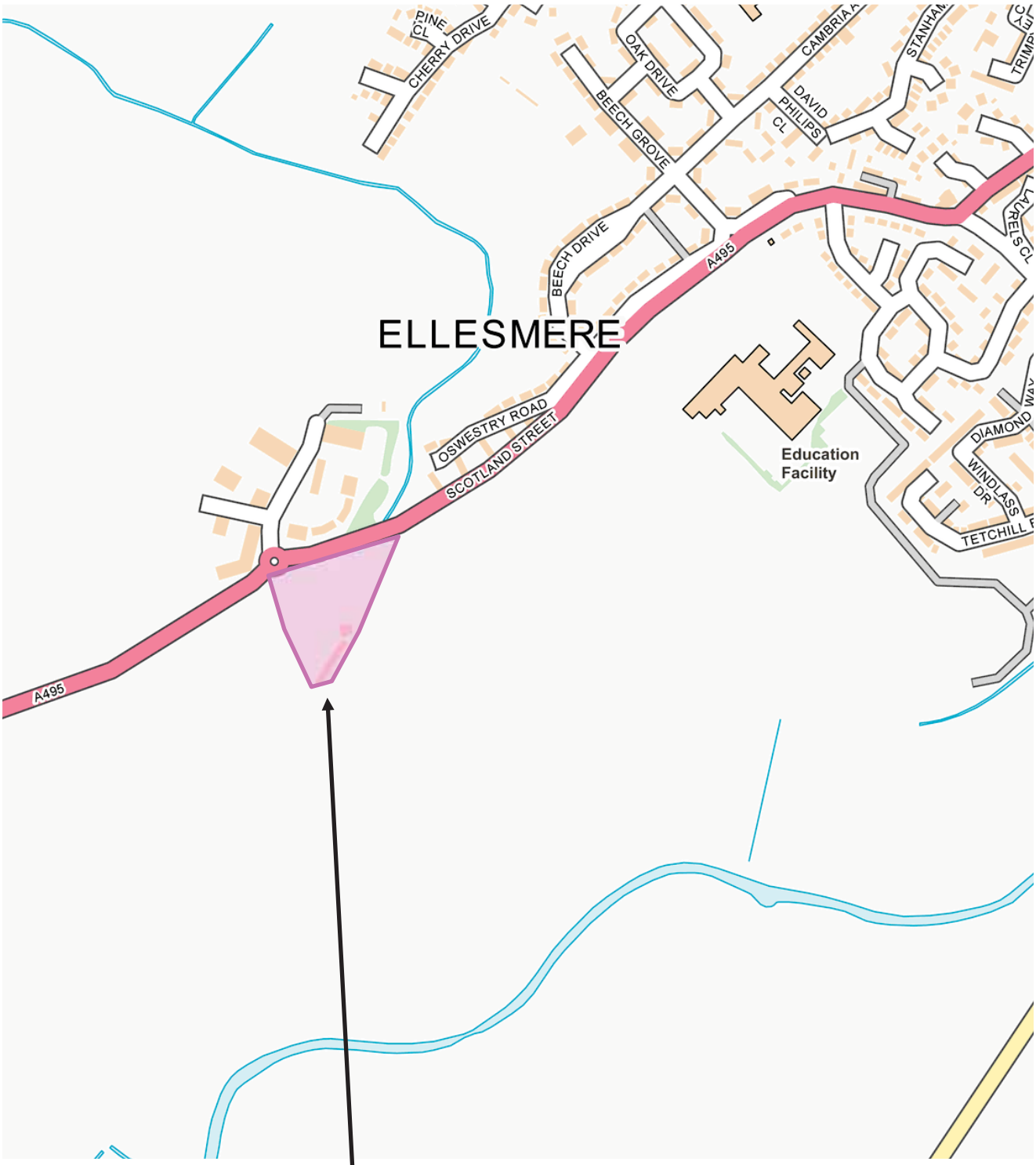
APPENDIX 1: DRAWINGS



Site Location

Client:	BWB Consulting Ltd
Contract:	Ellesmere
Contract No.:	N10010
Title:	Site Location Plan
Drawing:	N10010.SLP_1
Date:	27/06/21

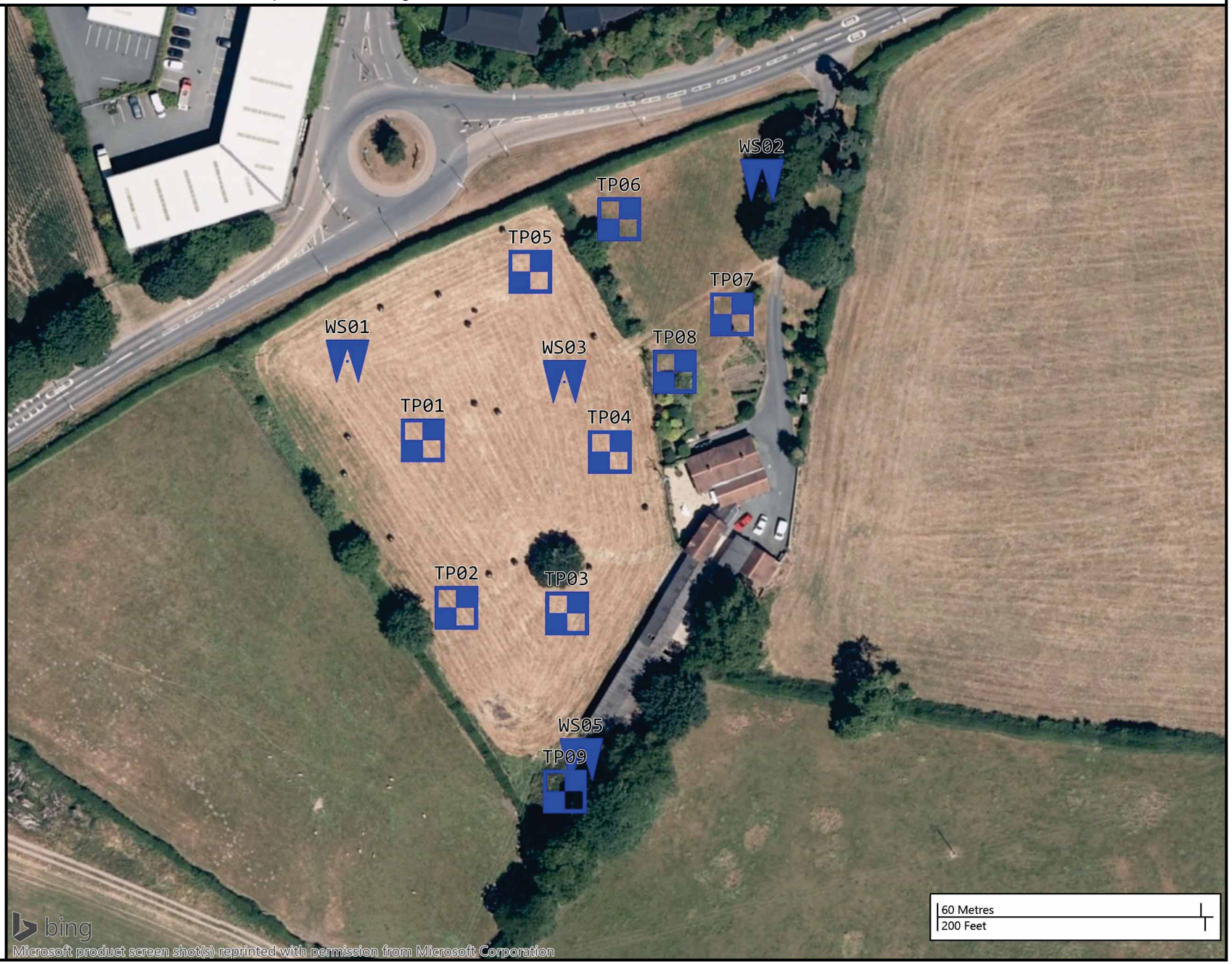
EXPLORATION & TESTING ASSOCIATES

Project Id:	N10010	Title:	N10010_EHLP.01
Project Title:	Ellesmere	Scale:	1:1250
Location:	Ellesmere	Engineer:	BWB Consulting Ltd
Client:	BWB Consulting Ltd	Contractor:	Exploration & Testing

EXPLORATION & TESTING ASSOCIATES

Legend Key

- Locations By Type - TP
- Locations By Type - WS



EXPLORATION
& TESTING ASSOCIATES

APPENDIX 2: ENGINEERING RECORDS

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338909.80 N334182.57
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP01	TP	89.50m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								Grass over firm brown very sandy CLAY (Topsoil)
					0.20	89.30		
		0.50	ES1					Brown slightly gravelly clayey fine and medium SAND. Gravel is subrounded fine to coarse quartzite. (Glaciofluvial Deposits)
					0.70	88.80		
		1.00	B1					Orangish brown slightly clayey slightly gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse sandstone and quartzite. (Glaciofluvial Deposits)
		1.00	ES2					
								Below 1.50m bgl: Low cobble content of quartzite.
		2.60	B2					*At 2.60m bgl: Damp. Slight grey staining.*
		2.60	ES3					
					2.80	86.70		End of Trial Pit at 2.80m

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Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
3.10	0.65	Collapsed back to 1.50m.	None.			

Remarks

1. Groundwater not encountered

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338917.07 N334144.20
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP02	TP	88.10m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								Grass over firm brown slightly sandy CLAY (Topsoil)
					0.30	87.80		
		0.50	D1					Firm brown slightly sandy CLAY. (Alluvium)
		0.50	ES1					
					0.90	87.20		Firm greyish brown slightly sandy slightly gravelly CLAY. Gravel is subangular fine and medium quartzite. (Alluvium)
					1.20	86.90		Firm grey sandy CLAY, with occasional rootlets (<10mm). (Alluvium)
		1.40	ES2					
		1.50	D2					
	▼							*Below 2.00m bgl: Light grey. Includes fine shell fragments.*
		2.30	D3					
					2.50	85.60		Brown slightly gravelly clayey fine to coarse SAND. Gravel is subrounded fine to coarse quartzite. (Glaciofluvial Deposits)
		2.70	B1					
	▼	3.00	D4					
					3.50	84.60		End of Trial Pit at 3.50m

1 2 3 4 5

Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
3.00	0.65		None.		2.00	20/05/2021 00:00:00
					3.00	20/05/2021 00:00:00

Remarks

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338942.32 N334142.61
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP03	TP	88.21m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.10	ES1		0.20	88.01		Grass over brown very clayey fine and medium SAND. (Topsoil)
		0.50	B1		0.70	87.51		Brown slightly gravelly very clayey fine and medium SAND. (Alluvium)
					0.90	87.31		Firm dark brown CLAY. (Alluvium)
		1.00	D1					Firm yellowish brown slightly gravelly sandy CLAY. Gravel is subangular fine to coarse flint and quartzite. (Glaciofluvial Deposits)
		1.50	B2		1.50	86.71		Brown clayey gravelly fine and medium SAND, with clay pockets. Gravel is subangular to subrounded fine to coarse quartzite and sandstone. (Glaciofluvial Deposits)
	▼	2.80	B3		3.00	85.21		End of Trial Pit at 3.00m

1 2 3 4 5

Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
2.85	0.65	Slight collapse.	None.		2.80	20/05/2021 00:00:00

Remarks

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338952.58 N334179.37
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP04	TP	90.43m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								Grass over firm brown sandy CLAY. (Topsoil)
					0.30	90.13		
		0.50	B1					Orangish brown slightly gravelly fine and medium SAND. Gravel is subangular to subrounded fine to coarse quartzite and sandstone. (Glaciofluvial Deposits)
		0.50	ES1					
		1.00	ES2					*Below 1.00m bgl: Becoming gravelly.*
		1.50	D1					
		2.50	B2					
					2.90	87.53		End of Trial Pit at 2.90m

1 2 3 4 5

Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
2.90	0.70	Collapsed back to 2.50m.	None.			

Remarks

1. Ground water not encountered.

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338934.96 N334220.71
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP05	TP	91.89m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.30	91.59		Grass over firm dark brown sandy CLAY. (Topsoil)
		0.50	D1					Brown gravelly fine to coarse SAND, with a low cobble content. Gravel is subrounded to subangular fine to coarse quartzite. Cobble is subrounded quartzite. (Glaciofluvial Deposits)
		0.60	ES1					
		1.00	B1					
		1.90	D2					*At 1.80m bgl: A 300mm band of firm slightly sandy CLAY.*
		2.40	B2					*Below 2.10m bgl: Gravel includes coal.*
		3.00	D3					*Below 2.60m bgl: Orangish brown.*
					3.50	88.39		End of Trial Pit at 3.50m

Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
3.30	0.65	Collapsed back to 2.60m.	None.			

Remarks

1. Ground water not encountered.

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338955.38 N334232.46
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP06	TP	91.80m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.40	ES1		0.40	91.40		Grass over very clayey fine and medium SAND. (Topsoil)
		0.50	B1					Orangish brown slightly gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse quartzite. (Glaciofluvial Deposits)
		1.40	ES2					
		1.50	D1					*Below 1.50m bgl: Very gravelly, with a low cobble content of subrounded quartzite.*
								Below 2.30m bgl: Gravel includes sandstone and coal.
		2.60	B2					
		3.10	D2					
					3.30	88.50		End of Trial Pit at 3.30m

1 2 3 4 5

Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
3.20	0.65		None.			

Remarks

1. Ground water not encountered.

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338981.05 N334210.42
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP07	TP	90.66m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10	ES1					Grass over firm slightly gravelly very sandy CLAY. Gravel is subrounded fine and medium quartzite. (Topsoil)
					0.30	90.36		
		0.50	D1					Orangish brown slightly gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse quartzite and sandstone. (Glaciofluvial Deposits)
								Below 0.50m bgl: Gravelly, with a low cobble content of subrounded quartzite.
								Below 1.00m bgl: Medium cobble content.
		1.50	B1					*Below 1.50m bgl: Gravel includes coal.*
		1.50	ES2					
		2.00	D2					
					2.20	88.46		End of Trial Pit at 2.20m

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Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
2.70	0.65		None.			

Remarks

1. Ground water not encountered.

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338967.78 N334197.45
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP08	TP	90.95m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								Grass over firm dark brown slightly gravelly very sandy CLAY, with occasional roots (<10mm). Gravel is subrounded fine and medium quartzite. (Topsoil)
		0.50 0.50	B1 ES1		0.40	90.55		Yellowish brown slightly clayey slightly gravelly fine and medium SAND, with occasional clayey pockets. Gravel is subrounded fine to coarse quartzite. (Glaciofluvial Deposits)
		1.10	D1		1.00	89.95		Firm slightly friable sandy CLAY. (Glaciofluvial Deposits)
		1.60	B2		1.40	89.55		Light orangish brown slightly gravelly fine and medium SAND. Gravel is subrounded fine to coarse quartzite. (Glaciofluvial Deposits)
					2.30	88.65		End of Trial Pit at 2.30m

1 2 3 4 5

Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
2.70	0.65	Collapsed back to 1.80m.	None.			

Remarks

1. Ground water not encountered.

Trial Pit Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338941.35 N334101.94
Project No. : N10010	Crew Name: Harvey Plant Hire	Equipment: JCB 3CX

Location Number	Location Type	Level	Logged By	Scale	Status
TP09	TP	88.30m AoD	OG	1:25	FINAL

Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES1					Grass over soft dark brown sandy, slightly gravelly clay (TOPSOIL). Gravel is fine to coarse, angular to subangular brick (Made Ground)
					0.50	87.80		Soft to firm, dark brown very sandy CLAY. (Made Ground)
					0.60	87.70		End of Trial Pit at 0.60m

1
2
3
4
5

Dimensions		Trench Support and Comment			Water Stike General	
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Depth Strike	Date Time
1.50	0.70	Stable				

Remarks

1. Groundwater not encountered
2. Additional trial pit within small stockpile

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP01
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP02
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP03
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP04
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP05
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP06
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP07
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP08
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Client:	BWB Consulting Limited
Contract:	Ellesmere
Contract no.:	N10010

Title:	Inspection Pit Photographs
Location:	TP09
Date:	20/05/21

EXPLORATION
& TESTING ASSOCIATES

Dynamic Sample Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338892.87 N334200.78
Project No. : N10010	Crew Name: Williams Drilling	Drilling Equipment: Dando Terrier

Borehole Number	Hole Type	Level	Logged By	Scale	Status
WS01	WS	89.57m AoD	SF	1:25	FINAL

Well	Water Strikes	Sample and In Situ Testing Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.20	ES1		0.30	89.27		Grass over dark brown clayey coarse SAND with occasional fragments of red brick and fine hair rootlets. (Topsoil)
		0.50 - 0.80	B1					Medium dense, brown slightly gravelly clayey fine to medium SAND. Gravel is angular to subrounded fine to coarse quartzite, sandstone and rare coal. (Glaciofluvial Deposits)
		1.00	D1					
		1.20	SPT	N=14 (1,1/3,3,4,4)	1.30	88.27		
		1.80	D2					Light brown clayey fine to medium SAND with occasional angular to subrounded coarse gravel of quartzite and sandstone. (Glaciofluvial Deposits)
	▼	2.00	SPT	N=13 (6,10/6,3,2,2)				*Below 200m: Medium dense*
		2.85	ES2					*At 3.00m: Loose*
		3.00	SPT	N=7 (3,2/1,2,2,2)	3.00	86.57		End of Borehole at 3.00m

Hole Diameter		Casing Diameter		Water Strike General		
Depth Base	Diameter	Depth Base	Diameter	Depth Strike	Date Time	Remarks
				2.00	20/05/2021 00:00:00	

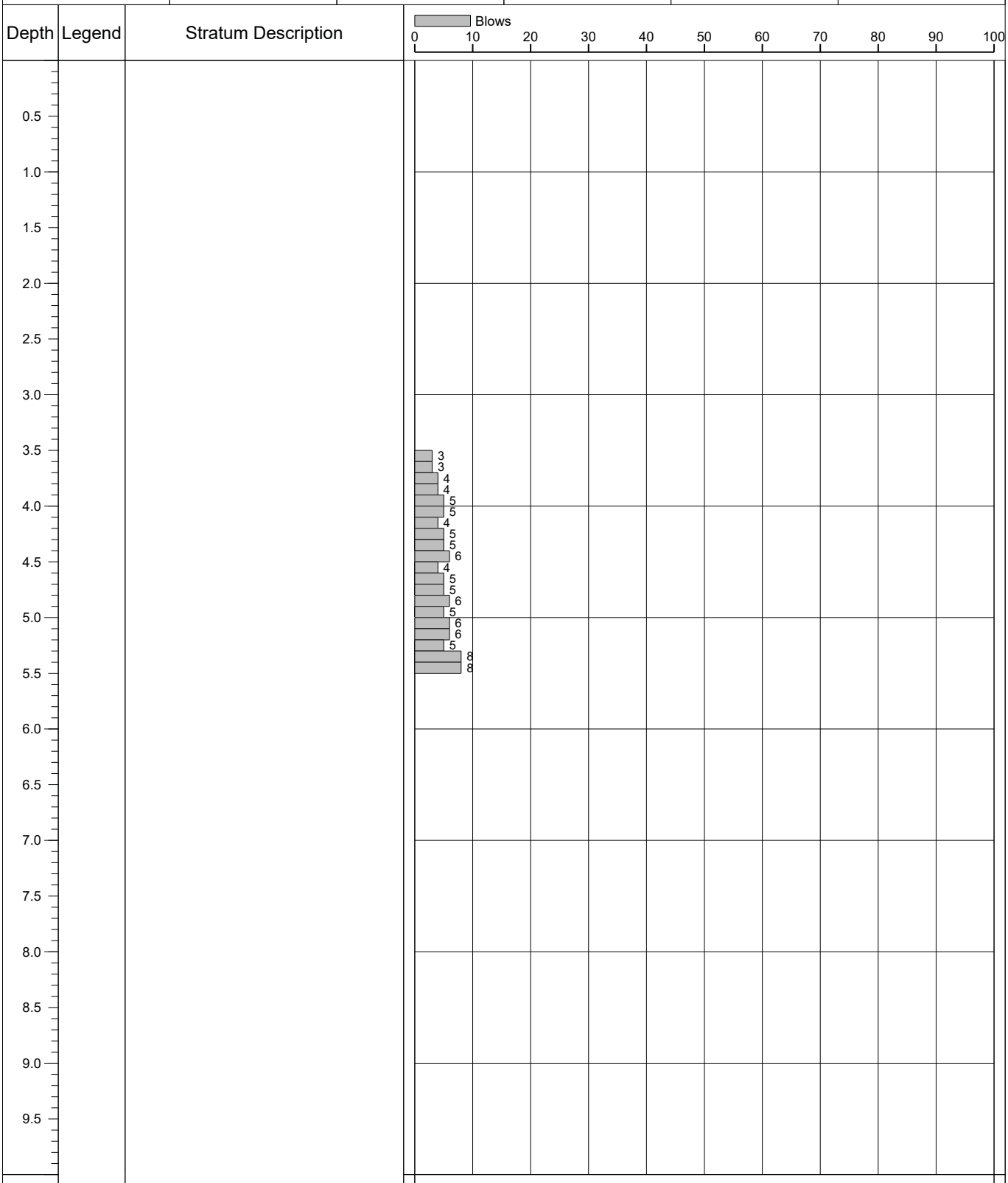
Remarks

1. SPT Ref: WS01/ Ratio: 80%
2. Probe from 3.50 to 5.50m

Probe Test Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338892.87 N334200.78
Project No. : N10010	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS01-DP	DP	89.57m AoD		1:50	Sheet 1 of 1



Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

Dynamic Sample Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338988.28 N334240.80
Project No. : N10010	Crew Name: Williams Drilling	Drilling Equipment: Dando Terrier

Borehole Number	Hole Type	Level	Logged By	Scale	Status
WS02	WS	90.04m AoD	AH	1:25	FINAL

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10	ES1					Grass over soft dark brown sandy CLAY with frequent rootlets. (Topsoil)
					0.30	89.74		
		0.40	ES2					Yellowish brown gravelly fine to coarse SAND. Gravel is subrounded to rounded fine to medium sandstone. (Glaciofluvial Deposits)
		1.20 - 1.65	D1					
		1.20	SPT	N=7 (1,1/1,1,2,3)				
		1.30 - 2.00	B1		1.30	88.74		Loose, brown clayey very sandy angular to rounded fine to coarse GRAVEL of mudstone, quartzite and sandstone. Sand is fine to coarse. (Glaciofluvial Deposits)
	▼	2.00 - 2.45	D2					
		2.00	SPT	N=6 (1,2/2,2,1,1)				
					2.70	87.34		Soft grey SILT. (Glaciofluvial Deposits)
								At 3.00m: Firm
		3.00 - 3.45	D3		3.00	87.04		End of Borehole at 3.00m
		3.00	SPT	N=10 (2,2/4,2,2,2)				

Hole Diameter		Casing Diameter		Water Strike General		
Depth Base	Diameter	Depth Base	Diameter	Depth Strike	Date Time	Remarks
				2.00	20/05/2021 00:00:00	

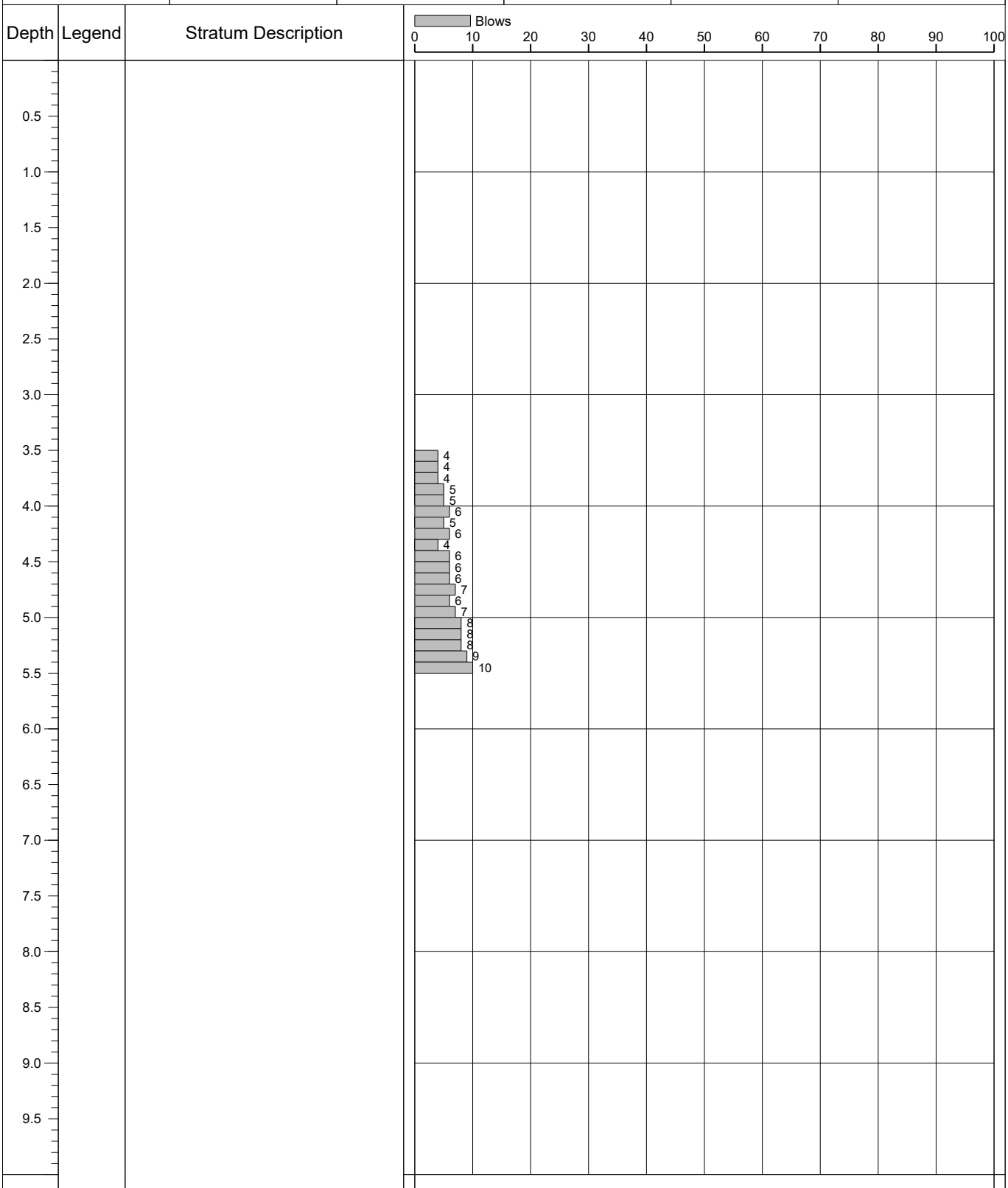
Remarks

1. SPT Ref: WS01/ Ratio: 80%
2. Probe from 3.50 to 5.50m

Probe Test Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338988.28 N334240.80
Project No. : N10010	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS02-DP	DP	90.04m AoD		1:50	Sheet 1 of 1



Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

Dynamic Sample Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338942.53 N334195.46
Project No. : N10010	Crew Name: Williams Drilling	Drilling Equipment: Dando Terrier

Borehole Number	Hole Type	Level	Logged By	Scale	Status
WS03	WS	91.14m AoD	AH	1:25	FINAL

Well	Water Strikes	Sample and In Situ Testing Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.10	ES1		0.20	90.94		Grass over soft dark brown sandy CLAY with frequent rootlets. (Topsoil)
		0.30	ES2					Orangish brown fine to medium SAND. (Glaciofluvial Deposits)
		1.00 - 1.50	B1					
		1.20 - 1.65 1.20	D1 SPT	N=7 (1,1/1,2,2,2)				*Below 1.20m: Loose*
					1.50	89.64		Brown very sandy subangular to rounded fine to medium GRAVEL of mudstone and sandstone. Sand is fine to coarse. (Glaciofluvial Deposits)
	▼	2.00 - 2.45 2.00	D2 SPT	N=8 (2,2/2,2,2,2)				*Below 2.00m: Loose*
		3.00 - 3.45 3.00	D3 SPT	N=10 (2,3/2,2,2,4)	3.00	88.14		*At 3.00m: Medium dense*
								End of Borehole at 3.00m

Hole Diameter		Casing Diameter		Water Strike General		
Depth Base	Diameter	Depth Base	Diameter	Depth Strike	Date Time	Remarks
				2.00	20/05/2021 00:00:00	

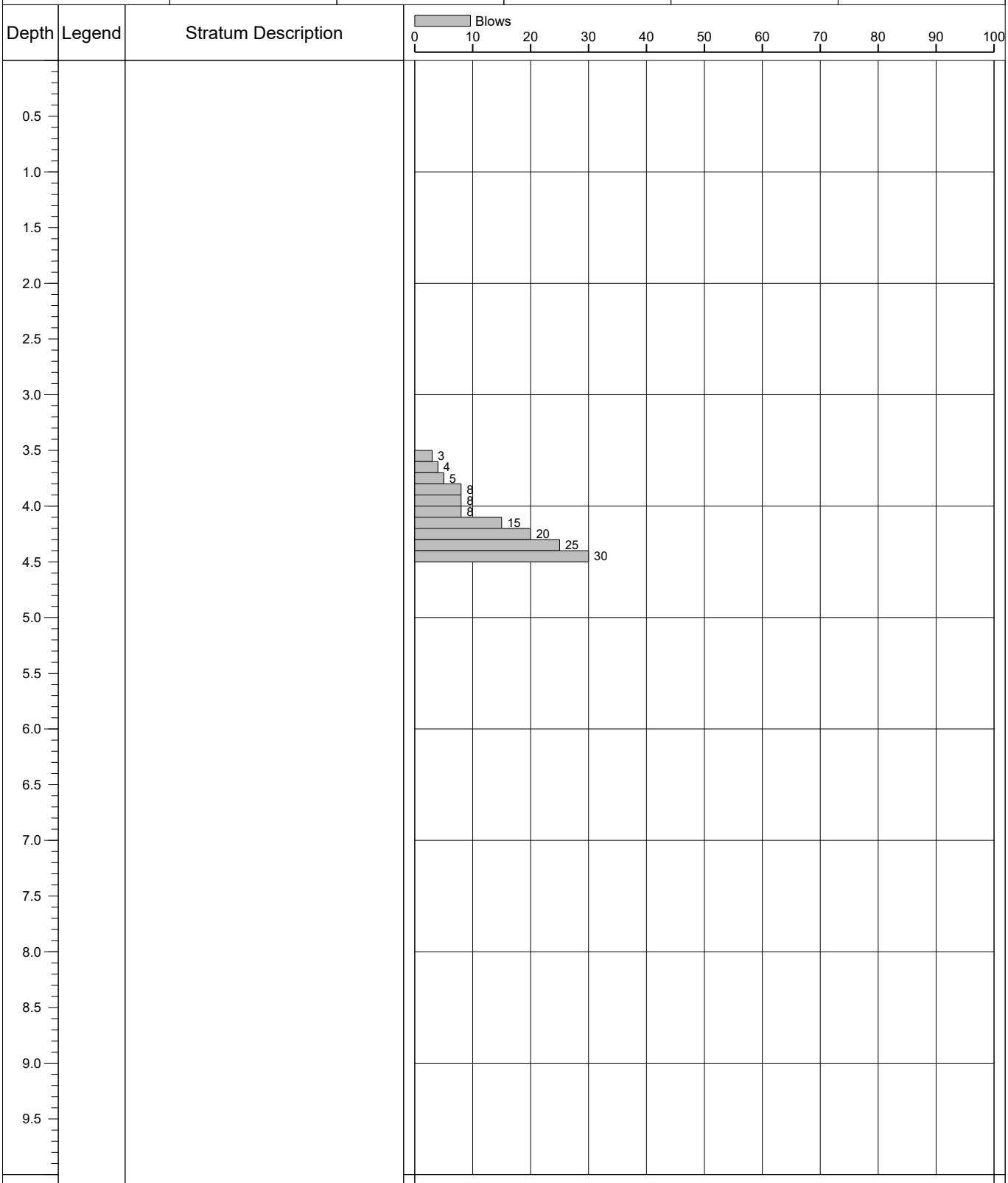
Remarks

1. SPT Ref: WS01/ Ratio: 80%
2. Probe from 3.50 to 4.50m, terminate due to possible cobble

Probe Test Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338942.53 N334195.46
Project No. : N10010	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS03-DP	DP	91.14m AoD		1:50	Sheet 1 of 1



Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

Dynamic Sample Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338965.51 N34159.61
Project No. : N10010	Crew Name: Williams Drilling	Drilling Equipment: Dando Terrier

Borehole Number	Hole Type	Level	Logged By	Scale	Status
WS04	WS	89.42m AoD	AH	1:25	FINAL

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10	ES1		0.20	89.22		Grass over soft dark brown sandy CLAY with frequent rootlets. (Topsoil)
		0.50	ES2					Yellowish brown gravelly fine to coarse SAND. Gravel is subrounded to rounded fine to medium sandstone. (Glaciofluvial Deposits)
		1.00 - 2.00	B1					
		1.20 - 1.65 1.20	D1 SPT	N=8 (1,2/2,2,2,2)				*Below 1.20m: Loose*
	▼	2.00 - 2.45 2.00	D2 SPT	N=0 (1,0/0,0,0,0)	2.10	87.32		Very loose, yellowish brown sandy subangular to rounded fine to medium GRAVEL of mudstone and sandstone. Sand is fine to coarse. (Glaciofluvial Deposits)
		2.50	D3					
		3.00 - 3.45 3.00	D4 SPT	N=8 (1,2/2,2,2,2)	3.00	86.42		End of Borehole at 3.00m

Hole Diameter		Casing Diameter		Water Strike General		
Depth Base	Diameter	Depth Base	Diameter	Depth Strike	Date Time	Remarks
				2.00	20/05/2021 00:00:00	

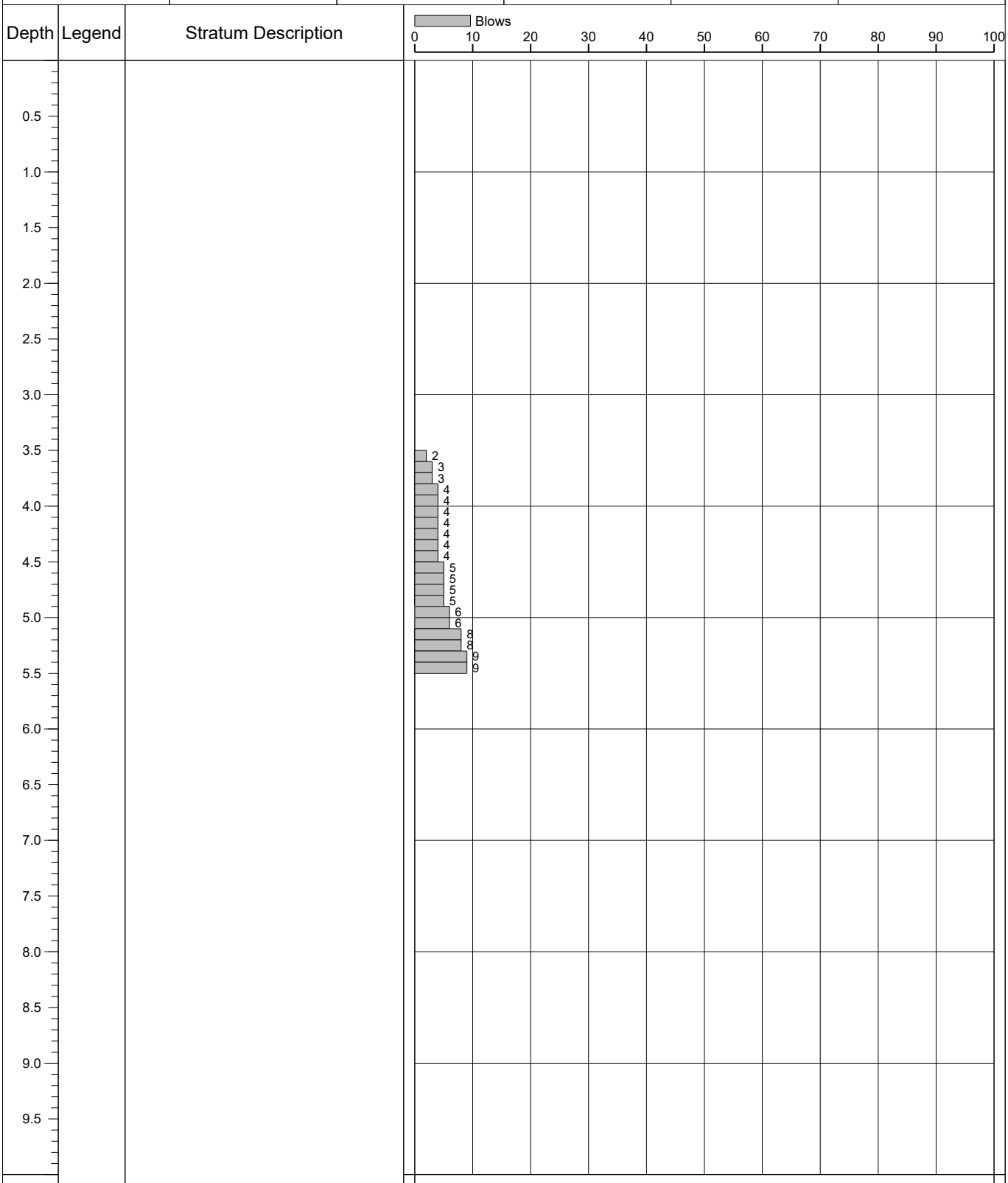
Remarks

1. SPT Ref: WS01/ Ratio: 80%
2. Probe from 3.50 to 5.50m

Probe Test Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338965.51 N34159.61
Project No. : N10010	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS04-DP	DP	89.42m AoD		1:50	Sheet 1 of 1



Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

Dynamic Sample Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338945.19 N334109.09
Project No. : N10010	Crew Name: Williams Drilling	Drilling Equipment: Dando Terrier

Borehole Number	Hole Type	Level	Logged By	Scale	Status
WS05	WS	88.46m AoD	SF	1:25	FINAL

Well	Water Strikes	Sample and In Situ Testing Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.10	ES1					Grass over dark brown slightly clayey fine to coarse grained SAND with fine hair rootlets. (Made Ground)
					0.30	88.16		
		0.50	ES2					Firm grey slightly sandy CLAY with occasional fragments of brick. (Made Ground)
					0.60	87.86		
		0.80	D1					Brown slightly gravelly clayey fine to coarse SAND. Gravel is angular to subrounded fine to coarse quartzite and sandstone. (Glaciofluvial Deposits)
		1.00	D2					
		1.20	SPT	N=9 (2,2/2,2,2,3)				*Below 1.20m: Loose*
					1.50	86.96		Light grey gravelly fine to coarse SAND. Gravel is angular to subrounded fine to medium quartzite. (Glaciofluvial Deposits)
		1.70	D3					
	▼	2.00	D4					*Below 2.00m: Very loose*
		2.00	SPT	N=2 (0,0/1,0,1,0)				
		2.50	D5		2.50	85.96		Light grey silty fine to medium SAND with rare rootlets. (Glaciofluvial Deposits)
		2.55 - 3.00	B1					*From 2.50-2.55m: Plastic, pseudo-fibrous, dark brown slightly sandy PEAT.*
								At 3.00m: Medium dense
		3.00	D6		3.00	85.46		End of Borehole at 3.00m
		3.00	SPT	N=16 (2,3/4,4,4,4)				

Hole Diameter		Casing Diameter		Water Strike General		
Depth Base	Diameter	Depth Base	Diameter	Depth Strike	Date Time	Remarks
				2.00	20/05/2021 00:00:00	

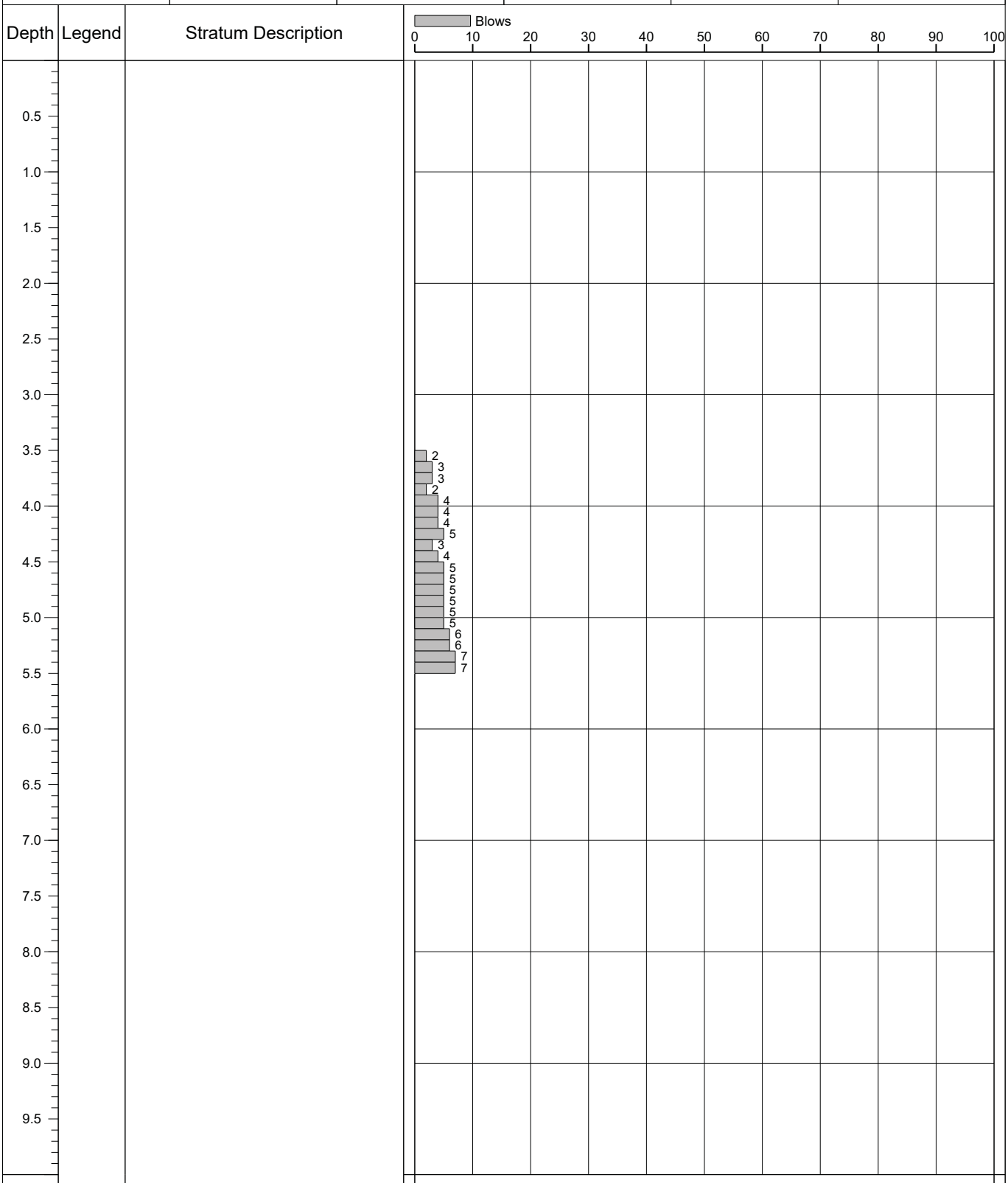
Remarks

1. SPT Ref: WS01/ Ratio: 80%
2. Probe from 3.50 to 5.50m

Probe Test Log

Project Name: Ellesmere	Client: BWB Consulting Ltd	Date: 20/05/2021
Location: Ellesmere	Contractor: Exploration & Testing	Co-ords: E338945.19 N334109.09
Project No. : N10010	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS05-DP	DP	88.46m AoD		1:50	Sheet 1 of 1



Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

EXPLORATION
& TESTING ASSOCIATES

APPENDIX 3: CHEMICAL TESTING

Liv Gatehouse
Exploration & Testing Associates Limited
3 Siskin Drive
Middlemarch Business Park
Coventry
CV3 4FJ

e: results@explorationtesting.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 : 21-77432

Project / Site name:	Ellesmere	**Samples received on:**	24/05/2021
Your job number:	N10010	**Samples instructed on/ Analysis started on:**	24/05/2021
Your order number:	PO-1117	**Analysis completed by:**	01/06/2021
Report Issue Number:	1	**Report issued on:**	01/06/2021
Samples Analysed:	1 bulk sample - 4 leachate samples - 9 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
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.

Analytical Report Number: 21-77432
Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884051	1884052	1884053	1884054	1884055
Sample Reference				WS01	WS01	WS04	WS05	TP02
Sample Number				1	2	2	2	1
Depth (m)				0.20	2.85	0.50	0.50	0.50
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	13	13	23	25
Total mass of sample received	kg	0.001	NONE	1.5	2.0	1.5	1.7	1.2
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	Not-detected	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	5.8	8.2	6.6	7.4	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Complex Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.013	0.0079	0.0084	0.12	-
Total Sulphur	mg/kg	50	MCERTS	350	< 50	110	630	-
Organic Matter	%	0.1	MCERTS	3.3	< 0.1	0.8	5.6	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 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	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	-

Analytical Report Number: 21-77432
Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884051	1884052	1884053	1884054	1884055
Sample Reference				WS01	WS01	WS04	WS05	TP02
Sample Number				1	2	2	2	1
Depth (m)				0.20	2.85	0.50	0.50	0.50
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.3	3.0	5.6	10	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	61	20	37	140	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.44	0.20	0.28	0.78	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	< 0.2	0.2	2.8	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.4	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	7.2	10	19	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	4.7	7.6	23	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	88	9.1	17	87	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	7.2	9.0	15	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	18	7.1	15	25	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	68	12	35	130	-
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
Petroleum Hydrocarbons								
TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10	< 10	58	-
TPH2 (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	< 8.0	25	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	30	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	13	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	14	-

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Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884051	1884052	1884053	1884054	1884055
Sample Reference				WS01	WS01	WS04	WS05	TP02
Sample Number				1	2	2	2	1
Depth (m)				0.20	2.85	0.50	0.50	0.50
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Pesticides								
Alachlor	µg/kg	10	NONE	< 10	-	-	-	< 10
Aldrin	µg/kg	10	NONE	< 10	-	-	-	< 10
Azinphos-ethyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Azinphos-methyl	µg/kg	10	NONE	< 10	-	-	-	< 10
BHC-alpha (benzene hexachloride)	µg/kg	10	NONE	< 10	-	-	-	< 10
BHC-beta	µg/kg	10	NONE	< 10	-	-	-	< 10
BHC-delta	µg/kg	10	NONE	< 10	-	-	-	< 10
BHC-gamma (Lindane, gamma HCH)	µg/kg	10	NONE	< 10	-	-	-	< 10
Bifenthrin	µg/kg	10	NONE	< 10	-	-	-	< 10
Carbophenothion	µg/kg	10	NONE	< 10	-	-	-	< 10
Chlordane-cis	µg/kg	10	NONE	< 10	-	-	-	< 10
Chlordane-trans	µg/kg	10	NONE	< 10	-	-	-	< 10
Chlorfenvinphos	µg/kg	10	NONE	< 10	-	-	-	< 10
Chlorothalonil	µg/kg	20	NONE	< 20	-	-	-	< 20
Chlorpyrifos	µg/kg	10	NONE	< 10	-	-	-	< 10
Cyfluthrin (Sum)	µg/kg	10	NONE	< 10	-	-	-	< 10
Cyhalothrin (Lambda)	µg/kg	10	NONE	< 10	-	-	-	< 10
Cypermethrin (Sum)	µg/kg	10	NONE	< 10	-	-	-	< 10
DDD-o,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDD-p,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDE-o,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDE-p,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDT-o,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
DDT-p,p'	µg/kg	10	NONE	< 10	-	-	-	< 10
Deltamethrin	µg/kg	10	NONE	< 10	-	-	-	< 10
Demeton-O	µg/kg	10	NONE	< 10	-	-	-	< 10
Demeton-S	µg/kg	10	NONE	< 10	-	-	-	< 10
Diazinon	µg/kg	10	NONE	< 10	-	-	-	< 10
Dichlorobenzonitrile, 2,6-	µg/kg	10	NONE	< 10	-	-	-	< 10
Dichlorvos	µg/kg	10	NONE	< 10	-	-	-	< 10
Dieldrin	µg/kg	10	NONE	< 10	-	-	-	< 10
Dimethoate	µg/kg	10	NONE	< 10	-	-	-	< 10
Dimethylvinphos	µg/kg	10	NONE	< 10	-	-	-	< 10
Endosulfan I (alpha isomer)	µg/kg	10	NONE	< 10	-	-	-	< 10
Endosulfan II (beta isomer)	µg/kg	10	NONE	< 10	-	-	-	< 10
Endosulfan sulfate	µg/kg	10	NONE	< 10	-	-	-	< 10
Endrin	µg/kg	20	NONE	< 20	-	-	-	< 20
Endrin aldehyde	µg/kg	10	NONE	< 10	-	-	-	< 10
Endrin ketone	µg/kg	10	NONE	< 10	-	-	-	< 10
Ethion	µg/kg	10	NONE	< 10	-	-	-	< 10
Etrimfos	µg/kg	10	NONE	< 10	-	-	-	< 10
Fenitrothion	µg/kg	10	NONE	< 10	-	-	-	< 10
Fenthion	µg/kg	10	NONE	< 10	-	-	-	< 10
Fenvalerate (Sum)	µg/kg	10	NONE	< 10	-	-	-	< 10
Heptachlor	µg/kg	10	NONE	< 10	-	-	-	< 10
Heptachlor exo-epoxide	µg/kg	10	NONE	< 10	-	-	-	< 10
Hexachlorobenzene	µg/kg	10	NONE	< 10	-	-	-	< 10
Hexachlorobutadiene	µg/kg	10	NONE	< 10	-	-	-	< 10
Isodrin	µg/kg	20	NONE	< 20	-	-	-	< 20
Malathion	µg/kg	10	NONE	< 10	-	-	-	< 10
Methacrifos	µg/kg	10	NONE	< 10	-	-	-	< 10
Methoxychlor, p,p'-	µg/kg	20	NONE	< 20	-	-	-	< 20

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Lab Sample Number				1884051	1884052	1884053	1884054	1884055
Sample Reference				WS01	WS01	WS04	WS05	TP02
Sample Number				1	2	2	2	1
Depth (m)				0.20	2.85	0.50	0.50	0.50
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Mevinphos, E+Z	µg/kg	10	NONE	< 10	-	-	-	< 10
Omethoate	µg/kg	20	NONE	< 20	-	-	-	< 20
Parathion	µg/kg	10	NONE	< 10	-	-	-	< 10
Parathion-methyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Pendimethalin	µg/kg	10	NONE	< 10	-	-	-	< 10
Pentachlorobenzene	µg/kg	10	NONE	< 10	-	-	-	< 10
Permethrin, Cis-	µg/kg	10	NONE	< 10	-	-	-	< 10
Permethrin, Trans-	µg/kg	10	NONE	< 10	-	-	-	< 10
Phorate	µg/kg	10	NONE	< 10	-	-	-	< 10
Phosalone	µg/kg	10	NONE	< 10	-	-	-	< 10
Phosphamidon (Sum)	µg/kg	10	NONE	< 10	-	-	-	< 10
Pirimiphos-ethyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Pirimiphos-methyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Propetamphos	µg/kg	10	NONE	< 10	-	-	-	< 10
Propyzamide	µg/kg	10	NONE	< 10	-	-	-	< 10
Tecnazene	µg/kg	10	NONE	< 10	-	-	-	< 10
Tetrachlorobenzene, 1,2,4,5-	µg/kg	10	NONE	< 10	-	-	-	< 10
Trichlorobenzene, 1,2,3-	µg/kg	10	NONE	< 10	-	-	-	< 10
Trichlorobenzene, 1,3,5-	µg/kg	10	NONE	< 10	-	-	-	< 10
Trifluralin	µg/kg	10	NONE	< 10	-	-	-	< 10
Herbicides								
Aldicarb	µg/kg	10	NONE	< 10	-	-	-	< 10
Aldicarb Sulfone	µg/kg	10	NONE	< 10	-	-	-	< 10
Aldicarb Sulfoxide	µg/kg	50	NONE	< 50	-	-	-	< 50
Atrazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Carbaryl	µg/kg	10	NONE	< 10	-	-	-	< 10
Carbofuran	µg/kg	10	NONE	< 10	-	-	-	< 10
Carbofuran, 3-OH	µg/kg	20	NONE	< 20	-	-	-	< 20
Chlortoluron	µg/kg	10	NONE	< 10	-	-	-	< 10
Cyanazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Diflubenzuron	µg/kg	50	NONE	< 50	-	-	-	< 50
Diuron	µg/kg	10	NONE	< 10	-	-	-	< 10
Fluometuron	µg/kg	10	NONE	< 10	-	-	-	< 10
Isoproturon	µg/kg	10	NONE	< 10	-	-	-	< 10
Linuron	µg/kg	20	NONE	< 20	-	-	-	< 20
Methiocarb	µg/kg	10	NONE	< 10	-	-	-	< 10
Methomyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Oxamyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Prometryn	µg/kg	10	NONE	< 10	-	-	-	< 10
Propazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Propoxur	µg/kg	10	NONE	< 10	-	-	-	< 10
Siduron	µg/kg	10	NONE	< 10	-	-	-	< 10
Simazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Tebuthiuron	µg/kg	10	NONE	< 10	-	-	-	< 10
Terbuthylazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Terbutryn	µg/kg	10	NONE	< 10	-	-	-	< 10
Thiadiazuron	µg/kg	10	NONE	< 10	-	-	-	< 10
Trietazine	µg/kg	10	NONE	< 10	-	-	-	< 10
Acid Herbicides								
2,3,6-TBA	µg/kg	50	NONE	< 50	-	-	-	< 50
2,4,5-T	µg/kg	10	NONE	< 10	-	-	-	< 10

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Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884051	1884052	1884053	1884054	1884055
Sample Reference				WS01	WS01	WS04	WS05	TP02
Sample Number				1	2	2	2	1
Depth (m)				0.20	2.85	0.50	0.50	0.50
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
2,4,5-TP (Fenoprop)	µg/kg	10	NONE	< 10	-	-	-	< 10
2,4-D	µg/kg	10	NONE	< 10	-	-	-	< 10
2,4-DB	µg/kg	10	NONE	< 10	-	-	-	< 10
4-CPA	µg/kg	20	NONE	< 20	-	-	-	< 20
Bromacil	µg/kg	10	NONE	< 10	-	-	-	< 10
Bromoxynil	µg/kg	10	NONE	< 10	-	-	-	< 10
Clopyralid	µg/kg	100	NONE	< 100	-	-	-	< 100
Dicamba	µg/kg	20	NONE	< 20	-	-	-	< 20
Diclofop	µg/kg	10	NONE	< 10	-	-	-	< 10
Dichlorprop	µg/kg	10	NONE	< 10	-	-	-	< 10
Dinoseb	µg/kg	10	NONE	< 10	-	-	-	< 10
Flamprop	µg/kg	50	NONE	< 50	-	-	-	< 50
Flamprop-Isopropyl	µg/kg	10	NONE	< 10	-	-	-	< 10
Ioxynil	µg/kg	10	NONE	< 10	-	-	-	< 10
MCPA	µg/kg	10	NONE	< 10	-	-	-	< 10
MCPB	µg/kg	20	NONE	< 20	-	-	-	< 20
MCPP (Mecoprop)	µg/kg	10	NONE	< 10	-	-	-	< 10
Picloram	µg/kg	50	NONE	< 50	-	-	-	< 50

U/S = Unsuitable Sample I/S = Insufficient Sample

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Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	33	4.3	4.6	24
Total mass of sample received	kg	0.001	NONE	1.2	1.5	1.5	0.50
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.7	6.6	6.3	5.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Complex Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.28	0.0075	0.0064	0.011
Total Sulphur	mg/kg	50	MCERTS	2500	< 50	< 50	260
Organic Matter	%	0.1	MCERTS	3.7	< 0.1	< 0.1	2.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 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
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80

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Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.9	3.1	3.2	8.4
Barium (aqua regia extractable)	mg/kg	1	MCERTS	52	12	10	61
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.64	0.20	0.16	0.59
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	< 0.2	< 0.2	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	3.7	4.5	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	4.7	4.2	40
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	4.6	6.0	61
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	5.0	6.6	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	16	4.7	6.1	19
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	51	10	15	66
Monoaromatics & Oxygenates							
Benzene	µg/kg	1	MCERTS	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-
Petroleum Hydrocarbons							
TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH2 (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-

Analytical Report Number: 21-77432
Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Pesticides							
Alachlor	µg/kg	10	NONE	-	-	-	< 10
Aldrin	µg/kg	10	NONE	-	-	-	< 10
Azinphos-ethyl	µg/kg	10	NONE	-	-	-	< 10
Azinphos-methyl	µg/kg	10	NONE	-	-	-	< 10
BHC-alpha (benzene hexachloride)	µg/kg	10	NONE	-	-	-	< 10
BHC-beta	µg/kg	10	NONE	-	-	-	< 10
BHC-delta	µg/kg	10	NONE	-	-	-	< 10
BHC-gamma (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	-	< 10
Bifenthrin	µg/kg	10	NONE	-	-	-	< 10
Carbophenothion	µg/kg	10	NONE	-	-	-	< 10
Chlordane-cis	µg/kg	10	NONE	-	-	-	< 10
Chlordane-trans	µg/kg	10	NONE	-	-	-	< 10
Chlorfenvinphos	µg/kg	10	NONE	-	-	-	< 10
Chlorothalonil	µg/kg	20	NONE	-	-	-	< 20
Chlorpyrifos	µg/kg	10	NONE	-	-	-	< 10
Cyfluthrin (Sum)	µg/kg	10	NONE	-	-	-	< 10
Cyhalothrin (Lambda)	µg/kg	10	NONE	-	-	-	< 10
Cypermethrin (Sum)	µg/kg	10	NONE	-	-	-	< 10
DDD-o,p'	µg/kg	10	NONE	-	-	-	< 10
DDD-p,p'	µg/kg	10	NONE	-	-	-	< 10
DDE-o,p'	µg/kg	10	NONE	-	-	-	< 10
DDE-p,p'	µg/kg	10	NONE	-	-	-	< 10
DDT-o,p'	µg/kg	10	NONE	-	-	-	< 10
DDT-p,p'	µg/kg	10	NONE	-	-	-	< 10
Deltamethrin	µg/kg	10	NONE	-	-	-	< 10
Demeton-O	µg/kg	10	NONE	-	-	-	< 10
Demeton-S	µg/kg	10	NONE	-	-	-	< 10
Diazinon	µg/kg	10	NONE	-	-	-	< 10
Dichlorobenzonitrile, 2,6-	µg/kg	10	NONE	-	-	-	< 10
Dichlorvos	µg/kg	10	NONE	-	-	-	< 10
Dieldrin	µg/kg	10	NONE	-	-	-	< 10
Dimethoate	µg/kg	10	NONE	-	-	-	< 10
Dimethylvinphos	µg/kg	10	NONE	-	-	-	< 10
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	-	< 10
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	-	< 10
Endosulfan sulfate	µg/kg	10	NONE	-	-	-	< 10
Endrin	µg/kg	20	NONE	-	-	-	< 20
Endrin aldehyde	µg/kg	10	NONE	-	-	-	< 10
Endrin ketone	µg/kg	10	NONE	-	-	-	< 10
Ethion	µg/kg	10	NONE	-	-	-	< 10
Etrimfos	µg/kg	10	NONE	-	-	-	< 10
Fenitrothion	µg/kg	10	NONE	-	-	-	< 10
Fenthion	µg/kg	10	NONE	-	-	-	< 10
Fenvalerate (Sum)	µg/kg	10	NONE	-	-	-	< 10
Heptachlor	µg/kg	10	NONE	-	-	-	< 10
Heptachlor exo-epoxide	µg/kg	10	NONE	-	-	-	< 10
Hexachlorobenzene	µg/kg	10	NONE	-	-	-	< 10
Hexachlorobutadiene	µg/kg	10	NONE	-	-	-	< 10
Isodrin	µg/kg	20	NONE	-	-	-	< 20
Malathion	µg/kg	10	NONE	-	-	-	< 10
Methacrifos	µg/kg	10	NONE	-	-	-	< 10
Methoxychlor, p,p'-	µg/kg	20	NONE	-	-	-	< 20

Analytical Report Number: 21-77432
Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Mevinphos, E+Z	µg/kg	10	NONE	-	-	-	< 10
Omethoate	µg/kg	20	NONE	-	-	-	< 20
Parathion	µg/kg	10	NONE	-	-	-	< 10
Parathion-methyl	µg/kg	10	NONE	-	-	-	< 10
Pendimethalin	µg/kg	10	NONE	-	-	-	< 10
Pentachlorobenzene	µg/kg	10	NONE	-	-	-	< 10
Permethrin, Cis-	µg/kg	10	NONE	-	-	-	< 10
Permethrin, Trans-	µg/kg	10	NONE	-	-	-	< 10
Phorate	µg/kg	10	NONE	-	-	-	< 10
Phosalone	µg/kg	10	NONE	-	-	-	< 10
Phosphamidon (Sum)	µg/kg	10	NONE	-	-	-	< 10
Pirimiphos-ethyl	µg/kg	10	NONE	-	-	-	< 10
Pirimiphos-methyl	µg/kg	10	NONE	-	-	-	< 10
Propetamphos	µg/kg	10	NONE	-	-	-	< 10
Propyzamide	µg/kg	10	NONE	-	-	-	< 10
Tecnazene	µg/kg	10	NONE	-	-	-	< 10
Tetrachlorobenzene, 1,2,4,5-	µg/kg	10	NONE	-	-	-	< 10
Trichlorobenzene, 1,2,3-	µg/kg	10	NONE	-	-	-	< 10
Trichlorobenzene, 1,3,5-	µg/kg	10	NONE	-	-	-	< 10
Trifluralin	µg/kg	10	NONE	-	-	-	< 10
Herbicides							
Aldicarb	µg/kg	10	NONE	-	-	-	< 10
Aldicarb Sulfone	µg/kg	10	NONE	-	-	-	< 10
Aldicarb Sulfoxide	µg/kg	50	NONE	-	-	-	< 50
Atrazine	µg/kg	10	NONE	-	-	-	< 10
Carbaryl	µg/kg	10	NONE	-	-	-	< 10
Carbofuran	µg/kg	10	NONE	-	-	-	< 10
Carbofuran, 3-OH	µg/kg	20	NONE	-	-	-	< 20
Chlortoluron	µg/kg	10	NONE	-	-	-	< 10
Cyanazine	µg/kg	10	NONE	-	-	-	< 10
Diflubenzuron	µg/kg	50	NONE	-	-	-	< 50
Diuron	µg/kg	10	NONE	-	-	-	< 10
Fluometuron	µg/kg	10	NONE	-	-	-	< 10
Isoproturon	µg/kg	10	NONE	-	-	-	< 10
Linuron	µg/kg	20	NONE	-	-	-	< 20
Methiocarb	µg/kg	10	NONE	-	-	-	< 10
Methomyl	µg/kg	10	NONE	-	-	-	< 10
Oxamyl	µg/kg	10	NONE	-	-	-	< 10
Prometryn	µg/kg	10	NONE	-	-	-	< 10
Propazine	µg/kg	10	NONE	-	-	-	< 10
Propoxur	µg/kg	10	NONE	-	-	-	< 10
Siduron	µg/kg	10	NONE	-	-	-	< 10
Simazine	µg/kg	10	NONE	-	-	-	< 10
Tebuthiuron	µg/kg	10	NONE	-	-	-	< 10
Terbuthylazine	µg/kg	10	NONE	-	-	-	< 10
Terbutryn	µg/kg	10	NONE	-	-	-	< 10
Thiadiazuron	µg/kg	10	NONE	-	-	-	< 10
Trietazine	µg/kg	10	NONE	-	-	-	< 10
Acid Herbicides							
2,3,6-TBA	µg/kg	50	NONE	-	-	-	< 50
2,4,5-T	µg/kg	10	NONE	-	-	-	< 10

Analytical Report Number: 21-77432
Project / Site name: Ellesmere
Your Order No: PO-1117

Lab Sample Number				1884056	1884057	1884058	1884059
Sample Reference				TP02	TP04	TP06	TP07
Sample Number				2	2	2	1
Depth (m)				1.40	1.00	1.40	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
2,4,5-TP (Fenoprop)	µg/kg	10	NONE	-	-	-	< 10
2,4-D	µg/kg	10	NONE	-	-	-	< 10
2,4-DB	µg/kg	10	NONE	-	-	-	< 10
4-CPA	µg/kg	20	NONE	-	-	-	< 20
Bromacil	µg/kg	10	NONE	-	-	-	< 10
Bromoxynil	µg/kg	10	NONE	-	-	-	< 10
Clopyralid	µg/kg	100	NONE	-	-	-	< 100
Dicamba	µg/kg	20	NONE	-	-	-	< 20
Diclofop	µg/kg	10	NONE	-	-	-	< 10
Dichlorprop	µg/kg	10	NONE	-	-	-	< 10
Dinoseb	µg/kg	10	NONE	-	-	-	< 10
Flamprop	µg/kg	50	NONE	-	-	-	< 50
Flamprop-Isopropyl	µg/kg	10	NONE	-	-	-	< 10
Ioxynil	µg/kg	10	NONE	-	-	-	< 10
MCPA	µg/kg	10	NONE	-	-	-	< 10
MCPB	µg/kg	20	NONE	-	-	-	< 20
MCPP (Mecoprop)	µg/kg	10	NONE	-	-	-	< 10
Picloram	µg/kg	50	NONE	-	-	-	< 50

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-77432
Project / Site name: Ellesmere

Your Order No: PO-1117

Lab Sample Number				1884061	1884062	1884063	1884064
Sample Reference				WS01	WS04	WS05	TP07
Sample Number				1	2	2	1
Depth (m)				0.20	0.50	0.50	0.10
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH	pH Units	N/A	ISO 17025	6.5	6.7	7.5	6.5
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
Sulphate as SO4	mg/l	0.1	ISO 17025	2.3	1.6	57.8	5.8
Heavy Metals / Metalloids							
Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0	1.0	27	1.2
Barium (dissolved)	µg/l	0.05	ISO 17025	9.4	12	47	16
Beryllium (dissolved)	µg/l	0.2	ISO 17025	0.7	0.2	0.2	0.6
Boron (dissolved)	µg/l	10	ISO 17025	19	13	210	22
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	< 0.08
Chromium (dissolved)	µg/l	0.4	ISO 17025	1.7	2.8	11	1.6
Copper (dissolved)	µg/l	0.7	ISO 17025	15	12	75	34
Lead (dissolved)	µg/l	1	ISO 17025	2.3	3.9	7.5	6.0
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	4.0	5.1	13	6.2
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	< 4.0
Vanadium (dissolved)	µg/l	1.7	ISO 17025	< 1.7	< 1.7	23	< 1.7
Zinc (dissolved)	µg/l	0.4	ISO 17025	21	9.5	27	24

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-77432
Project / Site name: Ellesmere

Your Order No: PO-1117

Lab Sample Number				1884060
Sample Reference				WS05A
Sample Number				1
Depth (m)				0.00
Date Sampled				20/05/2021
Time Taken				None Supplied
Analytical Parameter (Bulk Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Asbestos Identification	Type	N/A	ISO 17025	Chrysotile-Hard/Cement Type Material

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-77432
Project / Site name: Ellesmere

* 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 *
1884051	WS01	1	0.2	Brown clay and loam with gravel and vegetation.
1884052	WS01	2	2.85	Brown sand.
1884053	WS04	2	0.5	Brown clay and sand with gravel and vegetation.
1884054	WS05	2	0.5	Brown clay and loam with gravel and vegetation.
1884055	TP02	1	0.5	Brown clay and loam with gravel and vegetation.
1884056	TP02	2	1.4	Brown clay and loam with gravel and vegetation.
1884057	TP04	2	1	Brown sand with gravel and vegetation.
1884058	TP06	2	1.4	Brown sand with gravel and vegetation.
1884059	TP07	1	0.1	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 21-77432
Project / Site name: Ellesmere

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	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.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in Bulks	Asbestos Identification in bulk material with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	W	ISO 17025
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Boron in leachate	Determination of boron in leachate. Sample acidified and followed by ICP-OES.	In-house method based on MEWAM	L039-PL	W	ISO 17025
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	L038-PL	D	MCERTS
Complex Cyanide in soil	Determination of complex cyanide by calculation.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Hexavalent chromium in soil	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-PL	W	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	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 (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate	Determination of pH in leachate by electrometric measurement.	In house method.	L005-PL	W	ISO 17025

Analytical Report Number : 21-77432
Project / Site name: Ellesmere

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
TPH2 (Soil)	Determination of hydrocarbons C6-C10 by headspace GC-MS.	In-house method based on USEPA8260	L088-PL	W	MCERTS
Total cyanide in leachate	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
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 (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Pesticides by GC-MS/MS	Detemination of Pesticides in soil by GC MS/MS	In-house method	L055B-PL	W	NONE
Herbicides by LC-MS	Detemination of Herbicides in soil by LC MS	In-house method	L056B-PL	W	NONE
Acid Herbicides by LC-MS	Detemination of Acid Herbicides by LC MS	In-house method	L057B-PL	W	NONE
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' 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.

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Analytical Report Number : 21-79772

Project / Site name:	Ellesmere	**Samples received on:**	28/05/2021
Your job number:	N10010	**Samples instructed on/ Analysis started on:**	28/05/2021
Your order number:	1120	**Analysis completed by:**	23/06/2021
Report Issue Number:	1	**Report issued on:**	23/06/2021
Samples Analysed:	6 soil samples		

Signed: A Czerwińska

Agnieszka Czerwińska
#REF!
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

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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.

Analytical Report Number: 21-79772
Project / Site name: Ellesmere
Your Order No: 1120

Lab Sample Number				1895782	1895783	1895784	1895785	1895786
Sample Reference				WS01	WS03	TP02	TP03	TP05
Sample Number				1	2	2	1	1
Depth (m)				1.00	2.00	1.50	1.00	0.50
Date Sampled				20/05/2021	20/05/2021	20/05/2021	20/05/2021	20/05/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.4	8.3	17	15	8.6
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	1.0	1.0
Geotechnical								
Geotechnical Testing - Various		N/A	NONE	See attached	See attached	See attached	See attached	See attached
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	6.7	7.4	6.6	7.6	7.4
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.056	0.44	0.018	0.0065
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	14.2	55.5	442	17.7	6.5
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	2.7	2.1	1.6	14	1.1
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Heavy Metals / Metalloids								
Magnesium (water soluble)	mg/kg	5	NONE	14	11	25	13	14
Magnesium (leachate equivalent)	mg/l	2.5	NONE	7.2	5.6	12	6.6	7.0

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-79772
Project / Site name: Ellesmere
Your Order No: 1120

Lab Sample Number				1895787
Sample Reference				TP07
Sample Number				2
Depth (m)				2.00
Date Sampled				20/05/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	6.2
Total mass of sample received	kg	0.001	NONE	1.0

Geotechnical

Geotechnical Testing - Various		N/A	NONE	See attached

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.013
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	13.4
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	2.0
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	14
Magnesium (leachate equivalent)	mg/l	2.5	NONE	7.0

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-79772
Project / Site name: Ellesmere

* 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 *
1895782	WS01	1	1	Brown sandy clay with gravel.
1895783	WS03	2	2	Brown sandy clay with gravel and vegetation.
1895784	TP02	2	1.5	Grey clay and sand with gravel.
1895785	TP03	1	1	Brown sandy clay with gravel and vegetation.
1895786	TP05	1	0.5	Brown sandy gravel with vegetation.
1895787	TP07	2	2	Brown clay and sand with gravel.

Analytical Report Number : 21-79772
Project / Site name: Ellesmere

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Geotechnical Testing in Soil	See attached geotechnical report	See attached geotechnical report		W	NONE
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
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.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' 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.

EXPLORATION
& TESTING ASSOCIATES

APPENDIX 4: GEOTECHNICAL TESTING

EXPLORATION
& TESTING ASSOCIATES

Unit 8B, Bowburn South Industrial Estate, Durham, DH6 5AD

Laboratory Test Report

Client:	Exploration and Testing Associates Limited
Job Number:	N10010
Project:	Ellesmere
Report Number:	L21-232
Date Received:	03.06.2021
Client Contact:	Liv Gatehouse
Address:	'number three' Siskin Drive, Middlemarch Business Park, Coventry, CV3 4FJ

Testing Required:	Water Content – BS EN ISO 17892-1:2014 Determination of Liquid and Plastic Limits and Plasticity Index – BS EN ISO 17892-12:2018 Particle Size Distribution – BS EN ISO 17892-4:2016
Date Testing Started:	21.06.2021
Date Testing Finished:	28.06.2021

Date Report Issued:	29.06.2021
Reviewed By:	 N. Hodson – Materials Director
Authorised By:	 N. O'Brien – Laboratory Manager
Remarks:	(*) Denotes testing is outside of UKAS Accreditation Scope.

Samples will be stored for one month after the report has been issued before being disposed of.

The published results are appertaining only to the specimens tested.

UKAS TESTING
20632

EXPLORATION

Determination of Water Content, Liquid Limit, Plastic Limit and Derivation of Plasticity Index

Project No.	Project Name
N10010.1	Ellesmere

Hole No.	Sample			Soil Description	Water Content %	Passing 425µm %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
	Type	Ref	Depth							
TP03	D	1	1.00	Brown, Sandy, Gravelly CLAY	20	84	31 -1pt	19	12	Sample tested in natural state - material passing 425um estimated by hand picking
TP08	D	1	1.10	Brown, Slightly Sandy, Slightly Gravelly CLAY with Organics	12	98	19	12	7	Sample tested in natural state - material passing 425um estimated by hand picking
TP04	D	1	1.50	Red/Brown, Medium SAND	4.1					
TP02	D	2	1.50	Black, Sandy, Slightly Silty, Slightly Organic CLAY	19	100	42 -1pt	27	15	Sample tested in natural state - material passing 425um estimated by hand picking
TP02	D	3	2.30	Grey/Black, Slightly Sandy, Silty CLAY with Occasional Fine Gravel	35	100	77	56	21	Sample tested in natural state - material passing 425um estimated by hand picking
WS02	D	3	3.00	Brown, Sandy, GRAVEL with Clay Pockets	8.6					
TP05	D	3	3.00	Red SAND with Occasional GRAVEL	5.7					
TP02	D	4	3.00	Red, Wet, Medium SAND with Occasional Fine GRAVEL	17					

* UKAS Accredited Test

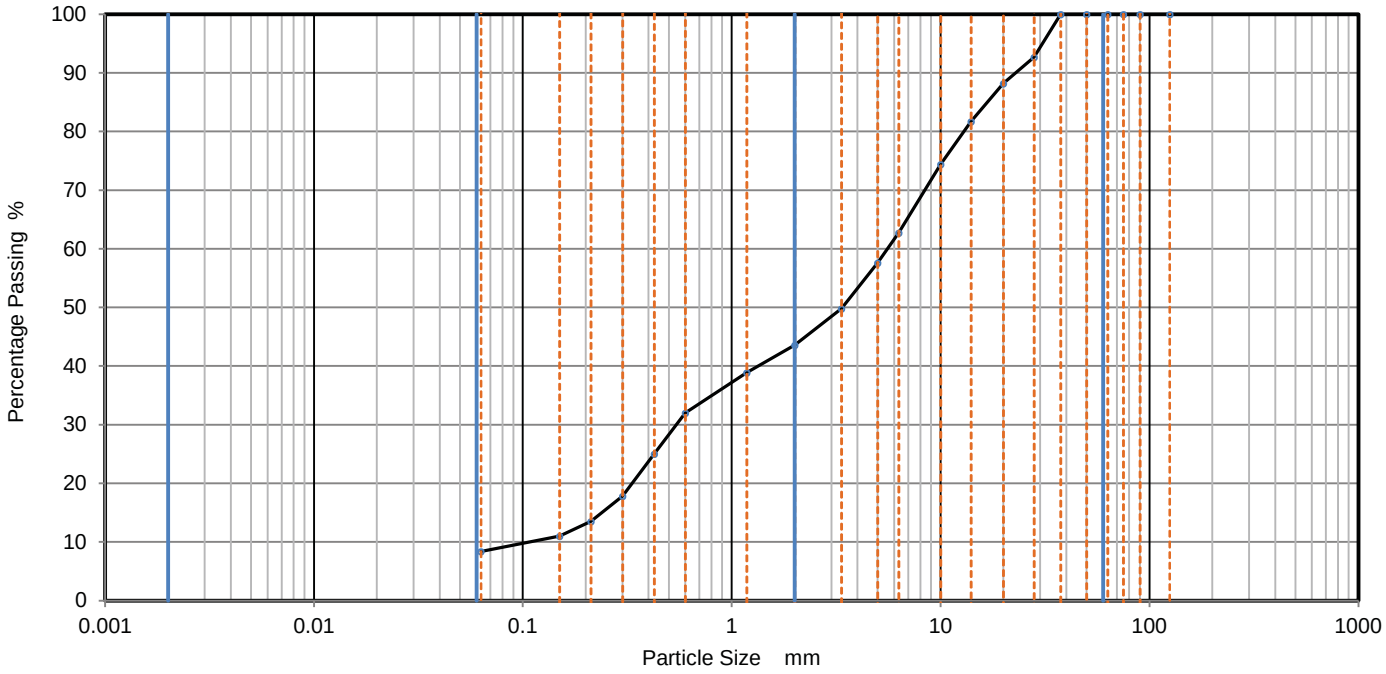
*Water Content carried out in accordance with BS EN ISO 17892: Part 1: 2014: Clause 5.1 & 5.2

*Liquid Limit, Plastic Limit & Plasticity Index all performed in accordance with BS EN ISO 17892: Part 12: 2018 - Fall cone four point method - Cone 80g/30°

Date	Approved By	
29/06/2021 16:17	N O'Brien	UKAS Accredited Laboratory No. 20632

PARTICLE SIZE DISTRIBUTION

				Job Ref	**N10010.1**
				Borehole/Pit No.	TP01
Site Name	Ellesmere			Sample No.	2
Soil Description	Brown, Gravelly SAND with Clay Pockets			Depth, m	2.60
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS EN ISO 17892-4:2016 - Wet & Dry Sieving			KeyLAB ID	EAT_202106293



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	93		
20	88		
14	82		
10	74		
6.3	63		
5	58		
3.35	50		
2	44		
1.18	39		
0.6	32		
0.425	25		
0.3	18		
0.212	14		
0.15	11		
0.063	8.4		

Sample Proportions	% dry mass
Very coarse	0
Gravel	56
Sand	35
Fines <0.063mm	8

Grading Analysis		
D_{100}	mm	
D_{60}	mm	5.57
D_{30}	mm	0.545
D_{10}	mm	0.118
Uniformity Coefficient		47
Curvature Coefficient		0.45

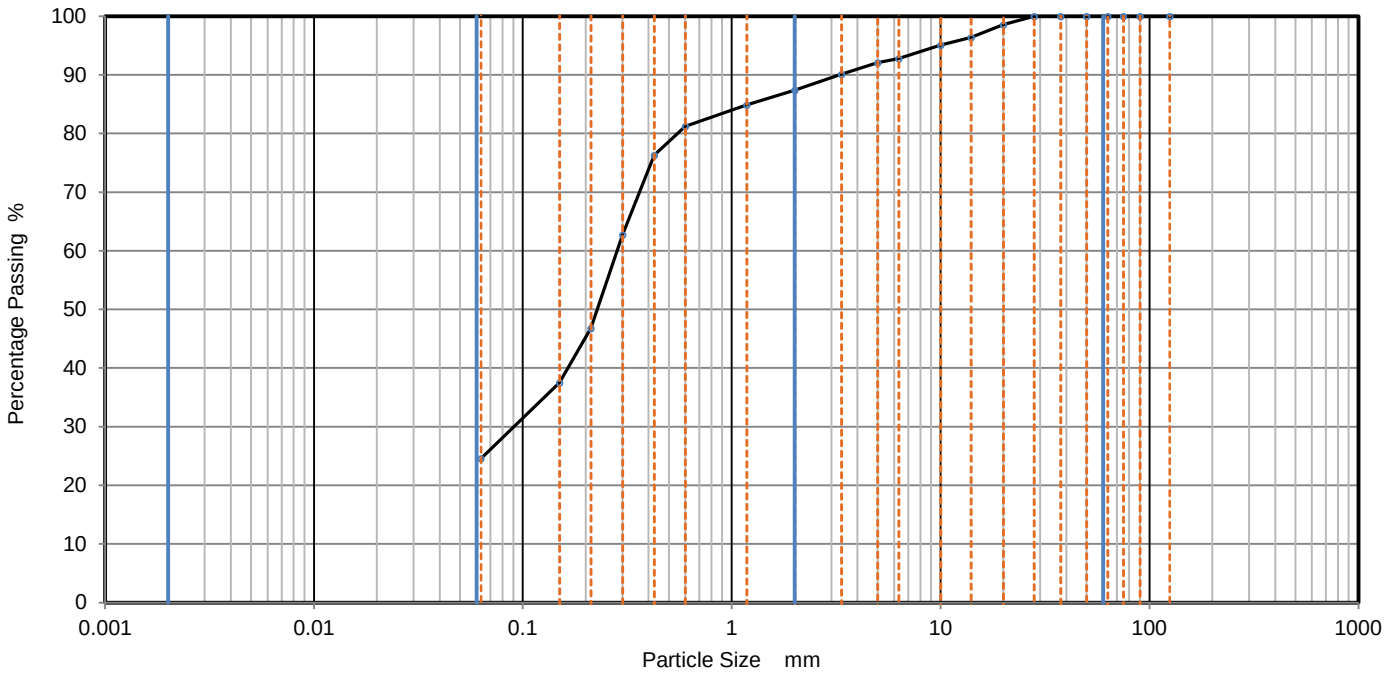
Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By		UKAS Accreditation No: 20632
29/06/2021 16:22	N O'Brien		

PARTICLE SIZE DISTRIBUTION

				Job Ref	**N10010.1**
				Borehole/Pit No.	TP02
Site Name	Ellesmere			Sample No.	1
Soil Description	Brown, Gravelly SANDY with Clay Pockets			Depth, m	2.70
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS EN ISO 17892-4:2016 - Wet & Dry Sieving			KeyLAB ID	EAT_202106296



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	99		
14	96		
10	95		
6.3	93		
5	92		
3.35	90		
2	87		
1.18	85		
0.6	81		
0.425	76		
0.3	63		
0.212	47		
0.15	38		
0.063	24.6		

Sample Proportions	% dry mass
Very coarse	0
Gravel	13
Sand	63
Fines <0.063mm	25

Grading Analysis		
D_{100}	mm	
D_{60}	mm	0.283
D_{30}	mm	0.0942
D_{10}	mm	
Uniformity Coefficient		
Curvature Coefficient		

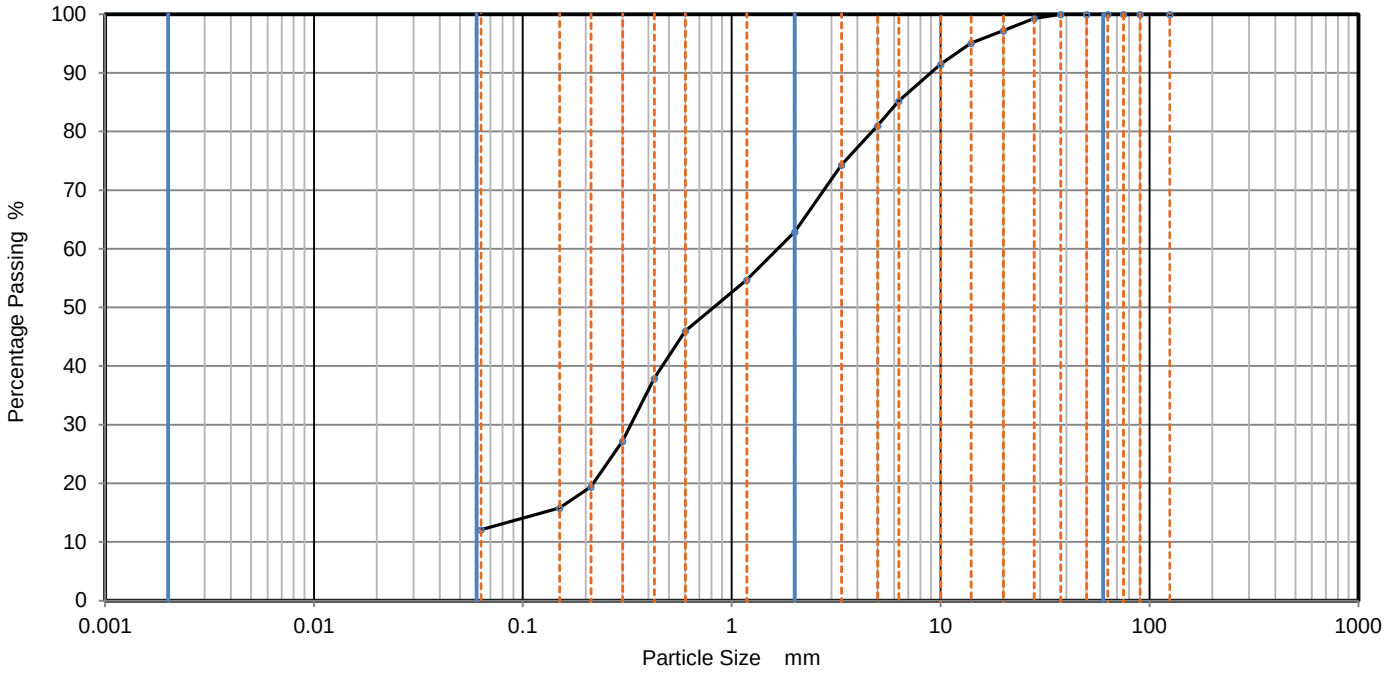
Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By		UKAS Accreditation No: 20632
29/06/2021 16:22	N O'Brien		

PARTICLE SIZE DISTRIBUTION

				Job Ref	**N10010.1**
				Borehole/Pit No.	TP03
Site Name	Ellesmere			Sample No.	3
Soil Description	Brown, Slightly Clayey, Gravelly SAND			Depth, m	2.80
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS EN ISO 17892-4:2016 - Wet & Dry Sieving			KeyLAB ID	EAT_202106299



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	99		
20	97		
14	95		
10	92		
6.3	85		
5	81		
3.35	74		
2	63		
1.18	55		
0.6	46		
0.425	38		
0.3	27		
0.212	19		
0.15	16		
0.063	12.1		

Sample Proportions	% dry mass
Very coarse	0
Gravel	37
Sand	51
Fines <0.063mm	12

Grading Analysis		
D_{100}	mm	
D_{60}	mm	1.66
D_{30}	mm	0.329
D_{10}	mm	
Uniformity Coefficient		
Curvature Coefficient		

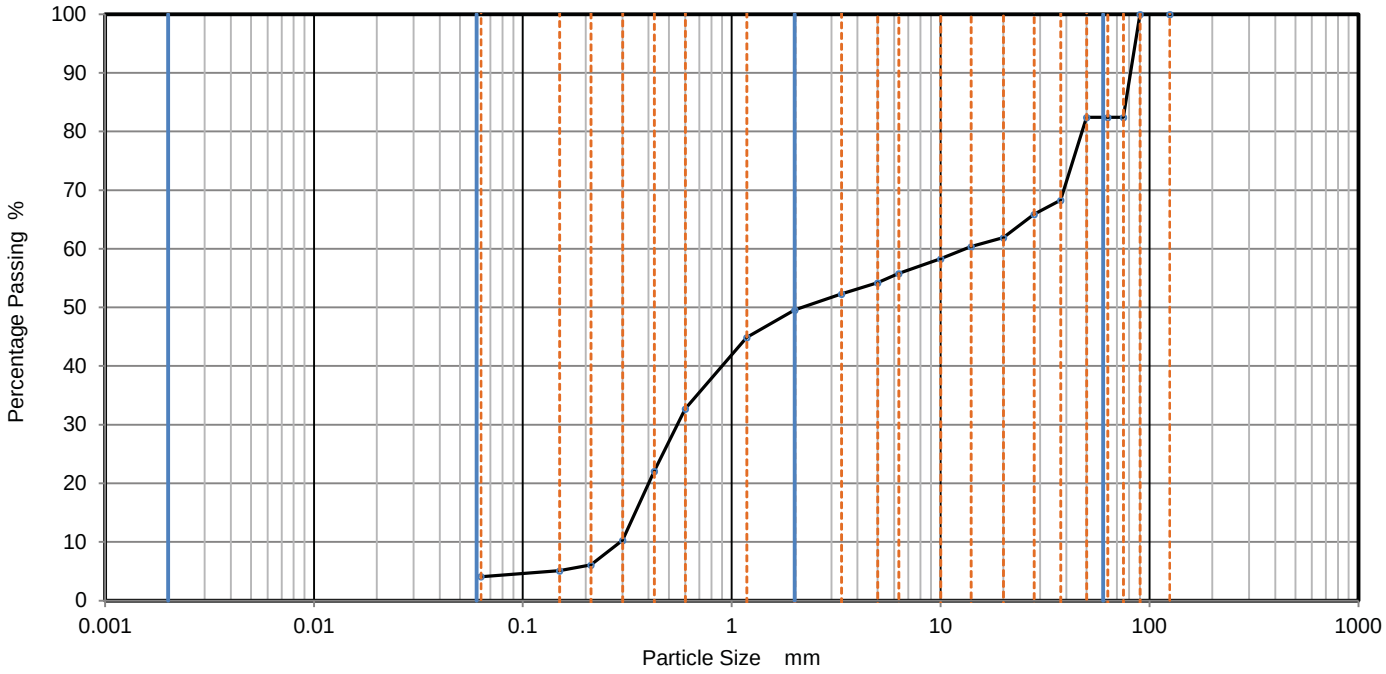
Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By		UKAS Accreditation No: 20632
29/06/2021 16:23	N O'Brien		

PARTICLE SIZE DISTRIBUTION

				Job Ref	**N10010.1**
				Borehole/Pit No.	TP05
Site Name	Ellesmere			Sample No.	1
Soil Description	Brown/Red, Gravelly SAND			Depth, m	1.00
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS EN ISO 17892-4:2016 - Wet & Dry Sieving			KeyLAB ID	EAT_2021062911



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	82		
63	82		
50	82		
37.5	68		
28	66		
20	62		
14	60		
10	58		
6.3	56		
5	54		
3.35	52		
2	50		
1.18	45		
0.6	33		
0.425	22		
0.3	10		
0.212	6		
0.15	5		
0.063	4.1		

Sample Proportions	% dry mass
Very coarse	18
Gravel	33
Sand	46
Fines <0.063mm	4

Grading Analysis		
D_{100}	mm	
D_{60}	mm	13.1
D_{30}	mm	0.549
D_{10}	mm	0.293
Uniformity Coefficient		45
Curvature Coefficient		0.078

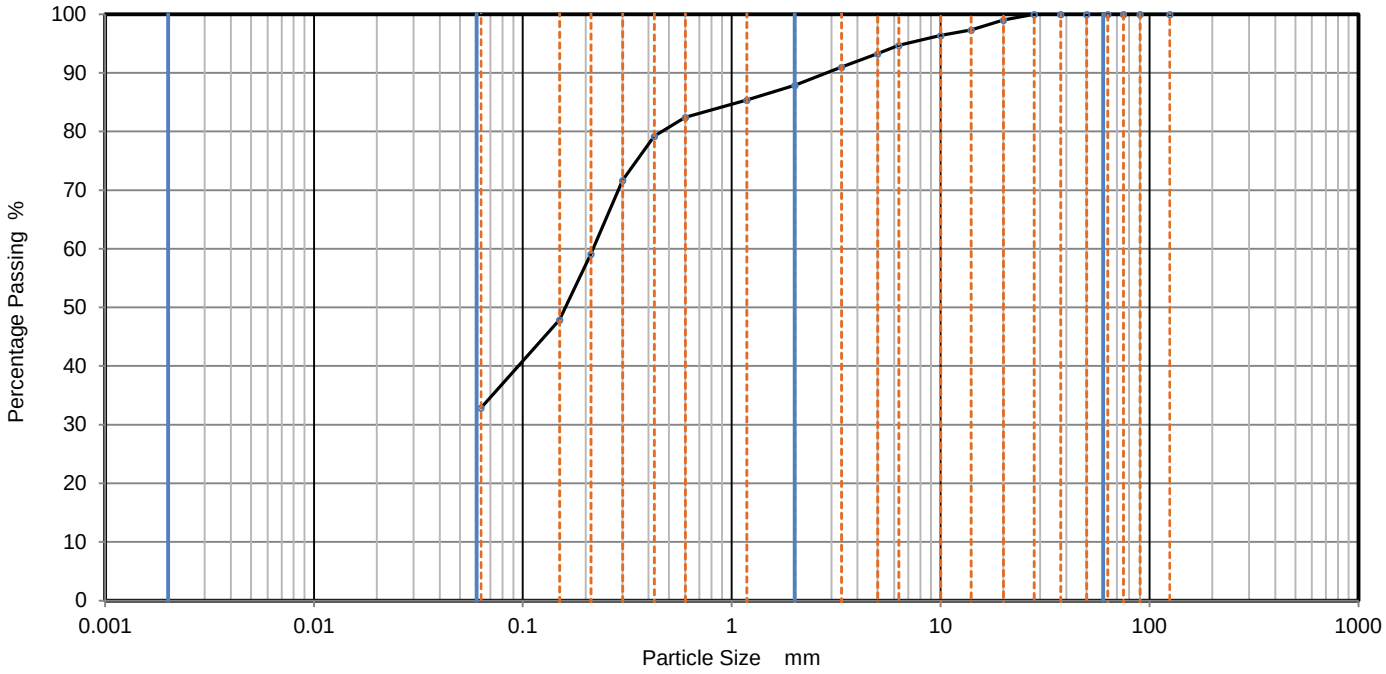
Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By
29/06/2021 16:19	N O'Brien

PARTICLE SIZE DISTRIBUTION

				Job Ref	**N10010.1**
				Borehole/Pit No.	TP07
Site Name	Ellesmere			Sample No.	1
Soil Description	Brown, Slightly Gravelly SAND			Depth, m	1.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS EN ISO 17892-4:2016 - Wet & Dry Sieving			KeyLAB ID	EAT_2021062913



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	99		
14	97		
10	96		
6.3	95		
5	93		
3.35	91		
2	88		
1.18	85		
0.6	82		
0.425	79		
0.3	72		
0.212	59		
0.15	48		
0.063	32.9		

Sample Proportions	% dry mass
Very coarse	0
Gravel	12
Sand	55
Fines <0.063mm	33

Grading Analysis		
D_{100}	mm	
D_{60}	mm	0.218
D_{30}	mm	
D_{10}	mm	
Uniformity Coefficient		
Curvature Coefficient		

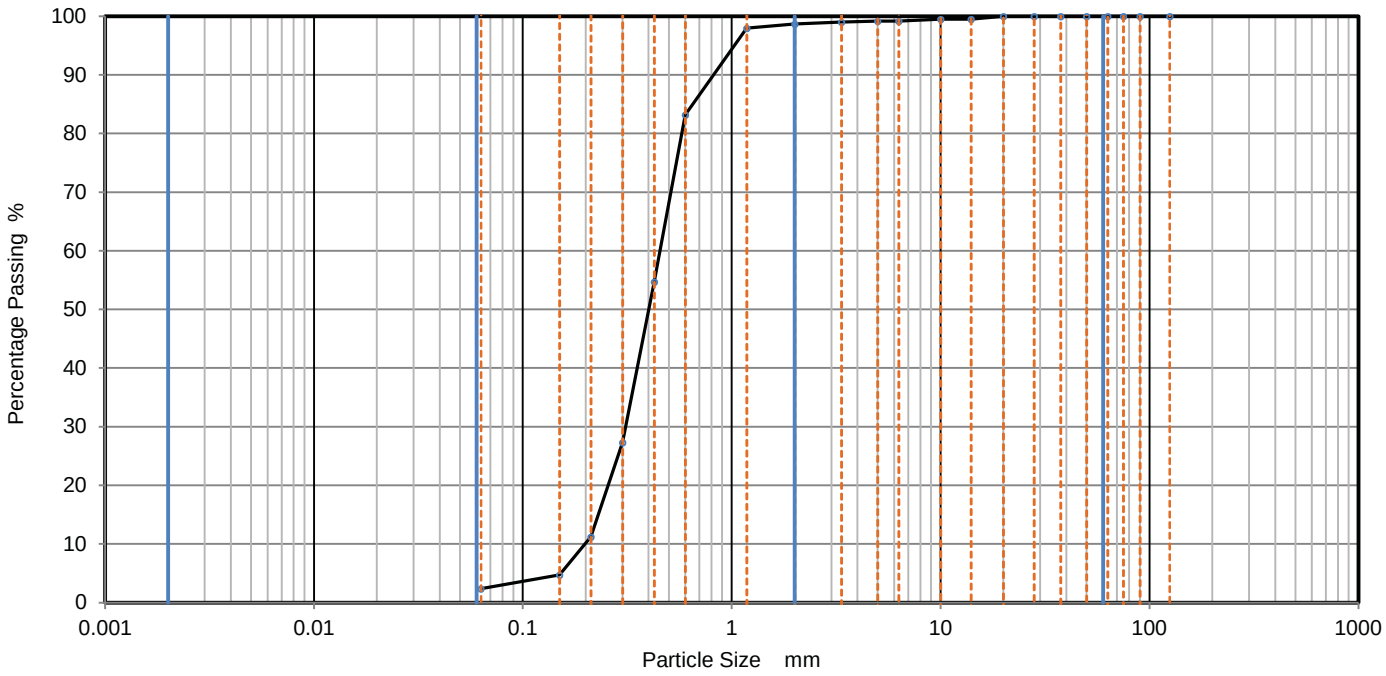
Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By		
29/06/2021 16:20	N O'Brien		

PARTICLE SIZE DISTRIBUTION

				Job Ref	**N10010.1**
				Borehole/Pit No.	TP08
Site Name	Ellesmere			Sample No.	2
Soil Description	Brown SAND			Depth, m	1.60
Specimen Reference		Specimen Depth	m	Sample Type	B
Test Method	BS EN ISO 17892-4:2016 - Wet & Dry Sieving			KeyLAB ID	EAT_2021062915



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	99		
3.35	99		
2	99		
1.18	98		
0.6	83		
0.425	55		
0.3	27		
0.212	11		
0.15	5		
0.063	2.4		

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	96
Fines <0.063mm	2

Grading Analysis		
D_{100}	mm	
D_{60}	mm	0.453
D_{30}	mm	0.311
D_{10}	mm	0.199
Uniformity Coefficient		2.3
Curvature Coefficient		1.1

Remarks

Preparation and testing in accordance with BS EN ISO 17892-4:2016 unless noted below

Date	Approved By		UKAS Accreditation No: 20632
29/06/2021 16:21	N O'Brien		

EXPLORATION
& TESTING ASSOCIATES

APPENDIX 5: MONITORING

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Elesmere
Contract No :	N10010
Date :	25/05/2021

Background Readings:	O_2% v/v :	21.1	CO_2% v/v :	0.1	CH_4% v/v :	0.0	Weather Conditions :	Overcast 9 degrees	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Increasing	Ground Conditions :	Damp	GA5000	OG

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
WS01	08:40	1005	-0.03	17.5	17.5	2.6	2.6	0.0	0.0	0	0	0.3	0.3	0.0	-	1.57	-	2.58
WS02	09:10	1005	-0.10	20.1	20.1	0.1	0.1	0.0	0.0	0	0	0.0	0.0	0.0	-	2.10	-	2.58
WS03	08:30	1005	-0.17	21	21	0.3	0.3	0.0	0.0	0	0	0.0	0.0	0.0	-	3.27	-	3.57
WS04	09:00	1005	-0.05	19.3	19.3	1.7	1.7	0.0	0.0	0	0	0.3	0.2	1.4	-	1.59	-	2.30
WS05	08:50	1005	-0.14	13.1	13.1	4.4	4.4	0.0	0.0	0	0	0.3	0.3	5.2	-	1.27	-	1.80

Remarks :

NR -Not recorded

EXPLORATION & TESTING ASSOCIATES

GAS AND GROUNDWATER MONITORING RESULTS

Contract Name :	Elesmere
Contract No :	N10010
Date :	02/06/2021

Background Readings:	O_2% v/v :	21.1	CO_2% v/v :	0.1	CH_4% v/v :	0.0	Weather Conditions :	Suny and dry, 18 degrees	Equipment Used:	Technician:
	H_2S ppm :	0	CO ppm :	0	Pressure Trend :	Increasing	Ground Conditions :	Dry	GA5000	OG

Location	Time	Atmospheric Pressure (mb)	Differential Pressure (mb)	O_2(% v/v)		CO_2 (% v/v)		CH_4 (% v/v)		H_2S (ppm)	CO (ppm)	Gas Flow Rate (l/hr)		VOC (ppm)	Depth to LNAPL	Water Depth	Depth to DNAPL	Total Depth
				Low	Steady	High	Steady	High	Steady	Peak	Peak	Peak	Steady	Peak	(mbgl)	(mbgl)	(mbgl)	(mbgl)
WS01	-	1005	0.00	17.3	17.5	3.1	3.1	0.0	0.0	0	1	0.0	0.0	-	-	1.64	-	2.58
WS02	-	1005	0.10	18.2	18.2	2.1	2.1	0.0	0.0	0	1	0.0	0.0	-	-	2.10	-	2.50
WS03	-	1005	0.00	18.6	18.6	2.8	2.8	0.0	0.0	0	0	0.2	0.2	-	-	3.29	-	3.42
WS04	-	1005	0.00	17.9	17.9	3.0	3.0	0.0	0.0	1	0	-0.3	0.0	-	-	1.73	-	2.30
WS05	-	1005	0.07	9.8	9.8	5.5	5.5	0.0	0.0	0	0	-0.1	0.0	-	-	1.49	-	1.76

Remarks :

NR -Not recorded

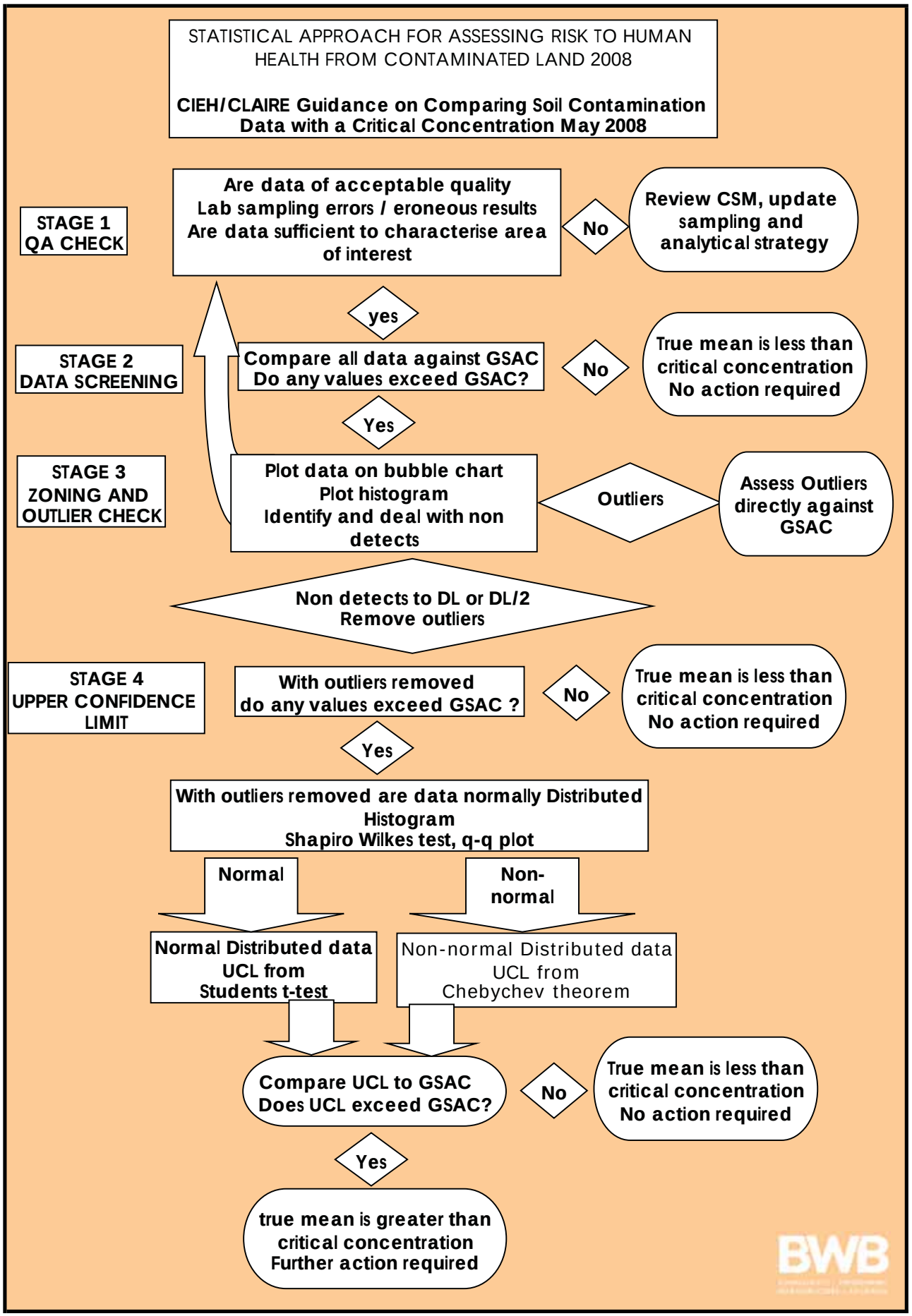
EXPLORATION
& TESTING ASSOCIATES

DURHAM
T. 0191 3896543
E. enquiries@explorationtesting.uk
Unit 8B, Bowburn South Industrial Estate, Durham, DH6 5AD.

COVENTRY
T. 02476 880452
E. enquiries@explorationtesting.uk
'number three' Siskin Drive, Middlemarch Business Park, Coventry, CV3 4FJ.

explorationtesting.uk
Registered in England and Wales No. 11803869. Registered Office. Unit 8B, Bowburn South Industrial Estate, Durham. DH6 5AD

Appendix 4: Soil Chemical Results Summary


STATISTICAL APPROACH FOR ASSESSING RISK TO HUMAN HEALTH FROM CONTAMINATED LAND 2008
CIEH/CLAIRE Guidance on Comparing Soil Contamination Data with a Critical Concentration May 2008
STAGE 1 QA CHECK
Are data of acceptable quality
Lab sampling errors / eroneous results
Are data sufficient to characterise area of interest
No
Review CSM, update sampling and analytical strategy
yes
STAGE 2 DATA SCREENING
Compare all data against GSAC
Do any values exceed GSAC?
No
True mean is less than critical concentration
No action required
Yes
STAGE 3 ZONING AND OUTLIER CHECK
Plot data on bubble chart
Plot histogram
Identify and deal with non detects
Outliers
Assess Outliers directly against GSAC
Non detects to DL or DL/2
Remove outliers
STAGE 4 UPPER CONFIDENCE LIMIT
With outliers removed
do any values exceed GSAC ?
No
True mean is less than critical concentration
No action required
Yes
With outliers removed are data normally Distributed
Histogram
Shapiro Wilkes test, q-q plot
Normal
Non-normal
Normal Distributed data
UCL from
Students t-test
Non-normal Distributed data
UCL from
Chebychev theorem
Compare UCL to GSAC
Does UCL exceed GSAC?
No
True mean is less than critical concentration
No action required
Yes
true mean is greater than critical concentration
Further action required
BWB

Human Health Generic QRA Worksheet

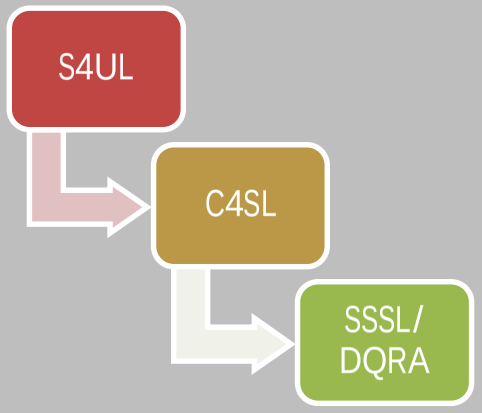
Ellesmere Marina	BMW2025

Define CSM – Is site represented by a standard land use?

Residential with / without homegrown produce
Commercial / Industrial
Public Open Space - Residential (S4UL/C4SL only)
Public Open Space - Park (S4UL/C4SL only)

GSAC Type (BWB, LQM S4UL, C4SL, Bespoke)	LQM_CIEH_S4UL
Key Receptor/CSM (Residential/Commercial/POS)	S4UL Residential with homegrown produce
Organic Matter % (If unknown use 1%)	1

GSAC Hierarcy



Generic Assessment Criteria Ellesmere Marina BMW2025	S4UL Residential with homegrown produce mg/kg	Source
Arsenic	**3.70E+01**	**LQM_CIEH_S4UL**
Barium	**1.35E+03**	**LQM_CIEH_S4UL**
Beryllium	**1.70E+00**	**LQM_CIEH_S4UL**
Boron	**2.90E+02**	**LQM_CIEH_S4UL**
Cadmium	**1.10E+01**	**LQM_CIEH_S4UL**
Chromium VI	**6.00E+00**	**LQM_CIEH_S4UL**
Chromium III	**9.10E+02**	**LQM_CIEH_S4UL**
Copper	**2.40E+03**	**LQM_CIEH_S4UL**
Lead*	**2.00E+02**	**DEFRA_C4SL**
Inorganic Mercury	**4.00E+01**	**LQM_CIEH_S4UL**
Nickel	**1.80E+02**	**LQM_CIEH_S4UL**
Selenium	**2.50E+02**	**LQM_CIEH_S4UL**
Vanadium	**4.10E+02**	**LQM_CIEH_S4UL**
Zinc	**3.70E+03**	**LQM_CIEH_S4UL**
Cyanide (Free)	**4.30E+01**	**BWB**
Cyanide (Complex)	**2.13E+02**	**BWB**
Phenols (Total)	**1.20E+02**	**LQM_CIEH_S4UL**
Benzene	**8.70E-02**	**LQM_CIEH_S4UL**
Toluene	**1.30E+02**	**LQM_CIEH_S4UL**
Ethyl benzene	**4.70E+01**	**LQM_CIEH_S4UL**
Total Xylene	**5.60E+01**	**LQM_CIEH_S4UL**
TPH (EC5-6) aliphatic	**4.20E+01**	**LQM_CIEH_S4UL**
TPH (>EC6-8) aliphatic	**1.00E+02**	**LQM_CIEH_S4UL**
TPH (>EC8-10) aliphatic	**2.70E+01**	**LQM_CIEH_S4UL**
TPH (>EC10-12) aliphatic	**1.30E+02**	**LQM_CIEH_S4UL**
TPH (>EC12-16) aliphatic	**1.10E+03**	**LQM_CIEH_S4UL**
TPH (>EC16-21) aliphatic	**6.50E+04**	**LQM_CIEH_S4UL**
TPH (>EC21-35) aliphatic	**6.50E+04**	**LQM_CIEH_S4UL**
TPH (>EC35-44) aliphatic	**6.50E+04**	**LQM_CIEH_S4UL**
TPH (>EC6-7) aromatic (benzene)	**7.00E+01**	**LQM_CIEH_S4UL**
TPH (>EC7-8) aromatic (toluene)	**1.30E+02**	**LQM_CIEH_S4UL**
TPH (>EC8-10) aromatic	**3.40E+01**	**LQM_CIEH_S4UL**
TPH (>EC10-12) aromatic	**7.40E+01**	**LQM_CIEH_S4UL**
TPH (>EC12-16) aromatic	**1.40E+02**	**LQM_CIEH_S4UL**
TPH (>EC16-21) aromatic	**2.60E+02**	**LQM_CIEH_S4UL**
TPH (>EC21-35) aromatic	**1.10E+03**	**LQM_CIEH_S4UL**
TPH (>EC35-44) aromatic	**1.10E+03**	**LQM_CIEH_S4UL**
Total TPH	**5.00E+02**	**LQM_CIEH_S4UL**
Naphthalene	**2.30E+00**	**LQM_CIEH_S4UL**
Acenaphthylene	**1.70E+02**	**LQM_CIEH_S4UL**
Acenaphthene	**2.10E+02**	**LQM_CIEH_S4UL**
Fluorene	**1.70E+02**	**LQM_CIEH_S4UL**
Phenanthrene	**9.50E+01**	**LQM_CIEH_S4UL**
Anthracene	**2.40E+03**	**LQM_CIEH_S4UL**
Fluoranthene	**2.80E+02**	**LQM_CIEH_S4UL**
Pyrene	**6.20E+02**	**LQM_CIEH_S4UL**
Benzo(a)anthracene	**7.20E+00**	**LQM_CIEH_S4UL**

Generic Assessment Criteria Ellesmere Marina BMW2025	S4UL Residential with homegrown produce mg/kg	Source
Chrysene	**1.50E+01**	**LQM_CIEH_S4UL**
Benzo(b)fluoranthene	**2.60E+00**	**LQM_CIEH_S4UL**
Benzo(k)fluoranthene	**7.70E+01**	**LQM_CIEH_S4UL**
Benzo(a)pyrene	**2.20E+00**	**LQM_CIEH_S4UL**
Indeno(1,2,3-c,d)pyrene	**2.70E+01**	**LQM_CIEH_S4UL**
Dibenzo(a,h)anthracene	**2.40E-01**	**LQM_CIEH_S4UL**
Benzo(g,hi)perylene	**3.20E+02**	**LQM_CIEH_S4UL**
Coal Tar (B(a)P as surrogate marker	**7.90E-01**	**LQM_CIEH_S4UL**
Tetrachloroethene (PCE)	**1.80E-01**	**LQM_CIEH_S4UL**
Trichloroethene (TCE)	**1.60E-02**	**LQM_CIEH_S4UL**
cis -1,2-Dichloroethene	**1.10E-01**	**LQM_CIEH_S4UL**
Vinyl Chloride (VC)	**6.40E-04**	**LQM_CIEH_S4UL**
1,1,2,2-Tetrachloroethane (PCA)	**1.60E+00**	**LQM_CIEH_S4UL**
1,1,1-Trichloroethane (TCA)	**8.80E+00**	**LQM_CIEH_S4UL**
1,2-Dichloroethane	**7.10E-03**	**LQM_CIEH_S4UL**
Carbon Tetrachloride	**2.60E-02**	**LQM_CIEH_S4UL**
Carbon disulphide	**1.40E-01**	**LQM_CIEH_S4UL**

Location	Sample depth	Easting	Northing	Strata Type	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium VI	Chromium III	Copper	Lead	Inorganic Mercury	Nickel	Selenium	Vanadium	Zinc	Cyanide (Free)	Cyanide (Complex)	Phenols (Total)
Detection Limit																					
GSAC					3.70E+01	1.35E+03	1.70E+00	2.90E+02	1.10E+01	6.00E+00	9.10E+02	2.40E+03	2.00E+02	4.00E+01	1.80E+02	2.50E+02	4.10E+02	3.70E+03	4.30E+01	2.13E+02	1.20E+02
WS01	0.20	338893	334201	Topsoil	8.3	61	0.44	0.6	0.2	4	13	12	88	0.3	10	1	18	68	1	1	1
WS01	2.85	338893	334201	Glaciofluvial Deposits	3	20	0.2	0.2	0.2	4	7.2	4.7	9.1	0.3	7.2	1	7.1	12	1	1	1
WS04	0.50	338966	334160	Glaciofluvial Deposits	5.6	37	0.28	0.2	0.2	4	10	7.6	17	0.3	9	1	15	35	1	1	1
WS05	0.50	338945	334109	Made Ground	10	140	0.78	2.8	0.4	4	19	23	87	0.3	15	1	25	130	1	1	1
TP02	1.40	338917	334144	Alluvium	7.9	52	0.64	0.5	0.4	4	15	12	15	0.3	23	1	16	51	1	1	1
TP04	1.00	338953	334179	Glaciofluvial Deposits	3.1	12	0.2	0.2	0.2	4	3.7	4.7	4.6	0.3	5	1	4.7	10	1	1	1
TP06	1.40	338955	334232	Glaciofluvial Deposits	3.2	10	0.16	0.2	0.2	4	4.5	4.2	6	0.3	6.6	1	6.1	15	1	1	1
TP07	0.10	338981	334210	Topsoil	8.4	61	0.59	0.5	0.2	4	16	40	61	0.3	14	1	19	66	1	1	1

Location	Sample depth	Benzene	Toluene	Ethyl benzene	Total Xylene	TPH (EC5-6) aliphatic	TPH (>EC6-8) aliphatic	TPH (>EC8-10) aliphatic	TPH (>EC10-12) aliphatic	TPH (>EC12-16) aliphatic	TPH (>EC16-21) aliphatic	TPH (>EC21-35) aliphatic	TPH (>EC6-7) aromatic (benzene)	TPH (>EC7-8) aromatic (toluene)	TPH (>EC8-10) aromatic	TPH (>EC10-12) aromatic	TPH (>EC12-16) aromatic	TPH (>EC16-21) aromatic	TPH (>EC21-35) aromatic
Detection Limit																			
GSAC		8.70E-02	1.30E+02	4.70E+01	5.60E+01	4.20E+01	1.00E+02	2.70E+01	1.30E+02	1.10E+03	6.50E+04	6.50E+04	7.00E+01	1.30E+02	3.40E+01	7.40E+01	1.40E+02	2.60E+02	1.10E+03
WS01	0.20																		
WS01	2.85																		
WS04	0.50	0.001	0.001	0.001	0.002	0.001	0.001	0.001	1	2	8	8	0.001	0.001	0.001	1	2	10	10
WS05	0.50	0.001	0.001	0.001	0.002	0.001	0.001	0.001	1	2	8	25	0.001	0.001	0.001	1	2	10	13
TP02	1.40																		
TP04	1.00																		
TP06	1.40																		
TP07	0.10																		

Location	Sample depth	Total TPH	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	Benzo(a)pyrene (as surrogate marker)	Tetrachloroethene (PCE)	*Trichloroethene (TCE)*	cis-1,2-Dichloroethene	Vinyl Chloride (VC)	1,1,2,2-Tetrachloroethane (PCA)	1,1,1-Trichloroethane (TCA)	1,2-Dichloroethane	Carbon Tetrachloride
Detection Limit																											
GSAC		5.00E+02	2.30E+00	1.70E+02	2.10E+02	1.70E+02	9.50E+01	2.40E+03	2.80E+02	6.20E+02	7.20E+00	1.50E+01	2.60E+00	7.70E+01	2.20E+00	2.70E+01	2.40E-01	3.20E+02	7.90E-01	1.80E-01	1.60E-02	1.10E-01	6.40E-04	1.60E+00	8.80E+00	7.10E-03	2.60E-02
WS01	0.20	10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05								
WS01	2.85	10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05								
WS04	0.50	10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05								
WS05	0.50	58	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05								
TP02	1.40	10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05								
TP04	1.00	10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05								
TP06	1.40	10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05								
TP07	0.10	10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05								

Determinand	Number of tests	Range (mg/kg)	S4UL Residential with home	Detection Limit (mg/kg)	Min	Max	No. of Exceedances	No. Non detects	< or not
Arsenic	8	<3 to 10	3.70E+01	0	3	10	0	192	<
Barium	8	<10 to 140	1.35E+03	0	10	140	0	192	<
Beryllium	8	<0.16 to 0.78	1.70E+00	0	0.16	0.78	0	192	<
Boron	8	<0.2 to 2.8	2.90E+02	0	0.2	2.8	0	192	<
Cadmium	8	<0.2 to 0.4	1.10E+01	0	0.2	0.4	0	192	<
Chromium VI	8	<4 to 4	6.00E+00	0	4	4	0	192	<
Chromium III	8	<3.7 to 19	9.10E+02	0	3.7	19	0	192	<
Copper	8	<4.2 to 40	2.40E+03	0	4.2	40	0	192	<
Lead*	8	<4.6 to 88	2.00E+02	0	4.6	88	0	192	<
Inorganic Mercury	8	<0.3 to 0.3	4.00E+01	0	0.3	0.3	0	192	<
Nickel	8	<5 to 23	1.80E+02	0	5	23	0	192	<
Selenium	8	<1 to 1	2.50E+02	0	1	1	0	192	<
Vanadium	8	<4.7 to 25	4.10E+02	0	4.7	25	0	192	<
Zinc	8	<10 to 130	3.70E+03	0	10	130	0	192	<
Cyanide (Free)	8	<1 to 1	4.30E+01	0	1	1	0	192	<
Cyanide (Complex)	8	<1 to 1	2.13E+02	0	1	1	0	192	<
Phenols (Total)	8	<1 to 1	1.20E+02	0	1	1	0	192	<
Benzene	2	<0.001 to 0.001	8.70E-02	0	0.001	0.001	0	198	<
Toluene	2	<0.001 to 0.001	1.30E+02	0	0.001	0.001	0	198	<
Ethyl benzene	2	<0.001 to 0.001	4.70E+01	0	0.001	0.001	0	198	<
Total Xylene	2	<0.002 to 0.002	5.60E+01	0	0.002	0.002	0	198	<
TPH (EC5-6) aliphatic	2	<0.001 to 0.001	4.20E+01	0	0.001	0.001	0	198	<
TPH (>EC6-8) aliphatic	2	<0.001 to 0.001	1.00E+02	0	0.001	0.001	0	198	<
TPH (>EC8-10) aliphatic	2	<0.001 to 0.001	2.70E+01	0	0.001	0.001	0	198	<
TPH (>EC10-12) aliphatic	2	<1 to 1	1.30E+02	0	1	1	0	198	<
TPH (>EC12-16) aliphatic	2	<2 to 2	1.10E+03	0	2	2	0	198	<
TPH (>EC16-21) aliphatic	2	<8 to 8	6.50E+04	0	8	8	0	198	<
TPH (>EC21-35) aliphatic	2	<8 to 25	6.50E+04	0	8	25	0	198	<
TPH (>EC35-44) aliphatic	0	<0 to 0	6.50E+04	0	0	0	0	198	<
TPH (>EC6-7) aromatic (benzene)	2	<0.001 to 0.001	7.00E+01	0	0.001	0.001	0	198	<
TPH (>EC7-8) aromatic (toluene)	2	<0.001 to 0.001	1.30E+02	0	0.001	0.001	0	198	<
TPH (>EC8-10) aromatic	2	<0.001 to 0.001	3.40E+01	0	0.001	0.001	0	198	<
TPH (>EC10-12) aromatic	2	<1 to 1	7.40E+01	0	1	1	0	198	<
TPH (>EC12-16) aromatic	2	<2 to 2	1.40E+02	0	2	2	0	198	<
TPH (>EC16-21) aromatic	2	<10 to 10	2.60E+02	0	10	10	0	198	<
TPH (>EC21-35) aromatic	2	<10 to 13	1.10E+03	0	10	13	0	198	<
TPH (>EC35-44) aromatic	0	<0 to 0	1.10E+03	0	0	0	0	192	<
Total TPH	8	<10 to 58	5.00E+02	0	10	58	0	192	<
Naphthalene	8	<0.05 to 0.05	2.30E+00	0	0.05	0.05	0	192	<
Acenaphthylene	8	<0.05 to 0.05	1.70E+02	0	0.05	0.05	0	192	<
Acenaphthene	8	<0.05 to 0.05	2.10E+02	0	0.05	0.05	0	192	<
Fluorene	8	<0.05 to 0.05	1.70E+02	0	0.05	0.05	0	192	<
Phenanthrene	8	<0.05 to 0.05	9.50E+01	0	0.05	0.05	0	192	<
Anthracene	8	<0.05 to 0.05	2.40E+03	0	0.05	0.05	0	192	<
Fluoranthene	8	<0.05 to 0.05	2.80E+02	0	0.05	0.05	0	192	<
Pyrene	8	<0.05 to 0.05	6.20E+02	0	0.05	0.05	0	192	<
Benzo(a)anthracene	8	<0.05 to 0.05	7.20E+00	0	0.05	0.05	0	192	<
Chrysene	8	<0.05 to 0.05	1.50E+01	0	0.05	0.05	0	192	<
Benzo(b)fluoranthene	8	<0.05 to 0.05	2.60E+00	0	0.05	0.05	0	192	<
Benzo(k)fluoranthene	8	<0.05 to 0.05	7.70E+01	0	0.05	0.05	0	192	<
Benzo(a)pyrene	8	<0.05 to 0.05	2.20E+00	0	0.05	0.05	0	192	<
Indeno(1,2,3-c,d)pyrene	8	<0.05 to 0.05	2.70E+01	0	0.05	0.05	0	192	<
Dibenzo(a,h)anthracene	8	<0.05 to 0.05	2.40E-01	0	0.05	0.05	0	192	<
Benzo(g,hi)perylene	8	<0.05 to 0.05	3.20E+02	0	0.05	0.05	0	192	<
Coal Tar (B(a)P as surrogate mark	8	<0.05 to 0.05	7.90E-01	0	0.05	0.05	0	192	<
Tetrachloroethene (PCE)	0	<0 to 0	1.80E-01	0	0	0	0	200	<
Trichloroethene (TCE)	0	<0 to 0	1.60E-02	0	0	0	0	200	<
cis-1,2-Dichloroethene	0	<0 to 0	1.10E-01	0	0	0	0	200	<
Vinyl Chloride (VC)	0	<0 to 0	6.40E-04	0	0	0	0	200	<
1,1,2,2-Tetrachloroethane (PCA)	0	<0 to 0	1.60E+00	0	0	0	0	200	<

Appendix 5: Soil Leachate Chemical Results Summary

*EQS Standard: Phenol and Benzene annual average of 300µg/l; Toluene 500µg/l for Freshwater, 400µg/l for Saltwater; 1,1,1-TCA 1,000µg/l.

Project Name:	Ellesmere Marina
Project Number:	BMW2025
Assessment for:	Soil Leachate Assessment
Laboratory:	i2
Receptor:	Freshwater
Receptor Water Hardness:	<40 (No Data)

BWB CONSULTANCY | ENVIRONMENT INFRASTRUCTURE | BUILDINGS

100 = Assessment Criteria Exceedance)

50 = M-BAT Bioavailability Assessment Required

	Contaminant	Units	Detection Limit	Guideline Concentration	Source	Number of Samples	Min	Max	No of Exceedances	WS01	WS04	WS05	TP07
										0.20	0.50	0.50	0.10
Heavy Metals	Arsenic	µg/l	1.00	50	EQS Freshwater	4	<1.00	27.00	0	< 1.0	1	27	1.2
	Barium	mg/l	0.00	700	UK DWS	4	0.01	0.05	0	0.01	0.01	0.05	0.02
	Beryllium	µg/l	0.20	None Available		4	0.20	0.70	0	0.7	0.2	0.2	0.6
	Cadmium	µg/l	0.08	0.08	EQS Freshwater	4	<0.08	<0.08	0	< 0.08	< 0.08	< 0.08	< 0.08
	Chromium III	µg/l	0.40	4.7	EQS Freshwater	4	1.60	11.00	1	1.7	2.8	11	1.6
	Copper	µg/l	0.70	1	EQS Freshwater	4	12.00	75.00	4	15	12	75	34
	Lead	µg/l	1.00	1.2	EQS Freshwater	4	2.30	7.50	4	2.3	3.9	7.5	6
	Mercury	µg/l	0.50	0.07	EQS Freshwater	4	<0.50	<0.50	0	< 0.5	< 0.5	< 0.5	< 0.5
	Nickel	µg/l	0.30	4	EQS Freshwater	4	4.00	13.00	3	4	5.1	13	6.2
	Selenium	µg/l	4.00	10	UK DWS	4	<0.40	<0.40	0	< 4.0	< 4.0	< 4.0	< 4.0
	Vanadium	µg/l	1.70	None Available		4	<1.70	23.00	0	< 1.7	< 1.7	23	< 1.7
	Zinc	µg/l	0.40	10.9	EQS Freshwater	4	9.50	27.00	3	21	9.5	27	24
	Sulphate	mg/l	0.10	400	EQS Freshwater	4	1.60	57.80	0	2.3	1.6	57.8	5.8
	Boron	µg/l	10.00	2000	EQS Freshwater	4	13.00	210.00	0	19	13	210	22
	pH					4	6.50	7.50	0	6.50	6.7	7.5	6.5
ics	Cyanide (total)	µg/l	10.00	1	EQS Freshwater	4	<10	<10	0	< 10	< 10	< 10	< 10

Appendix 6: Hazwaste Assessment

HazWasteOnline™

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.

4Z8VW-JKK2H-HDWJR

Job name

BMW2025 Ellemere Merina - The Nursery

Description/Comments

Project

BMW2025 Ellemere Merina - The Nursery

Site

BMW2025 Ellemere Merina - The Nursery

Classified by

Name:
Richard Robinson
Date:
08 Jul 2021 13:05 GMT
Telephone:
0115 924 1100

Company:
BWB Consulting Ltd
Waterfront House, Station Street
Nottingham
NG2 3DQ

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:	-
Course	**Date**
Hazardous Waste Classification	08 Dec 2016
3 year Refresher overdue	-

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01	0.20	Non Hazardous		2
2	WS01[2]	2.85	Non Hazardous		4
3	WS04	0.50	Non Hazardous		6
4	WS05	0.50	Non Hazardous		9
5	TP02[2]	1.40	Non Hazardous		12
6	TP04	1.00	Non Hazardous		14
7	TP06	1.40	Non Hazardous		16
8	TP07	0.10	Non Hazardous		18

Related documents

#	Name	Description
1	BWB Contaminated Land Suite WM3	waste stream template used to create this Job

Report

Created by: Richard Robinson

Created date: 08 Jul 2021 13:05 GMT

Classification of sample: WS01

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

Sample details

Sample name:
WS01
Sample Depth:
0.20 m
Moisture content:
21%
(no 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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	confirm TPH has NOT arisen from diesel or petrol					☑							
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.3	mg/kg	1.32	10.959	mg/kg	0.0011 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.44	mg/kg	2.775	1.221	mg/kg	0.000122 %		
4	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2		0.6	mg/kg	13.43	8.058	mg/kg	0.000806 %		
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<**LOD**
6	chromium { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		13	mg/kg	1.462	19	mg/kg	0.0019 %		
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		12	mg/kg	1.126	13.511	mg/kg	0.00135 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	88	mg/kg	1.56	137.264	mg/kg	0.0088 %		
9	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**
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		10	mg/kg	1.579	15.795	mg/kg	0.00158 %		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		68	mg/kg	2.774	188.642	mg/kg	0.0189 %		
13	pH			PH		5.8	pH		5.8	pH	5.8 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		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											
15		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**
				TPH									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
17		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
18		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
19		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
20		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									
21		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
22		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
23		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		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									
26		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
27		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
30		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
31		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
32		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0361 %		

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
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS01[2]

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

Sample details

Sample name:
WS01[2]
Sample Depth:
2.85 m
Moisture content:
13%
(no correction)

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

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	confirm TPH has NOT arisen from diesel or petrol					☑							
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3	mg/kg	1.32	3.961	mg/kg	0.000396 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.2	mg/kg	2.775	0.555	mg/kg	0.0000555 %		
4	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2		<0.2	mg/kg	13.43	<2.686	mg/kg	<0.000269 %		<**LOD**
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<**LOD**
6	chromium { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		7.2	mg/kg	1.462	10.523	mg/kg	0.00105 %		
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		4.7	mg/kg	1.126	5.292	mg/kg	0.000529 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	9.1	mg/kg	1.56	14.194	mg/kg	0.00091 %		
9	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**
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		7.2	mg/kg	1.579	11.372	mg/kg	0.00114 %		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		12	mg/kg	2.774	33.29	mg/kg	0.00333 %		
13	pH			PH		8.2	pH		8.2	pH	8.2 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		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											
15		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**
				TPH									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
17		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
18		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
19		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
20		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									
21		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
22		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
23		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		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									
26		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
27		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
30		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
31		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
32		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.00925 %		

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
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS04

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

Sample details

Sample name:
WS04
Sample Depth:
0.50 m
Moisture content:
13%
(no correction)

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

Hazard properties

None identified

Determinands

Moisture content: 13% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	confirm TPH has NOT arisen from diesel or petrol					☑							
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.6	mg/kg	1.32	7.394	mg/kg	0.000739 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.28	mg/kg	2.775	0.777	mg/kg	0.0000777 %		
4	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2		0.2	mg/kg	13.43	2.686	mg/kg	0.000269 %		
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
6	chromium { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		10	mg/kg	1.462	14.616	mg/kg	0.00146 %		
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		7.6	mg/kg	1.126	8.557	mg/kg	0.000856 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17	mg/kg	1.56	26.517	mg/kg	0.0017 %		
9	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
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		9	mg/kg	1.579	14.215	mg/kg	0.00142 %		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		35	mg/kg	2.774	97.095	mg/kg	0.00971 %		
13	pH			PH		6.6	pH		6.6	pH	6.6 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		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											
15		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**
				TPH									
16		benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
18		toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
19		xylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**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]									
20		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
21		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
22		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		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									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
27		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
28		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
29		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									
30		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
31		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
32		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
33		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
34		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
35		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
36		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0182 %		

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
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05

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

Sample details

Sample name:
WS05
Sample Depth:
0.50 m
Moisture content:
23%
(no 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: 23% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	confirm TPH has NOT arisen from diesel or petrol					☑					
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	13.203 mg/kg	0.00132 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.78 mg/kg	2.775	2.165 mg/kg	0.000216 %		
4	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2		2.8 mg/kg	13.43	37.604 mg/kg	0.00376 %		
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.4 mg/kg	1.285	0.514 mg/kg	0.00004 %		
6	chromium { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19 mg/kg	1.462	27.77 mg/kg	0.00278 %		
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23 mg/kg	1.126	25.895 mg/kg	0.00259 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	87 mg/kg	1.56	135.704 mg/kg	0.0087 %		
9	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**
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		15 mg/kg	1.579	23.692 mg/kg	0.00237 %		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		130 mg/kg	2.774	360.639 mg/kg	0.0361 %		
13	pH			PH		7.4 pH		7.4 pH	7.4 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		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											
15		TPH (C6 to C40) petroleum group				58	mg/kg		58	mg/kg	0.0058 %		
				TPH									
16		benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
17		ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
18		toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
19		xylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**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]									
20		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
21		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
22		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		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									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
27		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
28		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
29		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									
30		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
31		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
32		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
33		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
34		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
35		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
36		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0646 %		

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because No calorific materials or volatile contamination present.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0058%)

Classification of sample: TP02[2]

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

Sample details

Sample name:
TP02[2]
Sample Depth:
1.40 m
Moisture content:
33%
(no 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: 33% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	confirm TPH has NOT arisen from diesel or petrol					☑							
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.9	mg/kg	1.32	10.431	mg/kg	0.00104 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.64	mg/kg	2.775	1.776	mg/kg	0.000178 %		
4	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2		0.5	mg/kg	13.43	6.715	mg/kg	0.000672 %		
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.4	mg/kg	1.285	0.514	mg/kg	0.00004 %		
6	chromium { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		15	mg/kg	1.462	21.923	mg/kg	0.00219 %		
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		12	mg/kg	1.126	13.511	mg/kg	0.00135 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15	mg/kg	1.56	23.397	mg/kg	0.0015 %		
9	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
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		23	mg/kg	1.579	36.328	mg/kg	0.00363 %		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		51	mg/kg	2.774	141.481	mg/kg	0.0141 %		
13	pH			PH		6.7	pH		6.7	pH	6.7 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		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											
15		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**
				TPH									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
17		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
18		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
19		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
20		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									
21		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
22		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
23		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		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									
26		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
27		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
30		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
31		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
32		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0263 %		

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
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP04

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

Sample details

Sample name:
TP04
Sample Depth:
1.00 m
Moisture content:
4.3%
(no 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: 4.3% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	confirm TPH has NOT arisen from diesel or petrol					☑					
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3.1 mg/kg	1.32	4.093 mg/kg	0.000409 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.2 mg/kg	2.775	0.555 mg/kg	0.0000555 %		
4	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2		<0.2 mg/kg	13.43	<2.686 mg/kg	<0.000269 %		<LOD
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
6	chromium { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		3.7 mg/kg	1.462	5.408 mg/kg	0.000541 %		
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		4.7 mg/kg	1.126	5.292 mg/kg	0.000529 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	4.6 mg/kg	1.56	7.175 mg/kg	0.00046 %		
9	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
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		5 mg/kg	1.579	7.897 mg/kg	0.00079 %		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		10 mg/kg	2.774	27.741 mg/kg	0.00277 %		
13	pH			PH		6.6 pH		6.6 pH	6.6 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		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											
15		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**
				TPH									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
17		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
18		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
19		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
20		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									
21		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
22		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
23		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		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									
26		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
27		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
30		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
31		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
32		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0074 %		

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
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP06

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

Sample details

Sample name:
TP06
Sample Depth:
1.40 m
Moisture content:
4.6%
(no 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: 4.6% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	confirm TPH has NOT arisen from diesel or petrol					☑					
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3.2 mg/kg	1.32	4.225 mg/kg	0.000423 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.16 mg/kg	2.775	0.444 mg/kg	0.0000444 %		
4	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2		<0.2 mg/kg	13.43	<2.686 mg/kg	<0.000269 %		<LOD
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
6	chromium { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		4.5 mg/kg	1.462	6.577 mg/kg	0.000658 %		
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		4.2 mg/kg	1.126	4.729 mg/kg	0.000473 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	6 mg/kg	1.56	9.359 mg/kg	0.0006 %		
9	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
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		6.6 mg/kg	1.579	10.425 mg/kg	0.00104 %		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		15 mg/kg	2.774	41.612 mg/kg	0.00416 %		
13	pH			PH		6.3 pH		6.3 pH	6.3 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		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											
15		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**
				TPH									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
17		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
18		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
19		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
20		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									
21		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
22		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
23		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		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									
26		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
27		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
30		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
31		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
32		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.00924 %		

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
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP07

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

Sample details

Sample name:
TP07
Sample Depth:
0.10 m
Moisture content:
24%
(no correction)

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

Hazard properties

None identified

Determinands

Moisture content: 24% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	confirm TPH has NOT arisen from diesel or petrol					☑					
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.4 mg/kg	1.32	11.091 mg/kg	0.00111 %		
3	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.59 mg/kg	2.775	1.637 mg/kg	0.000164 %		
4	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2		0.5 mg/kg	13.43	6.715 mg/kg	0.000672 %		
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
6	chromium { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		16 mg/kg	1.462	23.385 mg/kg	0.00234 %		
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		40 mg/kg	1.126	45.036 mg/kg	0.0045 %		
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	61 mg/kg	1.56	95.149 mg/kg	0.0061 %		
9	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**
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		14 mg/kg	1.579	22.113 mg/kg	0.00221 %		
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		66 mg/kg	2.774	183.094 mg/kg	0.0183 %		
13	pH			PH		5.6 pH		5.6 pH	5.6 pH		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		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											
15		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**
				TPH									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
17		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
18		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
19		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
20		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									
21		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
22		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
23		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		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									
26		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
27		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
30		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
31		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
32		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.037 %		

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
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

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.

boron tribromide/trichloride/trifluoride (combined) (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride
Data source: N/A
Data source date: 06 Aug 2015
Hazard Statements: EUH014 , Acute Tox. 2 H330 , Acute Tox. 2 H300 , Skin Corr. 1A H314 , Skin Corr. 1B H314

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

pH (CAS Number: PH)

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

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

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

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

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

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

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

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

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

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

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

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

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

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

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on risk phrases

beryllium {beryllium oxide}

Worst case species based on risk phrases

boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on risk phrases

cadmium {cadmium sulfide}

Worst case species based on risk phrases

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

All chromium VI concentrations below LoD.

copper {dicopper oxide; copper (I) oxide}

Most likely common species

lead {lead chromate}

Worst case species based on risk phrases

mercury {mercury dichloride}

Worst case species based on risk phrases

nickel {nickel dihydroxide}

Worst case species based on risk phrases

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on risk phrases

zinc {zinc chromate}

Worst case species based on risk phrases

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}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2021.187.4816.9162 (06 Jul 2021)
HazWasteOnline Database: 2021.187.4816.9162 (06 Jul 2021)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of 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 2019 - UK: 2019 No. 720 of 27th March 2019
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
POPs Regulation 2019 - Regulation (EU) 2019/1021 of 20 June 2019

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