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Our ref: Whaley_Bridge_36_Factual_Report_Final

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04 August 2014

Dear Matthew

New Road, Whaley Bridge – Factual Report on Surface Soil Sampling Works

Please find following our factual report relating to a site walkover survey and surface soil sampling works undertaken at the National Grid Property Holdings Ltd. (NGPH) [REDACTED] located at New Road, Whaley Bridge (herein referred to as 'the site').

1. INTRODUCTION

Atkins undertook a site walkover and shallow soil sampling at the site in order to update current understanding of site conditions and obtain additional chemical data for shallow soils.

2. SITE DESCRIPTION

A site walkover was undertaken on 15th May 2014 with pertinent findings summarised below.

The overall site comprises three landholdings, the largest being irregular shaped and owned by NGPH, with an area of 0.70 ha. [REDACTED]

[REDACTED] The site layout is shown on the enclosed Figure 1.

The majority of the NGPH site is currently secure and vacant, with the exception of a stone building in the north west of the site (facing onto New Road) which appears to be tenanted as a shop. [REDACTED]

The site is bisected by Randall Carr Brook which flows east to west through the approximate centre of the site [REDACTED]. A narrow strip of land used as a roadway forms the southern part of the site, and appears to be used for shared access to both the site and a warehouse which is located adjacent to the east of the site.

Entrance to the site is via double chain link gates in the south of the site.

Groundcover at the site varies in composition. The western, eastern and northern parts of the NGPH landholding were unsurfaced, with dense vegetation along the eastern and western boundaries. The

remaining area (approx. 25%) was surfaced with imported crushed stone. [REDACTED]

The [REDACTED] majority of the NGPH site are relatively flat lying, however land at the eastern, western and northern boundaries rises steeply by approximately 3 m to meet the surrounding land.

Whilst the site is considered to be relatively secure and no evidence of trespassing was observed, it should be noted that a public footpath runs adjacent to the eastern boundary. The site boundary in this area is former by a 1.2 m high wall which is considered unlikely to prevent unauthorised access.

3. DESCRIPTION OF WORKS UNDERTAKEN

A total of 24 no. samples were taken from across the site, with sample locations targeted based on previous site investigation data. Sample locations are provided on the enclosed Figure 1. Duplicate samples were not obtained due to the heterogeneous nature of the made ground.

The samples were taken using best practice methodology and stored in appropriate containers before being dispatched for analysis to I2, a UKAS and MCERTS accredited laboratory.

A summary of the scheduled analyses is provided below in Table 1.

Table 1. Summary of Scheduled Laboratory Analyses

Sample Ref.	Asbestos Identification	Asbestos Quantification	Total and Easily Liberated Cyanide	Lead
HP1	x			
HP2	x			
HP3	x			
HP4			x	
HP5			x	
HP6			x	
HP7			x	
HP8	x		x	
HP9	x		x	
HP10			x	
HP11			x	
HP12	x		x	
HP13	x			
HP14	x			
HP15				x
HP16				x
HP17				x
HP18	x			x
HP19				x
HP20	x			
HP21	x	x		
HP22	x			
HP23	x			
HP24	x			

In total, 14 no. samples were scheduled for asbestos identification; 9 no. samples were scheduled for total and easily liberatable cyanide and 5 no. samples were scheduled for lead. In addition, a single sample (HP21) was scheduled for asbestos quantification following detection of chrysotile fibres in the initial identification test. Copies of original laboratory certificates are appended to this report.

Visual evidence of contamination was identified in HP7, where blue staining was noted on the granular made ground at 0.15 m below ground level (bgl) depth.

4. CLOSURE

We trust the above report presented above meets your requirements. Please do not hesitate to contact the undersigned should you wish to discuss any aspect of the report or require any further information.

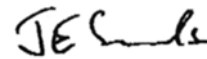
Yours sincerely

For and On Behalf of Atkins Limited



Richard Culver

Principal Consultant



Jonathan Steeds

Technical Director

Enclosures

Figure 1 Soil sampling locations
I2 Laboratory report ref. 14-54680-2

CLIENT
National Grid Property Holdings

PROJECT
Whaley Bridge
Horwich End, Whaley Bridge

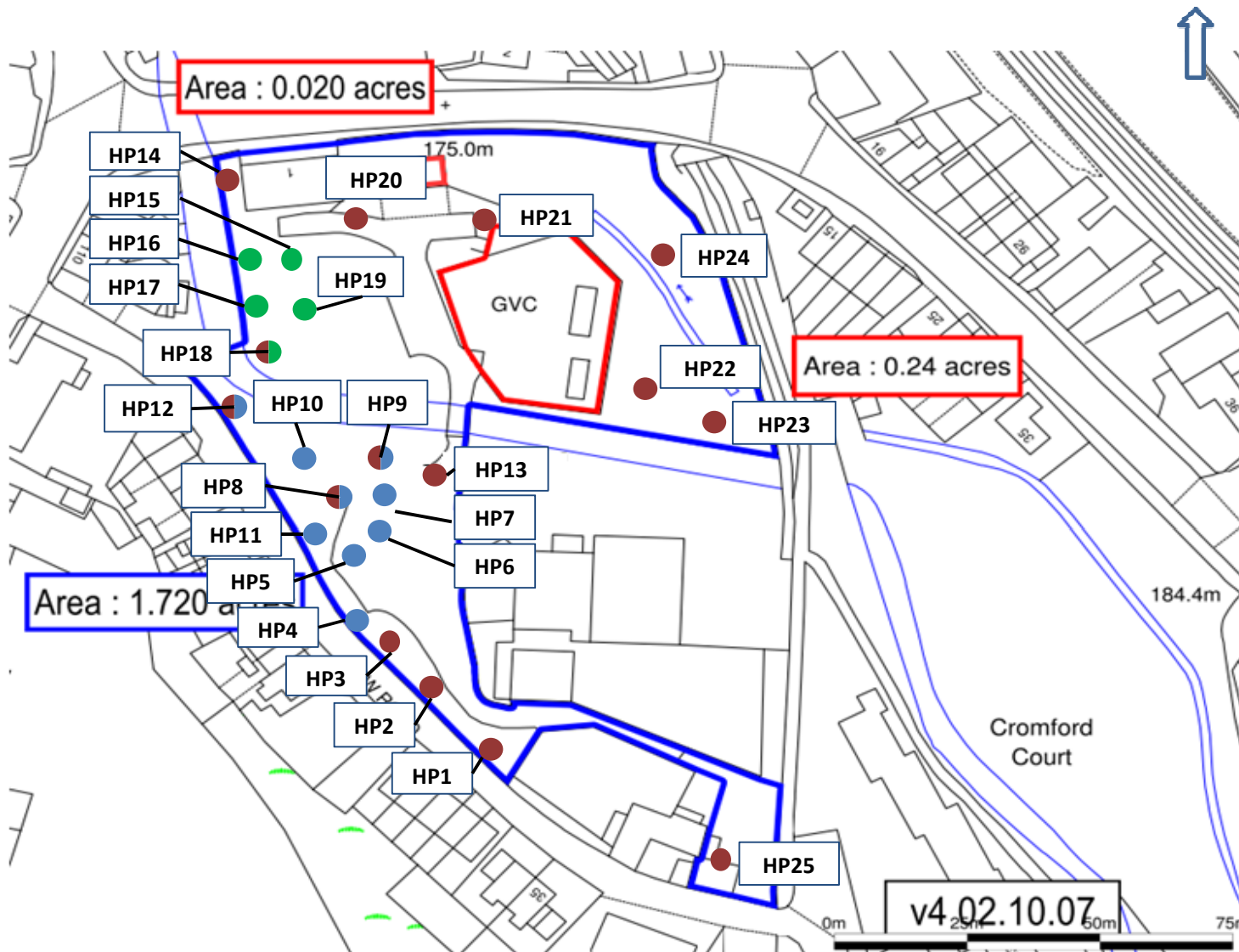
LEGEND

- Total and Easily Liberated Cyanide
- Asbestos
- Lead

Scale: Not to scale

TITLE

Figure 1
Soil Sampling Locations





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Analytical Report Number : 14-54680

Replaces Analytical Report Number : 14-54680, issue no. 1

Project / Site name: Whaley Bridge

Samples received on: 19/05/2014

Your job number:

Samples instructed on: 19/05/2014

Your order number:

Analysis completed by: 16/06/2014

Report Issue Number: 2

Report issued on: 16/06/2014

Samples Analysed: 24 soil samples

Signed: 

Dr Claire Stone
Quality Manager
For & on behalf of i2 Analytical Ltd.

Signed: 

Thurstan Plummer
Organics Technical Manager
For & on behalf of i2 Analytical Ltd.

Other office located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland

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.

Analytical Report Number: 14-54680

Project / Site name: Whaley Bridge

Lab Sample Number				340023	340024	340025	340026	340027
Sample Reference				HP1	HP2	HP3	HP4	HP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/05/2014	15/05/2014	15/05/2014	15/05/2014	15/05/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Unit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	-	-	-	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	-	-	-	15	34
Total mass of sample received	kg	0.001	NONE	-	-	-	0.54	0.40
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	-
Asbestos Identification Name (Subcontracted)	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Subcontracted)	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	-	-	-	6	53
Free Cyanide	mg/kg	1	NONE	-	-	-	< 1	< 1
Heavy Metals / Metalloids								
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-

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Project / Site name: Whaley Bridge

Lab Sample Number				340028	340029	340030	340031	340032
Sample Reference				HP6	HP7	HP8	HP9	HP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/05/2014	15/05/2014	15/05/2014	15/05/2014	15/05/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Unit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	4.0	5.2	9.3	7.2	14
Total mass of sample received	kg	0.001	NONE	0.54	0.49	1.1	1.3	0.51
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	-
Asbestos Identification Name (Subcontracted)	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Subcontracted)	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	2	< 1	14	8	2
Free Cyanide	mg/kg	1	NONE	< 1	< 1	< 1	< 1	< 1
Heavy Metals / Metalloids								
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-

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Lab Sample Number				340033	340034	340035	340036	340037
Sample Reference				HP11	HP12	HP13	HP14	HP15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/05/2014	15/05/2014	15/05/2014	15/05/2014	15/05/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Unit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	-	-	< 0.1
Moisture Content	%	N/A	NONE	15	23	-	-	12
Total mass of sample received	kg	0.001	NONE	0.51	0.93	-	-	0.44
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	Not-detected	-
Asbestos Identification Name (Subcontracted)	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Subcontracted)	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	2	33	-	-	-
Free Cyanide	mg/kg	1	NONE	< 1	2	-	-	-
Heavy Metals / Metalloids								
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	880

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Lab Sample Number				340038	340039	340040	340041	340042
Sample Reference				HP16	HP17	HP18	HP19	HP20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/05/2014	15/05/2014	15/05/2014	15/05/2014	15/05/2014
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Unit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	-
Moisture Content	%	N/A	NONE	17	17	15	9.8	-
Total mass of sample received	kg	0.001	NONE	0.50	0.46	1.1	1.3	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	-	Not-detected
Asbestos Identification Name (Subcontracted)	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Subcontracted)	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Free Cyanide	mg/kg	1	NONE	-	-	-	-	-
Heavy Metals / Metalloids								
Lead (aqua regia extractable)	mg/kg	1	MCERTS	740	530	260	130	-

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Lab Sample Number				340043	340044	340045	340046	
Sample Reference				HP21	HP22	HP23	HP24	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	
Date Sampled				15/05/2014	15/05/2014	15/05/2014	15/05/2014	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)				Units	Unit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	-	-	-	-	
Moisture Content	%	N/A	NONE	-	-	-	-	
Total mass of sample received	kg	0.001	NONE	-	-	-	-	
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile - Loose fibres	-	-	-	
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	
Asbestos Identification Name (Subcontracted)	Type	N/A	ISO 17025	No Asbestos Detected	-	-	-	
Asbestos Quantification (Subcontracted)	%	0.001	ISO 17025	<0.001	-	-	-	
General Inorganics								
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	
Free Cyanide	mg/kg	1	NONE	-	-	-	-	
Heavy Metals / Metalloids								
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	

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Project / Site name: Whaley Bridge

* 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 topsoil/loam 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 2 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
340023	HP1	None Supplied	None Supplied	-
340024	HP2	None Supplied	None Supplied	-
340025	HP3	None Supplied	None Supplied	-
340026	HP4	None Supplied	None Supplied	Brown topsoil and clay with gravel and vegetation.
340027	HP5	None Supplied	None Supplied	Black topsoil and sand with coal.
340028	HP6	None Supplied	None Supplied	Brown topsoil and sand with gravel and vegetation.
340029	HP7	None Supplied	None Supplied	Brown topsoil and sand with gravel.
340030	HP8	None Supplied	None Supplied	Brown topsoil and clay with gravel.
340031	HP9	None Supplied	None Supplied	Brown topsoil and clay with gravel and vegetation.
340032	HP10	None Supplied	None Supplied	Brown clay and topsoil with vegetation.
340033	HP11	None Supplied	None Supplied	Brown topsoil and sand with gravel and vegetation.
340034	HP12	None Supplied	None Supplied	Brown topsoil and clay with gravel and vegetation.
340035	HP13	None Supplied	None Supplied	-
340036	HP14	None Supplied	None Supplied	-
340037	HP15	None Supplied	None Supplied	Brown topsoil and clay with gravel and vegetation.
340038	HP16	None Supplied	None Supplied	Brown topsoil and clay with gravel and vegetation.
340039	HP17	None Supplied	None Supplied	Brown topsoil and clay with vegetation.
340040	HP18	None Supplied	None Supplied	Brown topsoil and clay with vegetation.
340041	HP19	None Supplied	None Supplied	Light brown gravelly clay with vegetation.
340042	HP20	None Supplied	None Supplied	-
340043	HP21	None Supplied	None Supplied	-
340044	HP22	None Supplied	None Supplied	-
340045	HP23	None Supplied	None Supplied	-
340046	HP24	None Supplied	None Supplied	-

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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
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
Asbestos quantification/ID Subcontracted analysis	Subcontracted analysis	Subcontracted analysis		D	ISO 17025
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	NONE
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
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Stones not passing through a 10 mm sieve is determined gravimetrically and reported as a percentage of the dry weight. Sample	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
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

Asbestos Methodology

Samples analysed by the in-house method were screened using approximately 100 g of soil sample. Quantification is performed on the whole sample.

Please note that on occasions where asbestos is found in the in-house method, the fibres are removed and isolated on the microscope slide; and therefore are not sent for quantification. In these instances there may be occasions where the quantification will be reported as negative (i.e the asbestos present has been isolated on the slide). This may also occur where more than one asbestos fibre type is identified in-house; and the quantification does not find all types previously identified (in-house method).

It is also possible that the in house method does not find any asbestos in the 100 g representative sub sample, whereas the quantification method (using the whole sample) has found fibres not previously identified.

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 30°C.

WhaleyBridge Shallow Soil sampling

Hand Dug Pit Logs

Location	Sample	Depth (m bgl)	Strata Description
HP1		0.00	Grass over MADE GROUND dark brown, very silty, slightly gravelly fine to medium sand. Gravel fine to coarse, sub angular to sub rounded with rare inclusions of coal, clinker and plastic bags.
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
		0.30	
HP2		0.00	Grass over MADE GROUND brown slightly silty gravelly coarse to medium sand. Gravel fine to coarse, sub angular to sub rounded with occasional inclusions of brick, rare metal and plastic bags.
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
HP3	ES1	0.00	MADE GROUND black / dark grey very gravelly coarse sand. Gravel fine to medium sub angular. Frequent inclusions of brick, tarmacadam and dolomite. Cobbles of sandstone from 0.1m bgl.
		0.05	
		0.10	
		0.15	
		0.20	
		0.25	
		0.30	
HP4		0.00	MADE GROUND grass over brown silty gravelly fine to coarse gravel. Gravel is fine to coarse sub angular to sub rounded of various lithologies including sandstone. Rare cobbles of slag, occasional
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
HP5		0.00	MADE GROUND dolomite gravel over silty, slightly gravelly, fine to coarse sand. Gravel fine to coarse of various lithologies.
		0.05	
		0.10	
		0.15	
	ES1	0.20	MADE GROUND coarse black ashy sand.
		0.25	
HP6		0.00	MADE GROUND dark brown slightly silty very gravelly fine to coarse sand. Gravel fraction is fine to coarse dolomite. Blue staining noted on gravel. Occasional Cobbles
		0.05	
	ES1	0.10	
		0.15	
HP7		0.00	MADE GROUND dark brown slightly silty very gravelly sand. Sand fraction is fine to coarse, gravel fraction is fine to coarse dolomite. Blue staining noted on gravel. Occasional
		0.05	
	ES1	0.10	
		0.15	
HP8		0.00	Brown silty slightly sandy TOPSOIL
			MADE GROUND brown very gravelly silt. Gravel is medium to coarse sub-angular to sub-rounded of dolomite.
		0.02	
		0.10	MADE GROUND brown very silty, gravelly, medium to coarse sand. Gravel fraction is fine to coarse, sub angular to sub rounded of
		0.15	
	ES1	0.20	

WhaleyBridge Shallow Soil sampling

Hand Dug Pit Logs

Location	Sample	Depth (m bgl)	Strata Description
HP9		0.00	Grass over MADE GROUND dark brown, very silty, slightly gravelly fine to medium SAND. Gravel fine to coarse, sub angular to sub rounded with rare inclusions of coal, clinker. Rare cobble of concrete.
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
		0.30	
HP10		0.00	MADE GROUND Soft to firm brown slightly sandy, slightly gravelly clay. Gravel fraction is fine to coarse sub angular to sub rounded sandstone. Rare boulder of concrete.
		0.05	
		0.10	
		0.15	
		0.20	
	ES1	0.25	
		0.30	
HP11		0.00	MADE GROUND dark brown, very silty, slightly gravelly fine to medium SAND. Gravel fine to coarse, sub angular to sub rounded with rare inclusions of coal, clinker, plastic bags and aluminium can.
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
		0.30	
HP12		0.00	MADE GROUND Dark brown slightly silty, very gravelly fine to coarse ashy sand. Gravel fraction is fine to coarse sub angular to sub rounded of various lithology.
		0.05	
		0.10	
		0.15	
		0.20	
		0.25	
	ES1	0.30	
HP13		0.00	Grass over MADE GROUND red brown slightly gravelly coarse sand. Gravel fraction is fine to medium sub angular to sub rounded of various lithologies.
		0.05	
		0.10	
		0.15	
		0.20	
		0.25	MADE GROUND dark brown, very silty, slightly gravelly fine to medium SAND. Gravel fine to coarse, sub angular to sub rounded with rare inclusions of coal, clinker.
	ES1	0.30	
HP14		0.35	Grass over MADE GROUND dark brown very silty gravelly fine to coarse sand. Gravel fraction is fine to coarse of slate, brick and various lithologies. Occasional cobbles of brick and slate.
		0.00	
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
		0.30	
		0.35	

WhaleyBridge Shallow Soil sampling

Hand Dug Pit Logs

Location	Sample	Depth (m bgl)	Strata Description
HP15		0.00	Grass over MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse brick, clinker and various lithologies.
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
HP16		0.00	Grass over MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse brick, clinker and various lithologies. Frequent cobbles of sandstone.
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
HP17		0.00	Grass over MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse brick, clinker and various lithologies.
		0.05	
	ES1	0.10	
		0.15	
		0.20	
		0.25	
HP18		0.30	Grass over MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse brick, clinker and various lithologies.
		0.00	
		0.05	
		0.10	
		0.15	
	ES1	0.20	
HP19		0.25	Wood chippings over MADE GROUND brown mottled grey very sandy fine to coarse sub angular gravel of dolomite. Sand fraction is coarse.
		0.30	
		0.00	
		0.05	
	ES1	0.10	
		0.15	
HP20		0.20	MADE GROUND brown mottled grey very sandy fine to coarse sub angular gravel of dolomite. Sand fraction is coarse.
		0.00	
		0.05	
		0.10	
	ES1	0.15	
HP21		0.20	MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse sub angular to sub rounded various lithologies. Occasional cobbles of sandstone.
		0.00	
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	

WhaleyBridge Shallow Soil sampling

Hand Dug Pit Logs

Location	Sample	Depth (m bgl)	Strata Description
HP22		0.00	MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse sub angular to sub rounded various lithologies.
		0.05	
		0.10	
		0.15	
		0.20	
	ES1	0.25	
		0.30	
		0.35	
HP23		0.00	MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse sub angular to sub rounded various lithologies.
		0.05	
		0.10	
		0.15	
		0.20	
		0.25	
	ES1	0.30	
		0.35	
HP24		0.00	MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse sub angular to sub rounded various lithologies. Occasional cobbles of sandstone.
		0.05	
		0.10	
		0.15	
	ES1	0.20	
		0.25	
		0.30	
HP25		0.00	MADE GROUND dark brown slightly silty gravelly fine to coarse sand. Gravel fraction is fine to coarse various lithologies. Occasional cobbles of sandstone. Occasional inclusions of slag and clinker.
		0.05	
		0.10	
		0.15	
		0.20	
		0.25	
		0.30	