



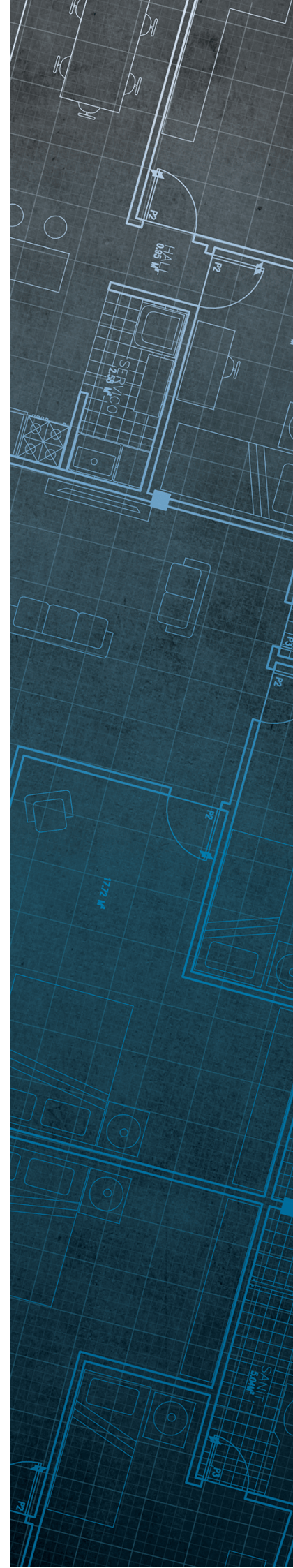
The Coal
Authority

Consultants Coal Mining Report

379433, 416756
Greater Manchester

Date of enquiry: 9 May 2019
Date enquiry received: 9 May 2019
Issue date: 9 May 2019

Our reference: 51002107805001
Your reference: GS-6015653



Consultants

Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

GROUNDSURE LIMITED

Enquiry address

379433, 416756
Greater Manchester

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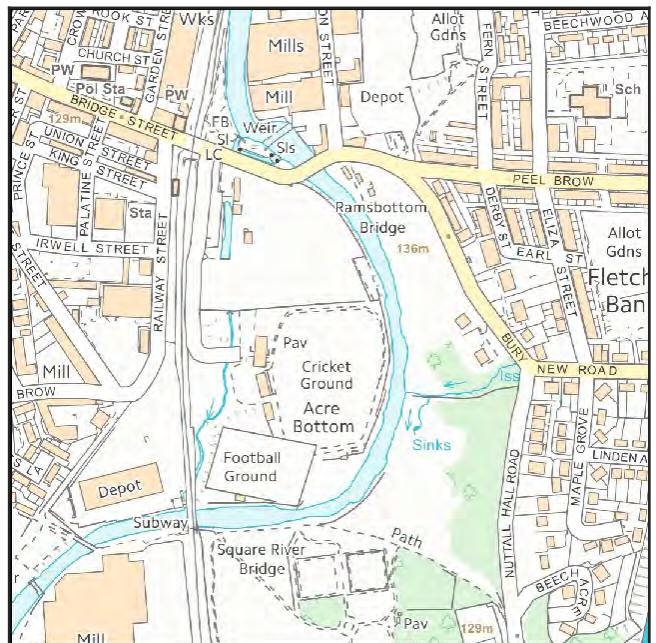
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

No past mining recorded.

Probable unrecorded shallow workings

None.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

None recorded within 100 metres of the enquiry boundary.

Abandoned mine plan catalogue numbers

None available.

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
LOWER HOLCOMBE BROOK	Coal	Yes	Within	N/A	100

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

None recorded within 50 metres of the enquiry boundary.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

Court orders

None recorded.

Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

Based on the responses in this report, no further information has been highlighted.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk**.

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission.

Mine water treatment schemes

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

Betts Geo Ltd

BETTS GEO ENVIRONMENTAL, 4 OLD MARSH
FARM BARN, MARSH FARM ROAD,
SEALAND, CH5 2LY

Groundsure
Reference:

GS-6015651

Your Reference: BG3315

Report Date 9 May 2019

Report Delivery Method: Email - pdf

Geo Insight

Address: HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM, BL0 0BS

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Geo Insight

Address: HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM, BL0 0BS

Date: 9 May 2019

Reference: GS-6015651

Client: Betts Geo Ltd

NW N NE



SW S SE

Aerial Photograph Capture date: 26-Mar-2012

Grid Reference: 379433,416756

Site Size: 4.6144ha

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Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Geology 1:10,000 Scale

1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	Yes
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	Yes
	1.2.2 Are there any records of landslide within 500m of the study site boundary at 1:10,000 scale?	Yes
1.3 Bedrock, Solid Geology and linear features	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale?	Yes

Section 2: Geology 1:50,000 Scale

2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	Yes
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	Yes
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	Yes
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	Yes
	2.2.3 Are there any records of landslide within 500m of the study site boundary?	Yes
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No

Section 2: Geology 1:50,000 Scale

2.3 Bedrock, Solid Geology and linear features

2.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.

2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?

Yes

2.3.3 Are there any records of linear features within 500m of the study site boundary?

Yes

Section 3: Radon

3. Radon

3.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

3.2 Radon Protection

No radon protective measures are necessary.

Section 4: Ground Workings

	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	19	10	30	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	14
4.3 Current Ground Workings	0	0	0	0	11

Section 5: Mining, Extraction & Natural Cavities

	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	0	0
5.2 Coal Mining	1	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
5.4 Non-Coal Mining*	1	0	0	1	0
5.5 Non-Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0

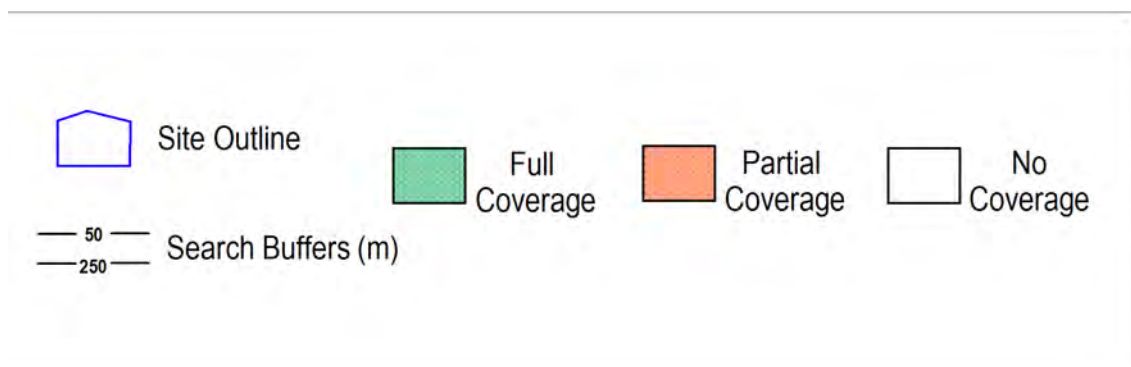
Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Tin Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
Section 6: Natural Ground Subsidence	On-site				
6.1 Shrink-Swell Clay	Very Low				
6.2 Landslides	Moderate				
6.3 Ground Dissolution of Soluble Rocks	Negligible				
6.4 Compressible Deposits	Moderate				
6.5 Collapsible Deposits	Very Low				
6.5 Running Sand	Low				
Section 7: Borehole Records	On-site	0-50m	51-250		
7 BGS Recorded Boreholes	8	5	25		
Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250		
8 Records of Background Soil Chemistry	4	0	0		
Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500	
9.1 Tunnels	0	0	0	Not Searched	
9.2 Historical Railway and Tunnel Features	12	7	14	Not Searched	
9.3 Historical Railways	0	0	0	Not Searched	
9.4 Active Railways	0	10	12	Not Searched	
9.5 Railway Projects	0	0	0	0	

1:10,000 Scale Availability



1_10,000 Availability Legend

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Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	Some deposits are mapped	Full	Full	Some deposits are mapped
2	409.0	Some deposits are mapped	Full	Full	Some deposits are mapped
N3	1475.0	Some deposits are mapped	Full	Full	Some deposits are mapped
N4	1628.0	Some deposits are mapped	Full	Full	Some deposits are mapped

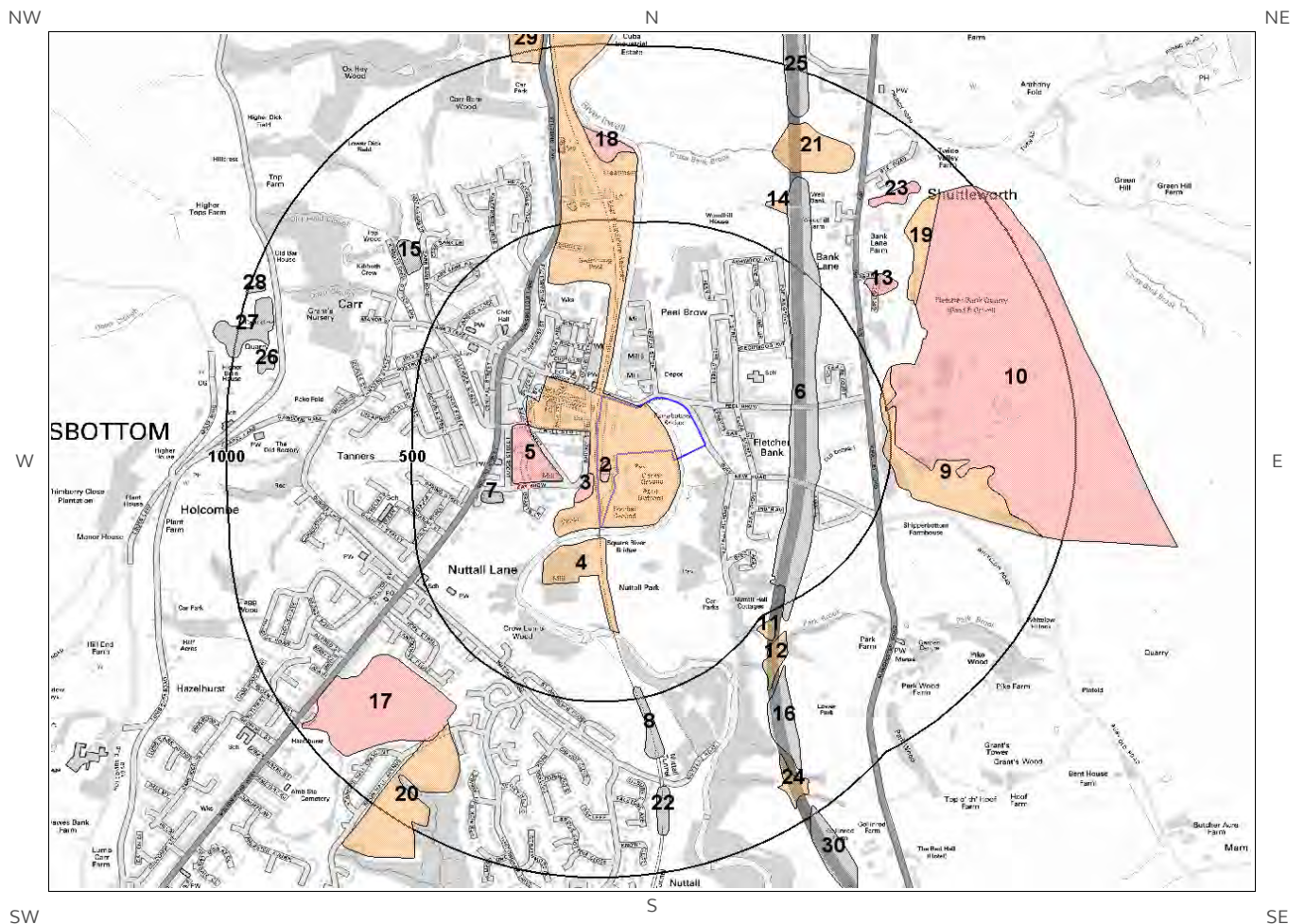
Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

The definitions of coverage are as follows:

Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped
Mass Movement	Some deposits are mapped on this tile	-	No coverage

1 Geology (1:10,000 scale).

1.1 Artificial Ground map (1:10,000 scale)



Artificial Ground Legend

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1. Geology 1:10,000 scale

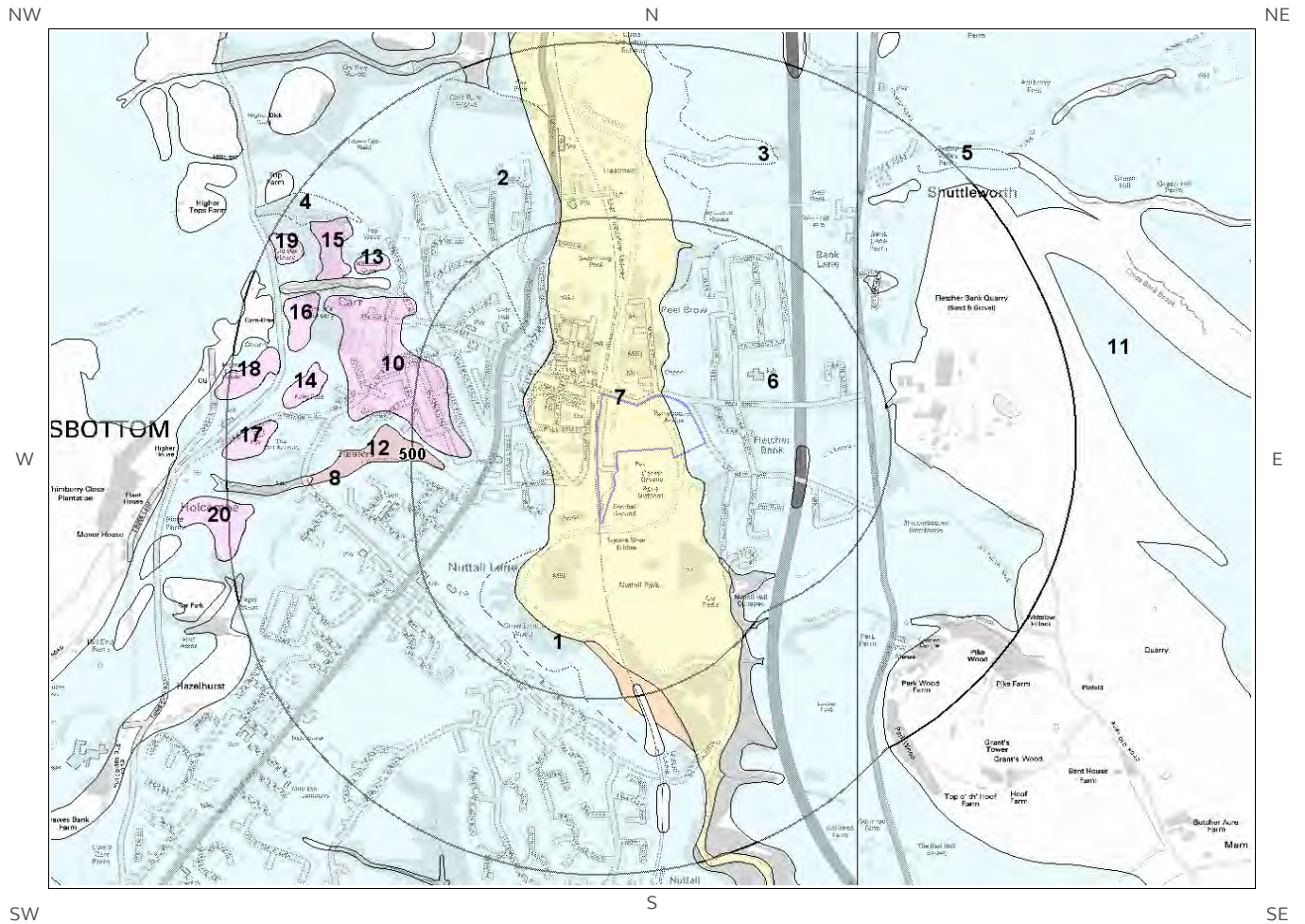
1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? Yes

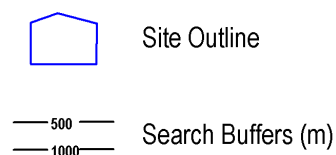
ID	Distance	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	0.0	On Site	WMGR-ARTDP	Infilled Ground	Artificial Deposit
3	11.0	W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
4	33.0	S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
5	95.0	W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
6	226.0	E	WGR-VOID	Worked Ground (Undivided)	Void
7	257.0	W	WGR-VOID	Worked Ground (Undivided)	Void
8	467.0	S	WGR-VOID	Worked Ground (Undivided)	Void
9	478.0	E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
10	495.0	E	WMGR-ARTDP	Infilled Ground	Artificial Deposit

1.2 Superficial Deposits and Landslips map (1:10,000 scale)



Artificial Ground Legend

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1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
6	0.0	On Site	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
7	0.0	On Site	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	118.0	W	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
9	334.0	S	RTD1-XSV	River Terrace Deposits, 1 - Sand And Gravel	Sand And Gravel
10	342.0	W	GFDUD-XSV	Glaciofluvial Deposits, Devensian - Sand And Gravel	Sand And Gravel
11	409.0	E	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
12	413.0	W	HEAD-DMTN	Head - Diamicton	Diamicton

1.2.2 Landslip

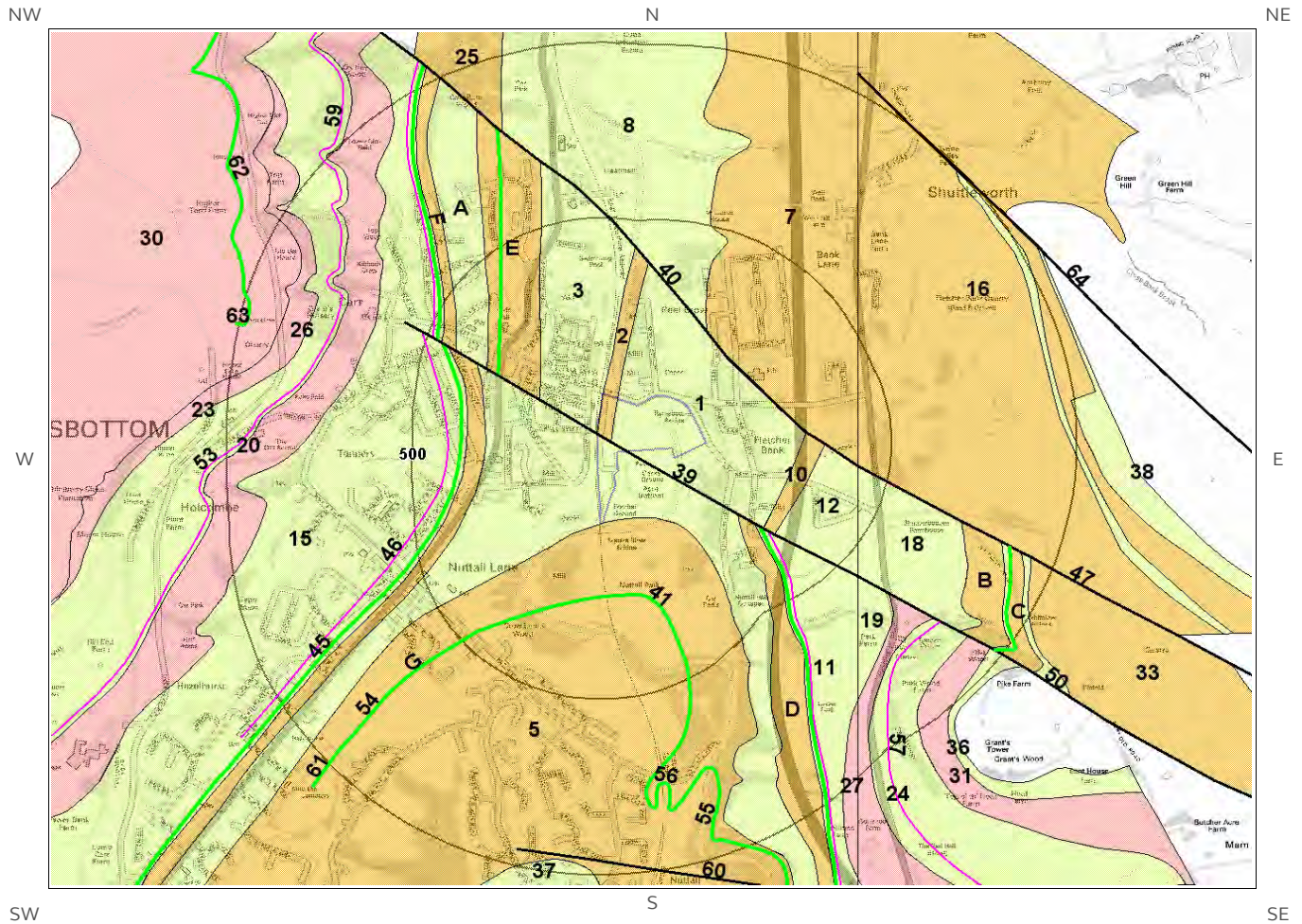
Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	164.0	SW	SLIP-UNKNOWN	Landslide Deposits	Unknown/unclassified Entry
2	247.0	NW	SLIP-UNKNOWN	Landslide Deposits	Unknown/unclassified Entry
3	298.0	N	SLIP-UNKNOWN	Landslide Deposits	Unknown/unclassified Entry

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

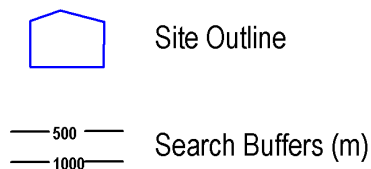
This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

1.3 Bedrock and linear features map (1:10,000 scale)



Bedrock and linear features Legend

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1.3 Bedrock and linear features

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age
2	0.0	On Site	HZG-SDST	Hazel Greave Grit - Sandstone	Marsdenian Sub-age
3	0.0	On Site	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age
4	0.0	On Site	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age
5	0.0	S	BBS-SDST	Brooksbottoms Grit - Sandstone	Marsdenian Sub-age
6E	165.0	W	BBS-SDST	Brooksbottoms Grit - Sandstone	Marsdenian Sub-age
7	176.0	NE	FLB-SDST	Fletcher Bank Grit - Sandstone	Marsdenian Sub-age
8	209.0	NE	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age
9D	219.0	SE	HLBG-SDST	Holcombe Brook Grit - Sandstone	Marsdenian Sub-age
10	242.0	SE	HZG-SDST	Hazel Greave Grit - Sandstone	Marsdenian Sub-age
11	260.0	SE	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age
12	291.0	SE	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age
13	301.0	W	HLBG-SDST	Holcombe Brook Grit - Sandstone	Marsdenian Sub-age
14A	318.0	W	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age
15	352.0	W	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age
16	409.0	E	FLB-SDST	Fletcher Bank Grit - Sandstone	Marsdenian Sub-age
17A	413.0	W	HLBG-SDST	Holcombe Brook Grit - Sandstone	Marsdenian Sub-age
18	414.0	E	MG-MDSI	Millstone Grit Group [see Also Migr] - Mudstone And Siltstone	Namurian Age

1.3.2 Linear features

Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance (m)	Direction	Category Description	Feature Description
39	0.0	On Site	FAULT	Normal fault, inferred
40	176.0	NE	FAULT	Normal fault, inferred
41	207.0	S	ROCK	Coal seam, inferred

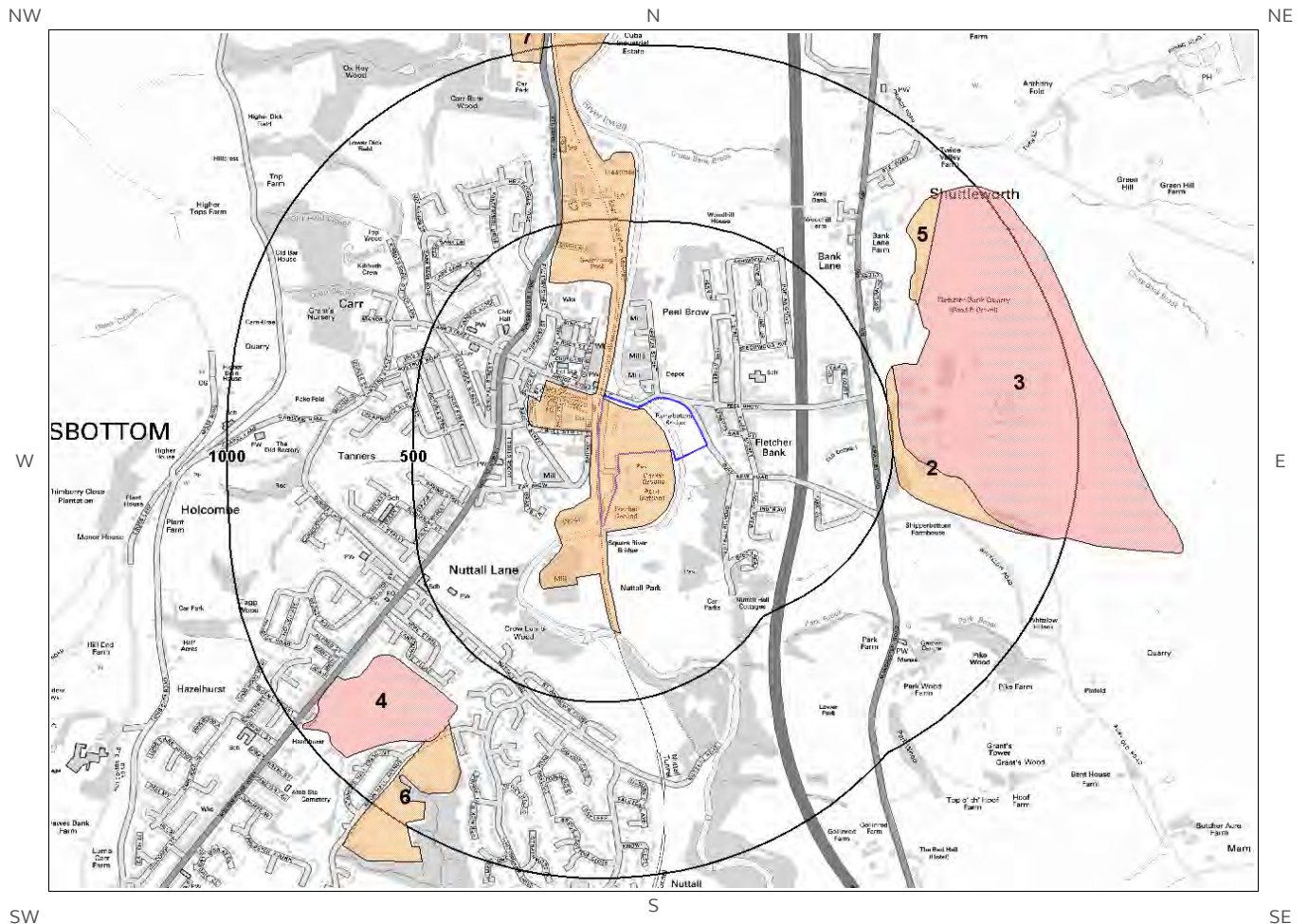
ID	Distance (m)	Direction	Category Description	Feature Description
42D	279.0	SE	ROCK	Coal seam, inferred
43E	285.0	W	ROCK	Coal seam, inferred
44D	300.0	SE	FOSSIL_HORIZON	Fossil horizon, marine band
45	367.0	W	ROCK	Coal seam, inferred
46	402.0	W	FOSSIL_HORIZON	Fossil horizon, marine band
47	414.0	E	FAULT	Normal fault, inferred
48F	470.0	W	ROCK	Coal seam, inferred
49F	484.0	W	FOSSIL_HORIZON	Fossil horizon, marine band

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 scale.

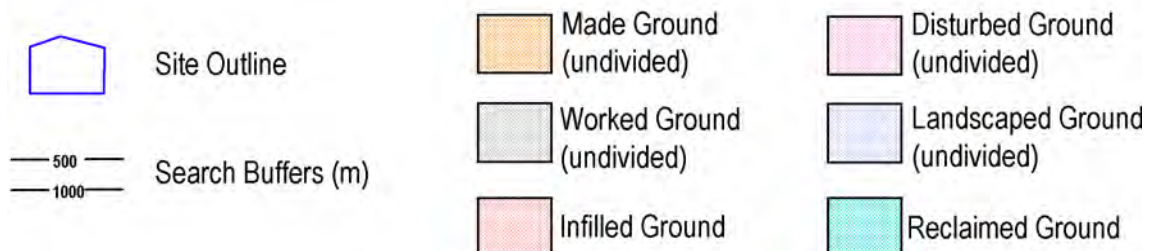
This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2 Geology 1:50,000 Scale

2.1 Artificial Ground map



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2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 076

2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary? Yes

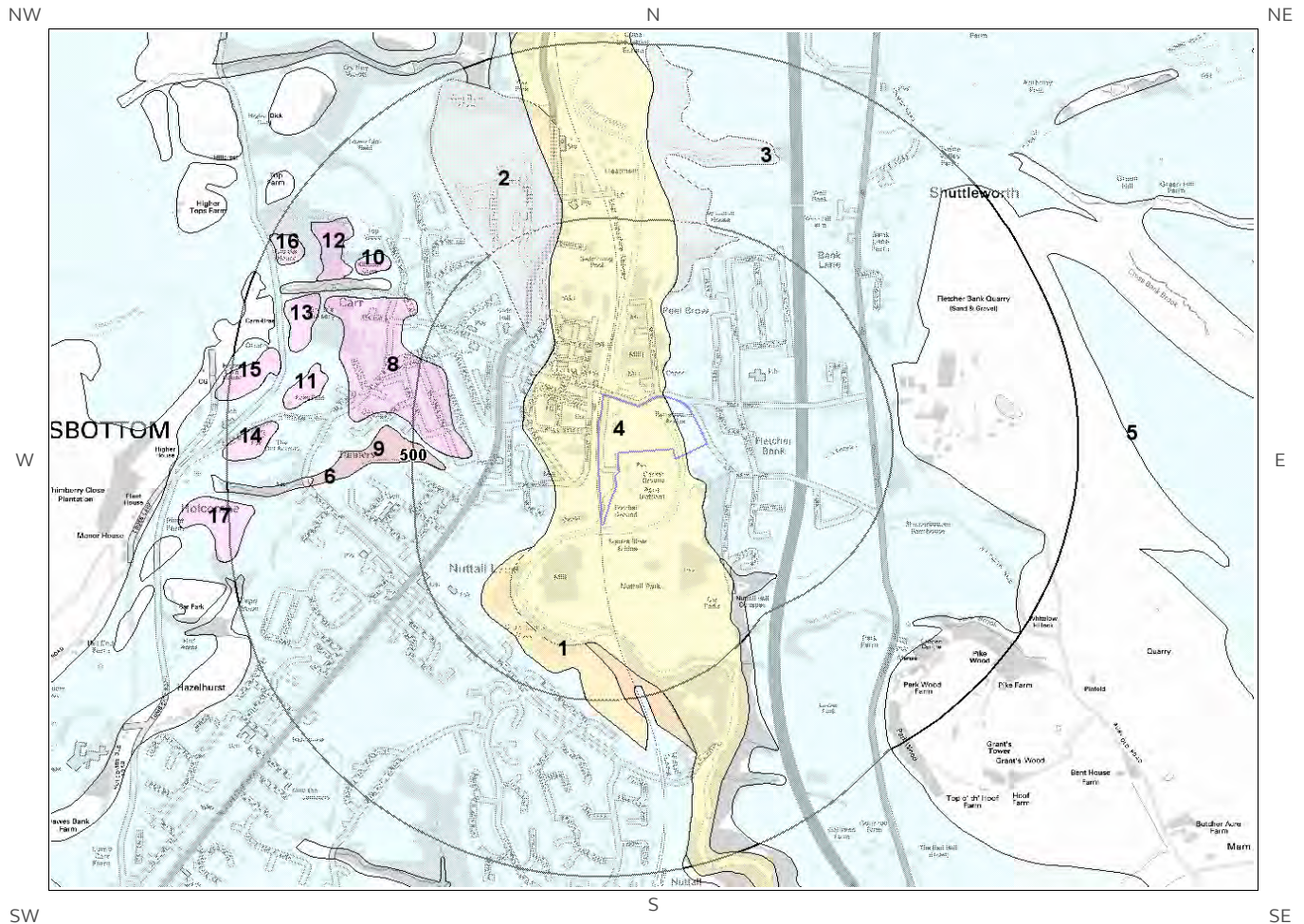
ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	490.0	E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

2.1.2 Permeability of Artificial Ground

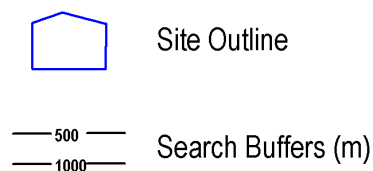
Are there any records relating to permeability of artificial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Very High	Low

2.2 Superficial Deposits and Landslips map (1:50,000 scale)



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2.2 Superficial Deposits and Landslips

2.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
4	0.0	On Site	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
5	0.0	On Site	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
6	119.0	W	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
7	335.0	S	RTD1-XSV	RIVER TERRACE DEPOSITS, 1	SAND AND GRAVEL
8	342.0	W	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
9	413.0	W	HEAD-DMTN	HEAD	DIAMICTON

2.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Intergranular	High	Very Low
0.0	On Site	Mixed	High	Low

2.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	191.0	W	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY
2	247.0	NW	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY
3	298.0	N	SLIP-UNKNOWN	LANDSLIDE DEPOSITS	UNKNOWN/UNCLASSIFIED ENTRY

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

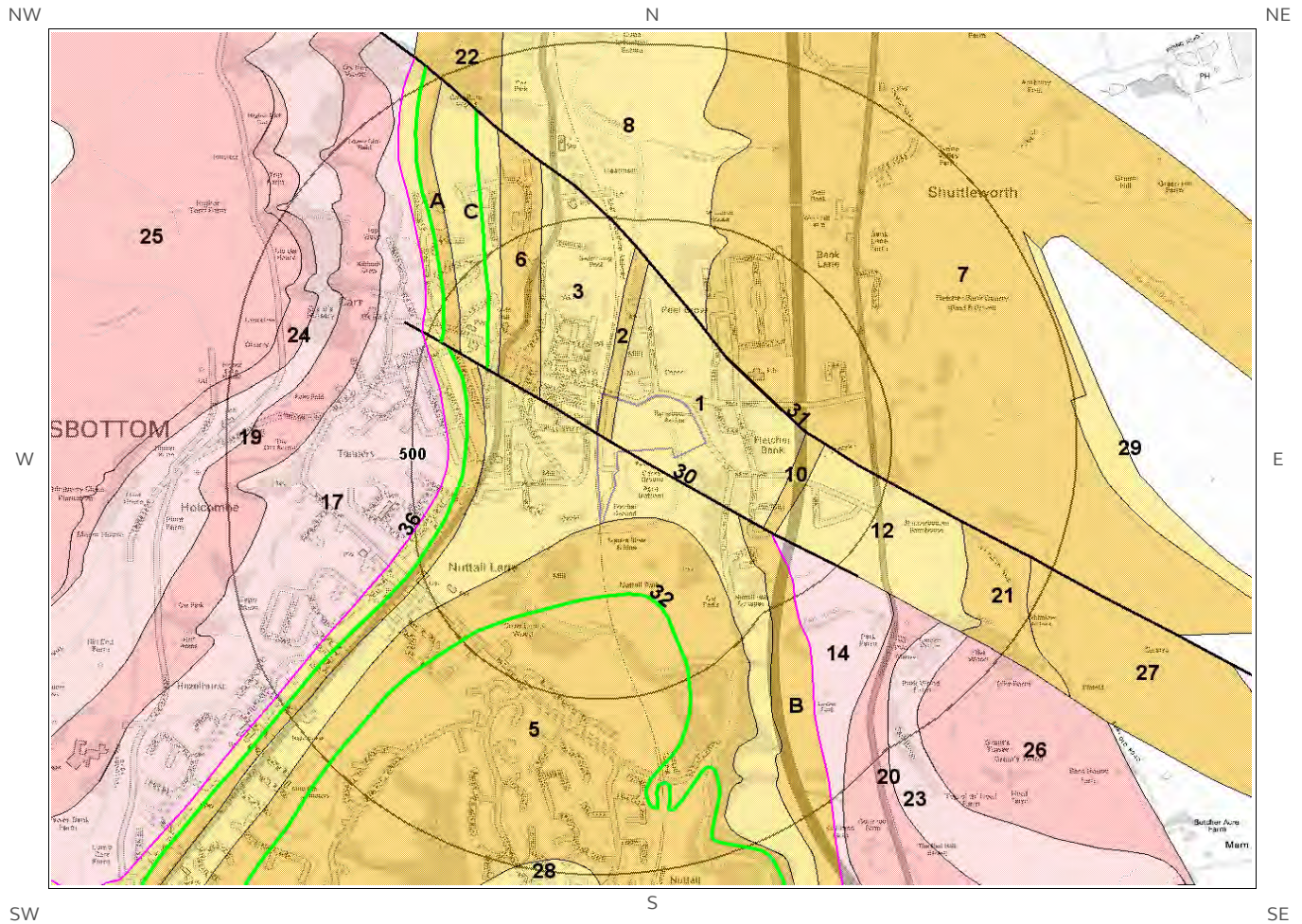
2.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site boundary?

No

Database searched and no data found.

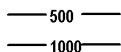
2.3 Bedrock and linear features map (1:50,000 scale)



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Site Outline



Search Buffers (m)

2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 076

2.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
2	0.0	On Site	GSYG-SDST	GUISELEY GRIT - SANDSTONE	NAMURIAN
3	0.0	On Site	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
4	0.0	On Site	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
5	0.0	S	BBS-SDST	BROOKSBOTTOMS GRIT - SANDSTONE	NAMURIAN
6	165.0	W	BBS-SDST	BROOKSBOTTOMS GRIT - SANDSTONE	NAMURIAN
7	175.0	NE	FLB-SDST	FLETCHER BANK GRIT - SANDSTONE	NAMURIAN
8	209.0	NE	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
9B	220.0	SE	HLBG-SDST	HOLCOMBE BROOK GRIT - SANDSTONE	NAMURIAN
10	243.0	E	GSYG-SDST	GUISELEY GRIT - SANDSTONE	NAMURIAN
11C	286.0	W	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
12	291.0	SE	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
13	301.0	W	HLBG-SDST	HOLCOMBE BROOK GRIT - SANDSTONE	NAMURIAN
14	307.0	SE	ROSSE-MDSI	ROSSENDALE FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
15D	352.0	W	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
16A	402.0	W	HLBG-SDST	HOLCOMBE BROOK GRIT - SANDSTONE	NAMURIAN
17	403.0	W	ROSSE-MDSI	ROSSENDALE FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN
18A	459.0	W	MARSD-MDSI	MARSDEN FORMATION - MUDSTONE AND SILTSTONE	NAMURIAN

2.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site boundary? Yes

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	Low	Low

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	High	Moderate
0.0	S	Fracture	High	Moderate

2.3.3 Linear features

Are there any records of linear features within 500m of the study site boundary? Yes

ID	Distance	Direction	Category Description	Feature Description
30	0.0	On Site	FAULT	Fault, inferred
31	175.0	NE	FAULT	Fault, inferred, displacement unknown
32	207.0	S	ROCK	Coal seam, inferred
33B	307.0	SE	FOSSIL_HORIZON	Marine band
34C	319.0	W	ROCK	Coal seam, inferred
35D	352.0	W	ROCK	Coal seam, inferred
36	403.0	W	FOSSIL_HORIZON	Marine band
37A	459.0	W	ROCK	Coal seam, inferred

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nation wide coverage.

3 Radon Data

3.1 Radon Affected Areas

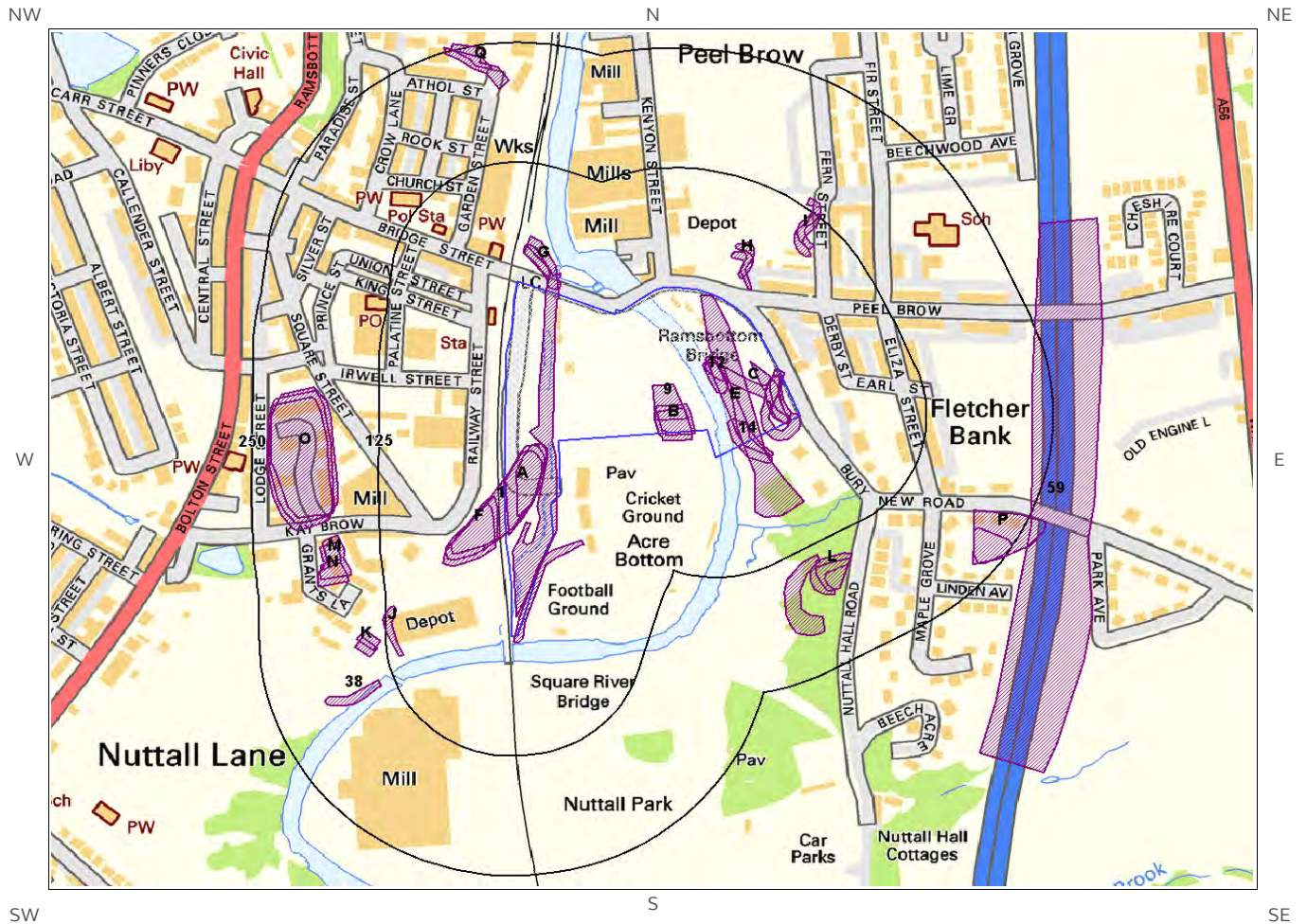
Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

3.2 Radon Protection

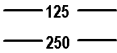
Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

4 Ground Workings map



Ground Workings Legend

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- | | | | |
|---|--------------------|---|----------------------------------|
|  | Site Outline |  | Historic Surface Ground Workings |
|  | Search Buffers (m) |  | Historic Underground Workings |
| | |  | Current Ground Workings |

4 Ground Workings

4.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Use	Date
1	0.0	On Site	379290 416615	Reservoir	1955
2	0.0	On Site	379339 416694	Ponds	1955
3A	0.0	On Site	379318 416624	Reservoir	1948
4A	0.0	On Site	379318 416624	Reservoirs	1891
5A	0.0	On Site	379318 416624	Pond	1908
6A	0.0	On Site	379318 416624	Reservoir	1927
7A	0.0	On Site	379326 416638	Pond	1968
8	0.0	On Site	379327 416522	Unspecified Ground Workings	1908
9	0.0	On Site	379463 416719	Filter Beds	1927
10B	0.0	On Site	379466 416696	Filter Beds	1948
11B	0.0	On Site	379468 416701	Filter Beds	1955
12	0.0	On Site	379507 416745	Refuse Heap	1948
13C	0.0	On Site	379559 416729	Refuse Heap	1927
14	0.0	On Site	379542 416679	Refuse Heap	1948
15D	0.0	On Site	379561 416721	Refuse Heap	1968
16C	0.0	On Site	379568 416722	Refuse Heap	1948
17D	0.0	On Site	379572 416729	Refuse Heap	1955
18E	0.0	On Site	379531 416715	Refuse Heap	1955
19E	0.0	On Site	379544 416715	Unspecified Ground Workings	1968
20G	3.0	N	379336 416861	Pond	1891
21F	8.0	W	379269 416591	Pond	1968

ID	Distance (m)	Direction	NGR	Use	Date
22F	11.0	W	379264 416581	Reservoir	1927
23F	11.0	W	379264 416581	Reservoir	1948
24F	11.0	W	379264 416581	Reservoir	1908
25G	14.0	N	379331 416868	Pond	1927
26G	14.0	N	379331 416868	Pond	1948
27H	23.0	NE	379537 416861	Unspecified Ground Workings	1955
28H	28.0	NE	379540 416863	Unspecified Ground Workings	1948
29H	28.0	NE	379540 416863	Unspecified Ground Workings	1927
30I	85.0	NE	379591 416894	Unspecified Ground Workings	1927
31I	85.0	NE	379591 416894	Unspecified Ground Workings	1948
32I	93.0	NE	379600 416906	Unspecified Ground Workings	1955
33J	109.0	W	379189 416480	Unspecified Ground Workings	1908
34J	130.0	W	379165 416470	Filter Beds	1955
35K	133.0	W	379162 416463	Filter Beds	1927
36K	133.0	W	379162 416463	Filter Beds	1948
37	137.0	SE	379584 416518	Refuse Heap	1968
38	139.0	W	379159 416416	Unspecified Ground Workings	1908
39L	141.0	SE	379625 416542	Refuse Heap	1955
40L	147.0	SE	379609 416538	Refuse Heap	1927
41L	147.0	SE	379609 416538	Refuse Heap	1948
42M	156.0	W	379132 416557	Ponds	1968
43M	156.0	W	379132 416557	Reservoirs	1955
44N	159.0	W	379130 416539	Reservoirs	1908
45N	159.0	W	379130 416539	Reservoirs	1948
46M	159.0	W	379130 416539	Reservoirs	1927
47M	164.0	W	379127 416562	Reservoirs	1948
48M	164.0	W	379127 416562	Reservoirs	1908
49O	164.0	W	379101 416667	Pond	1968
50O	169.0	W	379098 416662	Reservoir	1955

ID	Distance (m)	Direction	NGR	Use	Date
51O	171.0	W	379096 416655	Reservoir	1908
52O	171.0	W	379096 416655	Reservoir	1927
53O	171.0	W	379096 416655	Reservoir	1948
54O	171.0	W	379096 416655	Reservoir	1891
55P	198.0	SE	379798 416578	Refuse Heap	1928
56Q	202.0	N	379271 417068	Pond	1955
57P	209.0	SE	379782 416569	Refuse Heap	1938
58Q	224.0	N	379266 417081	Pond	1968
59	230.0	E	379830 416622	Cuttings	1980

4.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	678.0	S	379466 415772	Tunnel	1949
Not shown	678.0	S	379466 415772	Tunnel	1980
Not shown	678.0	S	379466 415772	Tunnel	1968
Not shown	681.0	S	379465 415768	Tunnel	1908
Not shown	681.0	S	379465 415768	Tunnel	1927
Not shown	681.0	S	379465 415768	Tunnel	1891
Not shown	681.0	S	379465 415768	Tunnel	1848
Not shown	888.0	S	379433 415419	Tunnel	1968
Not shown	888.0	S	379433 415419	Tunnel	1949
Not shown	891.0	S	379439 415419	Tunnel	1980
Not shown	894.0	S	379433 415414	Tunnel	1908

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	894.0	S	379433 415414	Tunnel	1891
Not shown	894.0	S	379433 415414	Tunnel	1848
Not shown	894.0	S	379433 415414	Tunnel	1927

4.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? Yes

The following Current Ground Workings information is provided by British Geological Survey:

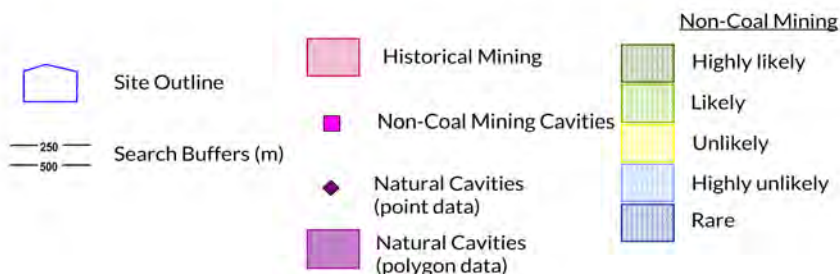
ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
Not shown	578.0	E	380169 416697	Sandstone	Fletcher Bank Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	630.0	NE	380055 417170	Sandstone	Fletcher Bank Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	715.0	E	380300 416800	Sandstone	Fletcher Bank Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive
Not shown	715.0	E	380300 416800	Sandstone	Fletcher Bank Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive
Not shown	806.0	W	378540 417079	Sandstone	Carr	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	837.0	NE	380110 417420	Sandstone	Bank Lane Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	853.0	W	378507 417128	Sandstone	Carr	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	881.0	W	378431 416915	Sandstone	Stony Bank	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	882.0	E	380460 416555	Sandstone	Grime Height Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	964.0	E	380515 416980	Sandstone	Fletcher Bank Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive
Not shown	967.0	NE	380350 417335	Sandstone	Fletcher Bank Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

5 Mining, Extraction & Natural Cavities map



Mining, Extraction and Natural Cavities Legend

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5 Mining, Extraction & Natural Cavities

5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? Yes

The following Coal Mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0.0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

5.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? Yes

The following non-coal mining information is provided by the BGS:

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
1	0.0	On Site	Not available	Vein Mineral	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
2	409.0	E	Not available	Vein Mineral	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled "Review of mining instability in Great Britain, 1990" PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.7 Brine Extraction

This data provides information from the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level..

Are there any Tin Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.10 Clay Mining

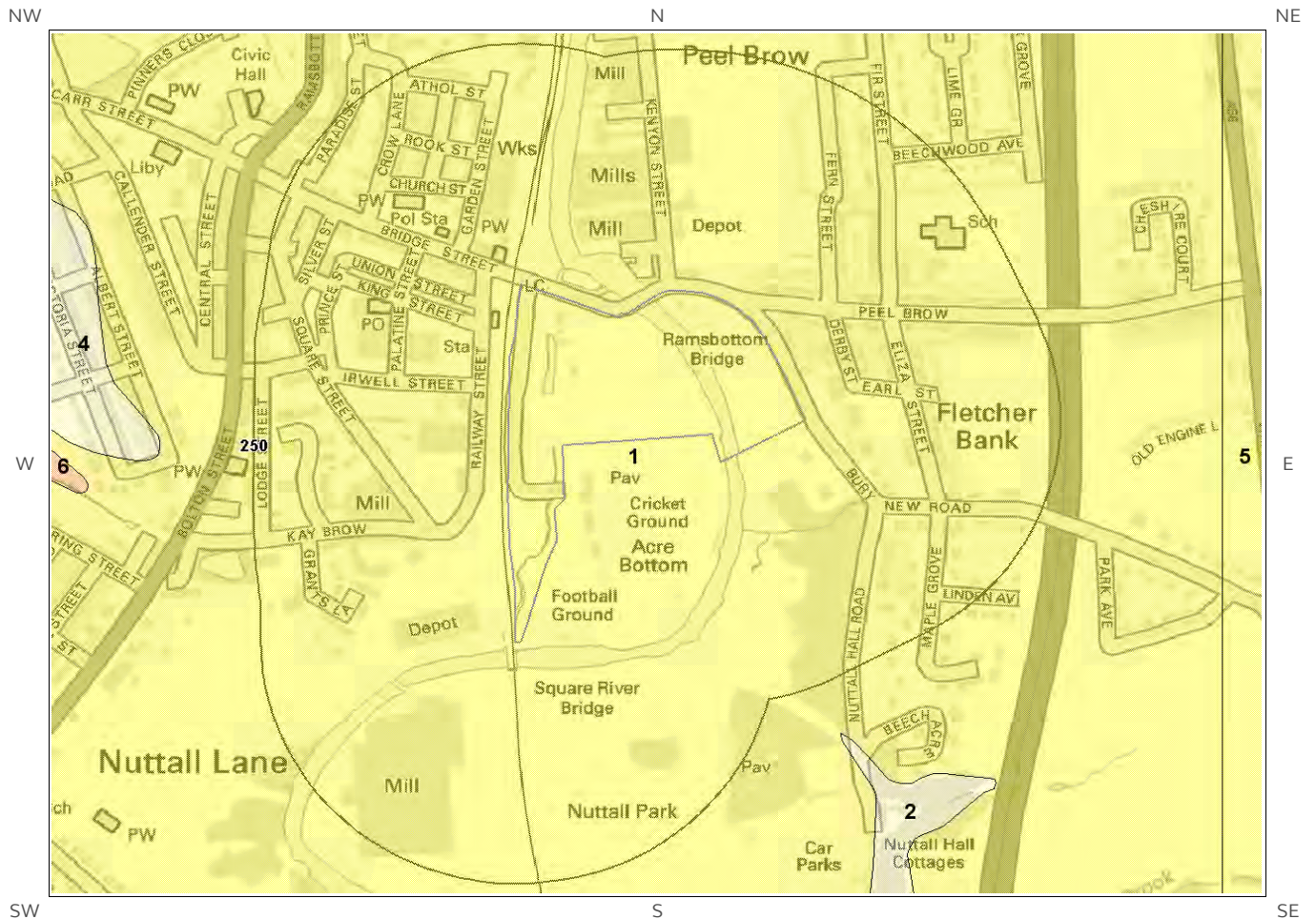
This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

6 Natural Ground Subsidence

6.1 Shrink-Swell Clay map

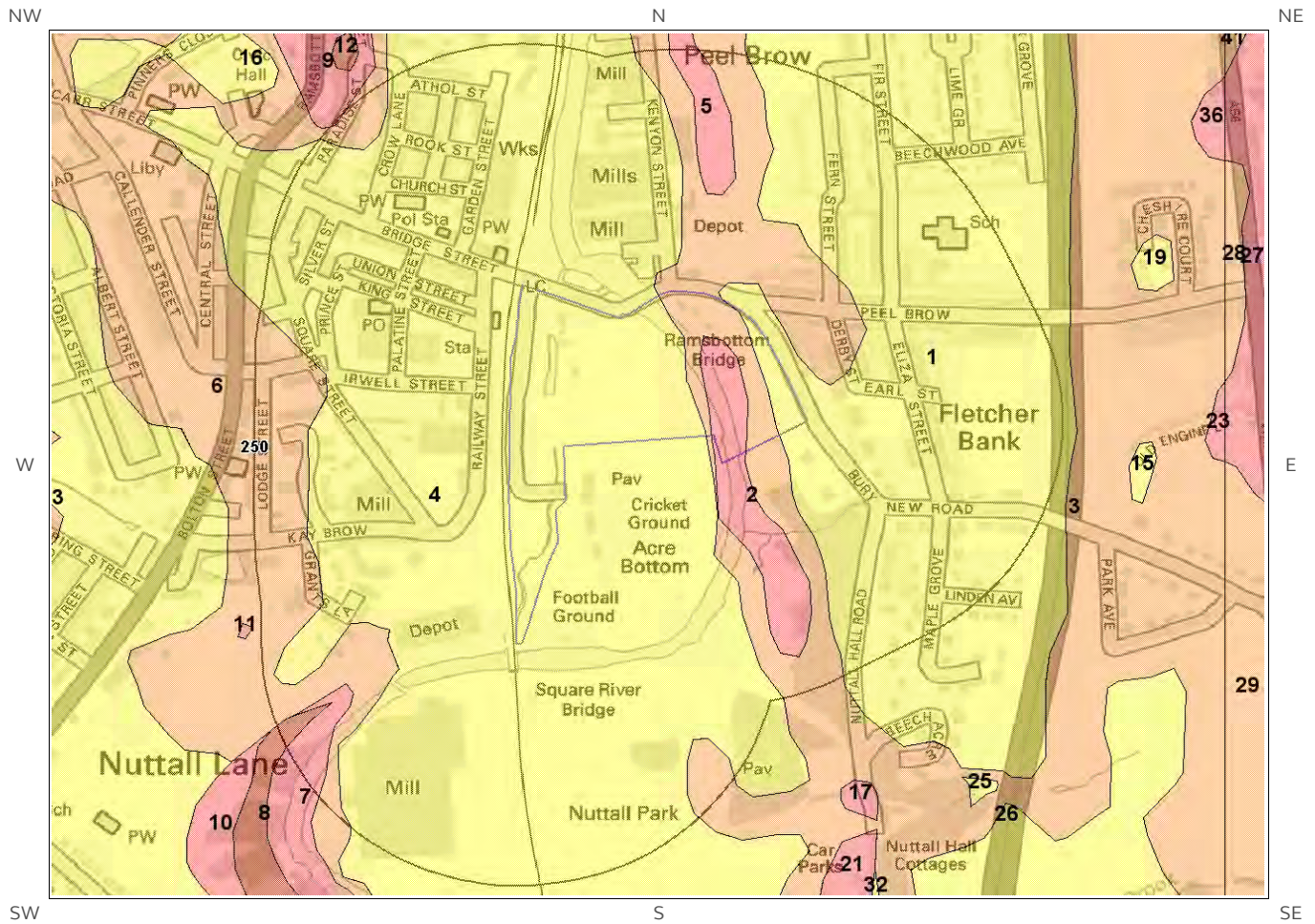


Shrink Swell Clay Legend

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6.2 Landslides map

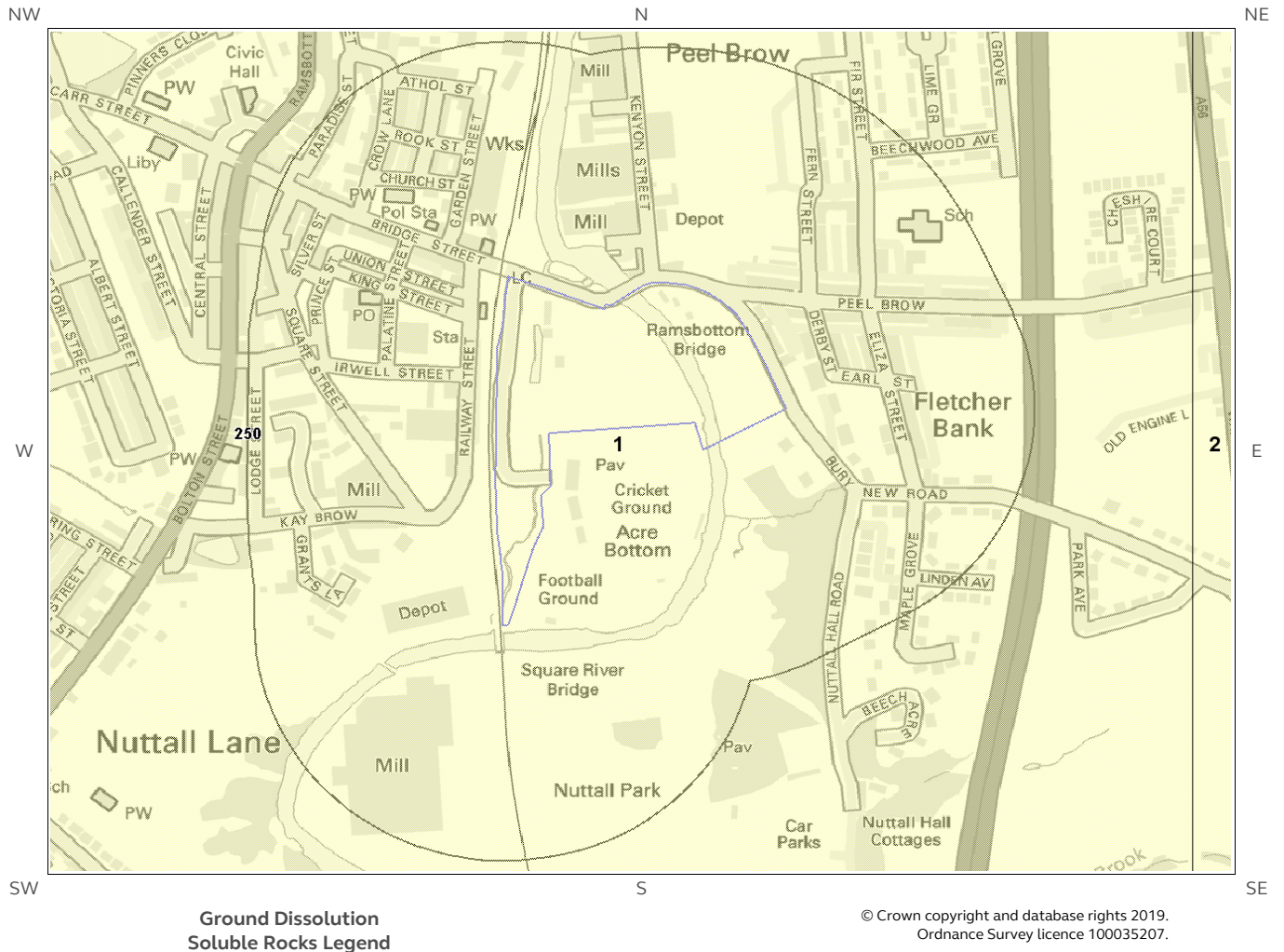


Landslides Legend

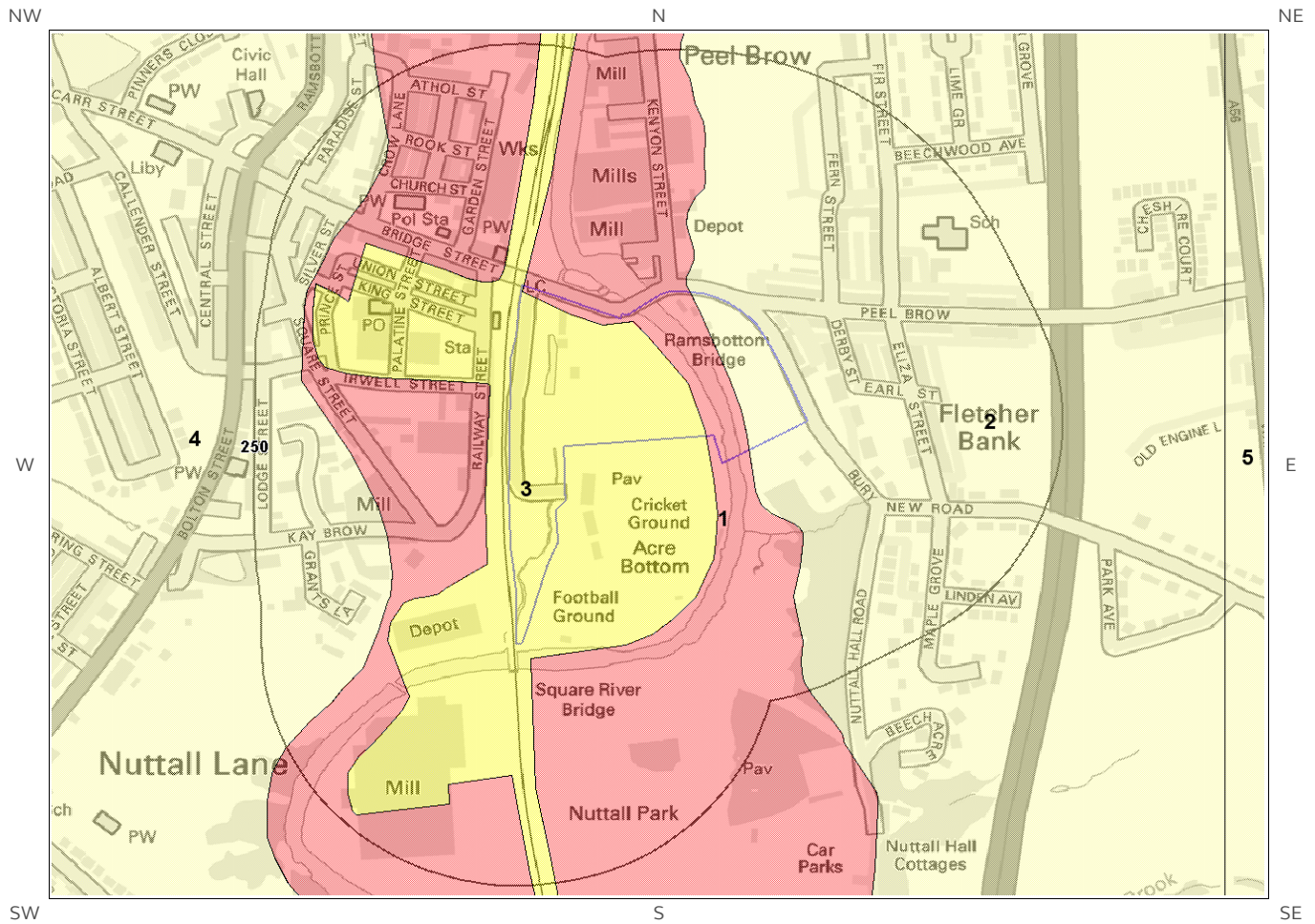
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6.3 Ground Dissolution of Soluble Rocks map



6.4 Compressible Deposits map

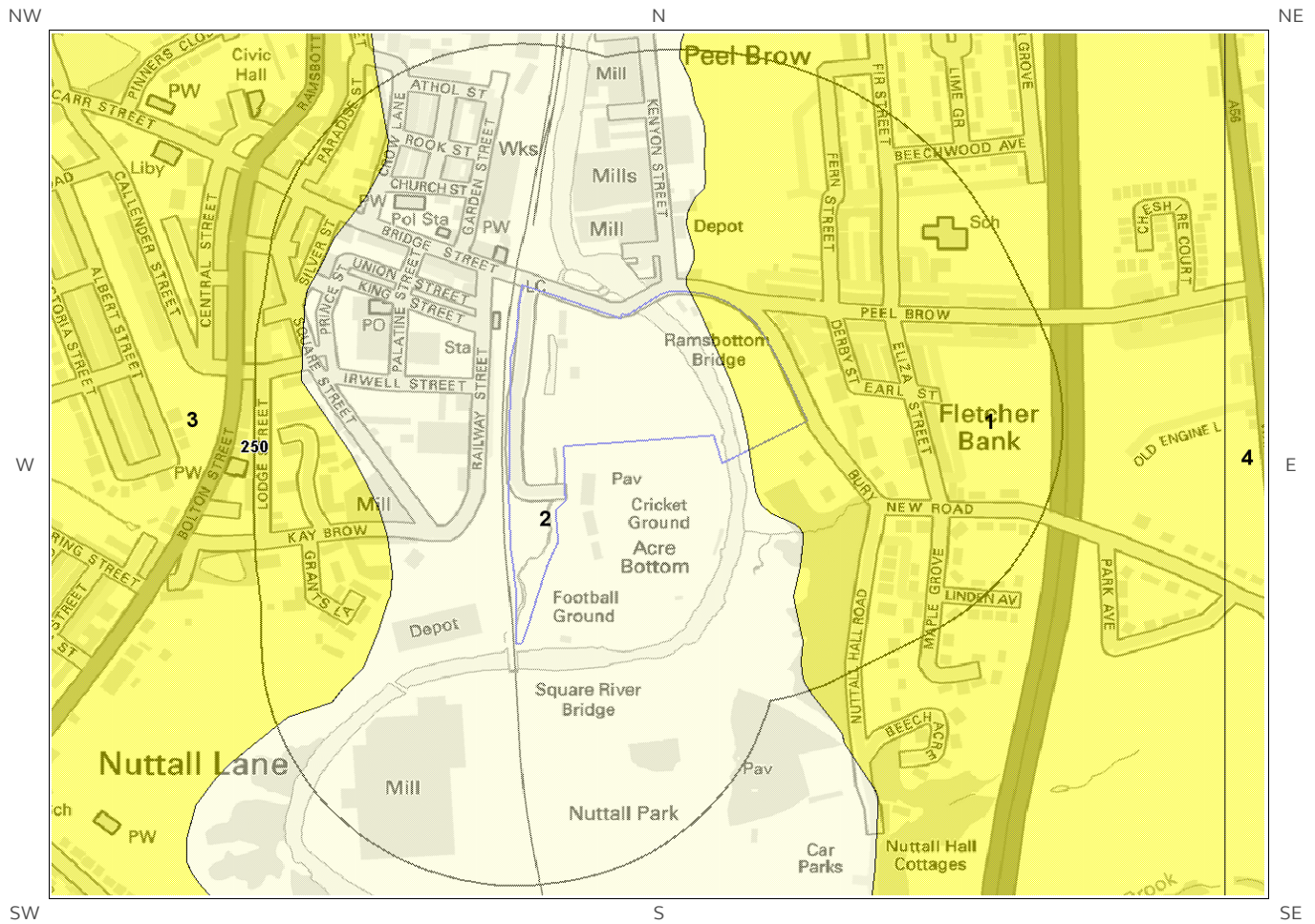


Compressible Deposits Legend

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6.5 Collapsible Deposits map

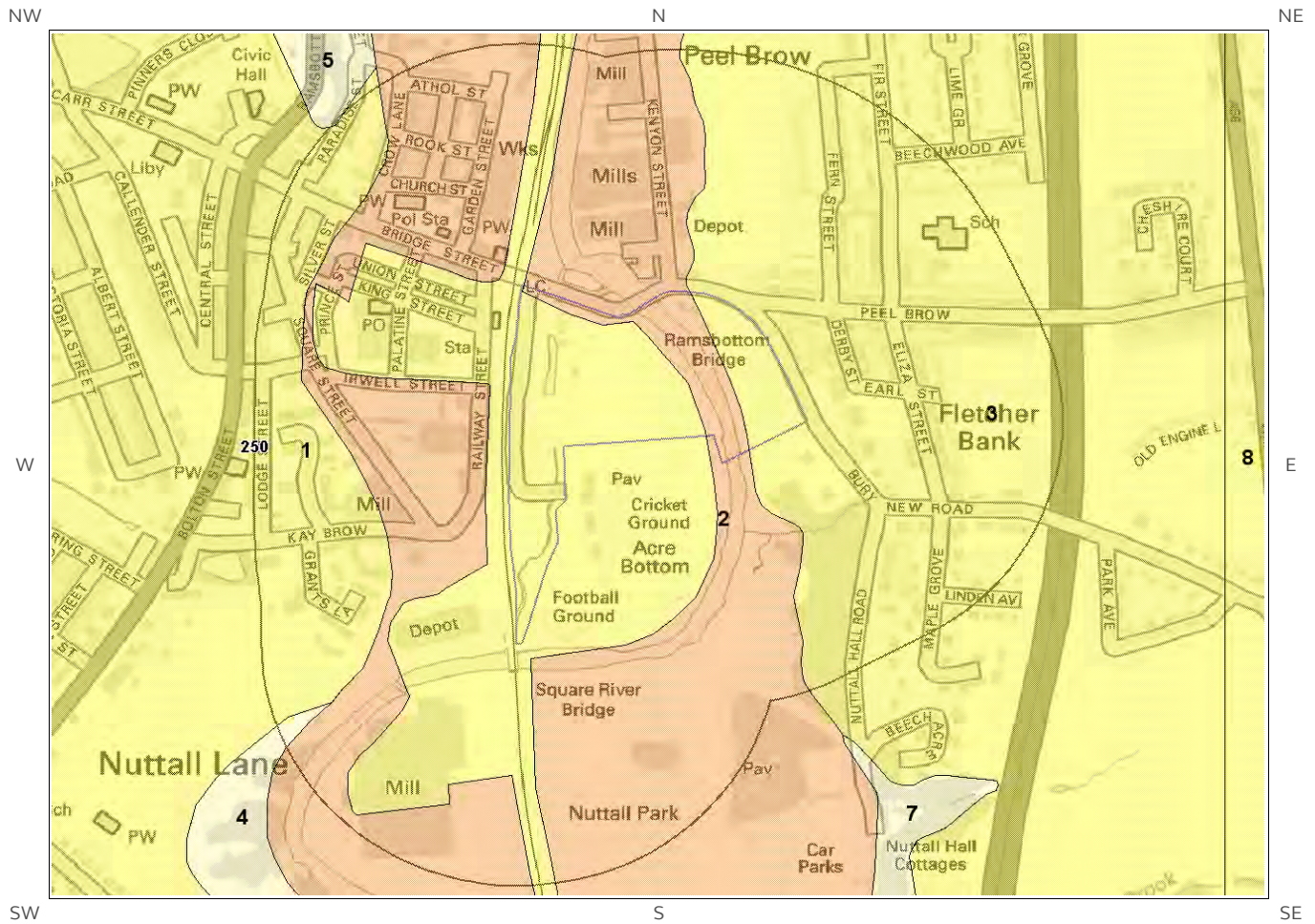


Collapsible Deposits Legend

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6.6 Running Sand map



Running Sand Legend

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6 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site** boundary? Moderate

6.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.
2	0.0	On Site	Moderate	Significant potential for slope instability with relatively small changes in ground conditions. Avoid large amounts of water entering the ground through pipe leakage or soak-aways. Do not undercut or place large amounts of material on slopes without technical advice. For new build - consider the potential and consequences of ground movement during excavations, or consequence of changes to loading or drainage. For existing property - probable increase in insurance risk is likely due to potential natural slope instability after changes to ground conditions such as a very long, excessively wet winter.

* This includes an automatically generated 50m buffer zone around the site

ID	Distance (m)	Direction	Hazard Rating	Details
3	0.0	On Site	Low	Possibility of slope instability problems after major changes in ground conditions. Consideration should be given to stability if changes to drainage or excavations take place. Possible increase in construction cost to reduce potential slope stability problems. Existing property - no significant increase in insurance risk due to natural slope instability problems.
4	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

6.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

6.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Moderate	Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build - consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property - possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.
2	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
3	0.0	On Site	Very Low	Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

6.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

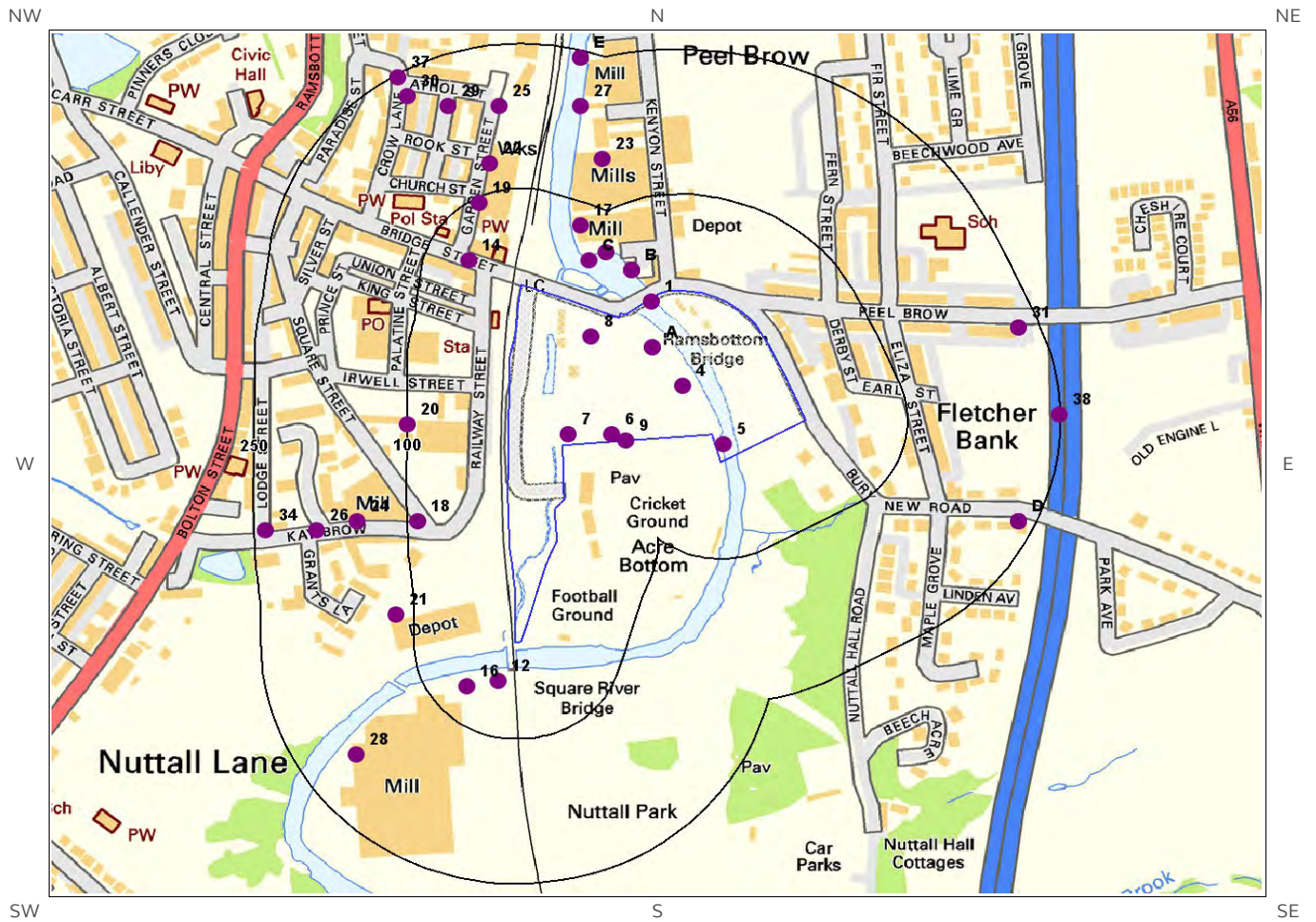
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.
2	0.0	On Site	Negligible	No indicators for collapsible deposits identified. No actions required to avoid problems due to collapsible deposits. No special ground investigation required, or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

6.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

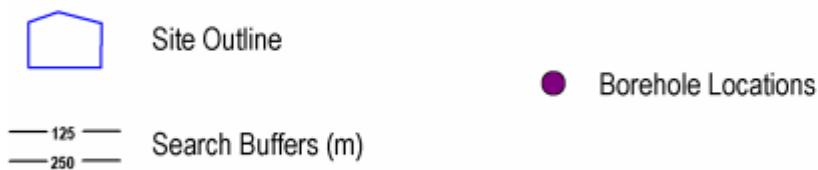
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
2	0.0	On Site	Low	Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build - consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property - no significant increase in insurance risk due to running sand problems is likely.
3	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

7 Borehole Records map



Borehole Records Legend

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7 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

38

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	0.0	On Site	379439 416827	SD71NE153	Not available	RIVER IRWELL RAMSBOTTOM TP F
2A	0.0	On Site	379440 416780	SD71NE172	Not available	RIVER IRWELL RAMSBOTTOM TP4
3A	0.0	On Site	379440 416780	SD71NE173	Not available	RIVER IRWELL RAMSBOTTOM TP4A
4	0.0	On Site	379470 416740	SD71NE168	Not available	RIVER IRWELL RAMSBOTTOM BH3
5	0.0	On Site	379510 416680	SD71NE174	Not available	RIVER IRWELL RAMSBOTTOM TP5
6	0.0	On Site	379400 416690	SD71NE187	66	RAMSBOTTOM PAPER MILLS
7	0.0	On Site	379358 416690	SD71NE7	66	RAMSBOTTOM PAPER MILLS
8	0.0	On Site	379380 416791	SD71NE8	Not available	RAMSBOTTOM PAPER MILLS
9	1.0	S	379414 416683	SD71NE6	108	RAMSBOTTOM PAPER MILLS
10B	35.0	NW	379420 416860	SD71NE167	Not available	RIVER IRWELL RAMSBOTTOM BH2
11B	35.0	NW	379420 416860	SD71NE171	Not available	RIVER IRWELL RAMSBOTTOM TP3
12	44.0	SW	379289 416434	SD71NE154	Not available	RIVER IRWELL RAMSBOTTOM TP G
13C	45.0	N	379378 416870	SD71NE151	Not available	RIVER IRWELL RAMSBOTTOM TP D
14	57.0	NW	379260 416870	SD71NE117	7	STUBBINS LANE BURY 1
15C	58.0	N	379395 416878	SD71NE152	Not available	RIVER IRWELL RAMSBOTTOM TP E
16	66.0	SW	379258 416429	SD71NE155	Not available	RIVER IRWELL RAMSBOTTOM TP H
17	76.0	N	379370 416906	SD71NE150	Not available	RIVER IRWELL RAMSBOTTOM TP C
18	90.0	W	379210 416600	SD71NE81	Not available	BOLTON ST/KAY BROW RAMSBOT BH1
19	94.0	NW	379270 416930	SD71NE118	6	STUBBINS LANE BURY 2
20	99.0	W	379200 416700	SD71NE192	Not available	RAMSBOTTOM
21	118.0	W	379188 416503	SD71NE5	142	HEPBURNS BLEACH WORKS
22	129.0	N	379280 416970	SD71NE119	4	STUBBINS LANE BURY 3

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
23	148.0	N	379391 416975	SD71NE149	Not available	RIVER IRWELL RAMSBOTTOM TP B
24	150.0	W	379150 416600	SD71NE82	Not available	BOLTON ST/KAY BROW RAMSBOT BH2
25	186.0	N	379290 417030	SD71NE120	5	STUBBINS LANE BURY 4
26	190.0	W	379110 416590	SD71NE83	Not available	BOLTON ST/KAY BROW RAMSBOT BH3
27	194.0	N	379370 417030	SD71NE170	Not available	RIVER IRWELL RAMSBOTTOM TP2
28	196.0	SW	379149 416358	SD71NE156	Not available	RIVER IRWELL RAMSBOTTOM TP J
29	198.0	N	379240 417030	SD71NE121	5	STUBBINS LANE BURY 5
30	225.0	NW	379200 417040	SD71NE122	4	STUBBINS LANE BURY 6
31	229.0	NE	379800 416800	SD71NE47	Not available	M66 BURY EASTERLY BY- PASS. 5882/1-4
32D	234.0	SE	379800 416600	SD71NE45	Not available	M66 BURY EASTERLY BY- PASS. 152E-W
33D	234.0	SE	379800 416600	SD71NE44	Not available	M66 BURY EASTERLY BY- PASS. 5881/1-4A
34	240.0	W	379060 416590	SD71NE84	Not available	BOLTON ST/KAY BROW RAMSBOT BH4
35E	242.0	N	379370 417080	SD71NE169	Not available	RIVER IRWELL RAMSBOTTOM TP1
36E	242.0	N	379370 417080	SD71NE166	Not available	RIVER IRWELL RAMSBOTTOM BH1
37	247.0	NW	379190 417060	SD71NE123	4	STUBBINS LANE BURY 7
38	249.0	E	379840 416710	SD71NE46	Not available	M66 BURY EASTERLY BY- PASS. 153

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#6: scans.bgs.ac.uk/sobi_scans/boreholes/22663
#7: scans.bgs.ac.uk/sobi_scans/boreholes/22483
#8: scans.bgs.ac.uk/sobi_scans/boreholes/22484
#9: scans.bgs.ac.uk/sobi_scans/boreholes/22482
#14: scans.bgs.ac.uk/sobi_scans/boreholes/22593
#19: scans.bgs.ac.uk/sobi_scans/boreholes/22594
#20: scans.bgs.ac.uk/sobi_scans/boreholes/22668
#21: scans.bgs.ac.uk/sobi_scans/boreholes/22481
#22: scans.bgs.ac.uk/sobi_scans/boreholes/22595
#25: scans.bgs.ac.uk/sobi_scans/boreholes/22596
#29: scans.bgs.ac.uk/sobi_scans/boreholes/22597
#30: scans.bgs.ac.uk/sobi_scans/boreholes/22598
#31: scans.bgs.ac.uk/sobi_scans/boreholes/22523
#32D: scans.bgs.ac.uk/sobi_scans/boreholes/22521
#33D: scans.bgs.ac.uk/sobi_scans/boreholes/22520
#37: scans.bgs.ac.uk/sobi_scans/boreholes/22599
#38: scans.bgs.ac.uk/sobi_scans/boreholes/22522

8 Estimated Background Soil Chemistry

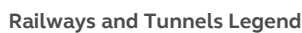
Records of background estimated soil chemistry within 250m of the study site boundary:

4

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg

*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.



 Site Outline
 Search Buffers (m)
 Underground or Partially Underground Railway / Subway System
 Railway Tunnel (OS Mapping)
 Abandoned or Dismantled Railway (OpenStreetMap)
 Railway Track (OS Mapping)
 Railway Track (OpenStreetMap)
 High Speed 2
 High Speed 2 Revised Proposed Route
 Crossrail 1
 Railway and/or Tunnel Feature from Historical Mapping

9 Railways and Tunnels

9.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels map.

9.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? Yes

Have any historical railway or tunnel features been identified within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Details	Date
1	0	On Site	379295 417181	Railway Sidings	1955
2	0	On Site	379295 417181	Railway Sidings	1968
3A	0	On Site	379360 416722	Railway Sidings	1927
4A	0	On Site	379360 416722	Railway Sidings	1908
5A	0	On Site	379360 416722	Railway Sidings	1948
6A	0	On Site	379360 416722	Railway Sidings	1891

ID	Distance (m)	Direction	NGR	Details	Date
14E	0	On Site	379283 416687	Railway Sidings	1962
15	0	On Site	379339 416731	Railway Sidings	1962
16E	0	On Site	379290 416640	Railway Sidings	1891
17F	0	On Site	379291 416643	Railway Sidings	1910
18F	0	On Site	379291 416643	Railway Sidings	1929
19F	0	On Site	379291 416643	Railway Sidings	1938
7	6	W	379277 416629	Railway Sidings	1908
8B	9	W	379281 416719	Railway Sidings	1927
9B	9	W	379281 416719	Railway Sidings	1948
20G	11	N	379300 417247	Railway Sidings	1938
21G	13	N	379267 417247	Railway Sidings	1891
22G	13	N	379299 417248	Railway Sidings	1910
23G	13	N	379299 417248	Railway Sidings	1929
24	52	W	379194 416519	Railway Sidings	1962
10C	55	W	379236 416546	Railway Sidings	1948
11C	55	W	379236 416546	Railway Sidings	1927
25H	57	N	379316 416951	Railway Sidings	1962
26H	58	N	379328 416952	Railway Sidings	1962
27I	64	N	379328 416954	Railway Sidings	1992
28I	64	N	379328 416954	Railway Sidings	1994
12D	98	W	379199 416481	Railway Sidings	1927
13D	98	W	379199 416481	Railway Sidings	1948
29	111	N	379330 416978	Railway Sidings	1978
30	155	N	379282 417397	Railway Sidings	1962
31J	191	N	379347 417079	Railway Sidings	1994
32J	191	N	379347 417079	Railway Sidings	1992
33J	191	N	379347 417079	Railway Sidings	1996

Any records that have been identified are represented on the Railways and Tunnels map.

9.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels map.

9.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Name	Type
2	W	Not given	Preserved
2	W	Not given	Preserved
2	W	Not given	Preserved
2	W	Not given	Preserved
2	W	Not given	Preserved
2	W	Not given	Preserved
3	W	Not given	Multi Track
3	W	Not given	Multi Track
32	S	Not given	Preserved
32	S	Not given	Preserved
62	N	Not given	Preserved
62	N	Not given	Preserved
64	N	Not given	Multi Track
64	N	Not given	Multi Track
126	N	Not given	Multi Track
126	N	Not given	Multi Track
126	N	Not given	Multi Track
126	N	Not given	Multi Track
140	N	Not given	Preserved
140	N	Not given	Preserved
192	N	Not given	Multi Track
192	N	Not given	Multi Track

Multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels map.

9.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? No

Is the study site within 500m of the route of the Crossrail 1 rail project? No

*Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a **Groundsure HS2 and Crossrail 1 Report**.*

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.

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Betts Geo Ltd

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FARM BARN, MARSH FARM ROAD,
SEALAND, CH5 2LY

Groundsure
Reference:

GS-6015650

Your Reference:

BG3315

Report Date

9 May 2019

Report Delivery
Method:

Email - pdf

Enviro Insight

Address: HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM, BL0 0BS

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,

Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Address: HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM, BL0 0BS

Date: 9 May 2019

Reference: GS-6015650

Client: Betts Geo Ltd

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 26-Mar-2012

Grid Reference: 379433,416756

Site Size: 4.6144ha

Report Reference: GS-6015650

Client Reference: BG3315

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Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	32	25	64	75
1.2 Additional Information – Historical Tank Database	15	0	8	2
1.3 Additional Information – Historical Energy Features Database	3	2	13	20
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	4	3	0
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	19	10	30	55
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	2	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	2	1	0	3
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	1	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	1	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	1	1	1
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	3	2	1
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	4	2
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	2	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	1	0	0	2	5	4
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	2	0	2	2	29	7
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	5	7	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	6	4	10	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	1	5	34	Not searched
4.2 Records of Petrol and Fuel Sites	0	1	0	1
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	Identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology				0-500m		
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site				Identified		
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site				Identified		
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	2	0	0	0	2	18
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	6	0	8	3	21
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	3
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	1	0	1	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	Yes
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	16	20	20	58	Not searched	Not searched
6.11 Surface water features within 250m of the study site	Yes	Yes	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Environment Agency Zone 2 floodplains within 250m of the study site	Identified					
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	Identified					
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	High					
7.4 Flood Defences within 250m of the study site	Identified					
7.5 Areas benefiting from Flood Defences within 250m of the study site	Identified					
7.6 Areas used for Flood Storage within 250m of the study site	None identified					
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Potential at Surface					
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	High					

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	2
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	3	6
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	1
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0
8.14 Records of Green Belt land	0	1	0	2	2	1

Section 9: Natural Hazards	
9.1 Maximum risk of natural ground subsidence	Moderate
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Moderate
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Moderate
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining	
10.1 Coal mining areas within 75m of the study site	Identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	Identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

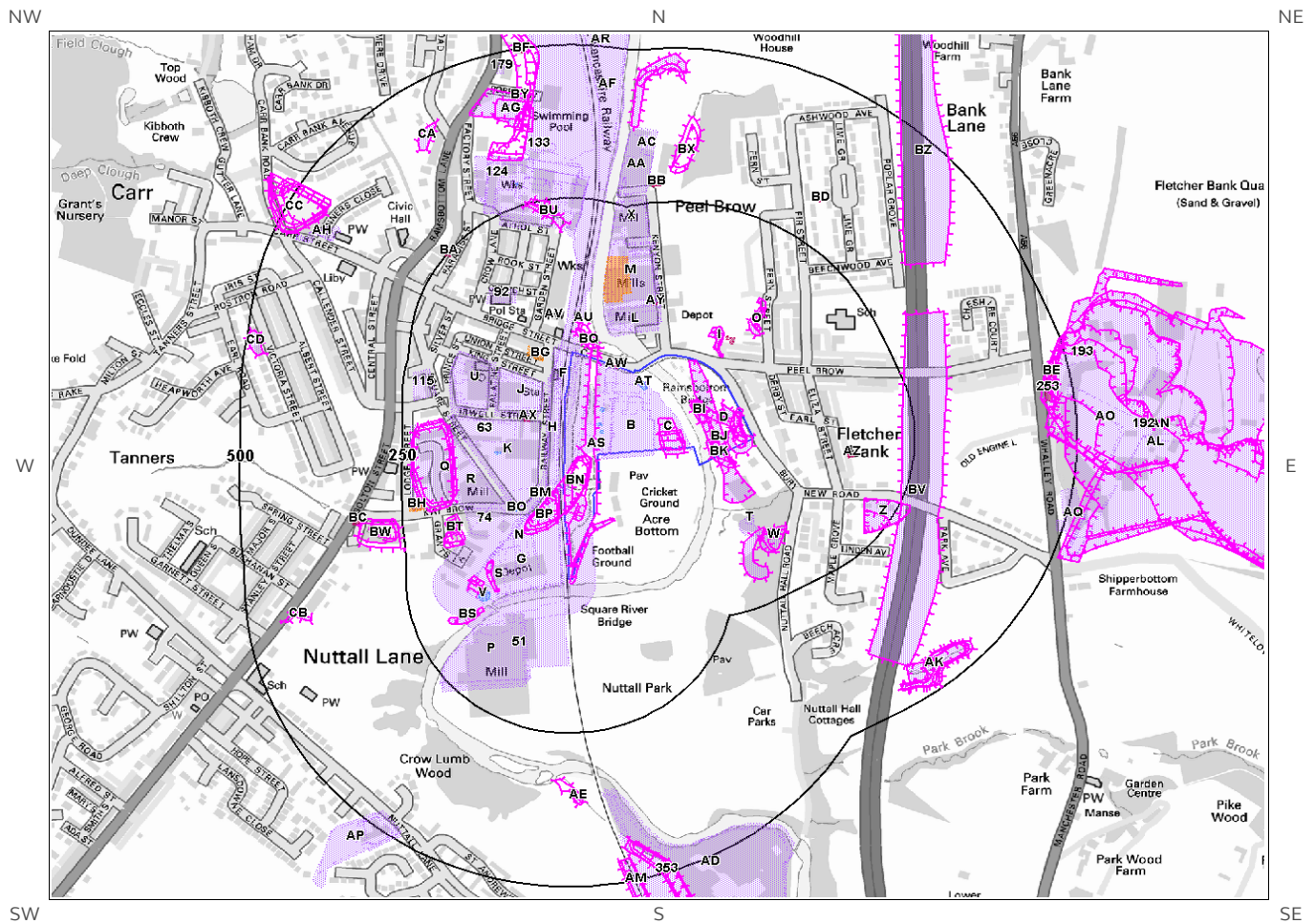
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

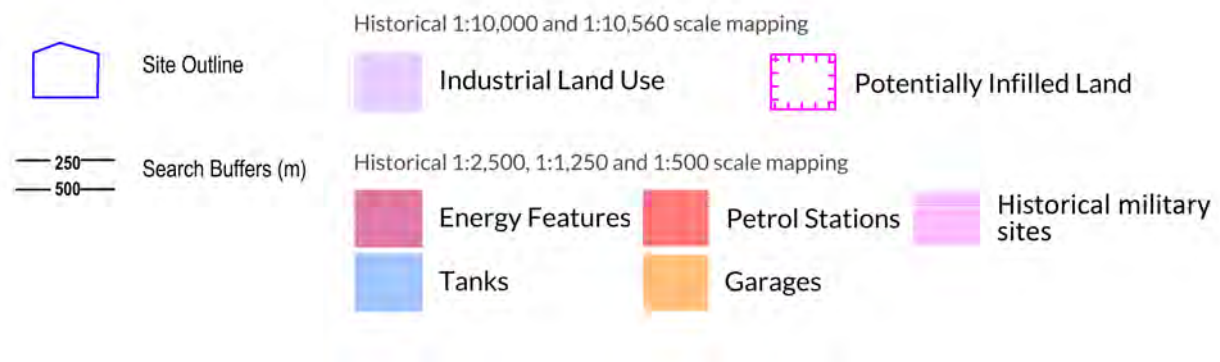
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



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1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 196

ID	Distance [m]	Direction	Use	Date
1D	0	On Site	Refuse Heap	1927
2BK	0	On Site	Refuse Heap	1948
3A	0	On Site	Refuse Heap	1968
4A	0	On Site	Refuse Heap	1948
5A	0	On Site	Refuse Heap	1955
6B	0	On Site	Paper Mill	1908
7B	0	On Site	Paper Mill	1948
8	0	On Site	Railway Sidings	1955
9BL	0	On Site	Unspecified Ground Workings	1908
10B	0	On Site	Paper Mill	1927
11B	0	On Site	Unspecified Mill	1891
12B	0	On Site	Paper Mill	1955
13B	0	On Site	Unspecified Mill	1968
14B	0	On Site	Unspecified Mill	1980
15C	0	On Site	Filter Beds	1927
16C	0	On Site	Filter Beds	1948
17C	0	On Site	Filter Beds	1955
18BJ	0	On Site	Unspecified Ground Workings	1968
19BI	0	On Site	Refuse Heap	1948
20D	0	On Site	Refuse Heap	1955
21AB	0	On Site	Railway Sidings	1968
22E	0	On Site	Railway Sidings	1948
23E	0	On Site	Railway Sidings	1927
24E	0	On Site	Railway Sidings	1891
25E	0	On Site	Railway Sidings	1908
26F	0	On Site	Railway Station	1927
27F	0	On Site	Railway Station	1908
28F	0	On Site	Railway Station	1891
29F	0	On Site	Railway Station	1948
30F	0	On Site	Railway Station	1955
31F	0	On Site	Railway Station	1968
32G	0	On Site	Bleaching Works	1955
33BM	6	W	Railway Sidings	1908

34G	8	W	Unspecified Depot	1980
35G	8	W	Unspecified Works	1968
36H	9	W	Railway Sidings	1948
37H	9	W	Railway Sidings	1927
38G	11	W	Bleaching Works	1948
39G	11	W	Unspecified Works	1927
40H	13	W	Railway Building	1955
41H	14	W	Railway Building	1908
42I	23	NE	Unspecified Ground Workings	1955
43I	28	NE	Unspecified Ground Workings	1948
44I	28	NE	Unspecified Ground Workings	1927
45J	32	W	Unspecified Works	1980
46J	34	W	Unspecified Mills	1955
47J	34	W	Unspecified Mills	1968
48K	36	W	Unspecified Mills	1955
49K	36	W	Unspecified Commercial/Industrial	1980
50K	36	W	Unspecified Mills	1968
51	36	S	Unspecified Mill	1980
52K	36	W	Unspecified Mills	1891
53J	38	W	Unspecified Mills	1927
54J	38	W	Unspecified Mills	1948
55M	44	N	Cotton Mills	1908
56L	44	N	Unspecified Mills	1948
57L	44	N	Unspecified Mills	1927
58L	51	N	Unspecified Commercial/Industrial	1980
59L	51	N	Unspecified Mills	1955
60M	54	N	Unspecified Mills	1968
61N	55	W	Railway Sidings	1948
62N	55	W	Railway Sidings	1927
63	75	W	Unspecified Mills	1948
64M	85	N	Unspecified Mills	1927
65M	85	N	Unspecified Mills	1948
66P	85	SW	Unspecified Mill	1968
67O	85	NE	Unspecified Ground Workings	1927
68O	85	NE	Unspecified Ground Workings	1948
69P	89	SW	Cotton Mill	1955
70Q	93	W	Unspecified Mill	1955
71Q	93	W	Unspecified Commercial/Industrial	1980
72Q	93	W	Unspecified Commercial/Industrial	1968
73O	93	NE	Unspecified Ground	1955

Workings				
74	93	W	Unspecified Works	1980
75M	94	N	Unspecified Commercial/Industrial	1980
76M	94	N	Unspecified Mills	1955
77R	95	W	Unspecified Mill	1908
78R	95	W	Unspecified Mill	1948
79R	95	W	Unspecified Mill	1927
80P	97	SW	Cotton Mill	1948
81P	97	SW	Unspecified Mill	1927
82S	98	W	Railway Sidings	1927
83S	98	W	Railway Sidings	1948
84T	108	SE	Old Engine	1955
85U	109	W	Unspecified Works	1980
86S	109	W	Unspecified Ground Workings	1908
87T	110	SE	Old Engine	1948
88T	110	SE	Old Engine	1908
89T	110	SE	Old Engine	1927
90U	117	W	Unspecified Mill	1955
91U	117	W	Unspecified Mill	1968
92	118	NW	Police Station	1980
93U	120	W	Unspecified Mill	1927
94U	120	W	Unspecified Mill	1948
95S	121	W	Unspecified Tank	1968
96S	122	W	Unspecified Tank	1955
97V	126	W	Unspecified Tank	1908
98V	126	W	Unspecified Tank	1927
99V	126	W	Unspecified Tank	1948
100V	130	W	Filter Beds	1955
101V	133	W	Filter Beds	1948
102V	133	W	Filter Beds	1927
103BR	137	SE	Refuse Heap	1968
104BS	139	W	Unspecified Ground Workings	1908
105W	141	SE	Refuse Heap	1955
106W	147	SE	Refuse Heap	1948
107W	147	SE	Refuse Heap	1927
108X	186	N	Unspecified Mill	1955
109X	186	N	Unspecified Commercial/Industrial	1980
110X	186	N	Unspecified Mill	1927
111X	186	N	Unspecified Mill	1948
112Y	186	N	Unspecified Mills	1891
113Y	186	N	Unspecified Disused Mills	1948
114Y	197	N	Unspecified Disused Mills	1955
115	197	W	Unspecified Works	1980

116Y	197	N	Unspecified Commercial/Industrial	1968
117Z	198	SE	Refuse Heap	1928
118Z	209	SE	Refuse Heap	1938
119Y	213	N	Unspecified Mills	1908
120Y	224	N	Unspecified Mills	1927
121BV	230	E	Cuttings	1980
122AA	264	N	Soap Works	1948
123AA	264	N	Soap Works	1927
124	265	NW	Unspecified Works	1980
125AF	267	N	Railway Sidings	1908
126AA	276	N	Unspecified Works	1968
127AA	276	N	Unspecified Works	1980
128AA	276	N	Soap Works	1955
129AB	312	N	Railway Sidings	1927
130AB	312	N	Railway Sidings	1948
131AB	312	N	Railway Sidings	1908
132AB	312	N	Railway Sidings	1891
133	326	N	Railway Building	1955
134BZ	338	NE	Cuttings	1980
135AC	342	N	Unspecified Tank	1955
136AC	342	N	Chimney	1968
137AC	342	N	Chimney	1980
138AD	345	S	Chemical Works	1955
139AD	345	S	Unspecified Disused Works	1968
140AE	346	S	Unspecified Pit	1948
141AE	346	S	Unspecified Pit	1927
142AD	346	S	Unspecified Disused Works	1980
143AF	347	N	Railway Sidings	1927
144AF	347	N	Railway Sidings	1948
145AF	347	N	Railway Sidings	1891
146AE	349	S	Unspecified Ground Workings	1908
147AD	350	S	Chemical Works	1948
148AD	350	S	Chemical Works	1927
149AG	375	N	Refuse Destructor	1927
150AG	375	N	Refuse Destructor	1948
151AJ	375	N	Unspecified Ground Workings	1955
152AG	386	N	Refuse Destructor	1955
153AG	387	N	Fire Station	1968
154CA	398	NW	Unspecified Ground Workings	1891
155CB	401	W	Unspecified Ground Workings	1955
156AH	407	NW	Unspecified Mill	1908

157AH	412	NW	Unspecified Disused Mill	1948
158AH	412	NW	Unspecified Mill	1927
159AI	434	S	Unspecified Pit	1908
160AI	437	S	Cuttings	1948
161AI	437	S	Cuttings	1927
162AK	439	SE	Unspecified Pit	1968
163AJ	440	N	Unspecified Ground Workings	1948
164AJ	440	N	Unspecified Ground Workings	1927
165AK	447	SE	Unspecified Pit	1928
166AK	447	SE	Unspecified Pit	1938
167AL	449	E	Unspecified Quarry	1891
168AL	449	E	Unspecified Quarry	1938
169AK	454	SE	Unspecified Pit	1955
170AO	460	E	Sandstone Quarry	1851
171AM	462	S	Cuttings	1955
172AM	462	S	Cuttings	1927
173AM	462	S	Cuttings	1948
174AM	462	S	Cuttings	1908
175AM	462	S	Cuttings	1891
176AL	464	E	Unspecified Quarry	1908
177AL	464	E	Unspecified Quarry	1928
178AN	464	E	Unspecified Quarry	1949
179	464	N	Smithy	1908
180CD	470	W	Refuse Heap	1891
181AP	471	SW	Hospital	1980
182AN	475	E	Unspecified Quarry	1967
183AN	475	E	Unspecified Quarry	1987
184AO	476	E	Railway Sidings	1938
185AP	478	SW	Hospital	1968
186AP	478	SW	Hospital	1955
187AP	482	SW	Hospital	1908
188AQ	482	E	Unspecified Works	1967
189AQ	482	E	Unspecified Works	1987
190AP	485	SW	Hospital	1948
191AP	485	SW	Hospital	1927
192	491	E	Railway Sidings	1928
193	494	E	Railway Sidings	1928
194AR	500	N	Railway Building	1948
195AR	500	N	Railway Building	1908
196AR	500	N	Railway Building	1927

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

25

ID	Distance (m)	Direction	Use	Date
197C	0	On Site	Unspecified Tank	1978
198C	0	On Site	Unspecified Tank	1992
199E	0	On Site	Unspecified Tank	1891
200E	0	On Site	Tanks	1992
201AS	0	On Site	Unspecified Tank	1938
202AS	0	On Site	Unspecified Tank	1910
203AS	0	On Site	Unspecified Tank	1929
204E	0	On Site	Tanks	1992
205E	0	On Site	Tanks	1978
206AT	0	On Site	Tanks	1992
207AT	0	On Site	Tanks	1978
208E	0	On Site	Tanks	1994
209E	0	On Site	Tanks	1994
210AT	0	On Site	Tanks	1994
211C	0	On Site	Unspecified Tank	1994
212AU	53	N	Unspecified Tank	1962
213AU	63	NW	Unspecified Tank	1978
214AV	63	NW	Unspecified Tank	1992
215AV	63	NW	Unspecified Tank	1994
216BO	73	W	Unspecified Tank	1891
217K	97	W	Tanks	1992
218V	123	W	Unspecified Tank	1910
219V	124	W	Unspecified Tank	1929
220Y	284	N	Unspecified Tank	1891
221AG	387	N	Unspecified Tank	1962

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

38

ID	Distance (m)	Direction	Use	Date
222AW	0	On Site	Electricity Substation	1992

223AW	0	On Site	Electricity Substation	1978
224AW	0	On Site	Electricity Substation	1994
225I	49	NE	Electricity Substation	1978
226I	49	NE	Electricity Substation	1989
227I	51	NE	Electricity Substation	1992
228AX	52	W	Electricity Substation	1978
229AX	53	W	Electricity Substation	1992
230AX	53	W	Electricity Substation	1994
231AY	84	N	Electricity Substation	1992
232AY	86	N	Electricity Substation	1994
233AY	87	N	Electricity Substation	1978
234AZ	148	E	Electricity Substation	1989
235AZ	149	E	Electricity Substation	1992
236AZ	149	E	Electricity Substation	1978
237BA	244	NW	Electricity Substation	1994
238BA	244	NW	Electricity Substation	1996
239BA	244	NW	Electricity Substation	1992
240BA	254	NW	Electricity Substation	1981
241BA	254	NW	Electricity Substation	1978
242BB	277	N	Electricity Substation	1978
243BB	277	N	Electricity Substation	1994
244BB	277	N	Electricity Substation	1992
245BB	277	N	Electricity Substation	1996
246BB	277	N	Electricity Substation	1981
247BC	314	W	Electricity Substation	1978
248BC	314	W	Electricity Substation	1992
249BC	315	W	Electricity Substation	1989
250BD	317	NE	Electricity Substation	1992
251BD	318	NE	Electricity Substation	1978
252BD	318	NE	Electricity Substation	1981
253	455	E	Electricity Substation	1993
254BE	468	E	Electricity Substation	1979
255BE	468	E	Electricity Substation	1987
256BE	469	E	Electricity Substation	1987
257BE	469	E	Electricity Substation	1993
258BF	493	N	Electricity Substation	1978
259BF	493	N	Electricity Substation	1981

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 7

ID	Distance (m)	Direction	Use	Date
260BG	41	W	Garage	1962
261BG	42	W	Garage	1992
262BG	42	W	Garage	1994
263BG	43	W	Garage	1978
264M	92	N	Depot and Destructor Works	1978
265BH	218	W	Garage	1992
266BH	218	W	Garage	1978

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 114

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

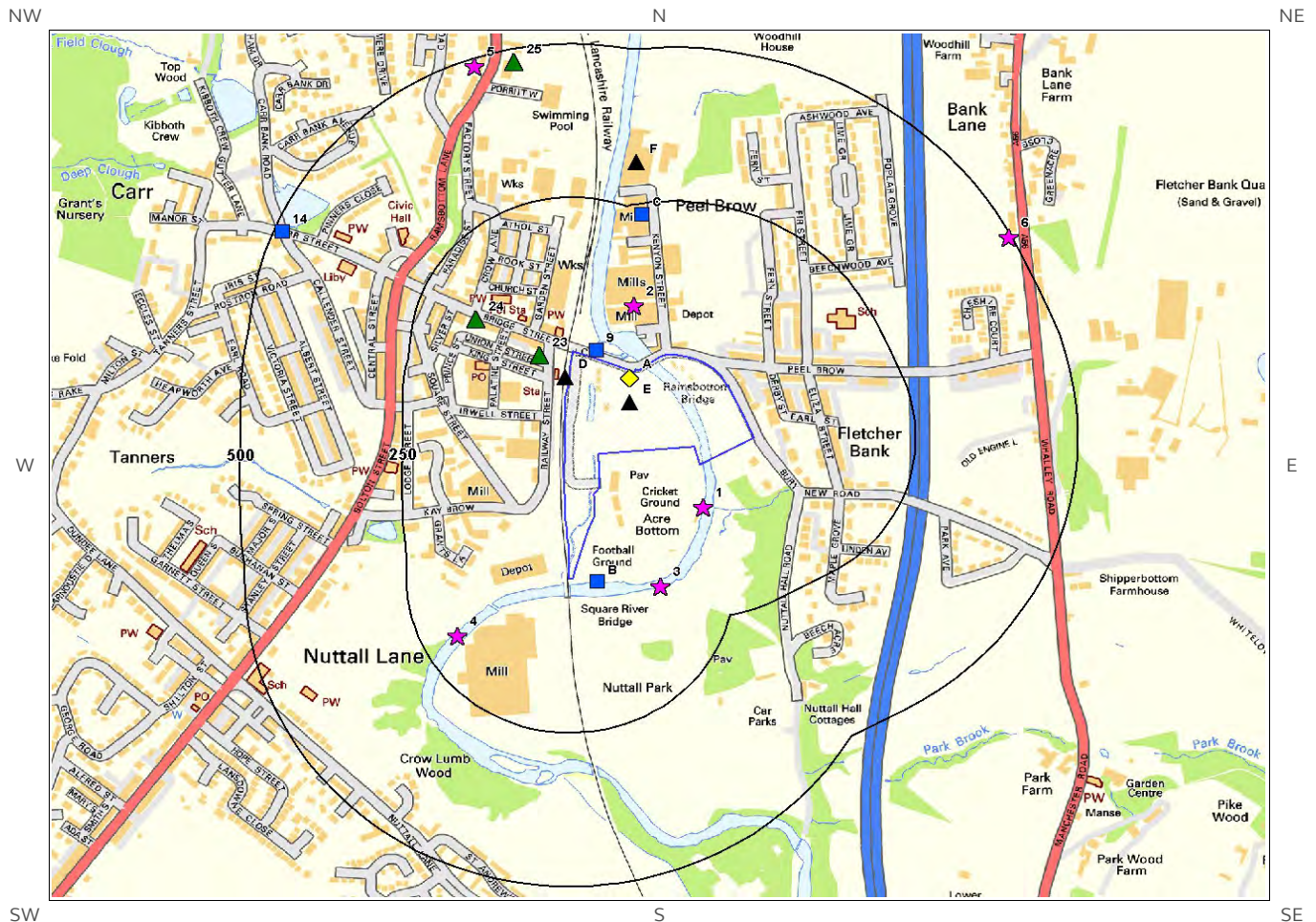
ID	Distance(m)	Direction	Use	Date
267BI	0	On Site	Refuse Heap	1948
268A	0	On Site	Refuse Heap	1927
269BJ	0	On Site	Refuse Heap	1955
270A	0	On Site	Unspecified Ground Workings	1968
271A	0	On Site	Refuse Heap	1955
272A	0	On Site	Refuse Heap	1948
273A	0	On Site	Refuse Heap	1968

274BK	0	On Site	Refuse Heap	1948
275BL	0	On Site	Unspecified Ground Workings	1908
276BM	0	On Site	Reservoir	1955
277BN	0	On Site	Reservoirs	1891
278BN	0	On Site	Reservoir	1948
279BN	0	On Site	Pond	1908
280BN	0	On Site	Reservoir	1927
281BN	0	On Site	Pond	1968
282C	0	On Site	Filter Beds	1955
283C	0	On Site	Filter Beds	1927
284AS	0	On Site	Ponds	1955
285C	0	On Site	Filter Beds	1948
286BQ	3	N	Pond	1891
287BO	8	W	Pond	1968
288BP	11	W	Reservoir	1927
289BP	11	W	Reservoir	1908
290BP	11	W	Reservoir	1948
291BQ	14	N	Pond	1948
292BQ	14	N	Pond	1927
293I	23	NE	Unspecified Ground Workings	1955
294I	28	NE	Unspecified Ground Workings	1927
295I	28	NE	Unspecified Ground Workings	1948
296O	85	NE	Unspecified Ground Workings	1948
297O	85	NE	Unspecified Ground Workings	1927
298O	93	NE	Unspecified Ground Workings	1955
299S	109	W	Unspecified Ground Workings	1908
300V	130	W	Filter Beds	1955
301V	133	W	Filter Beds	1948
302V	133	W	Filter Beds	1927
303BR	137	SE	Refuse Heap	1968
304BS	139	W	Unspecified Ground Workings	1908
305W	141	SE	Refuse Heap	1955
306W	147	SE	Refuse Heap	1927
307W	147	SE	Refuse Heap	1948
308BT	156	W	Reservoirs	1955
309BT	156	W	Ponds	1968
310BT	159	W	Reservoirs	1948
311BT	159	W	Reservoirs	1927
312BT	159	W	Reservoirs	1908
313BT	164	W	Reservoirs	1948

314BT	164	W	Reservoirs	1908
315Q	164	W	Pond	1968
316Q	169	W	Reservoir	1955
317Q	171	W	Reservoir	1908
318Q	171	W	Reservoir	1891
319Q	171	W	Reservoir	1948
320Q	171	W	Reservoir	1927
321Z	198	SE	Refuse Heap	1928
322BU	202	N	Pond	1955
323Z	209	SE	Refuse Heap	1938
324BU	224	N	Pond	1968
325BV	230	E	Cuttings	1980
326BW	256	W	Reservoir	1927
327BW	256	W	Reservoir	1948
328BW	256	W	Reservoir	1908
329BW	256	W	Pond	1891
330BW	257	W	Pond	1980
331BW	257	W	Pond	1968
332BW	262	W	Reservoir	1955
333BX	296	N	Pond	1948
334BX	296	N	Pond	1927
335BX	306	N	Pond	1955
336BY	322	N	Pond	1891
337AE	324	S	Pond	1908
338BY	330	N	Pond	1955
339BZ	338	NE	Cuttings	1980
340AE	346	S	Unspecified Pit	1927
341AE	346	S	Unspecified Pit	1948
342AE	349	S	Unspecified Ground Workings	1908
343AG	363	N	Pool	1980
344AG	375	N	Refuse Destructor	1927
345AG	375	N	Refuse Destructor	1948
346AJ	375	N	Unspecified Ground Workings	1955
347BY	386	N	Refuse Destructor	1955
348CA	398	NW	Unspecified Ground Workings	1891
349CB	401	W	Unspecified Ground Workings	1955
350AI	434	S	Unspecified Pit	1908
351AI	437	S	Cuttings	1948
352AI	437	S	Cuttings	1927
353	437	S	Reservoir	1955
354AK	439	SE	Unspecified Pit	1968
355AJ	440	N	Unspecified Ground Workings	1927

356AJ	440	N	Unspecified Ground Workings	1948
357CC	441	NW	Reservoir	1908
358CC	441	NW	Reservoir	1927
359CC	441	NW	Reservoir	1948
360CC	443	NW	Reservoir	1891
361CC	443	NW	Pond	1968
362CC	443	NW	Pond	1980
363CC	444	NW	Reservoir	1955
364AK	447	SE	Unspecified Pit	1928
365AK	447	SE	Unspecified Pit	1938
366AL	449	E	Unspecified Quarry	1891
367AL	449	E	Unspecified Quarry	1938
368AK	454	SE	Unspecified Pit	1955
369AO	460	E	Sandstone Quarry	1851
370AM	462	S	Cuttings	1955
371AM	462	S	Cuttings	1948
372AM	462	S	Cuttings	1891
373AM	462	S	Cuttings	1908
374AM	462	S	Cuttings	1927
375AL	464	E	Unspecified Quarry	1908
376AL	464	E	Unspecified Quarry	1928
377AN	464	E	Unspecified Quarry	1949
378CD	470	W	Refuse Heap	1891
379AN	475	E	Unspecified Quarry	1987
380AN	475	E	Unspecified Quarry	1967

2. Environmental Permits, Incidents and Registers Map



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- | | | | | | |
|---|-------------------------------|---|--|---|---|
|  | Site Outline |  | Recorded Pollution Incident |  | RAS 3 & 4 Authorisations |
|  | Dangerous Substances (List 1) |  | Part A(1) Authorised Processes and Historic IPC Authorisations |  | Part A(2) and Part B Authorised Processes |
|  | Dangerous Substances (List 2) |  | COMAH / NIHHS Sites |  | Sites Determined as Contaminated Land |
|  | Water Industry Referrals |  | Hazardous Substance Consents and Enforcements | | |
|  | Licenced Discharge Consents | | | | |
|  | Red List Discharge Consents | | | | |

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

2

The following IPC Authorisations are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
32D	7	W	379300 416800	Operator: Mondi Packaging Holcombe Ltd Address: Holcombe Mill, Bridge Street, Ramsbottom, Bury, Lancashire, BL0 0BS Process: Paper And Pulp Manufacturing Processes Permit Number: AU7451 Original Permit Number: IPCAPP Date Approved: 27-1-1997 Effective Date: 29-1-1997 Status: Superseded By Variation
33D	7	W	379300 416800	Operator: Mondi Packaging Holcombe Ltd Address: Holcombe Mill, Bridge Street, Ramsbottom, Bury, Lancashire, BL0 0BS Process: Paper And Pulp Manufacturing Processes Permit Number: BD4546 Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

6

The following Part A(1) and IPPC Authorised Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
26E	0	On Site	379400 416760	Operator: MONDI HOLCOMBE LTD Installation Name: DANISCO PAPER MILL EAEPRBJ6542IQS002 Process: PAPER, PULP AND BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: BJ6542IQ Original Permit Number: BJ6542IQ EPR Reference: - Issue Date: 09/01/2002 Effective Date: 09/01/2002 Last date noted as effective: 2019-01-31 Status: SUPERCEDED
27E	0	On Site	379400 416760	Operator: MONDI HOLCOMBE LTD Installation Name: DANISCO PAPER LIMITED Process: PAPER, PULP AND BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: KP3530KN Original Permit Number: BJ6542IQ EPR Reference: - Issue Date: - Effective Date: 25/06/2010

ID	Distance (m)	Direction	NGR	Details
				Last date noted as effective: 2019-01-31 Status: SURRENDER EFFECTIVE
28D	7	W	379300 416800	Operator: MONDI PAPER LTD Installation Name: - Process: PAPER, PULP & BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: BJ6542 Original Permit Number: BJ6542 EPR Reference: - Issue Date: 09/01/2002 Effective Date: 09/01/2002 Last date noted as effective: 2004-10-01 Status: SUPERSEDED BY PAS
29F	315	N	379410 417150	Operator: KAYS LTD Installation Name: RAMSBOTTOM SOAP WORKS Process: ORGANIC CHEMICALS; SURFACE-ACTIVE AGENTS Permit Number: XP3131YF Original Permit Number: WP3339LW EPR Reference: - Issue Date: - Effective Date: 22/08/2017 Last date noted as effective: 2019-01-31 Status: SURRENDER EFFECTIVE
30F	315	N	379410 417150	Operator: KAYS LTD Installation Name: RAMSBOTTOM SOAP WORKS Process: ORGANIC CHEMICALS; SURFACE-ACTIVE AGENTS Permit Number: WP3339LW Original Permit Number: WP3339LW EPR Reference: - Issue Date: 14/06/2007 Effective Date: 14/06/2007 Last date noted as effective: 2019-01-31 Status: SUPERCEDED
31F	315	N	379410 417150	Operator: KAYS LTD Installation Name: RAMSBOTTOM SOAP WORKS Process: ORGANIC CHEMICALS; SURFACE-ACTIVE AGENTS Permit Number: VP3435XJ Original Permit Number: WP3339LW EPR Reference: - Issue Date: 14/02/2008 Effective Date: 14/02/2008 Last date noted as effective: 2019-01-31 Status: SUPERCEDED

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

1

The following List 1 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
7A	0	On Site	379400 416800	Name: Danisco Paper, Holcombe Mill Status: Active Receiving Water: Stw Partcons Authorised Substances: Mercury (other), Hexachlorocyclohexane, Pentachlorophenol, Hexachlorobutadiene

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

1

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
8A	0	On Site	379400 416800	Name: Danisco Paper, Holcombe Mill Status: Not Active Receiving Water: - Authorised Substances: Atrazine & Simazine

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

3

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
23	49	W	379261 416836	Address: Station Garage, Railway Street, BL0 9AL Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
24	157	W	379163 416894	Address: First Impression, 44 Bridge Street, Ramsbottom, Bury, BL0 9AQ Process: Dry Cleaning Status: Current Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified
25	476	N	379221 417313	Address: Ramsbottom Service Station, Stubbins Road, Ramsbottom, BL0 0PU Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

6

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
9	13	N	379348 416847	Address: CARR STREET CSO 099BP, 82 CARR STREET, RAMSBOTTOM, BURY, LANCASHIRE, BL0 9EG Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0001 Permit Version: 4 Receiving Water: RIVER IRWELL Status: VARIED UNDER EPR 2010 Issue date: 11/04/2018 Effective Date: 11-Apr-2018 Revocation Date: -
10B	38	E	379350 416470	Address: CARR STREET CSO 099BP, 82 CARR STREET, RAMSBOTTOM, BURY, LANCASHIRE, BL0 9EG Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0001 Permit Version: 2 Receiving Water: RIVER IRWELL Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03-Sep-2010 Revocation Date: 04/02/2016
11B	38	E	379350 416470	Address: CARR STREET CSO 099BP, 82 CARR STREET, RAMSBOTTOM, BURY, LANCASHIRE, BL0 9EG Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0001 Permit Version: 1 Receiving Water: RIVER IRWELL Status: VARIED UNDER EPR 2010 Issue date: - Effective Date: 01-Jan-1995 Revocation Date: 02/09/2010
12C	232	N	379419 417068	Address: BRITANNIA WORKS, KENYON ST, RAMSBOTTOM, BURY, LANCASHIRE Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 0165/76 Permit Version: 2 Receiving Water: RIVER IRWELL Status: SURRENDERED UNDER EPR 2010 Issue date: - Effective Date: 01-Jan-1995 Revocation Date: 15/08/2017
13C	232	N	379419 417068	Address: BRITANNIA WORKS, KENYON ST, RAMSBOTTOM, BURY, LANCASHIRE Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 0165/76 Permit Version: 1 Receiving Water: RIVER IRWELL Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01-Apr-1991 Revocation Date: 31/12/1994
14	488	NW	378864 417040	Address: CARR STREET CSO 099BP, 82 CARR STREET, RAMSBOTTOM, BURY, LANCASHIRE, BL0 9EG Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0001 Permit Version: 3 Receiving Water: RIVER IRWELL Status: VARIED UNDER EPR 2010 Issue date: 05/02/2016 Effective Date: 05-Feb-2016 Revocation Date: 10/04/2018

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

6

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1	69	S	379512.0 416592.0	Incident Date: 17-Apr-2002 Incident Identification: 72361.0 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
2	94	NW	379405.0 416919.0	Incident Date: 22-Jun-2014 Incident Identification: 1247989.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)
3	132	E	379446.0 416462.0	Incident Date: 15-Apr-2002 Incident Identification: 71682.0 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
4	197	SW	379133.0 416382.0	Incident Date: 13-Jun-2001 Incident Identification: 9000.0 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5	487	N	379159.0	Incident Date: 25-Mar-2005 Water Impact: Category 4 (No Impact)

ID	Distance (m)	Direction	NGR	Details
6	495	NE	417308.0	Incident Identification: 301340.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Chemical Odour Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
			379984.0 417030.0	Incident Date: 25-Sep-2002 Incident Identification: 110419.0 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

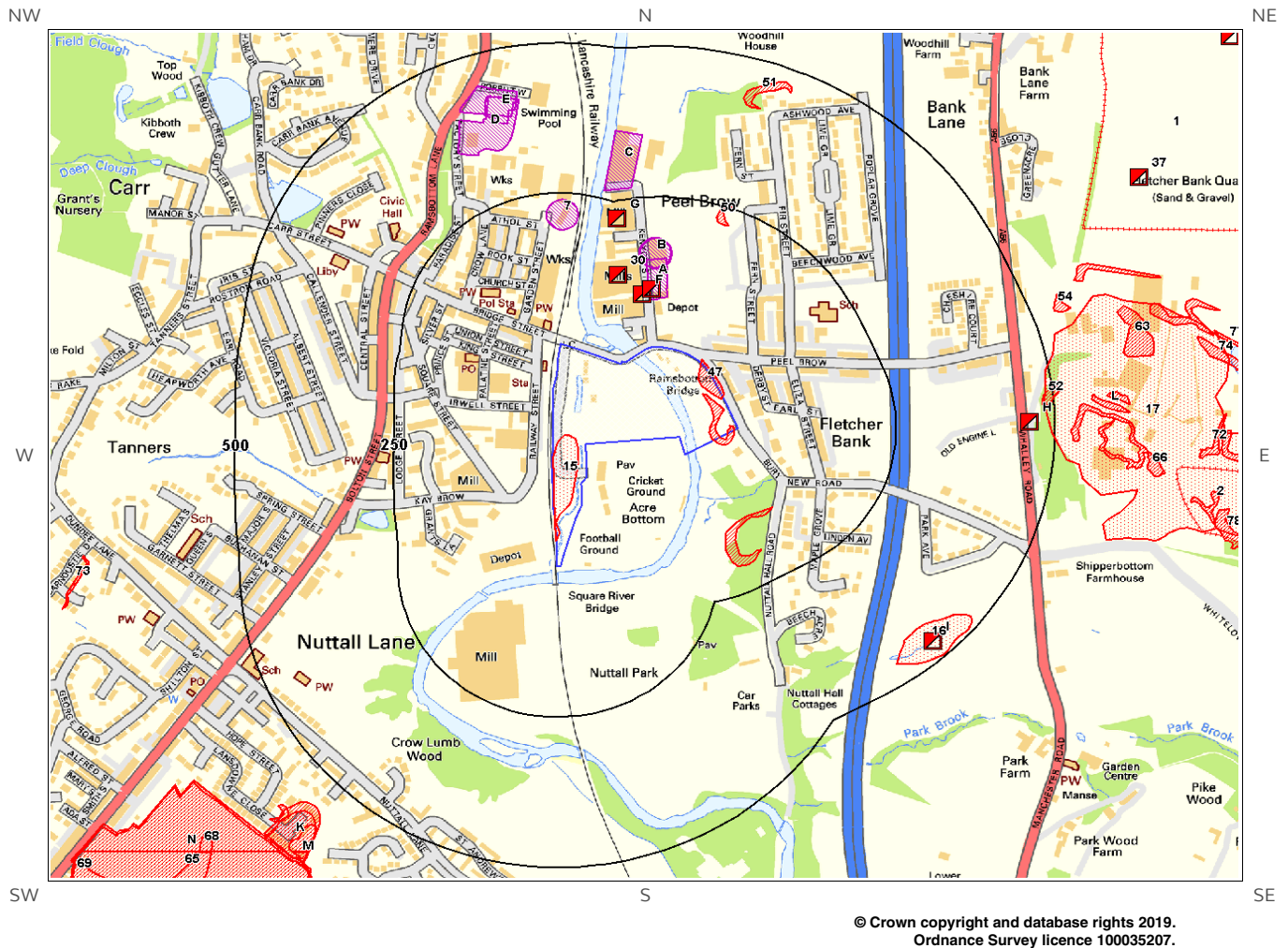
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site

0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



- | | | | | | |
|---|---------------------------|---|----------------------------|---|---|
|  | Site Outline |  | EA/NRW Active Landfill |  | Historic and Planned Waste Sites |
|  | EA/NRW Historic Landfill |  | EA/NRW Licensed Waste Site |  | Local Authority/Historical Mapping Landfill Records |
|  | BGS / DoE Survey Landfill | | | | |
-  250 Search Buffers (m)
 500

3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

2

The following Environment Agency/Natural Resources Wales landfill records are represented as polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
1	632	NE	380170 416650	Address: Fletcher Bank Quarry, Fletcher Bank, Ramsbottom, Lancashire, BL0 0DD Landfill Reference: 0.0 Environmental Permitting Regulations (Waste) Reference: - Landfill Type: WASTE LANDFILLING; ANY OTHER LANDFILL TO WHICH THE 2002 LANDFILL REGULATIONS APPLY Operator: Churchill Enviro Ltd Status: Transfer Effective IPPC Reference: EPR Reference:
2	694	E	380521 416530	Address: Land/premises At, Fletcher Bank, Ramsbottom, Bury, Lancashire, BL0 0DD Landfill Reference: 53693.0 Environmental Permitting Regulations (Waste) Reference: MML001 Landfill Type: A07: Industrial Waste Landfill (Factory curtilage) Operator: Marshalls Mono Ltd Status: Closure IPPC Reference: EPR Reference:

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

12

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
15	0	On Site		Site Address: Mill Lodge, Railway Street/Kenyon Street, Ramsbottom, Bury, Greater Manchester Waste Licence: Yes Site Reference: C013, RD/LIC/009/76 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 13-Dec-1977 Licence Surrendered: 08-May-1990 Licence Holder Address: Irwell Street, Ramsbottom Operator: - Licence Holder: Irwell Street Metal Company Limited First Recorded: 31-Dec-1977 Last Recorded: 31-Jul-1979
16	437	SE		Site Address: Park Farm, Off Manchester Road, Ramsbottom, Greater Manchester Licence Issue: 15-Jun-1979 Licence Surrendered: 01-Jul-2004

ID	Distance (m)	Direction	NGR	Details
				Waste Licence: Yes Site Reference: C003, RD/LIC/130/77 Waste Type: Inert, Household, Special Environmental Permitting Regulations (Waste) Reference: NR1/L/JCL001 Licence Holder Address: - Operator: J C Lees Esquire Licence Holder: J C Lees Esquire First Recorded: 30-Apr-1978 Last Recorded: -
17	485	E		Site Address: Fletcher Bank Quarry, Off Whitelaw Road, Fletcher Bank, Ramsbottom, Bury, Greater Manchester Waste Licence: Yes Site Reference: RD/LIC/285/83, C097 Waste Type: Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 31-Oct-1983 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Marshalls Mono Limited First Recorded: 31-Dec-1948 Last Recorded: -
18K	565	SW		Site Address: Carrington Novare, Off Hope Street, Ramsbottom, Greater Manchester Waste Licence: Yes Site Reference: C083 Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01-Jan-1974 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Bury Metropolitan Borough Council First Recorded: 31-Dec-1960 Last Recorded: 31-Dec-1984
19N	638	SW		Site Address: Land off Bolton Road West, Off Bolton Road West, Ramsbottom, Greater Manchester Waste Licence: - Site Reference: C059 Waste Type: Industrial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: 31-Dec-1975
Not shown	732	SW		Site Address: Carrington Novare, Off Hope Street, Ramsbottom, Greater Manchester Waste Licence: - Site Reference: C069 Waste Type: Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	864	NE		Site Address: Top Mill, Off Bye Road, Shuttleworth, Bury, Greater Manchester Waste Licence: Yes Site Reference: RD/LIC/675/90, L19A, C094 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 10-Jul-1991 Licence Surrendered: Licence Holder Address: Craig House, 5 Bank Street, Bury Operator: - Licence Holder: Bury Metropolitan Borough Council First Recorded: 31-Dec-1991 Last Recorded: -
Not shown	880	NE		Site Address: Land off Whalley Road, Off Whalley Road, Shuttleworth, Ramsbottom, Greater Manchester Waste Licence: - Site Reference: C073 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	1001	W		Site Address: Higher Barn Farm, Off Helmshore Road, Ramsbottom, Greater Manchester Waste Licence: - Site Reference: C120 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 31-Dec-1983 Last Recorded: -
Not	1161	NE		Site Address: Land off Bamford Road, Off Licence Issue:

ID	Distance (m)	Direction	NGR	Details
shown				Bamford Road, Shuttleworth, Ramsbottom, Greater Manchester Waste Licence: - Site Reference: C063 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 31-Dec-1983 Last Recorded: -
Not shown	1333	N		Site Address: Rose Bank Mill, Off Bolton Road North, Stubbins, Edenfield, Lancashire Waste Licence: - Site Reference: R016, K1/14/016 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Peel Holdings First Recorded: - Last Recorded: -
Not shown	1362	NE		Site Address: Top of the Lea, Off Bury Old Road, Shuttleworth, Ramsbottom, Greater Manchester Waste Licence: - Site Reference: C072 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

0

Database searched and no data found.

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

42

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
47	0	On Site	379550 416786	Refuse Tip	1962 mapping	Polygon
48	0	On Site	379557 416719	Refuse Tip	1962 mapping	Polygon
49	136	SE	379581 416524	Refuse Tip	1962 mapping	Polygon
50	221	N	379565 417057	Refuse Tip	1962 mapping	Polygon
51	420	N	379611 417258	Refuse Tip	1962 mapping	Polygon
52	482	E	380085 416758	Refuse Tip	1962 mapping	Polygon
53	526	E	380125 416692	Refuse Tip	1962 mapping	Polygon

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
54	536	E	380103 416912	Refuse Tip	1962 mapping	Polygon
55K	551	SW	378890 416033	Unknown	Bury Metropolitan Borough Council	Polygon
56L	560	E	380179 416746	Refuse Tip	1962 mapping	Polygon
57K	576	SW	378907 416023	Refuse Tip	1962 mapping	Polygon
58L	583	E	380191 416754	Refuse Tip	1962 mapping	Polygon
59	585	NE	380190 416964	Refuse Tip	1962 mapping	Polygon
60	585	SW	378879 416065	Refuse Tip	1962 mapping	Polygon
61M	615	SW	378903 415994	Refuse Tip	1970 mapping	Polygon
62M	615	SW	378903 415994	Refuse Tip	1962 mapping	Polygon
63	620	E	380218 416866	Refuse Tip	1962 mapping	Polygon
64N	635	SW	378709 415970	Bolton Road West	Bury Metropolitan Borough Council	Polygon
65	640	SW	378720 415909	Refuse Tip	1970 mapping	Polygon
66	647	E	380251 416645	Refuse Tip	1962 mapping	Polygon
67	678	E	380274 416889	Refuse Tip	1962 mapping	Polygon
68	708	SW	378754 416014	Refuse Tip	1962 mapping	Polygon
69	722	SW	378696 415909	Refuse Tip	1962 mapping	Polygon
70	724	E	380328 416574	Refuse Tip	1962 mapping	Polygon
Not shown	729	SW	378887 415787	Carrington Novare Sludge Lagoon or Broad Hey Woods	Bury Metropolitan Borough Council	Polygon
72	729	E	380348 416692	Refuse Tip	1962 mapping	Polygon
73	736	W	378548 416448	Refuse Tip	1962 mapping	Polygon
74	740	E	380353 416829	Refuse Tip	1962 mapping	Polygon
Not shown	741	SW	378866 415793	Refuse Tip	1962 mapping	Polygon
76	764	E	380359 416669	Refuse Tip	1962 mapping	Polygon
77	768	E	380410 416804	Refuse Tip	1962 mapping	Polygon
78	769	E	380360 416536	Refuse Tip	1962 mapping	Polygon
Not shown	840	E	380453 416704	Refuse Tip	1962 mapping	Polygon
Not	924	E	380518	Refuse Tip	1962 mapping	Polygon

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
shown			416519			
Not shown	994	N	379283 417866	Refuse Tip	1962 mapping	Polygon
Not shown	1318	NE	380569 417658	Refuse Tip	1962 mapping	Polygon
Not shown	1391	N	379970 418166	Refuse Tip	1962 mapping	Polygon
Not shown	1391	SW	378626 415243	Refuse Tip	1962 mapping	Polygon
Not shown	1406	NE	380642 417712	Refuse Tip	1962 mapping	Polygon
Not shown	1408	N	378936 418219	Refuse Tip	1962 mapping	Polygon
Not shown	1408	N	378936 418219	Refuse Tip	1982 mapping	Polygon
Not shown	1436	N	380014 418183	Refuse Tip	1962 mapping	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

12

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details		
3A	79	N	379463 416958	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1992	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
4A	79	N	379463 416958	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1994	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
5B	131	N	379462 416995	Type of Site: Waste Transfer Building Site Address: Kenyon Street, Ramsbottom, BURY, Greater Manchester, BL0 0A	Planning Application Reference: 36598 Date: 19/03/2001	Further Details: Scheme comprises a waste transfer station building with open ended front elevation and mezzanine floor, two roller shutter doors. This will also involve demolition. Construction - pitched roof; facing brick, metal cladding walls; metal cladding roof; rflight windows; roller shutter doors; portal frame. An application (ref: 36598) for Detailed Planning permission was granted, subject to conditions, by Bury M.B.C. on 28th September 2000. Contract awarded to Leach Construction Ltd.

ID	Distance (m)	Direction	NGR	Details		
				Data Source: Historic Planning Application Data Type: Point		
6B	132	N	379461 416996	Type of Site: Waste Transfer Station Site Address: Waterside Mill&PeelBridge Mill, Kenyon Street, ,Ramsbottom, BURY, Greater Manchester, BL0 OAB Planning Application Reference: 50696 Date: 01/10/2009	Further Details: Scheme comprises change of use from haulage firm to waste transfer station. An application (ref: 50696) for detailed planning permission was submitted to Bury M.B.C. Data Source: Historic Planning Application Data Type: Point	
7	189	N	379315 417059	Type of Site: Waste Recycling Centre Site Address: M A Excavations Ltd, Garden Street, Ramsbottom, BURY, Greater Manchester, BL0 9BG Planning Application Reference: 52446 Date: -	Further Details: Scheme comprises change of use of site to waste recycling centre. An application (ref: 52446) for detailed planning permission was refused by Bury M.B.C. A detailed planning application has been refused. Data Source: Historic Planning Application Data Type: Point	
8C	264	N	379411 417149	Type of Site: Scrap Works Site Address: N/A Planning Application Reference: N/A Date: 1938	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon	
9C	264	N	379411 417149	Type of Site: Scrap Works Site Address: N/A Planning Application Reference: N/A Date: 1929	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon	
10D	335	N	379198 417207	Type of Site: Refuse Destructor Site Address: N/A Planning Application Reference: N/A Date: 1929	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon	
11D	335	N	379198 417207	Type of Site: Refuse Destructor Site Address: N/A Planning Application Reference: N/A Date: 1938	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon	
12E	375	N	379218 417233	Type of Site: Refuse Destructor Site Address: N/A Planning Application Reference: N/A Date: 1927	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon	
13E	375	N	379218 417233	Type of Site: Refuse Destructor Site Address: N/A Planning Application Reference: N/A Date: 1848	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon	
14E	386	N	379199 417248	Type of Site: Refuse Destructor Site Address: N/A Planning Application Reference: N/A Date: 1949	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon	

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

20

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

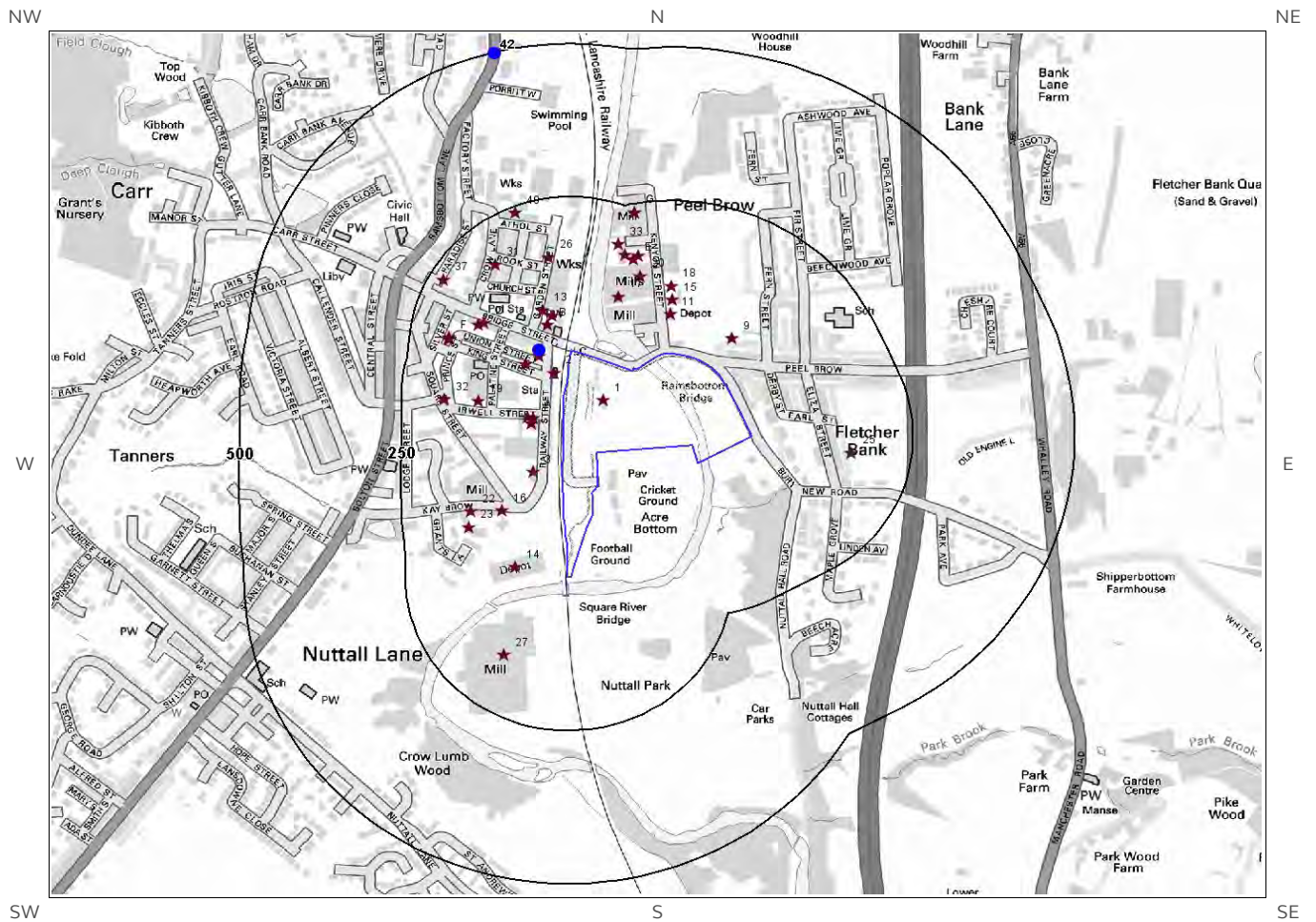
ID	Distance (m)	Direction	NGR	Details
27F	91	N	379441 416928	Site Address: Waterside Mill & Peel Bridge Mill, Kenyon Street, Ramsbottom, Lancs, BL0 0AB Type: 75kte HCl Waste TS + treatment Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: AWR003 EPR reference: CP3897ES/A001 Operator: A W R Rent A Skip Ltd Waste Management licence No: 100969 Annual Tonnage: 0.0 Issue Date: 04/08/2009 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: A W R Rent A Skip Correspondence Address: -
28F	91	N	379441 416928	Site Address: Waterside Mill, Kenyon Street, Ramsbottom, Lancashire, BL0 0AB Type: 75kte HCl Waste TS + treatment Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WHE032 EPR reference: EA/EPR/QP3092EN/T001 Operator: Wheeldon Brothers Waste Ltd Waste Management licence No: 100969 Annual Tonnage: 74999.0 Issue Date: 04/08/2009 Effective Date: 22/11/2010 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Waterside Mill & Peel Bridge Mill Correspondence Address: -
29F	98	N	379455 416937	Site Address: Land/premises At, Kenyon Street, Ramsbottom, Bury, Lancashire, BL0 0AB Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ISM001 EPR reference: EA/EPR/MP3496CP/V002 Operator: Irwell Street Metal Co Ltd Waste Management licence No: 53695 Annual Tonnage: 6250.0 Issue Date: 05/01/1994 Effective Date: - Modified: 21/11/2002 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Irwell Street Metal Co Ltd Correspondence Address: -
30	132	N	379403 416960	Site Address: Waterside Mill, Kenyon Street, Ramsbottom, Lancs, BL0 0AB Type: 75kte HCl Waste TS + treatment Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ROG033 EPR reference: EP3694EA/T001 Operator: Rogers David Waste Management licence No: 100969 Annual Tonnage: 0.0 Issue Date: 04/08/2009 Effective Date: 13/10/2009 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Waterside Mill Correspondence Address: -
31G	222	N	379401 417054	Site Address: Field Mill, Unit 4, Harrison Street, Ramsbottom, Bury, Lancashire, BL0 0AH Type: ELV Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: POR001 EPR reference: EA/EPR/EP3994CJ/V002 Operator: 9 Apart Limited Waste Management licence No: 50393 Annual Tonnage: 2500.0 Issue Date: 18/07/2005 Effective Date: - Modified: 14/08/2014 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: 9 Apart Limited Correspondence Address: -
32G	222	N	379401 417054	Site Address: Field Mill, Unit 4, Harrison Street, Ramsbottom, Bury, Lancashire, Issue Date: 18/07/2005 Effective Date: -

ID	Distance (m)	Direction	NGR	Details
				BLO 0AH Type: ELV Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: POR001 EPR reference: EA/EPR/EP3994CJ/A001 Operator: Porsch- Apart Ltd Waste Management licence No: 50393 Annual Tonnage: 2500.0 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Porsch- Apart Ltd Correspondence Address: -
33H	459	E	380050 416715	Site Address: Fletcher Bank, Manchester Road, Shuttleworth, Ramsbottom, BLO 0DD Type: Management of inert or extractive waste at mine Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAR237 EPR reference: EA/EPR/YP3490VR/A001 Operator: Marshalls Mono Limited Waste Management licence No: 102818 Annual Tonnage: 0.0 Issue Date: 21/06/2011 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Fletcher Bank Quarry Correspondence Address: -
34H	459	E	380050 416715	Site Address: Fletcher Bank, Manchester Road, Shuttleworth, Ramsbottom, Lancashire, BLO 0DD Type: Management of inert or extractive waste at mine Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAR237 EPR reference: EA/EPR/YP3490VR/A001 Operator: Marshalls Mono Ltd Waste Management licence No: 102818 Annual Tonnage: 0.0 Issue Date: 21/06/2011 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Fletcher Bank Quarry Correspondence Address: -
35I	468	SE	379898 416352	Site Address: Manchester Road, Ramsbottom, Bury, BLO Type: Landfill taking Non-Biodegradable Wastes Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: JCL001 EPR reference: - Operator: Lees Mr J C Waste Management licence No: 53922 Annual Tonnage: 0.0 Issue Date: 15/06/1979 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Park Farm Landfill Site Correspondence Address: Park Farm, Manchester Road, Ramsbottom, Bury, BLO
36I	468	SE	379898 416352	Site Address: Manchester Road, Ramsbottom, Bury, Lancashire, BLO Type: Other Landfill Site taking Special Waste Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JCL001 EPR reference: EA/EPR/BP3491CL/S002 Operator: Lees Mr J C Waste Management licence No: 53922 Annual Tonnage: 150000.0 Issue Date: 15/06/1979 Effective Date: - Modified: - Surrendered Date: Jul 1 2004 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Park Farm Landfill Site Correspondence Address: -
37	750	NE	380224 417123	Site Address: Fletcher Bank Quarry, Manchester Road, Ramsbottom, Bury, Lancashire, BLO 0DH Type: Treatment of waste to produce soil <75,000 tpy Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHE136 EPR reference: EA/EPR/GB3930RY/A001 Operator: Churchill Enviro Ltd Waste Management licence No: 104214 Issue Date: 15/05/2012 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Fletcher Bank Quarry Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
Annual Tonnage: 74999.0					
Not shown	927	NE	380437 417085	Site Address: Fletcher Bank, Ramsbottom, Bury, Lancashire, BL0 0HD Type: Use of waste in construction <100,000 tps Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU071 EPR reference: EA/EPR/RP3098VD/A001 Operator: Churchill Enviro Ltd Waste Management licence No: 102210 Annual Tonnage: 99999.0	Issue Date: 02/02/2011 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued Site Name: Fletcher Bank Quarry Correspondence Address: -
Not shown	927	NE	380437 417085	Site Address: Fletcher Bank Quarry, Ramsbottom, Bury, Lancashire, BL0 0HD Type: Deposit of waste to land as a recovery operation Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU071 EPR reference: EA/EPR/RP3098VD/S003 Operator: Churchill Enviro Ltd Waste Management licence No: 102210 Annual Tonnage: 0.0	Issue Date: 02/02/2011 Effective Date: - Modified: 02/06/2017 Surrendered Date: Feb 20 2018 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Fletcher Bank Correspondence Address: -
Not shown	946	E	380521 416530	Site Address: Land/premises At, Fletcher Bank, Ramsbottom, Bury, Lancashire, BL0 0DD Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MML001 EPR reference: EA/EPR/MP3596CS/V006 Operator: Marshalls Mono Ltd Waste Management licence No: 53693 Annual Tonnage: 0.0	Issue Date: 05/01/1995 Effective Date: - Modified: 02/12/2014 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Fletcher Bank Quarry Landfill Correspondence Address: -
Not shown	946	E	380521 416530	Site Address: Fletcher Bank, Ramsbottom, Bury, Lancashire, BL0 0DD Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FBQ001 EPR reference: - Operator: Marshalls Mono Limited Waste Management licence No: 50506 Annual Tonnage: 0.0	Issue Date: 08/03/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Fletcher Bank Quarry Landfill Site Correspondence Address: Fletcher Bank Quarry Landfill Site, Fletcher Bank, Ramsbottom, Bury, Lancashire, BL0 0DD
Not shown	946	E	380521 416530	Site Address: Fletcher Bank, Ramsbottom, Bury, Lancashire, BL0 0DD Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FBQ001 EPR reference: EA/EPR/PP3692CQ/A001 Operator: Marshalls Mono Ltd Waste Management licence No: 50506 Annual Tonnage: 150000.0	Issue Date: 08/03/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC Site Name: Fletcher Bank Quarry Landfill Site Correspondence Address: -
Not shown	992	SW	378445 415982	Site Address: Tagg Wood Works, Regent Street, Ramsbottom, Bury, Lancashire, BL0 9PL Type: Mobile Plant Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ENC003	Issue Date: 08/04/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Distance (m)	Direction	NGR	Details	
				EPR reference: - Operator: Encia Group Ltd Waste Management licence No: 54433 Annual Tonnage: 0.0	Site Name: Tagwood Works Mobile Plant Correspondence Address: Stone Cross Place, Stone Cross Lane North, Lowton, Warrington, WA3 2SH
Not shown	992	SW	378445 415982	Site Address: Tagg Wood Works, Regent Street, Ramsbottom, Bury, Lancashire, BL0 9PL Type: Mobile Plant Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ENC003 EPR reference: EA/EPR/QP3397CM/S002 Operator: Encia Group Ltd Waste Management licence No: 54433 Annual Tonnage: 74999.0	Issue Date: 08/04/2005 Effective Date: - Modified: - Surrendered Date: Nov 29 2006 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Tagwood Works Mobile Plant Correspondence Address: -
45J	993	NE	380367 417357	Site Address: Fletcher Bank Quarry, Ramsbottom, Bury, BL0 0HD Type: Use of waste in construction <100,000 tps Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU102 EPR reference: EA/EPR/BB3501MS/A001 Operator: Churchill Enviro Limited Waste Management licence No: 401512 Annual Tonnage: 99999.0	Issue Date: 17/07/2014 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued Site Name: Fletcher Bank Recovery Site Correspondence Address: -
46J	993	NE	380367 417357	Site Address: Fletcher Bank Quarry, Ramsbottom, Bury, Lancashire, BL0 0HD Type: Deposit of waste to land as a recovery operation Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU102 EPR reference: EA/EPR/BB3501MS/S003 Operator: Churchill Enviro Ltd Waste Management licence No: 401512 Annual Tonnage: 0.0	Issue Date: 17/07/2014 Effective Date: - Modified: 02/06/2017 Surrendered Date: Mar 29 2018 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Fletcher Bank Recovery Site Correspondence Address: -

4. Current Land Use Map



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Site Outline

 Current Industrial Sites

 Electricity Transmission Cables

 Search Buffers (m)

 Petrol & Fuel Sites

 Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

40

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	0	On Site	Chimney	379361 416764	Greater Manchester, BL0	Chimneys	Industrial Features
2	21	W	East Lancashire Railway (Ramsbottom Station)	379286 416809	Greater Manchester, BL0	Railways (Heritage, Steam and Miniature)	Tourism
3	46	W	TNT Express	379253 416647	Railway Street, Ramsbottom, Bury, Greater Manchester, BL0 9AL	Distribution and Haulage	Transport, Storage and Delivery
4A	47	W	Ramsbottom Metalwork	379253 416735	Empire Works, Railway Street, Ramsbottom, Bury, Greater Manchester, BL0 9AL	Metalworkers Including Blacksmiths	Construction Services
5C	48	W	Station Garage	379262 416837	Railway Street, Ramsbottom, Bury, Greater Manchester, BL0 9AL	Vehicle Repair, Testing and Servicing	Repair and Servicing
6A	50	W	Works	379250 416726	Greater Manchester, BL0	Unspecified Works Or Factories	Industrial Features
7A	56	W	Electricity Sub Station	379244 416737	Greater Manchester, BL0	Electrical Features	Infrastructure and Facilities
8B	56	NW	Booth King Partnership Ltd	379274 416887	Tollgate House 9c, Bridge Street, Ramsbottom, Bury, Greater Manchester, BL0 9AB	Civil Engineers	Engineering Services
9	57	NE	Electricity Sub Station	379560 416865	Greater Manchester, BL0	Electrical Features	Infrastructure and Facilities
10B	64	NW	Tank	379283 416902	Greater Manchester, BL0	Tanks (Generic)	Industrial Features
11	66	N	Depot	379465 416905	Greater Manchester, BL0	Container and Storage	Transport, Storage and Delivery
12C	67	W	Works	379241 416823	Greater Manchester, BL0	Unspecified Works Or Factories	Industrial Features
13	79	NW	Formulated Polymer Products Ltd	379267 416911	8, Garden Street, Ramsbottom, Bury, Greater Manchester, BL0 9BQ	Adhesives and Sealants	Industrial Products
14	81	W	Depot	379225 416492	Greater Manchester, BL0	Container and Storage	Transport, Storage and Delivery
15	89	N	I S M Waste &	379468	Kenyon Street,	Waste Storage, Processing	Infrastructure and

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
			Recycling	416928	Ramsbottom, Bury, Greater Manchester, BL0 0AB	and Disposal	Facilities
16	95	W	Ramsbottom Paint & Bodyshop	379205 416584	Kay Brow Yard, Kay Brow, Ramsbottom, Bury, Greater Manchester, BL0 9AY	Vehicle Repair, Testing and Servicing	Repair and Servicing
17	106	N	Depot	379385 416933	Greater Manchester, BL0	Container and Storage	Transport, Storage and Delivery
18	112	N	Depot	379467 416951	Greater Manchester, BL0	Container and Storage	Transport, Storage and Delivery
19	131	W	Electricity Sub Station	379169 416763	Greater Manchester, BL0	Electrical Features	Infrastructure and Facilities
20	133	N	Cadden Car & Commercial	379418 416966	Peel Bridge Mill, Kenyon Street, Ramsbottom, Bury, Greater Manchester, BL0 0AB	New Vehicles	Motoring
21D	142	W	Ramsbottom Flooring Ltd	379177 416889	38, Bridge Street, Ramsbottom, Bury, Greater Manchester, BL0 9AQ	Construction Completion Services	Construction Services
22	143	W	Rammy Tyres & Exhausts	379157 416583	Unit 1 Kay Brow Complex, Kay Brow, Ramsbottom, Greater Manchester, BL0 9AY	Vehicle Parts and Accessories	Motoring
23	148	W	M C Motor Repairs Ltd	379153 416557	Kay Brow Yard, Kay Brow, Ramsbottom, Bury, Greater Manchester, BL0 9AY	Vehicle Repair, Testing and Servicing	Repair and Servicing
24D	149	W	Woodholme Supplies	379168 416888	40-42, Bridge Street, Ramsbottom, Bury, Greater Manchester, BL0 9AQ	General Construction Supplies	Industrial Products
25	156	E	Electricity Sub Station	379745 416679	Greater Manchester, BL0	Electrical Features	Infrastructure and Facilities
26	156	N	Joshua Greaves & Sons Ltd	379276 416997	Garden Street, Ramsbottom, Bury, Greater Manchester, BL0 9BG	Special Purpose Machinery and Equipment	Industrial Products
27	159	SW	Cormar Carpets	379208 416348	Holme Mill, Railway Street, Ramsbottom, Bury, Greater Manchester, BL0 9AU	Carpets, Flooring, Rugs and Soft Furnishings	Consumer Products
28E	163	N	Works	379408 416994	Greater Manchester, BL0	Unspecified Works Or Factories	Industrial Features
29E	167	N	Works	379415 417001	Greater Manchester, BL0	Unspecified Works Or Factories	Industrial Features
30E	174	N	C & G Wholesale Foods Ltd	379395 417001	3 Waterside Park, Harrison Street, Ramsbottom, Bury, Greater Manchester, BL0 0AD	Fish, Meat and Poultry Products	Foodstuffs
31	183	NW	G Hodgson Electrical	379195 416986	16, Crow Lane, Ramsbottom, Bury, Greater Manchester, BL0 9BR	Tools Including Machine Shops	Industrial Products
32	184	W	Works	379116 416766	Greater Manchester, BL0	Unspecified Works Or Factories	Industrial Features
33	188	N	Works	379385	Greater Manchester, BL0	Unspecified Works Or	Industrial Features

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
				417019		Factories	
34F	189	W	Stitch	379123 416866	2 Princes Court, Silver Street, Ramsbottom, Bury, Greater Manchester, BL0 9BJ	Textiles, Fabrics, Silk and Machinery	Industrial Products
35F	190	W	Orbital Design	379123 416863	3 Princes Court, Silver Street, Ramsbottom, Bury, Greater Manchester, BL0 9BJ	Published Goods	Industrial Products
36F	190	W	printing.com	379123 416864	Princes Court, Totally Wicked, 3a, Silver Street, Ramsbottom, Bury, Greater Manchester, BL0 9BJ	Published Goods	Industrial Products
37	229	NW	Canopy Products Ltd	379114 416961	The Warehouse 2-4, Paradise Street, Ramsbottom, Bury, Greater Manchester, BL0 9BS	General Construction Supplies	Industrial Products
38G	236	N	9 Apart	379410 417070	Unit 3-4 Field Mill, Harrison Street, Ramsbottom, Bury, Greater Manchester, BL0 0AH	Vehicle Parts and Accessories	Motoring
39G	236	N	Kays Ramsbottom Ltd	379410 417070	Britannia Works, Kenyon Street, Ramsbottom, Bury, Greater Manchester, BL0 0AE	Cosmetics, Toiletries and Perfumes	Consumer Products
40	241	N	Cadet County Training Centre	379225 417070	Crow Lane, Ramsbottom, Greater Manchester, BL0 9BR	Armed Services	Central and Local Government

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

2

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
41B	49	W	379260 416837	UNBRANDED	Railway Street, Ramsbottom, Bury, Greater Manchester, BL0 9AL	No	Closed
42	498	N	379193 417329	ESSO	Stubbins Lane, Ramsbottom, Bury, Greater Manchester, BL0 0PU	No	Open

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:

0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

5.3 Bedrock and Solid Geology

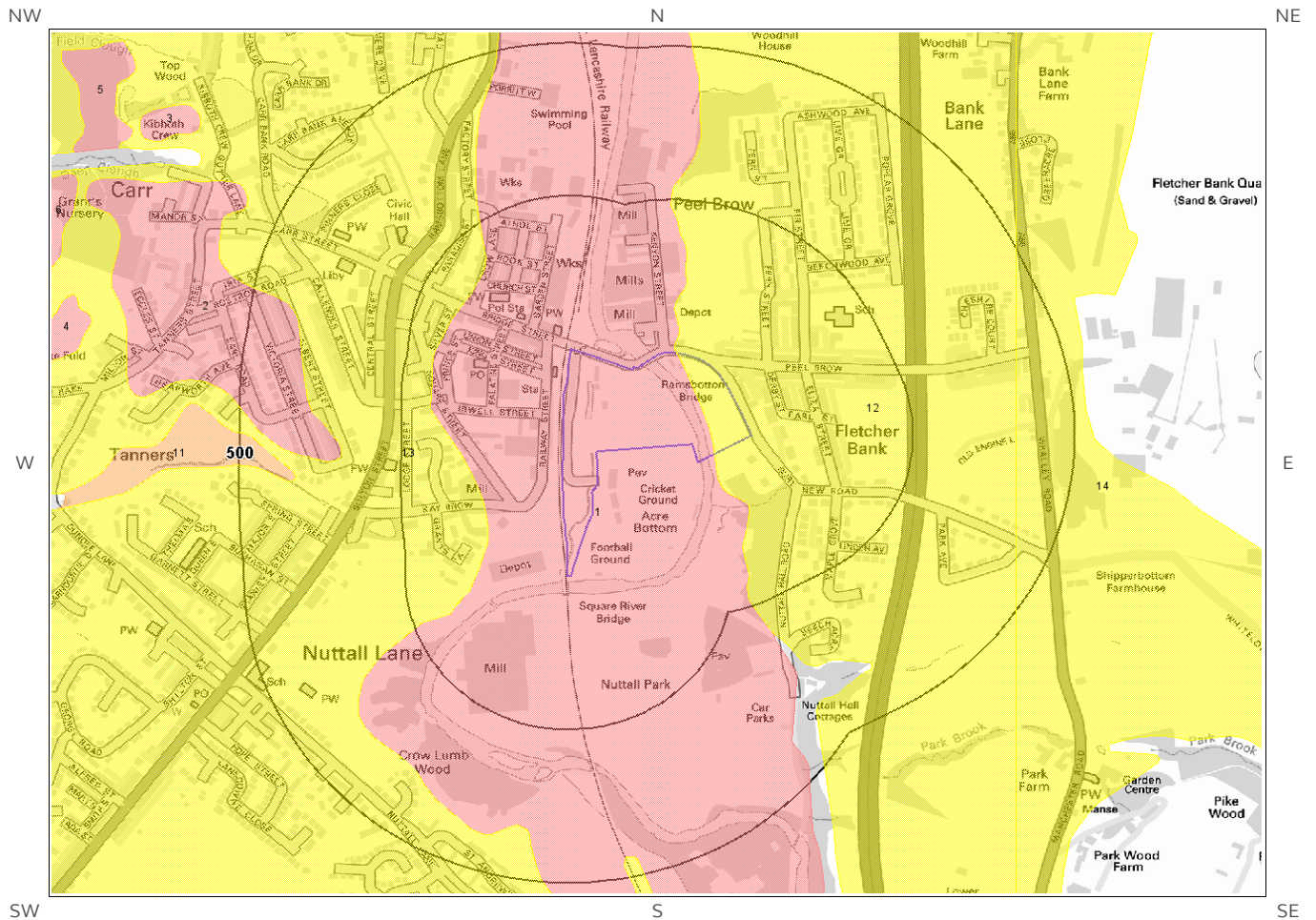
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
MARSD-MDSI	MARSDEN FORMATION	MUDSTONE AND SILTSTONE
MARSD-MDSI	MARSDEN FORMATION	MUDSTONE AND SILTSTONE
GSYG-SDST	GUISELEY GRIT	SANDSTONE
MARSD-MDSI	MARSDEN FORMATION	MUDSTONE AND SILTSTONE
BBS-SDST	BROOKSBOTTOMS GRIT	SANDSTONE

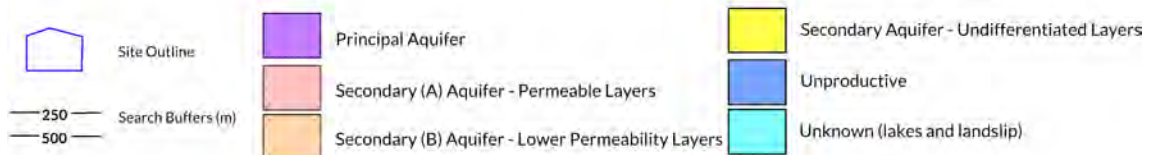
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

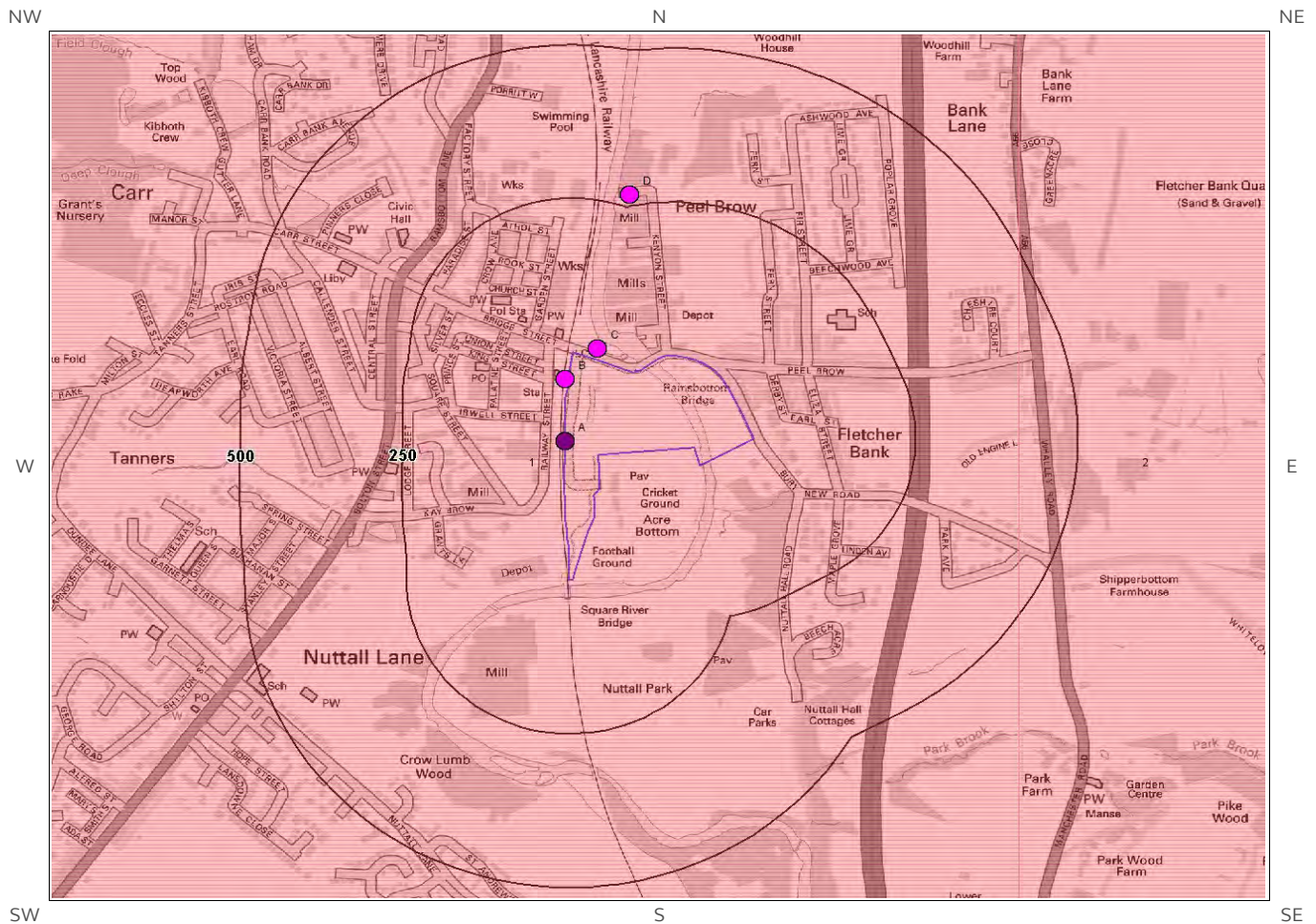
6a. Aquifer Within Superficial Geology



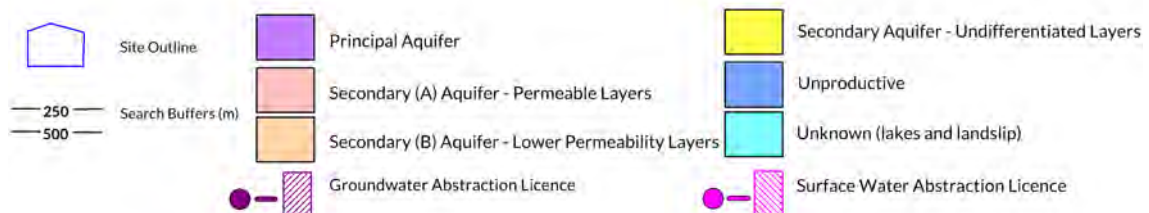
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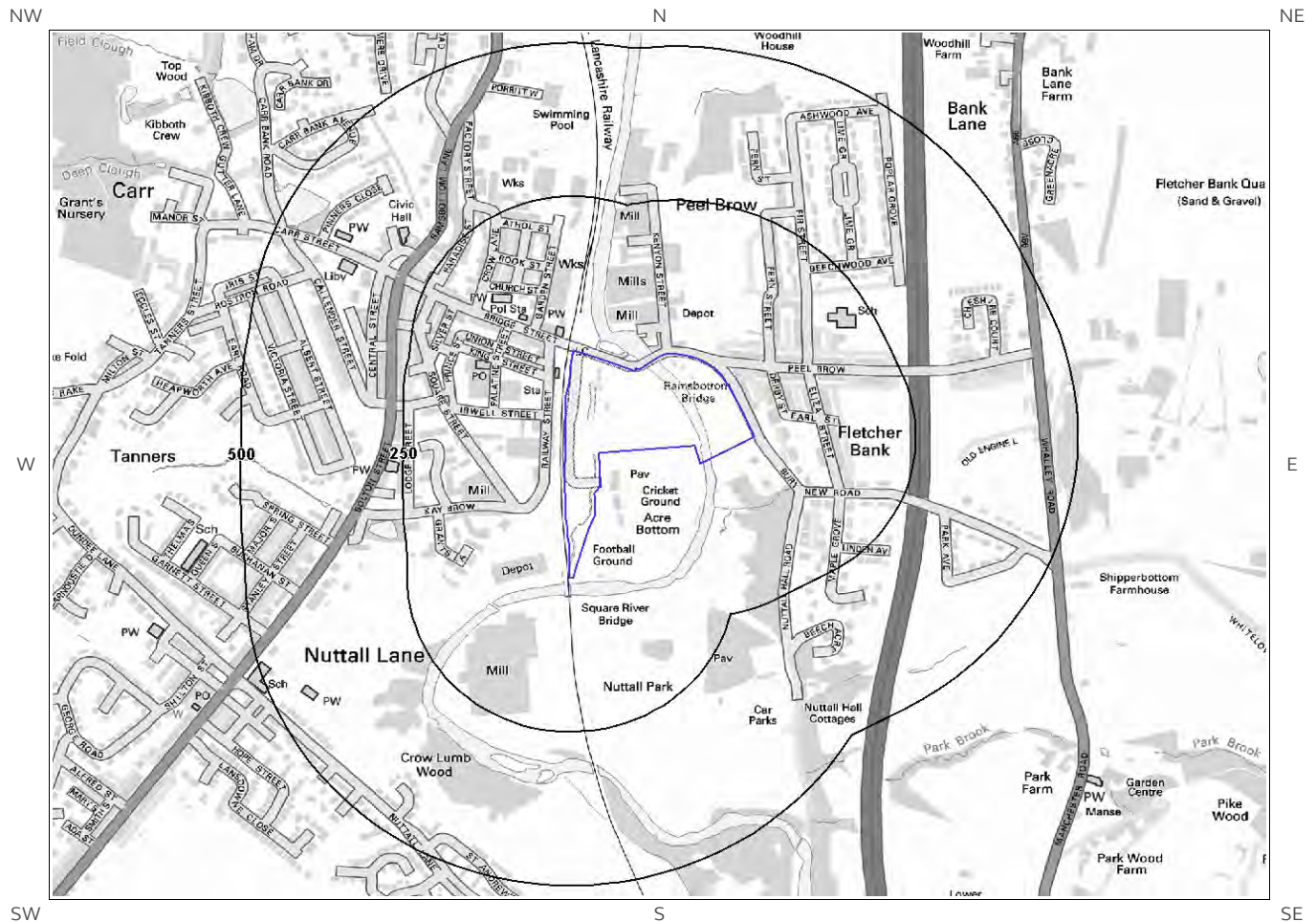
6b. Aquifer Within Bedrock Geology and Abstraction Licences



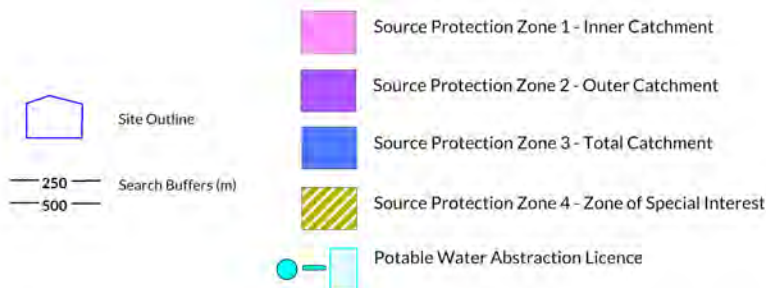
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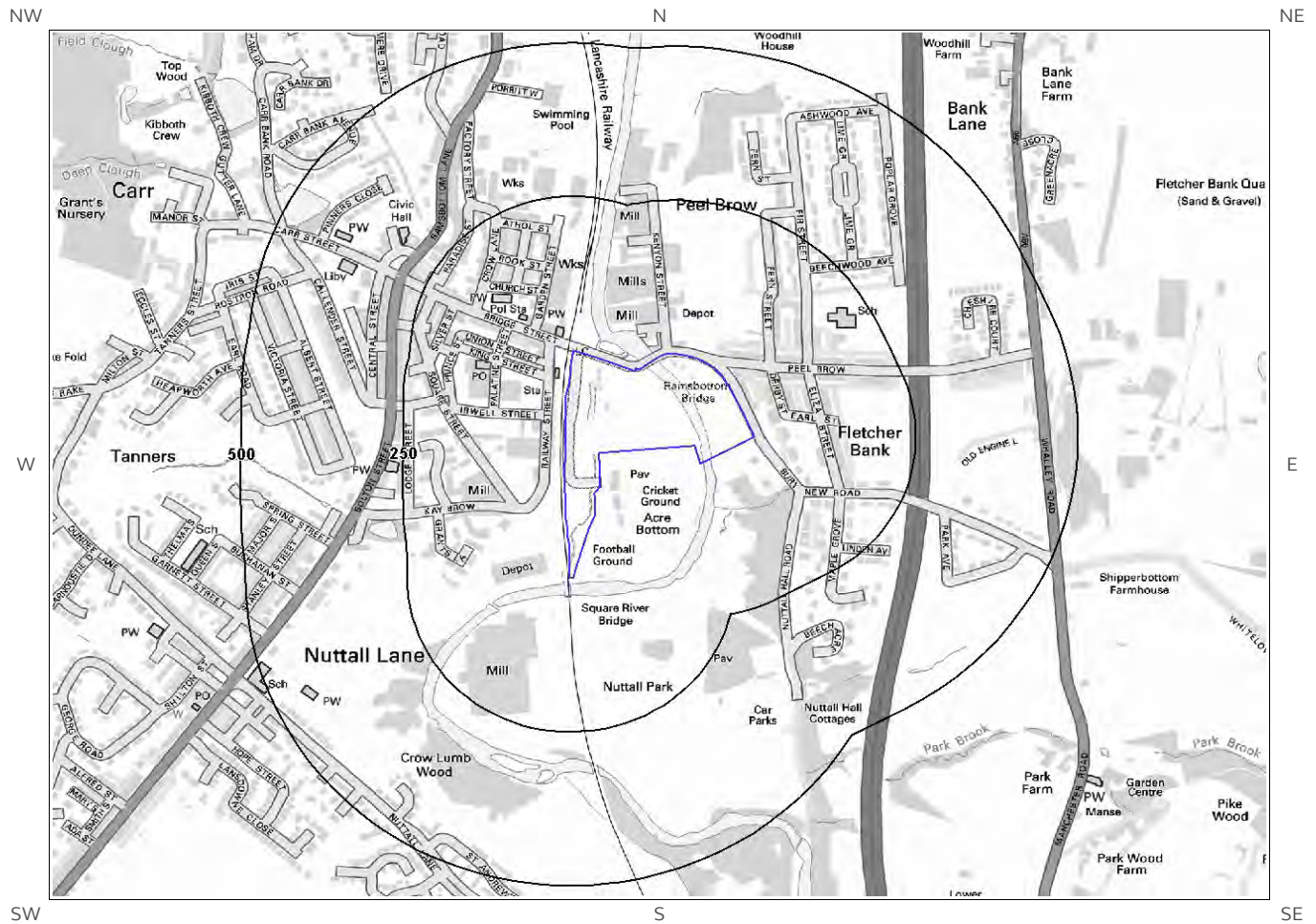
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



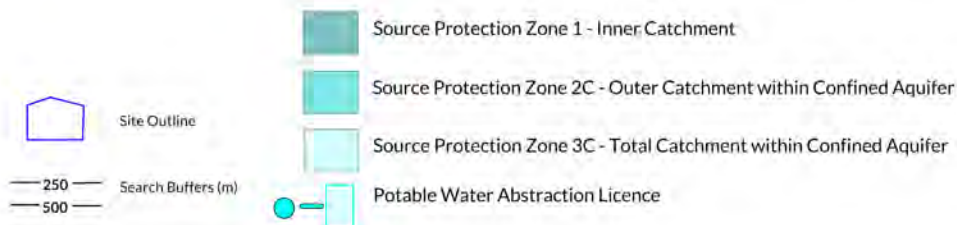
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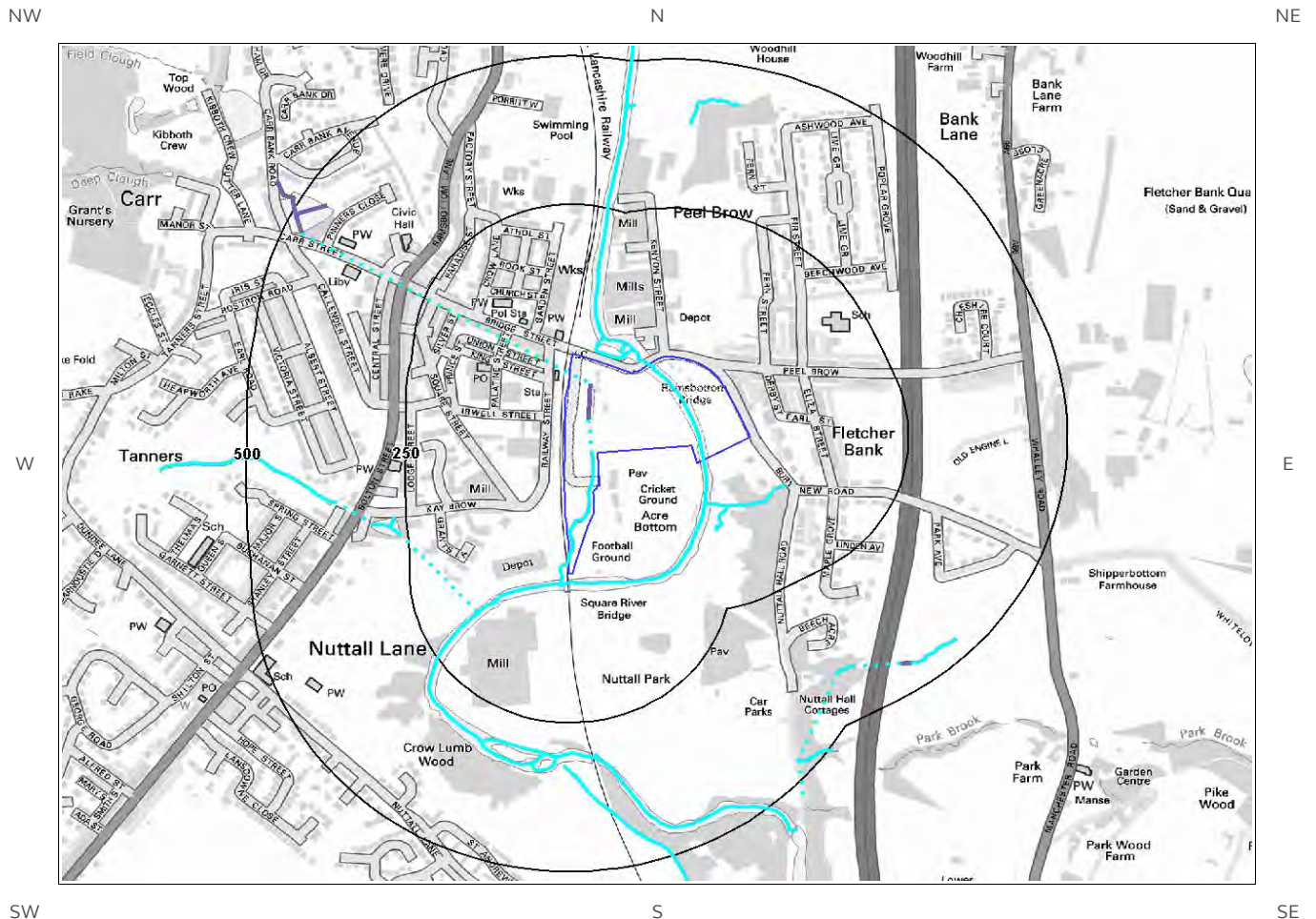
6d. Hydrogeology – Source Protection Zones within confined aquifer



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6e. Hydrology – Watercourse Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
12	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
13	119	W	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	342	W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
14	409	E	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
11	413	W	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	409	E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
3A	0	On Site	379300 416700	Status: Historical Licence No: 2569001030 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PEEL BRIDGE MILLS, RAMSBOTTOM" Data Type: Point Name: DANISCO PAPER LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 21/08/1999 Version End Date:
4A	0	On Site	379300 416700	Status: Historical Licence No: 2569001030 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PEEL BRIDGE MILLS, RAMSBOTTOM Data Type: Point Name: MONDI HOLCOMBE LIMITED Annual Volume (m³): 359149 Max Daily Volume (m³): 1637 Original Application No: - Original Start Date: 14/02/1966 Expiry Date: 31/03/2015 Issue No: 105 Version Start Date: 11/08/2008 Version End Date:
Not shown	775	S	379300 415700	Status: Historical Licence No: 2569001101 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "SPRING FED CATCHPIT AT NUTTAL HALL FARM, RAMSBOTTOM" Data Type: Point Name: WHITTAKER Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/01/1966 Version End Date:
Not shown	775	S	379300 415700	Status: Historical Licence No: 2569001101 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: SPRING FED CATCHPIT AT NUTTAL HALL FARM, RAMSBOTTOM Data Type: Point Name: WHITTAKER Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/01/1966 Version End Date:
Not shown	1089	N	379012 417892	Status: Active Licence No: 2569001129 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE A' AT STUBBINS PAPER MILL, RAMSBOTTOM. Data Type: Point Name: Essity UK Limited Annual Volume (m³): 772760 Max Daily Volume (m³): 4914 Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 105 Version Start Date: 19/03/2018 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1100	N	379000 417900	Status: Historical Licence No: 2569001129 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT STUBBINS PAPER MILL, RAMSBOTTOM Data Type: Point Name: SCA Hygiene Products Tissue Limited Annual Volume (m³): 545520 Max Daily Volume (m³): 2727.6 Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2012 Version End Date:
Not shown	1100	N	379000 417900	Status: Historical Licence No: 2569001129 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT STUBBINS PAPER MILL, RAMSBOTTOM" Data Type: Point Name: GEORGIA-PACIFIC GB LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 02/04/2001 Version End Date:
Not shown	1158	N	379400 418000	Status: Historical Licence No: 2569001086 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, ROSEBANK PRINTWORKS, RAMSBOTTOM," Data Type: Point Name: EDWARD TURNBULL & CO LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/01/1981 Version End Date:
Not shown	1158	N	379400 418000	Status: Historical Licence No: 2569001086 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, ROSEBANK PRINTWORKS, RAMSBOTTOM, Data Type: Point Name: EDWARD TURNBULL & CO LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 22/01/2004 Version End Date:
Not shown	1158	N	379400 418000	Status: Historical Licence No: 2569001086 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES ROSEBANK PRINTWORKS RAMSBOTTOM Data Type: Point Name: EDWARD TURNBULL & CO LTD Annual Volume (m³): 13638 Max Daily Volume (m³): 1091.04 Original Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 22/01/2004 Version End Date:
Not shown	1579	W	377800 417300	Status: Historical Licence No: 2569001125 Details: General Farming & Domestic Direct Source: Ground Water - North West Region Point: "WELL AT RAMSBOTTOM, KNOWN AS SOLDIERS WELL" Data Type: Point Name: PLATT Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/05/1971 Version End Date:
Not shown	1579	W	377800 417300	Status: Historical Licence No: 2569001125 Details: General Farming & Domestic Direct Source: Ground Water - North West Region Point: WELL AT RAMSBOTTOM, KNOWN AS SOLDIERS WELL Data Type: Point Name: PLATT Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 27/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/05/1971 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1638	SE	380800 415600	Status: Historical Licence No: 2569001190 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: SPRING FED COLLECTING CHAMBER AT WALMERSLEY Data Type: Point Name: MOSLEY AND THWAITES Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 08/05/1972 Expiry Date: - Issue No: 100 Version Start Date: 08/05/1972 Version End Date:
Not shown	1650	SW	377800 415800	Status: Active Licence No: 2569001228 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS Data Type: Point Name: DARUL ULOOM Annual Volume (m³): 22730 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 20/06/1990 Expiry Date: - Issue No: 100 Version Start Date: 20/06/1990 Version End Date:
Not shown	1650	SW	377800 415800	Status: Historical Licence No: 2569001228 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS" Data Type: Point Name: DARUL ULOOM Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 20/06/1990 Expiry Date: - Issue No: 100 Version Start Date: 20/06/1990 Version End Date:
Not shown	1650	SW	377800 415800	Status: Historical Licence No: 2569001228 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS Data Type: Point Name: DARUL ULOOM Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 20/06/1990 Expiry Date: - Issue No: 100 Version Start Date: 20/06/1990 Version End Date:
Not shown	1661	NE	381100 417400	Status: Historical Licence No: 2569001100 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: SPRING FED CATCHPIT AT GREEN HILL FARM, SHUTTLEWORTH, RAMS Data Type: Point Name: OVENDEN Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 19/01/1966 Version End Date:
Not shown	1661	NE	381100 417400	Status: Historical Licence No: 2569001100 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "SPRING FED CATCHPIT AT GREEN HILL FARM, SHUTTLEWORTH, RAMS" Data Type: Point Name: OVENDEN Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 19/01/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1835	W	377600 415800	Status: Historical Licence No: 2569001204 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT HOLCOMBE, BURY" Data Type: Point Name: DAVENPORT	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 30/07/1979 Expiry Date: - Issue No: 100 Version Start Date: 30/07/1979 Version End Date:
Not shown	1835	W	377600 415800	Status: Historical Licence No: 2569001204 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT HOLCOMBE, BURY Data Type: Point Name: DAVENPORT	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 30/07/1979 Expiry Date: - Issue No: 100 Version Start Date: 30/07/1979 Version End Date:
Not shown	1950	NE	381000 418100	Status: Historical Licence No: 2569001099 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "SPRING FED CATCHPIT AT TOP O'TH' LEE AND DRY GAP FARMS, S" Data Type: Point Name: OVENDEN	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 19/01/1966 Version End Date:
Not shown	1950	NE	381000 418100	Status: Historical Licence No: 2569001099 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: SPRING FED CATCHPIT AT TOP O'TH' LEE AND DRY GAP FARMS, S Data Type: Point Name: OVENDEN	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 19/01/1966 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details	
25B	7	W	379300 416800	Status: Historical Licence No: 2569001029 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: R.IRWELL AT RAMSBOTTOM Data Type: Point Name: MONDI PAPER LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 11/09/2001 Version End Date:
26B	7	W	379300 416800	Status: Historical Licence No: 2569001224 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region	Annual Volume (m³): 90920 Max Daily Volume (m³): 1091.04 Application No: - Original Start Date: 12/04/1988 Expiry Date: -

ID	Distance (m)	Direction	NGR	Details	
				Point: R.IRWELL AT RAMSBOTTOM Data Type: Point Name: MONDI HOLCOMBE LIMITED	Issue No: 103 Version Start Date: 11/08/2008 Version End Date:
27B	7	W	379300 416800	Status: Historical Licence No: 2569001029 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: GOIT FED BY SURFACE DRAINAGE AND RIVER IRWELL AT RAMSBOTTOM Data Type: Point Name: MONDI HOLCOMBE LIMITED	Annual Volume (m³): 322766 Max Daily Volume (m³): 1637 Application No: - Original Start Date: 14/02/1966 Expiry Date: 31/03/2015 Issue No: 105 Version Start Date: 11/08/2008 Version End Date:
28C	16	N	379350 416850	Status: Historical Licence No: 2569001246 Details: Supply to a Leat for Throughflow Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT BRIDGE STREET , RAMSBOTTOM Data Type: Point Name: BURY METROPOLITAN BOROUGH COUNCIL	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 19/01/1994 Expiry Date: - Issue No: 100 Version Start Date: 11/08/2000 Version End Date:
29C	16	N	379350 416850	Status: Historical Licence No: 2569001246 Details: Supply to a Leat for Throughflow Direct Source: "Surface, Non-Tidal - North West Region" Point: "RIVER IRWELL AT BRIDGE STREET , RAMSBOTTOM" Data Type: Point Name: BURY METROPOLITAN BOROUGH COUNCIL	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 19/01/1994 Expiry Date: - Issue No: 100 Version Start Date: 11/08/2000 Version End Date:
30C	16	N	379350 416850	Status: Active Licence No: 2569001246 Details: Supply To A Leat For Throughflow Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT BRIDGE STREET RAMSBOTTOM Data Type: Point Name: BURY METROPOLITAN BOROUGH COUNCIL	Annual Volume (m³): 6.31152e+007 Max Daily Volume (m³): 172920 Application No: - Original Start Date: 19/01/1994 Expiry Date: - Issue No: 100 Version Start Date: 11/08/2000 Version End Date:
31D	267	N	379400 417100	Status: Historical Licence No: 2569001047 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT BRITANNIA WORKS KENYON STREET RAMSBOTTOM Data Type: Point Name: KAYS RAMSBOTTOM LTD	Annual Volume (m³): 159111 Max Daily Volume (m³): 636.44 Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/09/1995 Version End Date:
32D	267	N	379400 417100	Status: Historical Licence No: 2569001047 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: R IRWELL AT PREMISES, BRITANNIA WORKS, KENYON STREET, RA Data Type: Point Name: KAYS RAMSBOTTOM LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/09/1995 Version End Date:
33D	267	N	379400 417100	Status: Historical Licence No: 2569001047 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100

ID	Distance (m)	Direction	NGR	Details	
				Point: R IRWELL AT, BRITANNIA WORKS, KENYON STREET, RAMSBOTTOM Data Type: Point Name: KAYS RAMSBOTTOM LTD	Version Start Date: 27/09/1995 Version End Date:
34D	267	N	379400 417100	Status: Historical Licence No: 2569001047 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT BRITANNIA WORKS KENYON STREET RAMSBOTTOM Data Type: Point Name: KAYS RAMSBOTTOM LTD	Annual Volume (m³): 159111 Max Daily Volume (m³): 636.44 Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/09/1995 Version End Date:
35D	267	N	379400 417100	Status: Historical Licence No: 2569001047 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: R IRWELL AT, BRITANNIA WORKS, KENYON STREET, RAMSBOTTOM Data Type: Point Name: KAYS RAMSBOTTOM LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/09/1995 Version End Date:
36D	267	N	379400 417100	Status: Historical Licence No: 2569001047 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "R IRWELL AT PREMISES, BRITANNIA WORKS, KENYON STREET, RA" Data Type: Point Name: KAYS RAMSBOTTOM LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/09/1995 Version End Date:
37D	267	N	379400 417100	Status: Historical Licence No: 2569001047 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: R IRWELL AT PREMISES, BRITANNIA WORKS, KENYON STREET, RA Data Type: Point Name: KAYS RAMSBOTTOM LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/09/1995 Version End Date:
38D	267	N	379400 417100	Status: Historical Licence No: 2569001047 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "R IRWELL AT PREMISES, BRITANNIA WORKS, KENYON STREET, RA" Data Type: Point Name: KAYS RAMSBOTTOM LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/09/1995 Version End Date:
Not shown	925	N	379246 417768	Status: Active Licence No: 2569001201 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT 'A' AT STUBBINS, RAMSBOTTOM, BURY. Data Type: Point Name: Essity UK Limited	Annual Volume (m³): 3.1e+006 Max Daily Volume (m³): 9090 Application No: - Original Start Date: 07/11/1977 Expiry Date: - Issue No: 105 Version Start Date: 19/03/2018 Version End Date:
Not shown	961	N	379200 417800	Status: Historical Licence No: 2569001201 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region	Annual Volume (m³): 4.15968e+006 Max Daily Volume (m³): 11365 Application No: - Original Start Date: 07/11/1977 Expiry Date: -

ID	Distance (m)	Direction	NGR	Details	
				Point: R IRWELL AT RAMSBOTTOM, BURY Data Type: Point Name: SCA Hygiene Products Tissue Limited	Issue No: 102 Version Start Date: 13/08/2012 Version End Date:
Not shown	961	N	379200 417800	Status: Historical Licence No: 2569001201 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "R IRWELL AT RAMSBOTTOM, BURY" Data Type: Point Name: GEORGIA-PACIFIC GB LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 07/11/1977 Expiry Date: - Issue No: 101 Version Start Date: 02/04/2001 Version End Date:
Not shown	1065	NW	378785 417771	Status: Historical Licence No: 2569001128 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS 'A' AT STUBBINS, RAMSBOTTOM, BURY Data Type: Point Name: SCA Hygiene Products Tissue Limited	Annual Volume (m³): 1.45e+006 Max Daily Volume (m³): 4543 Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 103 Version Start Date: 08/11/2013 Version End Date:
Not shown	1083	NW	378800 417800	Status: Historical Licence No: 2569001128 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS (2) FED BY SURFACE DRAINAGE AT STUBBINS PAP Data Type: Point Name: GEORGIA-PACIFIC GB LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 02/04/2001 Version End Date:
Not shown	1083	NW	378800 417800	Status: Historical Licence No: 2569001128 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS X 2 FED BY SURFACE DRAINAGE AT STUBBINS Data Type: Point Name: SCA Hygiene Products Tissue Limited	Annual Volume (m³): 1.70475e+006 Max Daily Volume (m³): 5682.5 Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2012 Version End Date:
Not shown	1105	NE	380400 417500	Status: Historical Licence No: 2569001199 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: CROSS BANK BRK AT RAMSBOTTOM, BURY Data Type: Point Name: MARSHALLS MONO LTD	Annual Volume (m³): 34096 Max Daily Volume (m³): 136 Application No: - Original Start Date: 22/09/1975 Expiry Date: - Issue No: 101 Version Start Date: 28/08/2014 Version End Date:
Not shown	1105	NE	380400 417500	Status: Historical Licence No: 2569001199 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "CROSS BANK BRK AT RAMSBOTTOM, BURY" Data Type: Point Name: MARSHALLS MONO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 22/09/1975 Expiry Date: - Issue No: 100 Version Start Date: 18/02/1987 Version End Date:
Not shown	1105	N	378930 417882	Status: Active Licence No: 2569001128 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR 'B' AT SUBBINS, RAMSBOTTOM, BURY. Data Type: Point Name: Essity UK Limited	Annual Volume (m³): 1.45e+006 Max Daily Volume (m³): 4543 Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 106 Version Start Date: 19/03/2018 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1160	N	378938 417943	Status: Active Licence No: 2569001128 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR 'C' AT SUBBINS, RAMSBOTTOM, BURY. Data Type: Point Name: Essity UK Limited Annual Volume (m³): 1.45e+006 Max Daily Volume (m³): 4543 Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 106 Version Start Date: 19/03/2018 Version End Date:
Not shown	1196	N	379000 418000	Status: Historical Licence No: 2569001128 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS (2) FED BY SURFACE DRAINAGE AT STUBBIN Data Type: Point Name: GEORGIA-PACIFIC GB LTD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 02/04/2001 Version End Date:
Not shown	1196	N	379000 418000	Status: Historical Licence No: 2569001128 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS X 2 FED BY SURFACE DRAINAGE AT STUBBINS Data Type: Point Name: SCA Hygiene Products Tissue Limited Annual Volume (m³): 1.70475e+006 Max Daily Volume (m³): 5682.5 Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2012 Version End Date:
Not shown	1196	N	379000 418000	Status: Historical Licence No: 2569001128 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS (2) FED BY SURFACE DRAINAGE AT STUBBIN85 Data Type: Point Name: FORT JAMES UK LTD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/01/1998 Version End Date:
Not shown	1196	N	379000 418000	Status: Historical Licence No: 2569001128 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS (2) FED BY SURFACE DRAINAGE AT STUBBIN\$85 Data Type: Point Name: GEORGIA-PACIFIC GB LTD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 02/04/2001 Version End Date:
Not shown	1361	N	379500 418200	Status: Historical Licence No: 2569001180 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR AT ROSEBANK PRINTWORKS, RAMSBOTTOM, NEAR BURY Data Type: Point Name: EDWARD TURNBULL & CO LTD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 01/06/1969 Expiry Date: - Issue No: 101 Version Start Date: 22/01/2004 Version End Date:
Not shown	1361	N	379500 418200	Status: Historical Licence No: 2569001180 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR AT ROSEBANK PRINTWORKS, RAMSBOTTOM, NEAR BURY" Data Type: Point Name: EDWARD TURNBULL & CO LTD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 01/06/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1993 Version End Date:
Not shown	1361	N	379500 418200	Status: Historical Licence No: 2569001180 Details: Process water Annual Volume (m³): 547793 Max Daily Volume (m³): 1963.872 Application No: -

ID	Distance (m)	Direction	NGR	Details
				Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR AT ROSEBANK PRINTWORKS RAMSBOTTOM NEAR BURY Data Type: Point Name: EDWARD TURNBULL & CO LTD Original Start Date: 01/06/1969 Expiry Date: - Issue No: 101 Version Start Date: 22/01/2004 Version End Date:
Not shown	1692	N	379800 418500	Status: Historical Licence No: 2569001179 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR AT PREMISES, EDENWOOD MILL, RAMSBOTTOM" Data Type: Point Name: TURNBULL & STOCKDALE LTD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 24/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 22/01/1999 Version End Date:
Not shown	1692	N	379800 418500	Status: Historical Licence No: 2569001179 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR AT PREMISES, EDENWOOD MILL, RAMSBOTTOM Data Type: Point Name: TURNBULL & STOCKDALE LTD Annual Volume (m³): 218208 Max Daily Volume (m³): 1091.06 Application No: - Original Start Date: 24/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 22/01/1999 Version End Date:
Not shown	1732	N	378800 418500	Status: Historical Licence No: 2569001110 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY UNNAMED TRIBUTARY RIVER IRWELL STUBBINS Data Type: Point Name: VOITH FABRICS STUBBINS LTD Annual Volume (m³): 272765.7 Max Daily Volume (m³): 1136.5 Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 27/09/1999 Version End Date:
Not shown	1732	N	378800 418500	Status: Historical Licence No: 2569001110 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY UNNAMED TRIB OF R IRWELL AT STUBBINS VAL Data Type: Point Name: VOITH FABRICS STUBBINS LTD Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 27/09/1999 Version End Date:
Not shown	1761	S	378950 414750	Status: Historical Licence No: 2569001038 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL IN RAMSBOTTOM Data Type: Point Name: GREENLEAF ENTERPRISES LTD Annual Volume (m³): 23639.7 Max Daily Volume (m³): 90.92 Application No: - Original Start Date: 25/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 01/03/2003 Version End Date:
Not shown	1830	N	378730 418580	Status: Historical Licence No: 2569001110 Details: Lake & Pond Throughflow Direct Source: Surface, Non-Tidal - North West Region Point: UN-NAMED TRIBUTARY RIVER IRWELL AT LH PREMISES STUBBINS VALE Data Type: Point Name: VOITH PAPER FABRICS STUBBINS LTD Annual Volume (m³): 272766 Max Daily Volume (m³): 1136.5 Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/02/2006 Version End Date:
Not shown	1987	NE	381200 417900	Status: Historical Licence No: 2569001012 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY NEW GATE BRK AND FIELD DRAINAGE, ADJACENT Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 14/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/01/1991

ID	Distance (m)	Direction	NGR	Details
				Data Type: Point Name: TOMASZEWSKI
				Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

Identified

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distance (m)	Direction	NGR	Details
Not shown	1650	SW	377800 415800	Status: Historical Licence No: 2569001228 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS" Data Type: Point Name: DARUL ULOOM Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 20/06/1990 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1650	SW	377800 415800	Status: Historical Licence No: 2569001228 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS Data Type: Point Name: DARUL ULOOM Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 20/06/1990 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1650	SW	377800 415800	Status: Active Licence No: 2569001228 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: BOREHOLE AT HOLCOMBE, NEAR BURY, LANCS Data Type: Point Name: DARUL ULOOM Annual Volume (m³): 22730 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 20/06/1990 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
15	E	Minor Aquifer/Low Leaching Potential	L	Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants.
409	E	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site Identified

6.9.1 Biological Quality:

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
Not shown	1258	N	379400 418100	River Name: Dearden Bk Reach: Qsl At Scout Moor Resvr. To Irwell End/Start of Stretch: End of Stretch NGR	B	C	C	C	C

6.9.2 Chemical Quality:

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAH). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
Not shown	1218	N	379401 418060	River Name: Dearden Bk. Reach: Qsl At Scout Moor Resvr. To Irwell End/Start of Stretch: Sample Point NGR	B	B	B	A	A
Not shown	1253	N	379361 418097	River Name: Irwell Reach: Rossendale Stw To Chest Wheel Bridge End/Start of Stretch: Sample Point NGR	B	A	A	B	B
Not shown	1258	N	379400 418100	River Name: Dearden Bk. Reach: Qsl At Scout Moor Resvr. To Irwell End/Start of Stretch: End of Stretch NGR	B	B	B	A	A

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
2	0 On Site	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.4
3	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
5	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	0 On Site	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 7.0
7	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	0 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
34	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
35	0 On Site	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.4
36	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
37	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): 1.6
38	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
39	0 On Site	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 7.0
40	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
41	0 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	10 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
42	10 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	11 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
43	11 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
11	12 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.3
44	12 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.3
12	15 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.6
45	15 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.6

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
13	21 SW	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 12.5
46	21 SW	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 12.5
14	24 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.6
15	24 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.5
47	24 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.6
48	24 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.5
16	35 NW	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.7
49	35 NW	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.7
17	40 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.8
50	40 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.8
18	41 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.7
51	41 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.7
19	69	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	S			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
52	69 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
20	72 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
53	72 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
21	86 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
22	86 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
54	86 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
55	86 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
23	111 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.8
56	111 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.8
24	112 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.3
25	112 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.8
57	112 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): 0.3
58	112 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.8
26	113 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
59	113 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
27	157 SW	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.0
28	157 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
60	157 SW	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.0
61	157 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
29	263 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 10.7
62	263 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 10.7
30	269 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 7.4
63	269 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 7.4
31	277 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 16.7

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
64	277 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 16.7
32	300 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
Not shown	300 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
33	302 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.7
Not shown	302 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.7
34	304 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
67	304 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
35	305 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
36	305 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
37	305 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
Not shown	305 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
Not shown	305 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
Not shown	305	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	S			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
38	308 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
Not shown	308 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
39	311 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
Not shown	311 S	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
40	314 SW	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
Not shown	314 SW	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 15.1
41	322 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	322 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
42	363 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
75	363 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
43	392 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	392 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): Not Provided
44	414 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
45	414 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
77	414 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
78	414 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
46	417 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
79	417 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
47	424 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	424 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
48	425 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.7
Not shown	425 N	River Irwell	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.7
49	449 SE	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
82	449 SE	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
50	456 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
83	456 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
51	459 NW	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 54.8
84	459 NW	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 54.8
52	472 NW	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 23.8
85	472 NW	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 23.8
53	475 SE	Park Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
54	475 SE	Park Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	475 SE	Park Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	475 SE	Park Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
55	478 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	478 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
56	480	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	W			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
Not shown	480 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
57	494 NW	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 7.0
90	494 NW	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 7.0

6.11 Surface Water Features

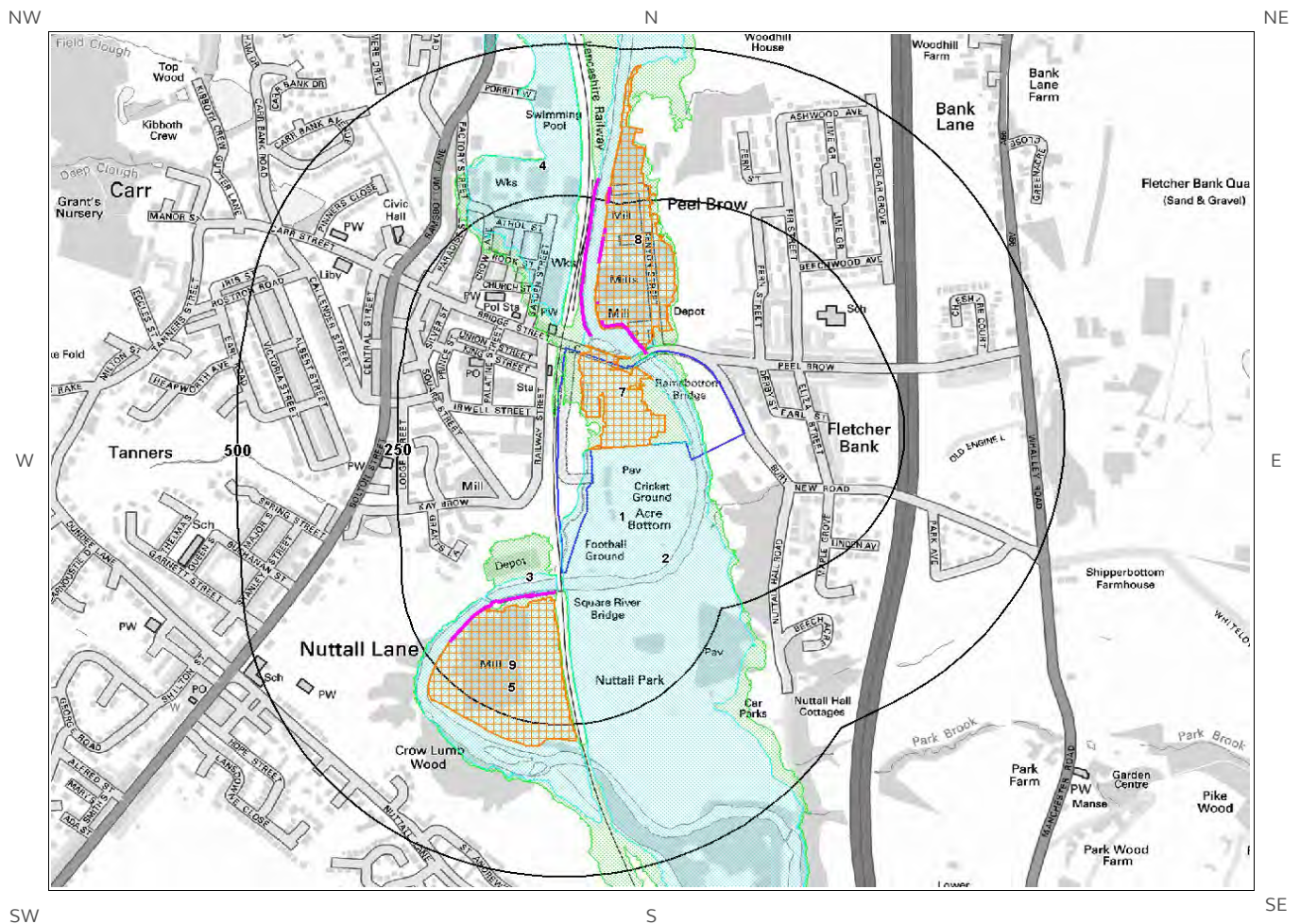
Surface water features within 250m of the study site

Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
0	On Site
0	On Site
10	SW
10	W
11	NW
72	S
86	SE
86	SE
119	SW

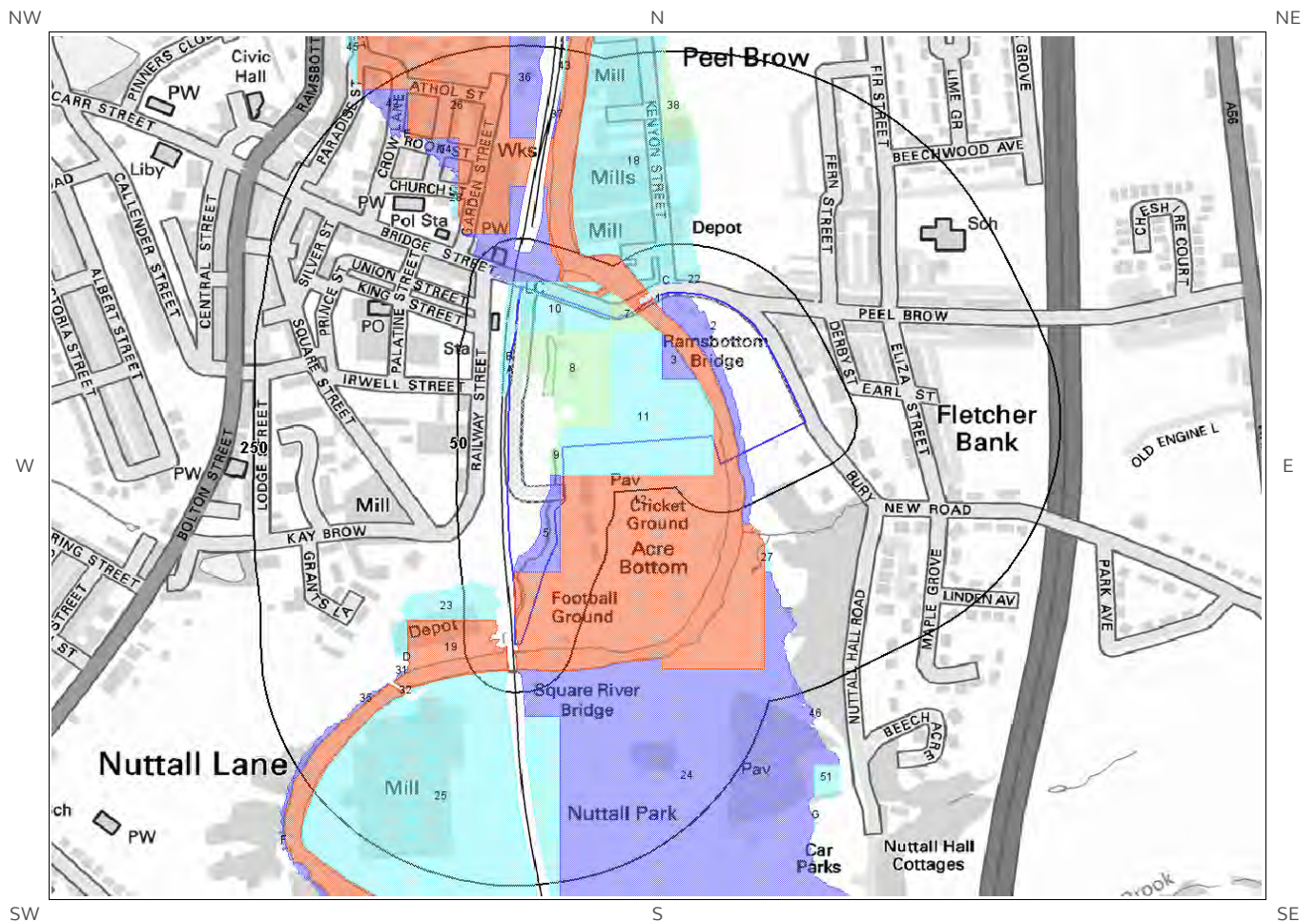
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



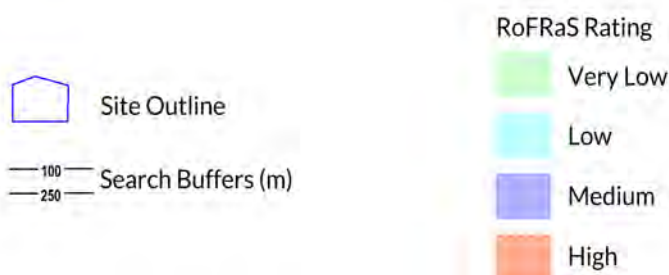
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m

Identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

ID	Distance (m)	Direction	Update	Type
1	0	On Site	21-Feb-2019	Zone 2 - (Fluvial /Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m

Identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

ID	Distance (m)	Direction	Update	Type
1	0	On Site	21-Feb-2019	Zone 3 - (Fluvial /Tidal Models)
	10	W	21-Feb-2019	Zone 3 - (Fluvial /Tidal Models)
	40	N	21-Feb-2019	Zone 3 - (Fluvial /Tidal Models)
	44	S	21-Feb-2019	Zone 3 - (Fluvial /Tidal Models)

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite

High

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a High (1 in 30 or greater) chance of flooding in any given year.

Any relevant data within 250m is represented on the RoFRaS Flood map. Data to 50m is reported in the table below.

ID	Distance (m)	Direction	RoFRaS flood Risk
1	0.0	On Site	Low
2	0.0	On Site	Low
3	0.0	On Site	Medium
4	0.0	On Site	Medium
5	0.0	On Site	Medium
6A	0.0	On Site	Very Low
7	0.0	On Site	Very Low
8	0.0	On Site	Very Low
9	0.0	On Site	Very Low
10	0.0	On Site	Low
11	0.0	On Site	Low
12	0.0	On Site	High
13A	0.0	On Site	Very Low
14B	0.0	W	Very Low
15	0.0	W	Very Low
16B	1.0	W	Very Low
17	5.0	N	Medium
18	8.0	NW	Low
19	9.0	W	High
20C	9.0	N	Medium
21C	10.0	N	Medium
22	11.0	N	Medium
23	14.0	W	Low
24	26.0	S	Medium
25	28.0	S	Low

7.4 Flood Defences

Flood Defences within 250m of the study site

Identified

The following flood defence records are represented as lines on the Flood Map:

ID	Distance (m)	Direction	Update
10	5	NW	21-Feb-2019
11	30	N	21-Feb-2019
12	33	S	21-Feb-2019
13	55	SW	21-Feb-2019
14	56	SW	21-Feb-2019
15	56	SW	21-Feb-2019
16	56	SW	21-Feb-2019
17	84	N	21-Feb-2019
18	148	N	21-Feb-2019
19	197	N	21-Feb-2019
20	245	N	21-Feb-2019

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site

Identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site

None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site

Identified

Clearwater Flooding or Superficial Deposits Flooding

Clearwater Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

7.8 Groundwater Flooding Confidence Areas

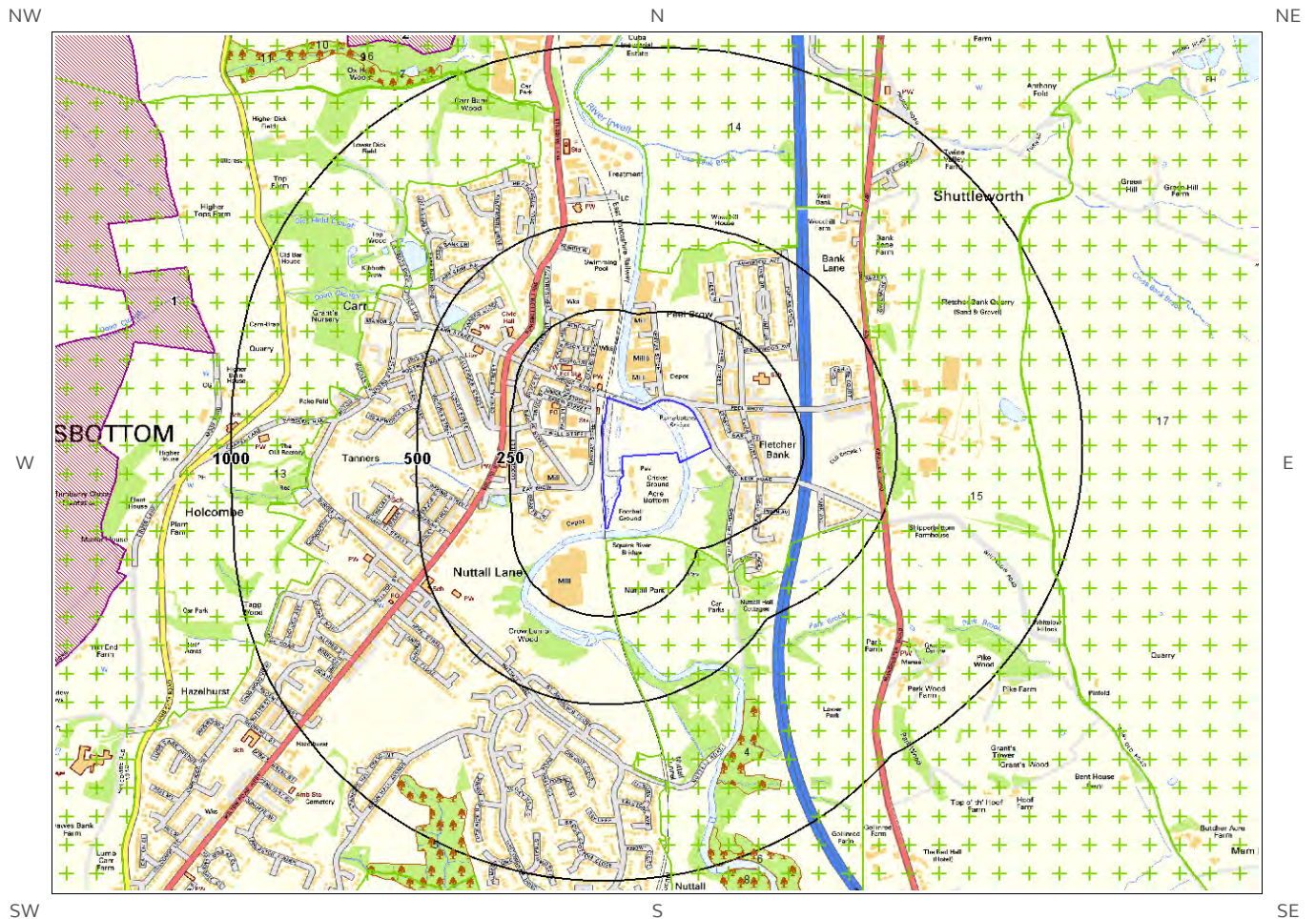
British Geological Survey confidence rating in this result

High

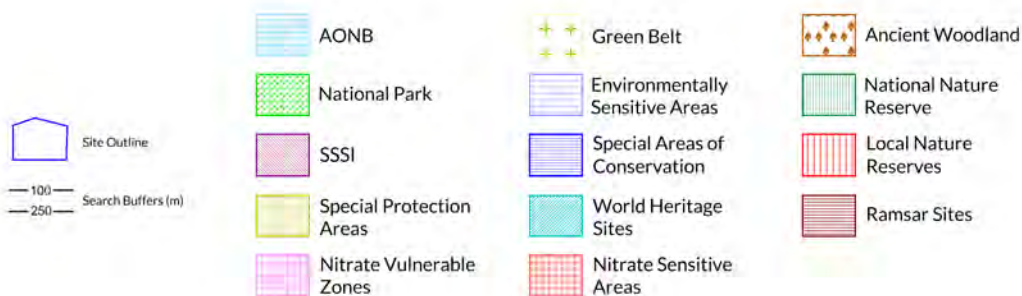
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

2

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
1	1064	W	West Pennine Moors	Natural England
2	1079	NW	Lower Red Lees Pasture	Natural England

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

9

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
4	611	SE	NUTTALL WOOD	Ancient and Semi-Natural Woodland
5	844	SW	BROAD HEY WOOD	Ancient and Semi-Natural Woodland
6	896	S	GOLLINROD WOOD	Ancient and Semi-Natural Woodland
7	1012	NW	UNKNOWN	Ancient Replanted Woodland
8	1022	S	GOLLINROD WOOD	Ancient and Semi-Natural Woodland
9	1134	NW	UNKNOWN	Ancient and Semi-Natural Woodland
10	1184	NW	UNKNOWN	Ancient and Semi-Natural Woodland
11	1224	NW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1693	SW	DAWES BANK WOOD	Ancient and Semi-Natural Woodland

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

1

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
Not shown	1768	SW	Redisher Wood	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.

8.14 Records of Green Belt land within 2000m of the study site:

6

Green Belt data contains Ordnance Survey data © Crown copyright and database right [2015].

ID	Distance	Direction	Green Belt Name	Local Authority Name
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13	35	S	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
14	358	N	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
15	455	E	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
16	824	N	Liverpool, Manchester and West Yorks Greenbelt	Rossendale District (B)
17	860	E	Liverpool, Manchester and West Yorks Greenbelt	Rossendale District (B)
Not shown	1871	N	Liverpool, Manchester and West Yorks Greenbelt	Rossendale District (B)

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **Groundsure Geo Insight**, available from our **website**. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell** hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Significant potential for slope instability with relatively small changes in ground conditions. Avoid large amounts of water entering the ground through pipe leakage or soak-aways. Do not undercut or place large amounts of material on slopes without technical advice. For new build consider the potential and consequences of ground movement during excavations, or consequence of changes to loading or drainage. For existing property probable increase in insurance risk is likely due to potential natural slope instability after changes to ground conditions such as a very long, excessively wet winter.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property no significant increase in insurance risk due to running sand problems is likely.

* This indicates an automatically generated 50m buffer and site.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

Identified

The following coal mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

Identified

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Vein Mineral	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

Past underground mine workings are uncommon, localised and of limited area. The rock types present in this area are such that minor mineral veins may be present within them on which it is possible that there have been attempts to work these by underground methods and/or it is possible that small scale underground extraction of other materials may have occurred. All such occurrences are likely to be restricted in size and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:

Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

Environment Agency

National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 03708 506 506

Web: www.environment-agency.gov.uk

Email: enquiries@environment-agency.gov.uk

Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe

Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000

The Coal Authority

200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority

Authority: Bury Metropolitan Borough Council
Phone: 01612 535 000

Web: <http://www.bury.gov.uk/>

Address: Town Hall, Knowsley Street, Bury, Lancashire, BL9 OSW

Gemapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:

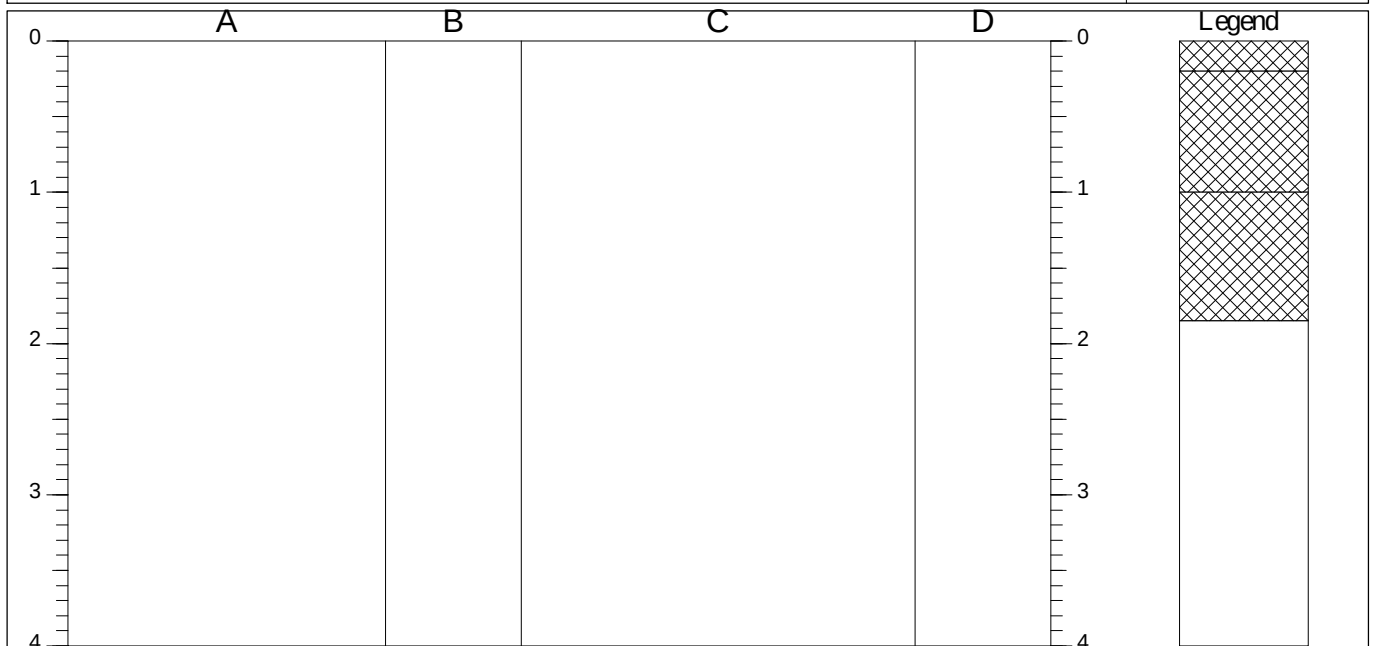
<https://www.groundsure.com/terms-and-conditions-feb11-2019>

APPENDIX E

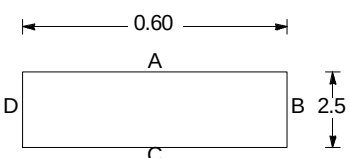
(i) Exploratory Hole Logs

TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP1
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

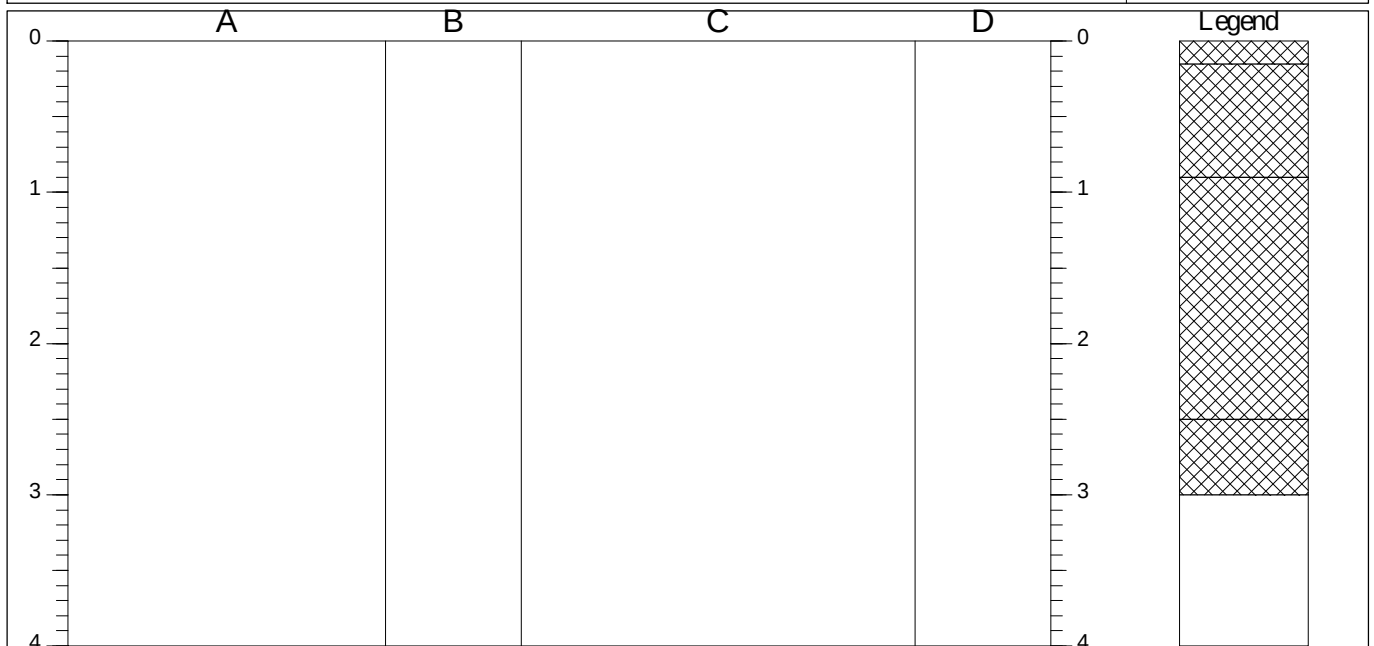


STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Maintained grass over brown slightly clayey gravelly occasionally cobbly fine to coarse SAND. Gravel and cobbles are fine to coarse angular to subangular of rootlets, brick, concrete, metal, timber, paper and textiles. TOPSOIL	0.10	ES	
0.20-1.00					
1.00-1.85		MADE GROUND: Loose brown slightly clayey very gravelly occasionally cobbly fine to coarse SAND. Gravel and cobbles are fine to coarse angular to subangular of brick, concrete, metal, timber, paper and textiles. Occasional sandstone boulders noted.	1.00	ES	
		MADE GROUND: Soft bluish brown very sandy silty gravelly cobbly CLAY with common boulders of concrete and sandstone. Gravel and cobbles are fine to coarse angular to subangular of brick, concrete, metal, timber, paper and textiles. Occasional sandstone b			

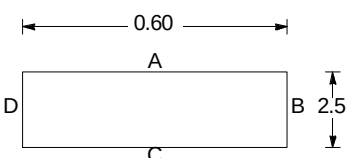
Shoring/Support: Stability: Collapse noted within Made Ground below topsoil. pit widening.			GENERAL REMARKS Hydrocarbon / organic odour from 1.00mbgl. Concrete boulders noted 1.85mbgl.
			
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR

TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP2
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

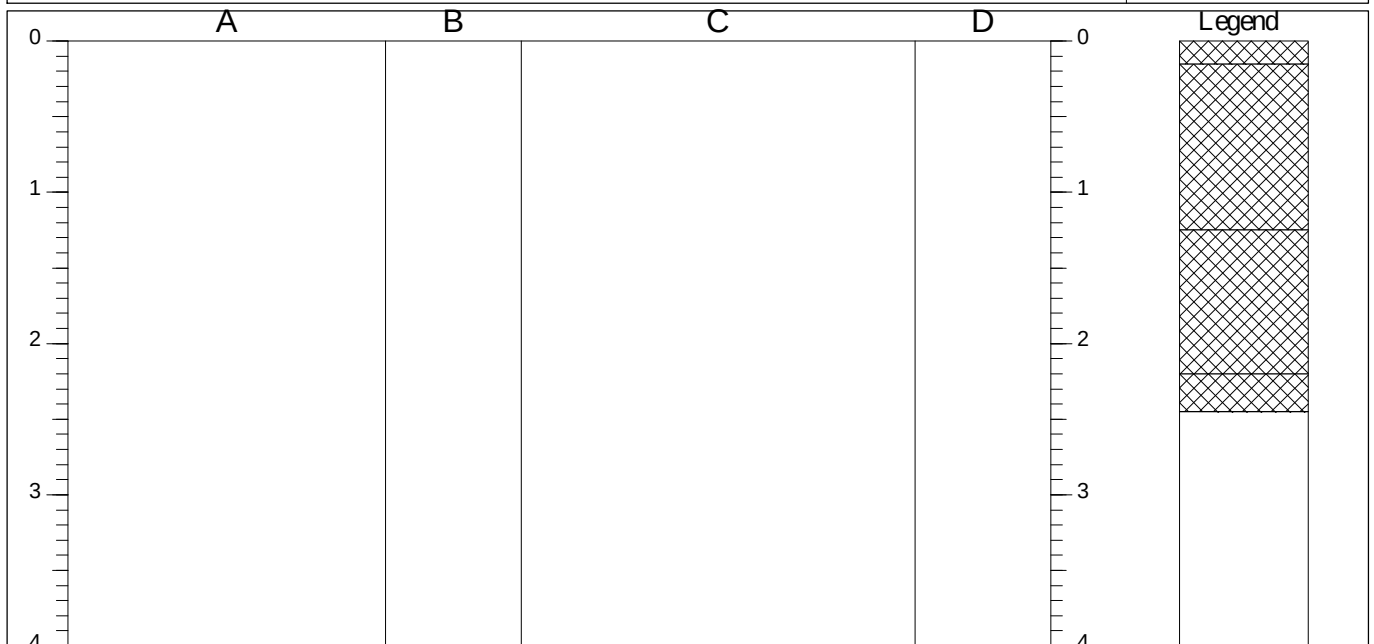


STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.15		MADE GROUND: Maintained grass over brown slightly clayey gravelly occasionally cobbley fine to coarse SAND. Gravel and cobbles are fine to coarse angular to subangular of rootlets, brick, concrete, metal, timber, paper and textiles. TOPSOIL	0.50	ES	
0.15-0.90					
0.90-2.50		MADE GROUND: Loose brown slightly clayey very gravelly occasionally cobbley fine to coarse SAND. Gravel and cobbles are fine to coarse angular to subangular of brick, concrete, glass, plastic, metal, timber, paper and textiles. Occasional sandstone boulders noted.			
		MADE GROUND: Soft bluish brown very sandy silty gravelly cobbley CLAY with common boulders of concrete and sandstone. Gravel and cobbles are fine to coarse angular to subangular of brick, plastic, glass, concrete, metal, timber, paper and textiles. Occasional sandstone boulders. Seepage at 1.70mbgl.			
2.50-3.00		MADE GROUND: Soft grey very sandy gravelly CLAY. Gravel is fine to coarse angular to subrounded of paper pulp, glass, metal, plastic and rare ash.			

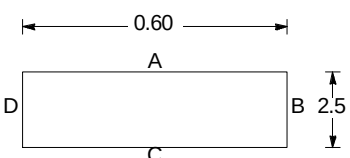
Shoring/Support: Stability: Collapse noted within Made Ground below topsoil. pit widening.			GENERAL REMARKS Hydrocarbon / organic odour from 1.00mbgl. Concrete boulders noted 0.90mbgl.
			
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR

TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP3
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



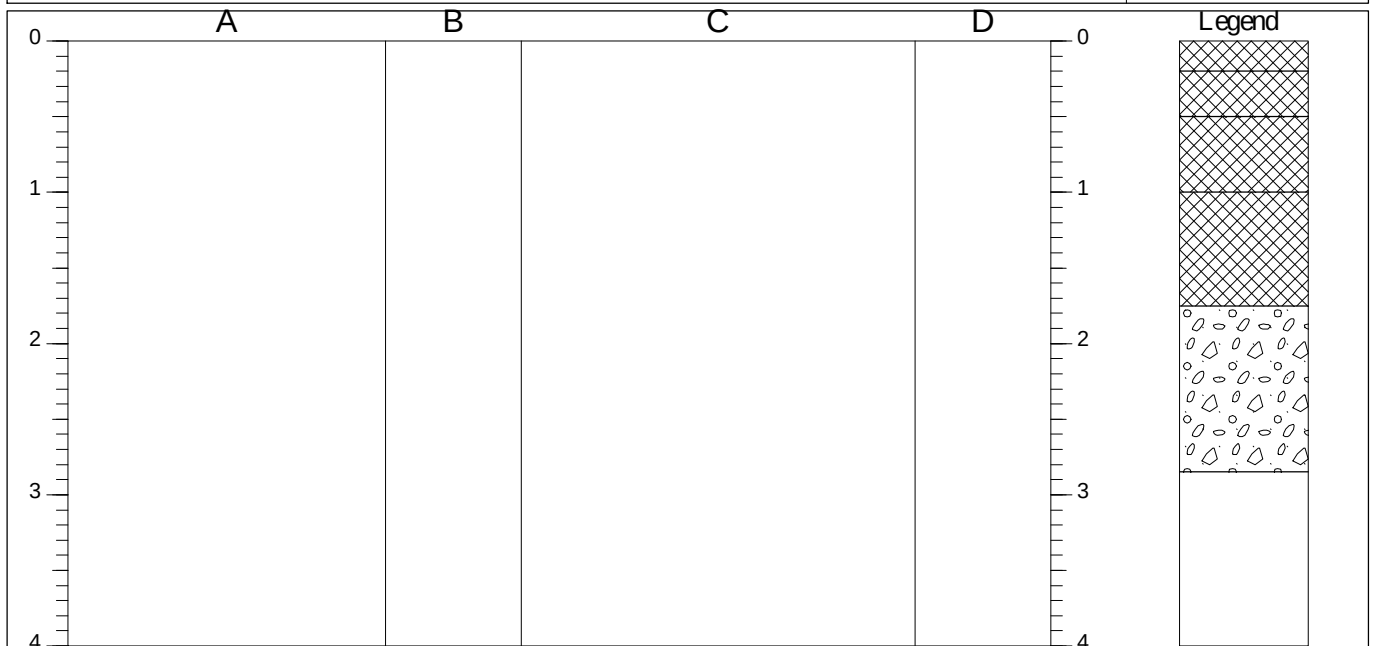
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.15		MADE GROUND: Maintained grass over brown slightly clayey gravelly occasionally cobbley fine to coarse SAND. Gravel and cobbles are fine to coarse angular to subangular of rootlets, brick, concrete, metal, timber, paper and textiles.	0.15	ES	
0.15-1.25		TOPSOIL			
1.25-2.20		MADE GROUND: Loose brown slightly clayey very gravelly occasionally cobbley fine to coarse SAND. Gravel and cobbles are fine to coarse angular to subangular of brick, concrete, glass, asphalt, plastic, metal, timber, paper and textiles. Occasional sandstone boulders noted.	1.50	ES	
2.20-2.45		MADE GROUND: Soft bluish brown very sandy silty gravelly cobbley CLAY with common boulders of concrete and sandstone. Gravel and cobbles are fine to coarse angular to subangular of brick, plastic, glass, concrete, metal, timber, paper and textiles. Occasional sandstone boulders.			
		MADE GROUND: Brown very sandy clayey GRAVEL. Gravel is fine to coarse angular to subagular of ash, pulp and brick.			

Shoring/Support: Stability: Hole terminated due to collapse.	GENERAL REMARKS Dry
	

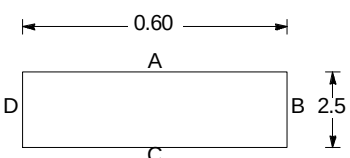
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP4
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



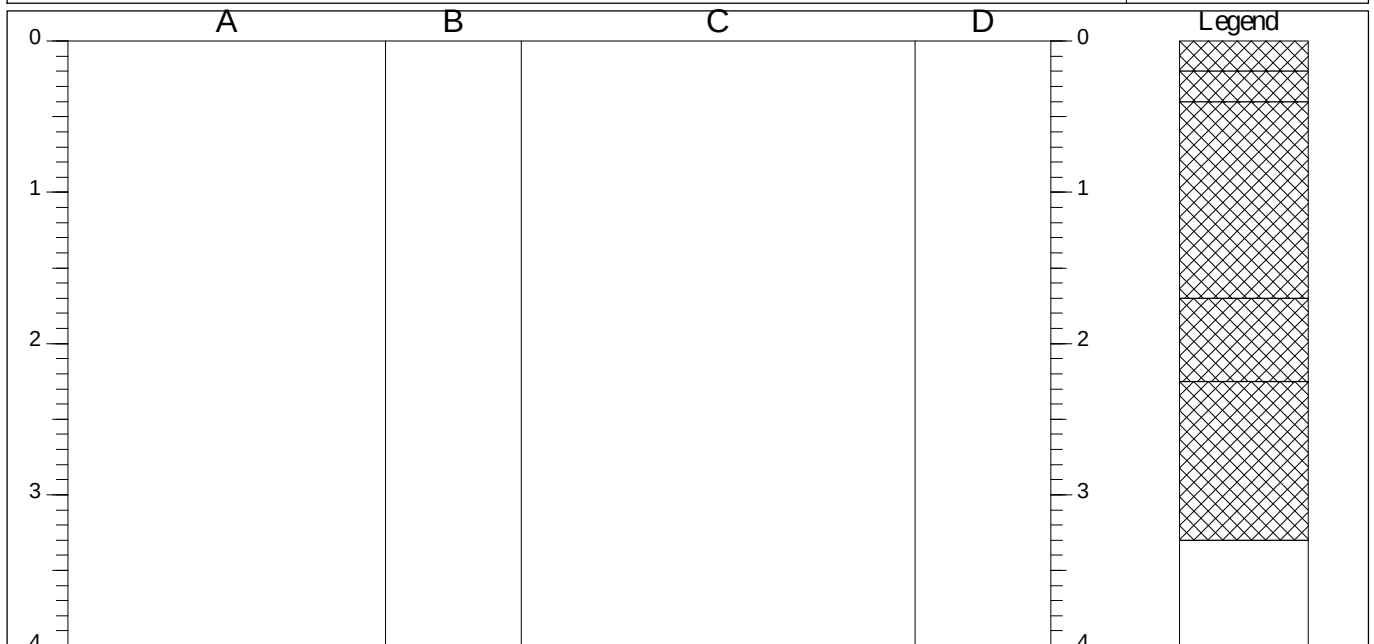
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	0.50	ES	
0.20-0.50		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.50-1.00		MADE GROUND: Loose to medium dense brown and black very sandy GRAVEL. Gravel is fine to medium angular to subrounded of sandstone and ash.			
1.00-1.75		MADE GROUND: Interbedded loose to medium dense dark brown, brown and black fine to coarse fine to coarse SAND & GRAVEL. Gravel is fine to coarse angular to subrounded of brick, sandstone and ash.	1.00	ES	
1.75-2.85		Medium dense brownish orange slightly clayey very sandy GRAVEL. Gravel is fine to coarse angular to subrounded of sandstone. Water strike at 2.65mbgl. Cobbles present with depth.			

Shoring/Support: Stability: Stable		GENERAL REMARKS Location adjacent to formerly leaking IBC. Brown 'rubbery' substance noted around pit at surface. Water strike at 2.65mbgl.
		

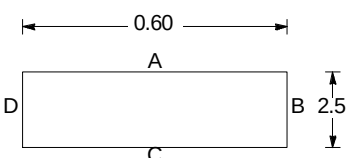
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP5
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



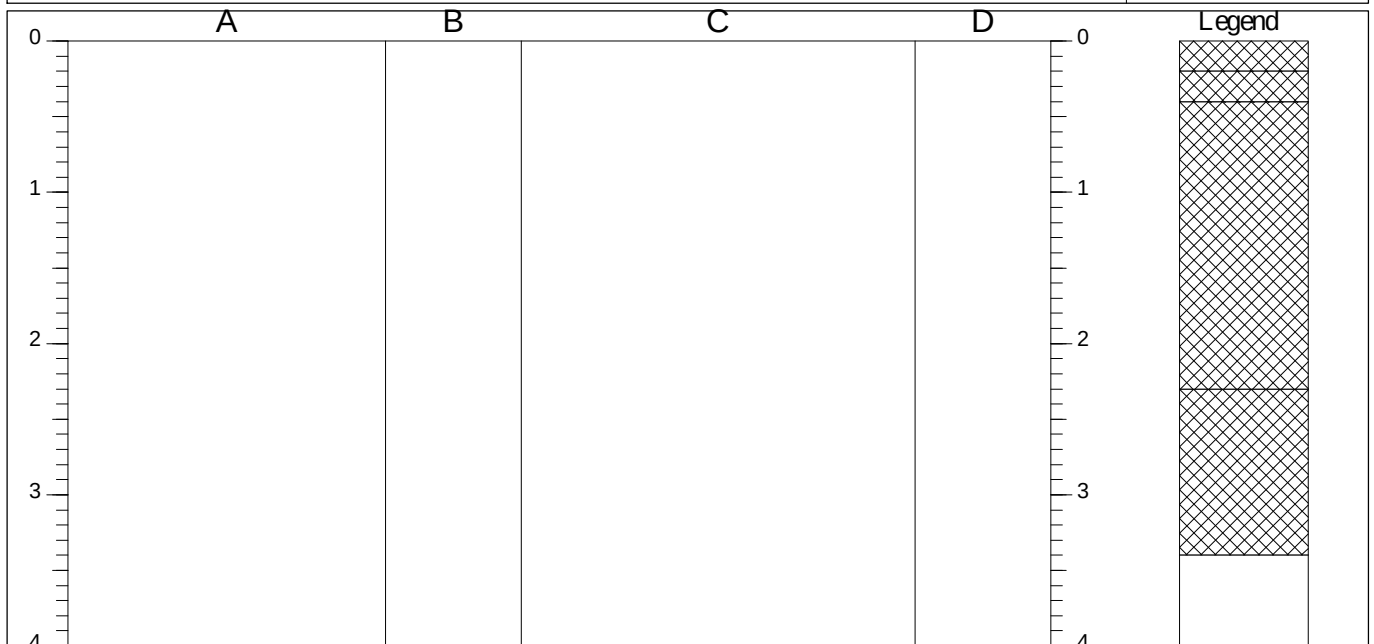
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	0.40	ES	
0.20-0.40		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.40-1.70		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone. 'Geogrid' at 0.60mbgl.			
1.70-2.25		MADE GROUND: Loose to medium dense black fine to coarse very gravelly occasionally cobbly SAND. Gravel is fine to coarse angular to subrounded of of ash, clinker, brick and occasional clinker. Water strike at base.	1.70	ES	
2.25-3.30		Possible MADE GROUND: Soft greyish brown and black very sandy slightly clayey SILT. Slight organic odour noted.	2.25 2.25	D ES	

Shoring/Support: Stability: Stable 	GENERAL REMARKS Water strike at 2.25mbgl. Slight organic odour from 2.25mbgl.
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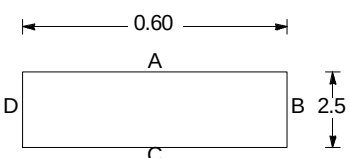
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP6
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



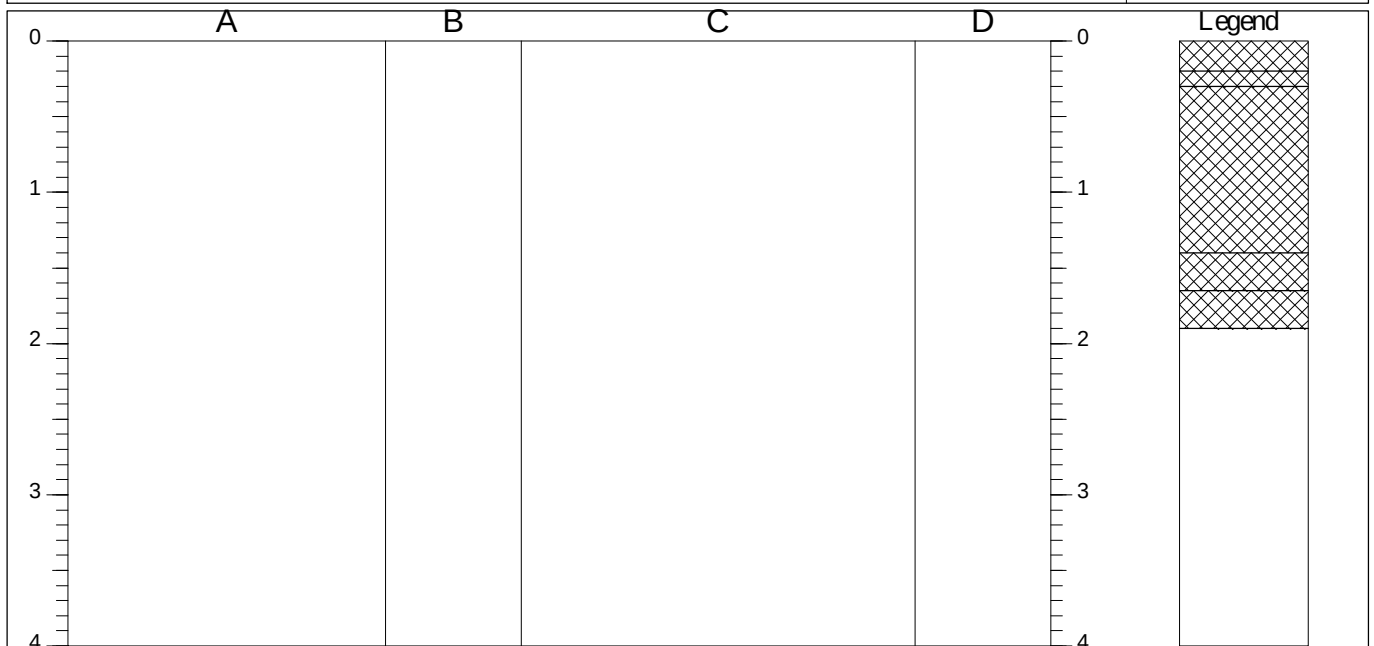
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	0.50	ES	
0.20-0.40		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.40-2.30		MADE GROUND: Loose to medium dense black fine to coarse very gravelly occasionally cobbly SAND. Gravel is fine to coarse angular to subrounded of of ash, clinker, brick and occasional clinker. Occasional orange brown sand laminations.			
2.30-3.40		Possible MADE GROUND: Soft greyish brown and black very sandy slightly clayey SILT.			

Shoring/Support: Stability: Stable		GENERAL REMARKS Dry
		

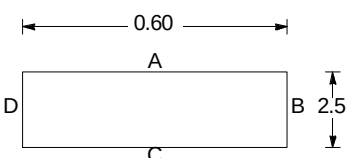
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP7
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



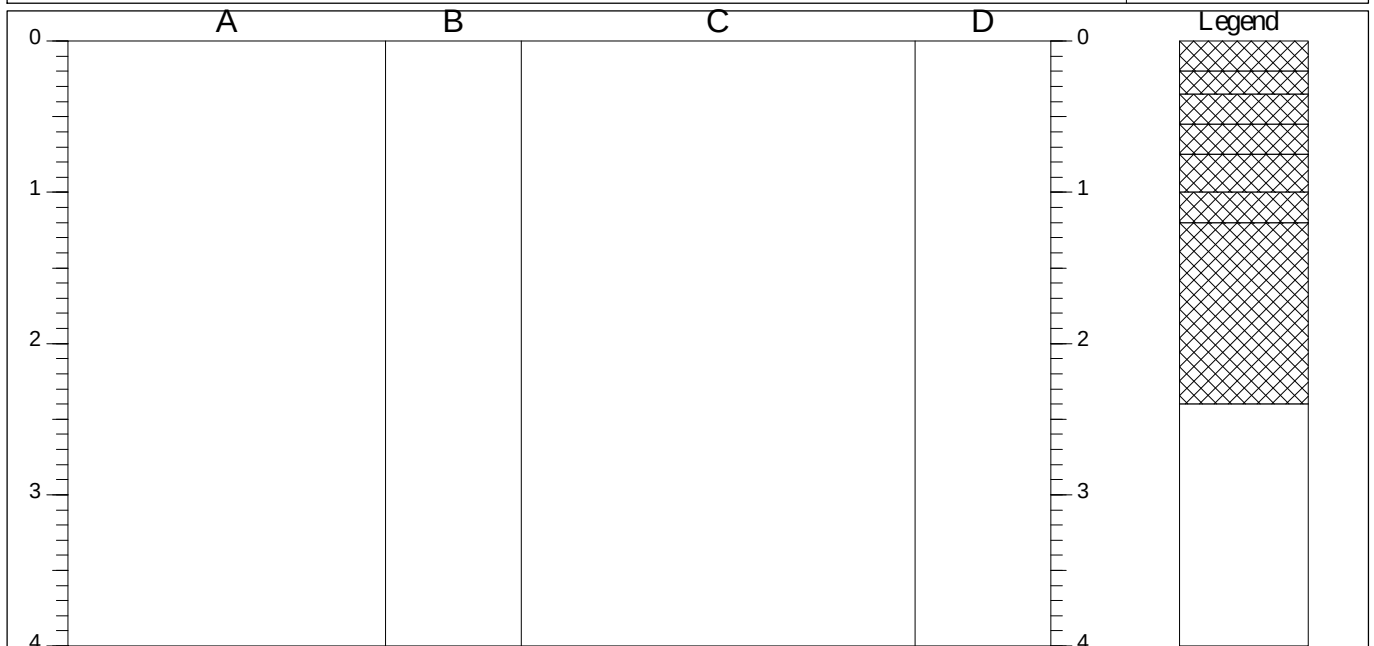
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	0.50	ES	
0.20-0.30		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.30-1.40		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone.			
1.40-1.65		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.			
1.65-1.90		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone. Large concrete pad or slab in half of pit.			

Shoring/Support: Stability: Stable 	GENERAL REMARKS Concrete pad / slab covering half of pit at 1.90mbgl.
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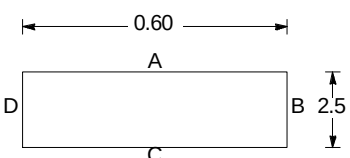
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP8
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

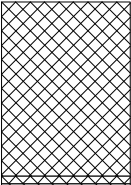


STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	1.00	ES	
0.20-0.35		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.35-0.55					
0.55-0.75		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone.			
0.75-1.00		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.			
1.00-1.20		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone. Occasional sections of sandstone flags.			
1.20-2.40		MADE GROUND: Loose to medium dense black fine to coarse very gravelly cobbly SAND. Gravel is fine to coarse angular to subrounded of of ash, clinker, brick and occasional clinker. Sections of footings noted. Cobbles of brick.			
		MADE GROUND: Loose sandy gravelly COBBLES with occasional footing / wall sections. Gravel and cobbles are fine to coarse of brick. Hole appears to be within a round structure, possibly former chimney base, curved walls noted. Water strike at 2.10mbgl, water noted as black with hydrocarbon odour and sheen.			

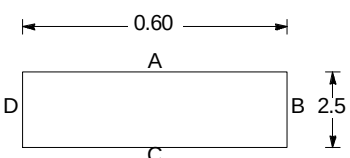
Shoring/Support: Stability: Stable		GENERAL REMARKS Possible chimney base at 1.20mbgl. Water strike at 2.10mbgl, black water strong hydrocarbon odour and sheen. Hole aborted due to risk from water.
		
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX
		Logged By KR

TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP9
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

0	A	B	C	D	0	Legend 
1					1	
2					2	
3					3	
4					4	

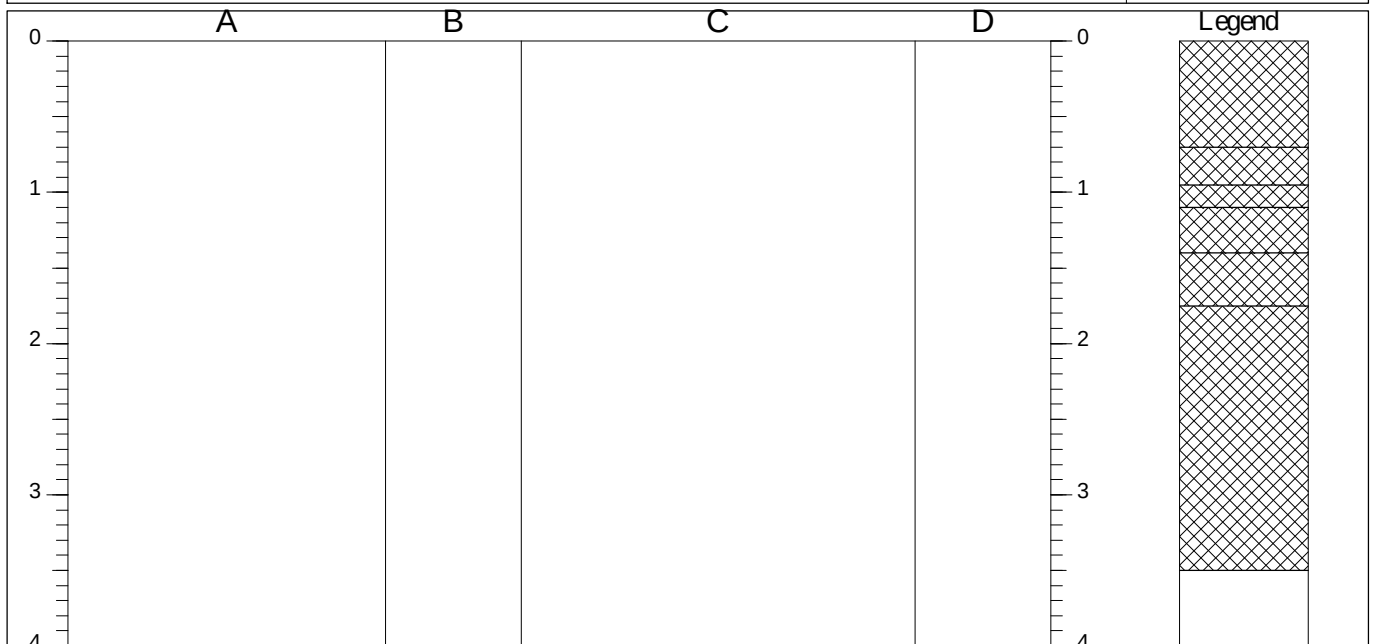
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-1.15		MADE GROUND: Loose sandy GRAVELS and COBBLES. Gravel and cobbles fine to coarse brick, concrete, metal, plastic, rubber and sections of footings.	0.20	ES	
1.15-1.20		MADE GROUND: Concrete slab- very hard, possible machine base.			

Shoring/Support: Stability: Stable	GENERAL REMARKS Hole terminated on very hard concrete slab. Cannot be broken out by JCB.
	

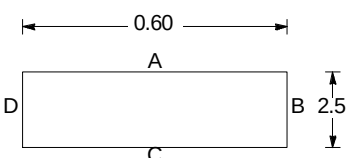
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP10
Job No 18ECH016	Date 25-06-19 25-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

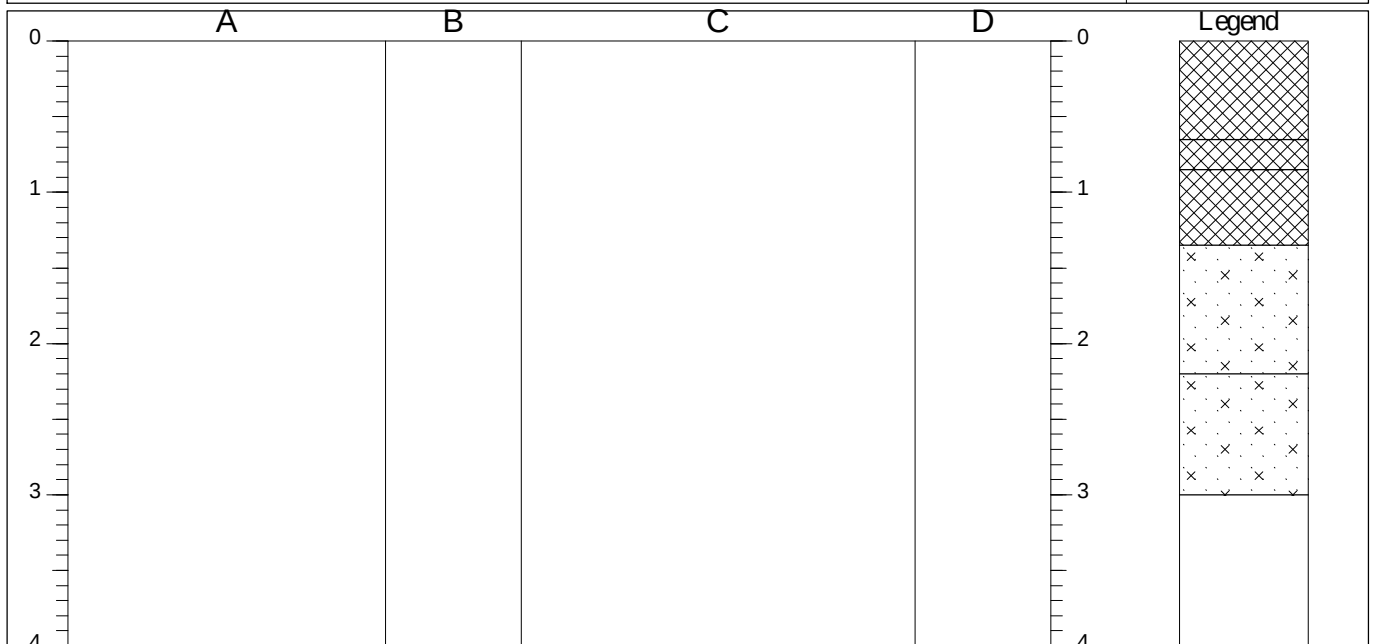


STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.70		MADE GROUND: Loose sandy GRAVELS and COBBLES. Gravel and cobbles fine to coarse brick, concrete, metal, plastic, rubber and sections of footings.	0.50	ES	
0.70-0.95		MADE GROUND: Metal flooring tiles 40x40cm over concrete slab.			
0.95-1.10		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone.			
1.10-1.40		MADE GROUND: Soft brown clayey sandy SILT.	1.75	ES	
1.40-1.75		MADE GROUND: Loose to medium dense red gravelly SAND. Gravel is fine to coarse angular to subangular of brick and ash. SAND is of crushed brick.			
1.75-3.50		Possible MADE GROUND: Soft greyish brown and black clayey sandy SILT. Damp from 1.75m and water strike at 3.50mbgl. Possible reworked.			

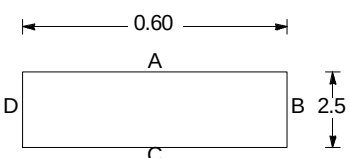
Shoring/Support: Stability: Stable			GENERAL REMARKS Damp from 1.75mbgl. Water strike at 3.50mbgl
			
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used JCB 3CX	Logged By KR

TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP11
Job No 18ECH016	Date 02-07-19 02-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



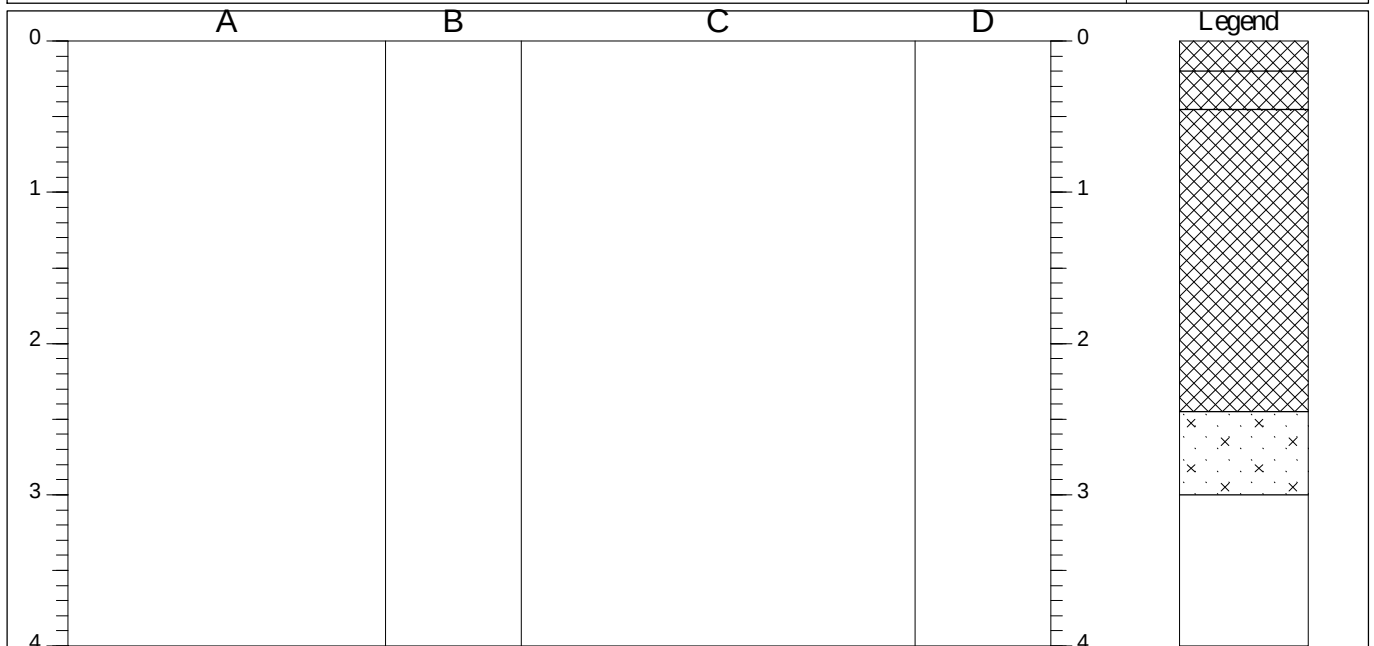
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.65		MADE GROUND: Brown fine to coarse SAND & GRAVEL. Gravel is fine to coarse angular to subrounded of sandstone, brick and concrete.	0.50	ES	
0.65-0.85		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course. Noted as being very hard.			
0.85-1.35		MADE GROUND: Loose mixed lithology SAND & GRAVEL with occasional cobbles. Gravel and cobbles are fine to coarse angular to subrounded of brick, concrete, metal, plastic and other demolition type materials.	1.40	ES	
1.35-2.20		Medium dense greyish brown silty SAND. Strata is slightly damp.			
2.20-3.00		Medium dense grey silty SAND. Strata is slightly damp.			

Shoring/Support: Stability: Stable 		GENERAL REMARKS Hole undertaken adjacent to slab. Observed to be at least 650mm thick.
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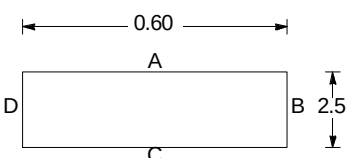
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used 13t tracked excavator	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP12
Job No 18ECH016	Date 02-07-19 02-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



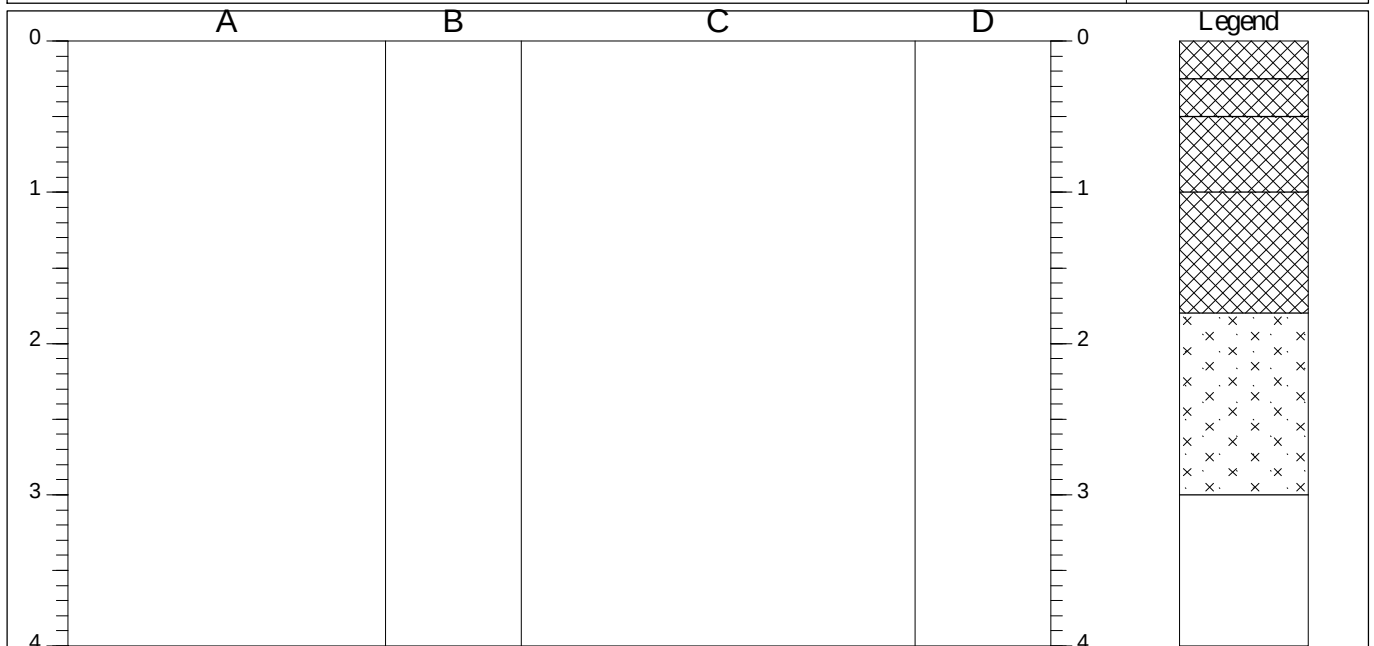
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	0.45	ES	
0.20-0.45		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.45-2.45		MADE GROUND: Loose to medium dense brown, black and orangish brown fine to coarse SAND & GRAVEL angular to subangular of brick, concrete, ash and metal. Concrete slab noted in southern quarter of pit at 1.00mbgl.			
2.45-3.00		Medium dense brown and grey very silty SAND.			

Shoring/Support: Stability:	GENERAL REMARKS Concrete slab in southern corner of pit at 1.00mbgl.
	

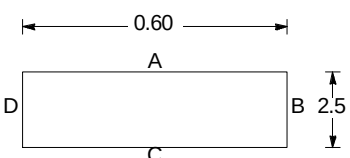
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used 13t tracked excavator	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP13
Job No 18ECH016	Date 02-07-19 02-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



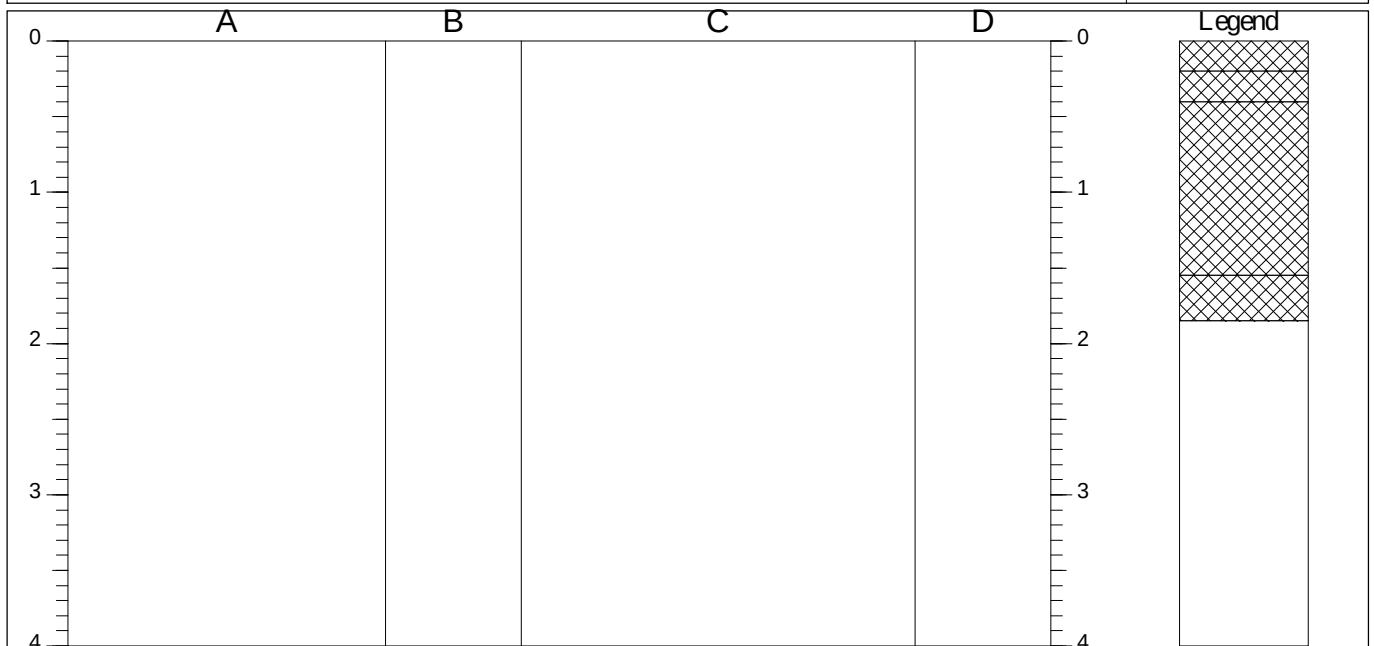
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.25		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	1.00	ES	
0.25-0.50		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone.			
0.50-1.00		MADE GROUND: Loose to medium dense brown and black very sandy GRAVEL. Gravel is fine to medium angular to subrounded of sandstone and ash.			
1.00-1.80		MADE GROUND: Soft black, grey and reddish brown clayey very sandy SILT.			
1.80-3.00		Soft grey very sandy SILT. Damp from 2.50mbgl.			

Shoring/Support: Stability: Made Ground Unstable		GENERAL REMARKS Damp from 2.50mbgl.
		

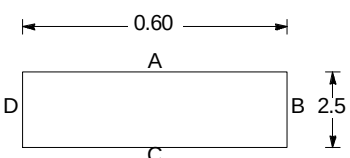
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used 13t tracked excavator	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP14
Job No 18ECH016	Date 02-07-19 02-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



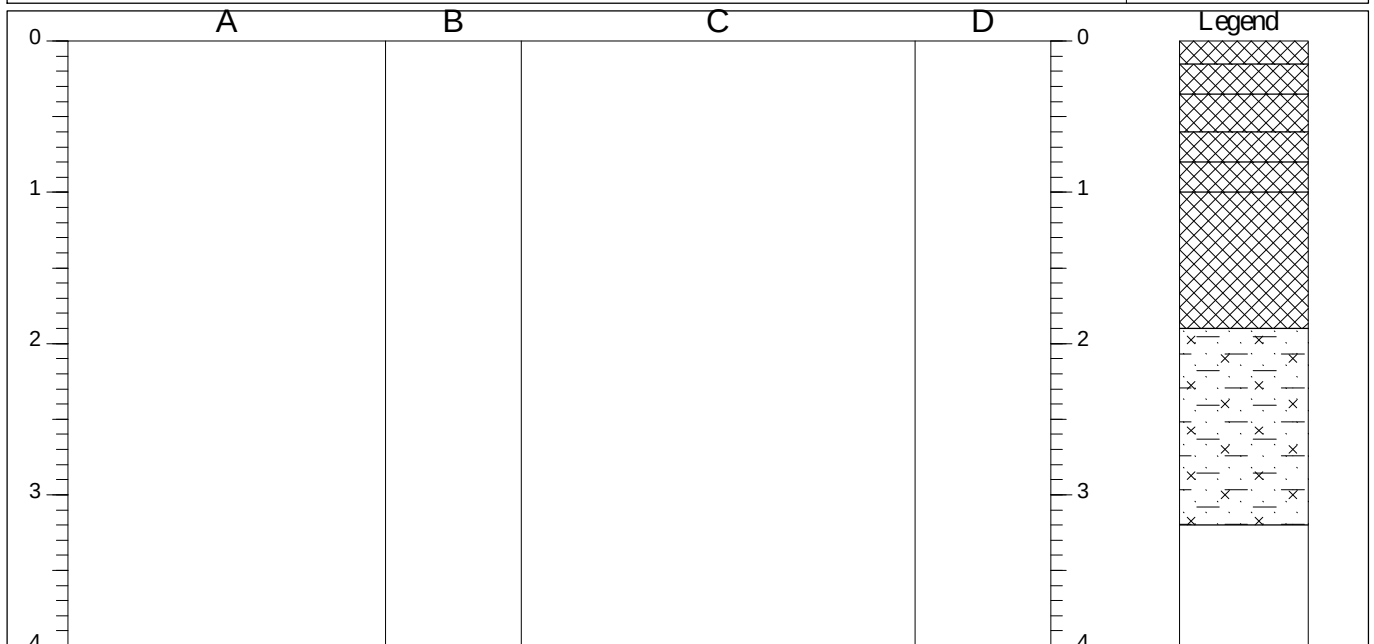
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	0.50	ES	
0.20-0.40		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.40-1.55		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL with common cobbles. Gravel is fine to medium angular to subangular of sandstone, brick, ash and metal with sections of footings. Possible basement strucutre.			
1.55-1.85		MADE GROUND: Concrete slab with reinforcement on eastern half. Loose to medium dense clayey silty SAND on other half.	1.55	ES	

Shoring/Support: Stability: Stable 	GENERAL REMARKS Backfilled voids, possible basement.
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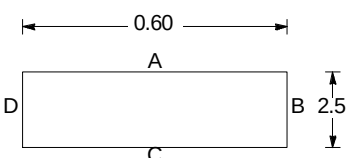
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used 13t tracked excavator	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP15
Job No 18ECH016	Date 02-07-19 02-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.15		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	1.00	ES	
0.15-0.35		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.35-0.60		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone.			
0.60-0.80		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.			
0.80-1.00		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
1.00-1.90		MADE GROUND: Loose to medium dense brown and black very sandy GRAVEL. Gravel is fine to medium angular to subrounded of sandstone and ash.			
1.90-3.20		Medium dense brown fine to medium silty clayey SAND.	1.90	ES	

Shoring/Support: Stability: Stable 	GENERAL REMARKS Dry
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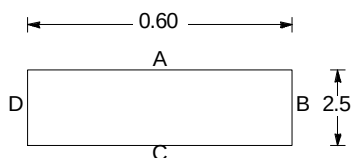
All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used 13t tracked excavator	Logged By KR
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TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP16
Job No 18ECH016	Date 02-07-19 02-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

The figure shows a blank 4x4 grid. The columns are labeled A, B, C, and D from left to right. The rows are labeled 0, 1, 2, 3, and 4 from top to bottom. A legend on the right side of the grid shows a cross-hatched pattern, which is used to represent a specific data value in the grid.

STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.60		MADE GROUND: Loose black and red SAND, GRAVEL & COBBLES of brick, concrete, plastic, metal and other demolition waste materials. Standing water at 0.60mbgl. Strong hydrocarbon and 'waste' odours. Hole aborted due to potential for containation spreading.	0.60	ES	

Shoring/Support:
Stability: StableGENERAL
REMARKS

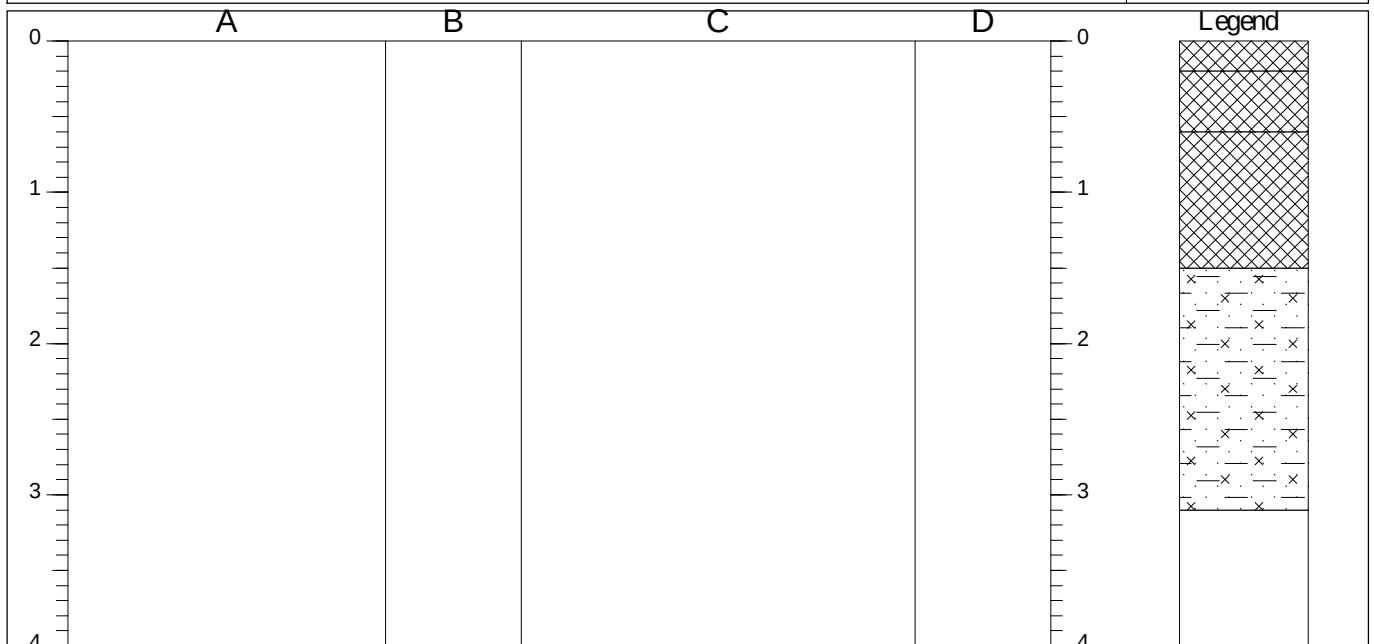
Hole undertaken between hard concrete slabs.
Standing water at 0.60mbgl, no flow.
Strong hydrocarbon and 'waste' odour with sheen and possible free product.

All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used 13t tracked excavator	Logged By KR
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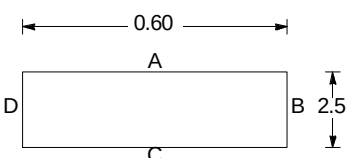
AGS3 UK TP 19ECH016 - MONDI SITE, RAMSBOTTOM.GPJ GINT STD AGS 3 1.GDT 8/7/19

TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP17
Job No 18ECH016	Date 02-07-19 02-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



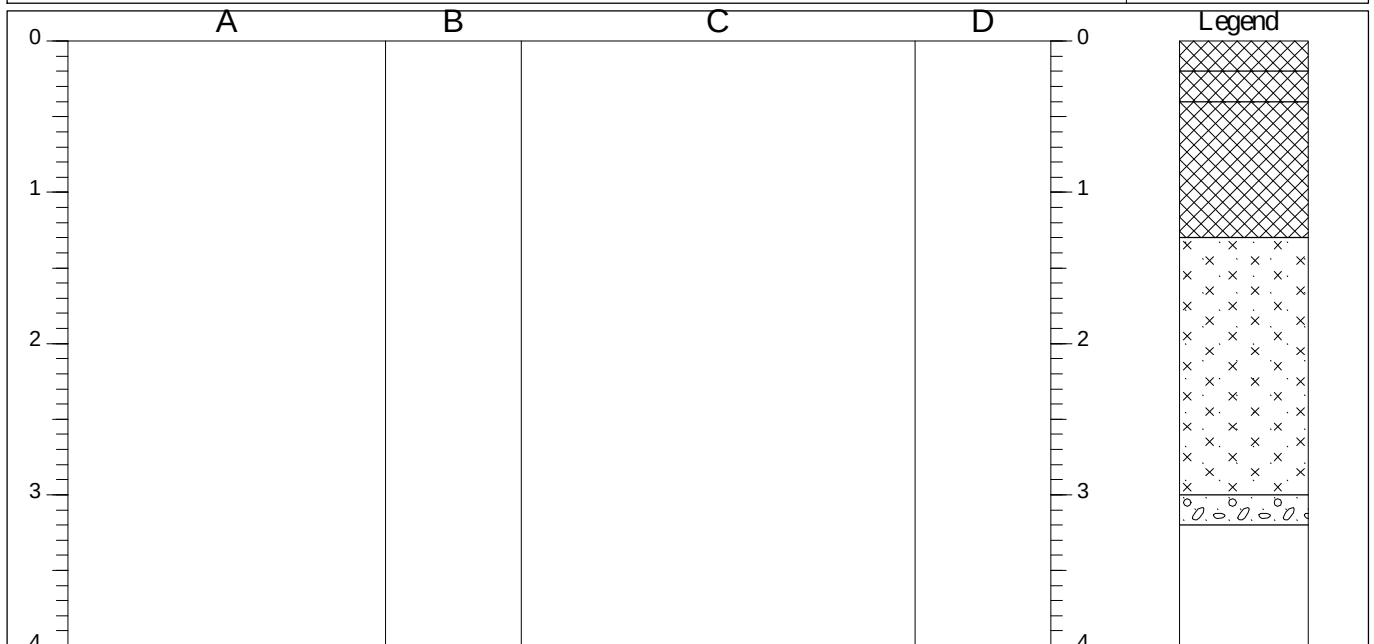
STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	0.60	ES	
0.20-0.60		MADE GROUND: Loose to medium dense yellowish brown and black fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone, brick and ash. Ash becoming more common with depth.			
0.60-1.50		MADE GROUND: Loose to medium dense fine to coarse SAND & GRAVEL. Gravel is fone to coarse angular to subangular of ash and brick.			
1.50-3.10		Loose to medium dense brown clayey silty fine to medium SAND. Occasional orange mottle noted. Reducing cohesive content with depth.	1.50	ES	

Shoring/Support: Stability: Stable 	GENERAL REMARKS Dry
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All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used 13t tracked excavator	Logged By KR
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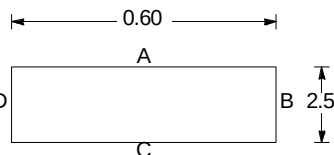
TRIAL PIT LOG

Project Mondi Site, Ramsbottom				TRIAL PIT No TP18
Job No 18ECH016	Date 02-07-19 02-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1



STRATA			SAMPLES & TESTS		
Depth	No	DESCRIPTION	Depth	No	Remarks/Tests
0.00-0.20		MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.	0.50	ES	
0.20-0.40		MADE GROUND: Loose to medium dense grey sandy GRAVEL. Gravel is fine to coarse angular to subangular of limestone.			
0.40-1.30		MADE GROUND: Loose brown fine to coarse SAND, GRAVEL & COBBLES of of concrete, metal, brick, sandstone and other demolition materials.			
1.30-3.00		Stiff grey very sandy SILT. Slightly damp.	1.30	D	
3.00-3.20		Medium dense very silty fine to coarse SAND & GRAVEL. Gravel is fine to coarse subangular to subrounded of mixed lithology.			

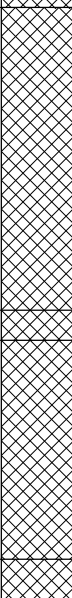
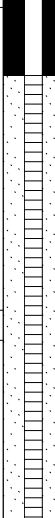
Shoring/Support: Stability: Stable	GENERAL REMARKS Water strike at 3.20mbgl.



All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used 13t tracked excavator	Logged By KR
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BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS1	
Job No 18ECH016	Date 26-06-19 26-06-19	Ground Level (m)	Co-Ordinates ()		
Contractor BETTS GEO Ltd				Sheet 1 of 1	

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill			
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION					
0.55	ES					0.20	MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.					
						0.55	MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone.					
1.20		N8				(2.00)	MADE GROUND: Loose black fine to coarse very gravelly occasionaly cobbley SAND. Gravel is fine to coarse angular to subrounded of ash, clinker, brick and occasional clinker.					
2.00	N0			2.55								
2.75	ES			2.75		MADE GROUND: Very soft to soft brownish grey clayey sandy SILT.						
3.00		N0				MADE GROUND:MADE GROUND: Very soft greyish black clayey sandy SILT. Slight hydrocarbon odour. Occasional narrow sand bands with leaves noted. Possible pocket of paper waste 4.00-4.20mbgl.						
						(1.45)						
4.00		N0				4.20						
4.20	D					4.50	Possible MADE GROUND: Soft grey sandy SILT with occasional fine to medium angular to subangular gravel of sandstone.					
								(0.50)		Medium dense grey fine to coarse SAND & GRAVEL angular to subrounded of mixed lithology.		
5.00		N34						5.00				

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Wet from 2.75mbgl
All dimensions in metres Scale 1:50			Client Eccleston Homes			Method/ Plant Used Competitor Rig			Logged By KR		

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS2
Job No 18ECH016	Date 26-06-19 26-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

SAMPLES & TESTS			STRATA						
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Geology	Instrument/ Backfill
						0.20	MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.		
0.60	ES					(1.20)	MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL . Gravel is fine to medium angular to subangular of sandstone.		
1.20		N50/ 85 mm				1.40			
						1.45	MADE GROUND: Concrete slab		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
All dimensions in metres Scale 1:50		Client Eccleston Homes				Method/ Plant Used		Competitor Rig		Logged By KR	

AGS3 UK BH 19ECH016 - MONDI SITE. RAMSBOTTOM.GPJ GINT STD AGS 3 1.GDT 8/7/19

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS6	
Job No 18ECH016	Date 26-06-19 26-06-19	Ground Level (m)	Co-Ordinates ()		
Contractor BETTS GEO Ltd				Sheet 1 of 1	

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.55	ES					0.20	MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.		
						0.50	MADE GROUND: Loose to medium dense grey sandy GRAVEL.		
						0.55	Gravel is fine to coarse angular to subangular of limestone.		
						0.60	MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone.		
							MADE GROUND: Concrete slab		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
											Concrete slab at 0.60mbgl
All dimensions in metres Scale 1:50			Client Eccleston Homes			Method/ Plant Used Competitor Rig			Logged By KR		

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS7	
Job No 18ECH016	Date 26-06-19 26-06-19	Ground Level (m)	Co-Ordinates ()		
Contractor BETTS GEO Ltd				Sheet 1 of 1	

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
	ES	N2	Water ↓			0.20	MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.		
						(0.45) 0.65	MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone.		
						0.95	MADE GROUND: Loose to medium dense brown and black very sandy GRAVEL. Gravel is fine to medium angular to subrounded of sandstone and ash.		
0.95	ES	N4				(0.55) 1.20	MADE GROUND: Loose to medium dense brown, black and white very sandy GRAVEL. Gravel is fine to medium angular to subrounded of sandstone and ash.		
					1.50	MADE GROUND: Loose to medium dense brown, black and white very sandy GRAVEL. Gravel is fine to medium angular to subrounded of sandstone and ash. Unknown white material.			
					1.80	MADE GROUND: Loose orange, black and brown silty clayey fine to medium SAND. Reworked.			
1.80	ES	N0				(2.05) 2.00	Loose to medium dense brown clayey silty fine to medium SAND. Wet 3.70-3.85mbgl.		
									
									
2.00	ES	N0				(3.85) 3.00	Medium dense grey silty fine to medium SAND.		
									
									
3.00	ES	N0			(4.30) 4.00	Soft grey very sandy SILT. Saturated.			
									
									
4.00	ES	N13			(5.00) 5.00				
									
									
5.00	ES	N13							
									
									
	ES	N13							
									
									
	ES	N13							
									
									

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Water strike 3.70-3.85mbgl
All dimensions in metres Scale 1:50			Client Eccleston Homes			Method/ Plant Used Competitor Rig			Logged By KR		

BOREHOLE LOG

Project Holcombe Mill, Bridge Street, Ramsbottom				BOREHOLE No WS8	
Job No 19ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()		
Contractor				Sheet 1 of 1	

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.50-0.60	ES					0.10	Tarmac (cored).		
						0.25	[MADE GROUND]		
1.20	N7					(1.45)	Loose light grey brown very sandy GRAVEL of medium angular limestone (sub-base). [MADE GROUND]		
						1.70	Loose to medium dark brown black gravelly medium to coarse SAND. Gravel of fine to medium angular to subrounded mixed lithologies including sandstone and brick. [MADE GROUND]		
1.80-1.90	ES					2.00	Medium angular white sandstone cobble at 0.4mbgl.		
						2.00	Soft orange brown sandy CLAY with rare gravel of fine subrounded mixed lithologies. [ALLUVIUM]		
2.00	N17					(0.70)	No recovery.		
						2.70			
3.00	N17					(0.50)	Soft light yellow brown mottled blue grey, yellow and pink slightly sandy CLAY with rare gravel of medium angular sandstone. [ALLUVIUM]		
						3.20			
3.70-3.80	D					(0.50)	Medium light brown fine silty SAND. [ALLUVIUM]		
						3.70			
4.00	N11					4.00	Firm to stiff brown slightly sandy slightly gravelly CLAY. Gravel of fine subrounded to subangular mixed lithologies. [ALLUVIUM]		
						(0.80)	Very loose/sloppy brown fine to medium SAND. [ALLUVIUM]		
5.00	N10					4.80			
						5.00	Firm to stiff brown slightly sandy slightly gravelly CLAY. Gravel of fine subrounded to subangular mixed lithologies. [ALLUVIUM]		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											No olfactory evidence of contamination. Ground water at 4.0mbgl. Stable.
All dimensions in metres Scale 1:50			Client Eccleston Homes			Method/ Plant Used Competitor Rig			Logged By RD		

AGS3 UK BH 19ECH016 - HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM.GPJ GINT STD AGS.3.1.GDT 9/7/19

BOREHOLE LOG

Project Holcombe Mill, Bridge Street, Ramsbottom				BOREHOLE No WS9	
Job No 19ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()	Sheet 1 of 1	
Contractor					

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.60-0.70	ES					0.06	Tarmac (cored). [MADE GROUND]		
						0.40	Loose light grey brown very sandy GRAVEL of medium angular limestone (sub-base). [MADE GROUND]		
1.00-1.10	ES	N15				0.60	Loose to medium orange brown slightly cobbly gravelly fine to medium SAND.		
						0.90	Gravel of fine to coarse subrounded to rounded mixed lithologies including white sandstone. Cobble of fine to medium subrounded mixed lithologies. [RE-WORKED ALLUVIUM]		
2.00		N14				1.20	Loose black slightly gravelly ashy fine to medium SAND with rare cobble.		
						1.40	Gravel of fine to medium angular to subrounded mixed lithologies including white sandstone. Cobble of fine to medium subrounded mixed lithologies. [RE-WORKED ALLUVIUM]		
3.00		N21				2.80	Soft orange brown slightly gravelly sandy CLAY. Gravel of fine to medium subrounded to subangular mixed lithologies. [ALLUVIUM]		
							No recovery.		
3.50-3.60	D						Loose light orange brown clayey very sandy GRAVEL of fine to coarse angular to rounded white sandstone. [ALLUVIUM]		
						(2.20)	Firm to stiff brown slightly sandy slightly gravelly CLAY. Gravel of fine subrounded to subangular mixed lithologies. [ALLUVIUM]		
4.00		N30							
5.00		N23				5.00			

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											No olfactory evidence of contamination. Ground water at 2.6mbgl. Casing required 0 - 3mbgl.
All dimensions in metres Scale 1:50			Client Eccleston Homes			Method/ Plant Used Competitor Rig			Logged By RD		

AGS3 UK BH 19ECH016 - HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM.GPJ GINT STD AGS.3.1.GDT 9/7/19

BOREHOLE LOG

Project Holcombe Mill, Bridge Street, Ramsbottom				BOREHOLE No WS10
Job No 19ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor				Sheet 1 of 1

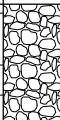
SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION		
1.00-1.10	ES					(0.60) 0.60	Tarmac (cored). [MADE GROUND]		
						0.95 1.10	Loose light grey brown very sandy GRAVEL of medium angular limestone (sub-base). [MADE GROUND]		
							Loose to medium dark grey brown slightly clayey gravelly medium to coarse SAND. Gravel of fine to coarse subrounded to subangular mixed lithologies including white sandstone. [ALLUVIUM]		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											No olfactory evidence of contamination. Dry and stable. Terminated at 1.10mbgl due to large cobble.
All dimensions in metres Scale 1:50		Client Eccleston Homes				Method/ Plant Used Competitor Rig					Logged By RD

AGS3 UK BH 19ECH016 - HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM.GPJ GINT STD AGS3 1.GDT 9/7/19

BOREHOLE LOG

Project Holcombe Mill, Bridge Street, Ramsbottom				BOREHOLE No WS11	
Job No 19ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()		
Contractor				Sheet 1 of 1	

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION		
0.50-0.60	ES					0.06	Tarmac (cored).		
						0.40	[MADE GROUND]		
					0.60	Loose light grey brown very sandy GRAVEL of medium angular limestone (sub-base).			
					0.80	[MADE GROUND]			
							Loose black slightly gravelly ashy fine to medium SAND with rare cobble. Gravel of fine to medium angular to subrounded mixed lithologies including white sandstone. Cobble of fine to medium subrounded mixed lithologies. [RE-WORKED ALLUVIUM]		
							Loose to medium light grey brown slightly clayey gravelly SAND. Gravel of fine to medium subrounded to subangular mixed lithologies including white sandstone. [ALLUVIUM]		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS No olfactory evidence of contamination. Dry and Stable. Terminated at 0.80mbgl due to concrete.
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	

All dimensions in metres Scale 1:50	Client Eccleston Homes	Method/ Plant Used Competitor Rig	Logged By RD
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AGS3 UK BH 19ECH016 - HOLCOMBE MILL, BRIDGE STREET, RAMSBOTTOM.GPJ GINT STD AGS.3.1.GDT 9/7/19

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS12
Job No 18ECH016	Date 26-06-19 26-06-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION		
0.35	ES					0.20	MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.		
						0.35	MADE GROUND: Loose to medium dense grey sandy GRAVEL .		
						0.55	Gravel is fine to coarse angular to subangular of limestone.		
						0.60	MADE GROUND: Loose to medium dense yellowish brown and black fine to medium SAND & GRAVEL . Gravel is fine to medium angular to subangular of sandstone, brick and ash.		
							MADE GROUND: Concrete slab		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS	
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To		
												Concrete slab at 0.60mbgl
All dimensions in metres Scale 1:50		Client Eccleston Homes				Method/ Plant Used Competitor Rig					Logged By KR	

AGS3 UK BH 19ECH016 - MONDI SITE. RAMSBOTTOM.GPJ GINT STD AGS 3 1.GDT 8/7/19

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS13	
Job No 18ECH016	Date 26-06-19 26-06-19	Ground Level (m)	Co-Ordinates ()		
Contractor BETTS GEO Ltd				Sheet 1 of 1	

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION		
0.35	ES					0.35	MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.		
						0.55	MADE GROUND: Loose to medium dense grey sandy clayey		
						0.60	GRAVEL. Gravel is fine to coarse angular to subangular of limestone and brick.		
							MADE GROUND: Concrete slab		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
											Concrete slab at 0.60mbgl.
All dimensions in metres Scale 1:50			Client Eccleston Homes			Method/ Plant Used Competitor Rig			Logged By KR		

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS14
Job No 18ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

[illegible]

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
All dimensions in metres Scale 1:50		Client Eccleston Homes				Method/ Plant Used		Competitor Rig		Logged By KR	

AGS3 UK BH 19ECH016 - MONDI SITE, RAMSBOTTOM.GPJ GINT STD AGS 3 1.GDT 8/7/19

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS15
Job No 18ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

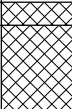
[illegible]

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
All dimensions in metres Scale 1:50		Client Eccleston Homes				Method/ Plant Used		Competitor Rig		Logged By KR	

AGS3 UK BH 19ECH016 - MONDI SITE. RAMSBOTTOM.GPJ GINT STD AGS 3 1.GDT 8/7/19

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS16
Job No 18ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

SAMPLES & TESTS			STRATA					Geology	Instrument/ Backfill
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION		
0.75	ES	N6	Water ↓			0.15	MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.		
				(0.60)		MADE GROUND: Loose to medium dense yellowish brown fine to medium SAND & GRAVEL. Gravel is fine to medium angular to subangular of sandstone and occasional brick.			
				0.75		MADE GROUND: Loose to medium dense black fine to coarse very gravelly occasionally cobbly SAND. Gravel is fine to coarse angular to subrounded of ash, brick and occasional clinker. Water strike at base.			
1.20				(0.95)					
				1.70	MADE GROUND: Soft grey sandy SILT.				
2.00	ES	N0		1.90					
				2.20	MADE GROUND: Loose to medium dense black silty fine to medium SAND & GRAVEL. Gravel is fine to medium of ash. Clay band at 1.95-2.00mbgl. Hydrocarbon odour.				
				(0.60)	MADE GROUND: Soft to firm dark grey and black sandy SILT. Slight organic odour.				
2.20	D	N1		2.80					
(0.90)				Soft grey sandy SILT. Wet from 3.00mbgl.					
3.70									
4.00		N22	x	x					
			x	x	(0.80)	Medium dense grey slightly silty fine to coarse SAND. Barrel refusal at 4.50mbgl.			
5.00		N4	x	x					
			x	x	4.50				

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Water Strike at 3.00mbgl. Barrel refusal at 4.50mbgl.
All dimensions in metres Scale 1:50			Client Eccleston Homes			Method/ Plant Used Competitor Rig			Logged By KR		

BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS17
Job No 18ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

SAMPLES & TESTS			STRATA						
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Geology	Instrument/Backfill
0.45	ES					0.30	MADE GROUND: Concrete slab with reinforcement and Damp Proof Course.		
						0.40	MADE GROUND: Loose to medium dense brown gravelly slightly clayey fine to coarse SAND. Gravel is fine to coarse angular to subangular of sandstone, brick and concrete.		
						0.45		MADE GROUND: Concrete slab	

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
All dimensions in metres Scale 1:50		Client Eccleston Homes				Method/ Plant Used Competitor Rig					Logged By KR

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BOREHOLE LOG

Project Mondi Site, Ramsbottom				BOREHOLE No WS18
Job No 18ECH016	Date 01-07-19 01-07-19	Ground Level (m)	Co-Ordinates ()	
Contractor BETTS GEO Ltd				Sheet 1 of 1

[illegible]

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
All dimensions in metres Scale 1:50		Client Eccleston Homes				Method/ Plant Used		Competitor Rig		Logged By KR	

AGS3 UK BH 19ECH016 - MONDI SITE. RAMSBOTTOM.GPJ GINT STD AGS 3 1.GDT 8/7/19



REF 1925
Bh 1

SITE
CLIENT

Holcombe Mill, Ramsbottom
Betts Geo-Environmental

TITLE

Proving rockhead

ORIGIN

printout direct from rig on site
drilled & logged by Neil Catlow

PRINTOUT
SCALE

25 June 2019
1:200

GL AOD

RIG
ORIENTATION
FLUSH
BIT

Montabert Hydrofore
vertical
river water bowser supply
75mm T/C

DEPTH	STRATA	GRAPHIC	DESCRIPTION	SPT N value	INTERPRETATION
0.0	0.0	fill	masonry and concrete	not taken	ground level concrete base
0.5					
1.0					
1.5					
2.0	2.0	sand	grey, loose drilling		
2.5					
3.0					
3.5	3.5	clay	brown, sandy, soft		
4.0					
4.5					
5.0					
5.5					
6.0					
6.5					
7.0					
7.5					
8.0					
8.5					
9.0	9.2	clay	brown, silty, with boulders, firm		
9.5					
10.0					
10.5					
11.0					
11.5					
12.0					
12.5					
13.0					
13.5					
14.0					
14.5					
15.0					
15.5					
16.0					
16.5					
17.0					
17.5					
18.0					
18.5					
19.0					
19.5					
20.0					
20.5					
21.0					
21.5					
22.0					
22.5					
23.0	23.0	shale	dark grey, sandy, firm drilling occasional thin sandstone layers		rockhead
23.5					
24.0					
24.5					
25.0					
25.5					
26.0					
26.5					
27.0					
27.5					
28.0					
28.5					
29.0					
29.5					
30.0	30.0		bottom of hole		

IN HOLE GAS TESTING

%	O2	20.6
%	CH4	0.0
%	CO2	0.0
%	LEL	0.0
ppm	H2S	0.0
ppm	CO	0.0

Nkc Geotech Ltd
25 Grosvenor Road
Wrexham
LL11 1BT
www.nkc.co.uk

drilled and logged by
Neil Catlow B.Sc FGS



REF	1925	SITE	Holcombe Mill, Ramsbottom		PRINTOUT	26 June 2019
Bh	2	CLIENT	Betts Geo-Environmental		SCALE	1:200
		TITLE			GL AOD	
		ORIGIN	printout direct from rig on site drilled & logged by Neil Catlow		RIG	Montabert Hydrofore
					ORIENTATION	vertical
					FLUSH	river water bowser supply
					BIT	75mm T/C
	DEPTH	STRATA	GRAPHIC	DESCRIPTION	SPT N value	INTERPRETATION
0.0	0.0	fill		masonry and concrete	not taken	ground level
0.5						concrete base
1.0				dark brown, loose drilling		
1.5	1.2	sand				
2.0						
2.5						
3.0						
3.5	3.5	clay		brown, sandy, soft with gravel		
4.0						
4.5	5.2	clay		brown, silty, with boulders, firm		
5.0						
5.5						
6.0						
6.5						
7.0						
7.5						
8.0						
8.5						
9.0						
9.5						
10.0						
10.5						
11.0						
11.5						
12.0	12.0	clay		grey, silty, with boulders, firm		
12.5						
13.0						
13.5						
14.0						
14.5						
15.0						
15.5						
16.0						
16.5						
17.0						
17.5						
18.0						
18.5						
19.0						
19.5						
20.0						
20.5						
21.0	21.0	shale		dark grey, sandy, firm drilling		rockhead
21.5				occasional thin sandstone layers		
22.0						
22.5						
23.0						
23.5						
24.0						
24.5						
25.0						
25.5						
26.0						
26.5						
27.0						
27.5						
28.0						
28.5						
29.0						
29.5						
30.0						
30.5						
31.0						
31.5						
32.0						
32.5						
33.0						
33.5						
34.0						
34.5						
35.0						
35.5						
36.0	36.0			bottom of hole		

IN HOLE GAS TESTING

%	O2	20.6
%	CH4	0.0
%	CO2	0.0
%	LEL	0.0
ppm	H2S	0.0
ppm	CO	0.0

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REF 1925
Bh 3

SITE
CLIENT

Holcombe Mill, Ramsbottom
Betts Geo-Environmental

PRINTOUT
SCALE
GL AOD

26 June 2019
1:200

TITLE

RIG
ORIENTATION
FLUSH
BIT

Montabert Hydrofore
vertical
river water piped supply
75mm T/C

ORIGIN

printout direct from rig on site
drilled & logged by Neil Catlow

DEPTH	STRATA	GRAPHIC	DESCRIPTION	SPT N value	INTERPRETATION
0.0	0.0	fill	black sale, coal, ash, loose	not taken	ground level mound
0.5					
1.0					
1.5					
2.0					
2.5					
3.0					
3.5					
4.0					
4.5					
5.0	5.0	masonry			reservoir floor ?
5.5	5.5	gravel	brown, with sand		
6.0					
6.5					
7.0					
7.5					
8.0					
8.5					
9.0					
9.5	9.5	clay	brown, silty, with boulders, firm		
10.0					
10.5					
11.0					
11.5					
12.0					
12.5					
13.0					
13.5					
14.0					
14.5					
15.0					
15.5					
16.0					
16.5					
17.0					
17.5					
18.0					
18.5					
19.0					
19.5					
20.0					
20.5					
21.0	21.0	shale	dark grey, sandy, firm drilling occasional thin sandstone layers		rockhead
21.5					
22.0					
22.5					
23.0					
23.5					
24.0					
24.5					
25.0					
25.5					
26.0					
26.5					
27.0					
27.5					
28.0					
28.5					
29.0					
29.5					
30.0					
30.5					
31.0					
31.5					
32.0					
32.5					
33.0					
33.5					
34.0					
34.5					
35.0					
35.5					
36.0	36.0		bottom of hole		

IN HOLE GAS TESTING

% O2	20.6
% CH4	0.0
% CO2	0.0
% LEL	0.0
ppm H2S	0.0
ppm CO	0.0

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REF 1925 Bh 4	SITE CLIENT Holcombe Mill, Ramsbottom Betts Geo-Environmental	TITLE printout direct from rig on site drilled & logged by Neil Catlow	PRINTOUT SCALE GL AOD RIG ORIENTATION FLUSH BIT	27 June 2019 1:200 Montabert Hydrofore vertical river water piped supply 75mm T/C	
DEPTH	STRATA	GRAPHIC	DESCRIPTION	SPT N value	INTERPRETATION
0.0	0.0	fill	black, oily, plastic, loose extremely loose, small voids	not taken	ground level mound
0.5					
1.0					
1.5					
2.0					
2.5					
3.0					
3.5					
4.0					
4.5	4.5	masonry			reservoir floor ?
5.0	5.0	gravel	brown, with sand and clay layers		
5.5					
6.0					
6.5					
7.0					
7.5					
8.0					
8.5					
9.0					
9.5					
10.0					
10.5	10.4	clay	brown, silty, with boulders, firm		
11.0					
11.5					
12.0					
12.5					
13.0					
13.5					
14.0					
14.5					
15.0					
15.5					
16.0					
16.5					
17.0					
17.5					
18.0					
18.5					
19.0					
19.5					
20.0					
20.5					
21.0					
21.5					
22.0					
22.5					
23.0	23.0	shale	dark grey, sandy, firm drilling occasional thin sandstone layers		rockhead
23.5					
24.0					
24.5					
25.0					
25.5					
26.0					
26.5					
27.0					
27.5					
28.0					
28.5					
29.0					
29.5					
30.0					
30.5					
31.0					
31.5					
32.0					
32.5					
33.0					
33.5					
34.0					
34.5					
35.0					
35.5					
36.0					
36.5					
37.0					
37.5					
38.0	38.0		bottom of hole		

IN HOLE GAS TESTING

%	O2	20.6
%	CH4	0.0
%	CO2	0.0
%	LEL	0.0
ppm	H2S	0.0
ppm	CO	0.0

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APPENDIX F

(i) Contamination Testing Results

SUMMARY OF CONTAMINATION ANALYSIS: SOIL

SUMMARY OF CONTAMINATION ANALYSIS: METALS

Project Name	Mordil Site, Rasmbottom
Project No	19ECH016
Date	25/06/2019

SOIL TYPE		M1		M2		M3		M4		M5		M6		M7		M8		M9		M10		M11		M12		M13		M14		M15		M16		M17		M18		M19		M20		M21		M22		M23		M24		M25		M26		M27		M28		M29		M30		M31		M32		M33		M34		M35		M36		M37		M38		M39		M40		M41		M42		M43		M44		M45		M46		M47		M48		M49		M50		M51		M52		M53		M54		M55		M56		M57		M58		M59		M60		M61		M62		M63		M64		M65		M66		M67		M68		M69		M70		M71		M72		M73		M74		M75		M76		M77		M78		M79		M80		M81		M82		M83		M84		M85		M86		M87		M88		M89		M90		M91		M92		M93		M94		M95		M96		M97		M98		M99		M100		M101		M102		M103		M104		M105		M106		M107		M108		M109		M110		M111		M112		M113		M114		M115		M116		M117		M118		M119		M120		M121		M122		M123		M124		M125		M126		M127		M128		M129		M130		M131		M132		M133		M134		M135		M136		M137		M138		M139		M140		M141		M142		M143		M144		M145		M146		M147		M148		M149		M150		M151		M152		M153		M154		M155		M156		M157		M158		M159		M160		M161		M162		M163		M164		M165		M166		M167		M168		M169		M170		M171		M172		M173		M174		M175		M176		M177		M178		M179		M180		M181		M182		M183		M184		M185		M186		M187		M188		M189		M190		M191		M192		M193		M194		M195		M196		M197		M198		M199		M200		M201		M202		M203		M204		M205		M206		M207		M208		M209		M210		M211		M212		M213		M214		M215		M216		M217		M218		M219		M220		M221		M222		M223		M224		M225		M226		M227		M228		M229		M230		M231		M232		M233		M234		M235		M236		M237		M238		M239		M240		M241		M242		M243		M244		M245		M246		M247		M248		M249		M250		M251		M252		M253		M254		M255		M256		M257		M258		M259		M260		M261		M262		M263		M264		M265		M266		M267		M268		M269		M270		M271		M272		M273		M274		M275		M276		M277		M278		M279		M280		M281		M282		M283		M284		M285		M286		M287		M288		M289		M290		M291		M292		M293		M294		M295		M296		M297		M298		M299		M300		M301		M302		M303		M304		M305		M306		M307		M308		M309		M310		M311		M312		M313		M314		M315		M316		M317		M318		M319		M320		M321		M322		M323		M324		M325		M326		M327		M328		M329		M330		M331		M332		M333		M334		M335		M336		M337		M338		M339		M340		M341		M342		M343		M344		M345		M346		M347		M348		M349		M350		M351		M352		M353		M354		M355		M356		M357		M358		M359		M360		M361		M362		M363		M364		M365		M366		M367		M368		M369		M370		M371		M372		M373		M374		M375		M376		M377		M378		M379		M380		M381		M382		M383		M384		M385		M386		M387		M388		M389		M390		M391		M392		M393		M394		M395		M396		M397		M398		M399		M400		M401		M402		M403		M404		M405		M406		M407		M408		M409		M410		M411		M412		M413		M414		M415		M416		M417		M418		M419		M420		M421		M422		M423		M424		M425		M426		M427		M428		M429		M430		M431		M432		M433		M434		M435		M436		M437		M438		M439		M440		M441		M442		M443		M444		M445		M446		M447		M448		M449		M450		M451		M452		M453		M454		M455		M456		M457		M458		M459		M460		M461		M462		M463		M464		M465		M466		M467		M468		M469		M470		M471		M472		M473		M474		M475		M476		M477		M478		M479		M480		M481		M482		M483		M484		M485		M486		M487		M488		M489		M490		M491		M492		M493		M494		M495		M496		M497		M498		M499		M500		M501		M502		M503		M504		M505		M506		M507		M508		M509		M510		M511		M512		M513		M514		M515		M516		M517		M518		M519		M520		M521		M522		M523		M524		M525		M526		M527		M528		M529		M530		M531		M532		M533		M534		M535		M536		M537		M538		M539		M540		M541		M542		M543		M544		M545		M546		M547		M548		M549		M550		M551		M552		M553		M554		M555		M556		M557		M558		M559		M560		M561		M562		M563		M564		M565		M566		M567		M568		M569		M570		M571		M572		M573		M574		M575		M576		M577		M578		M579		M580		M581		M582		M583		M584		M585		M586		M587		M588		M589		M590		M591		M592		M593		M594		M595		M596		M597		M598		M599		M600		M601		M602		M603		M604		M605		M606		M607		M608		M609		M610		M611		M612		M613		M614		M615		M616		M617		M618		M619		M620		M621		M622		M623		M624		M625		M626		M627		M628		M629		M630		M631		M632		M633		M634		M635		M636		M637		M638		M639		M640		M641		M642		M643		M644		M645		M646		M647		M648		M649		M650		M651		M652		M653		M654		M655		M656		M657		M658		M659		M660		M661		M662		M663		M664		M665		M666		M667		M668		M669		M670		M671		M672		M673		M674		M675		M676		M677		M678		M679		M680		M681		M682		M683		M684		M685		M686		M687		M688		M689		M690		M691		M692		M693		M694		M695		M696		M697		M698		M699		M700		M701		M702		M703		M704		M705		M706		M707		M708		M709		M710		M711		M712		M713		M714		M715		M716		M717		M718		M719		M720		M721		M722		M723		M724		M725		M726		M727		M728		M729		M730		M731		M732		M733		M734		M735		M736		M737		M738		M739		M740		M741		M742		M743		M744		M745		M746		M747		M748		M749		M750		M751		M752		M753		M754		M755		M756		M757		M758		M759		M760		M761		M762		M763		M764		M765		M766		M767		M768		M769		M770		M771		M772		M773		M774		M775		M776		M777		M778		M779		M780		M781		M782		M783		M784		M785		M786		M787		M788		M789		M790		M791		M792		M793		M794		M795		M796		M797		M798		M799		M800		M801		M802		M803		M804		M805		M806		M807		M808		M809		M810		M811		M812		M813		M814		M815		M816		M817		M818		M819		M820		M821		M822		M823		M824		M825		M826		M827		M828		M829		M830		M831		M832		M833		M834		M835		M836		M837		M838		M839		M840		M841		M842		M843		M844		M845		M846		M847		M848		M849		M850		M851		M852		M853		M854		M855		M856		M857		M858		M859		M860		M861		M862		M863		M864		M865		M866		M867		M868		M869		M870		M871		M872		M873		M874		M875		M876		M877		M878		M879		M880		M881		M882		M883		M884		M885		M886		M887		M888		M889		M890		M891		M892		M893		M894		M895		M896		M897		M898		M899		M900		M901		M902		M903		M904		M905		M906		M907		M908		M909		M910		M911		M912		M913		M914		M915		M916		M917		M918		M919		M920		M921		M922		M923		M924		M925		M926		M927		M928		M929		M930		M931		M932		M933		M934		M935		M936		M937		M938		M939		M940		M941		M942		M943		M944		M945		M946		M947		M948		M949		M950		M951		M952		M953		M954		M955		M956		M957		M958		M959		M960		M961		M962		M963		M964		M965		M966		M967		M968		M969		M970		M971		M972		M973		M974		M975		M976		M977		M978		M979		M980		M981		M982		M983		M984		M985		M986		M987		M988		M989		M990		M991		M992		M993		M994		M995		M996		M997		M998		M999		M1000	
DEPTH (m)	0.10	1.00	0.50	0.15	1.50	0.50	0.80	1.70	2.20	2.25	0.50	0.50	1.00	0.20	0.50	0.50	2.75	4.20	0.60	0.95	1.80	0.55	1.00	1.75	0.50	1.80	0.60	1.00	1.00	0.50	0.35	0.25	0.90	0.75	2.00	0.45	0.30	0.80	1.50	0.60	0.50	1.50	1.00	0.30	1.30	0.50	1.60	0.45	0.45	-	-	-	-	-</																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

Metals	Mean Value 1997	Range		ARMA 2017 (mg/kg)	ARMA 2017 (mg/kg)	DEFRA CCL
	HS ₁	Largest Value 1997	Smallest Value 1997	With Homogenous Product (1% SDE)	With Homogenous Product (5% SDE)	
pH	6.86	11.80	7.10			
Sulphate (water sol. 2:1)	0.21	0.77	0.02			
Organic matter	0.82	6.00	0.10			
Aspenic	31.08	160.00	10.00	32	32	32
Cadmium	1.47	1.50	0.50	18	18	22.1
Chromium	161.29	160.00	17.00	479	4790	-
Chromium (hexavalent)	1.22	1.60	0.00	3.62	3.63	26.5
Cu-act	0.00	0.00	0.00			
Mercury (Methyl)	0.44	1.50	0.50	1.81	15.8	20.0
Nickel	32.40	79.00	9.00		EAA/TRA without aug 2015	
Nitrogen	11.71	2.15	1.80	275	275	-
Phosphorus	21.72	100.00	35.00	2000	2000	-

NOTE:
Any individual results and mean value tests above SQVs are shown RED highlighted
Any outlier values which exceed relevant SQVs are shown in red

SGRs are derived from the EA 2008 SGRs which are taken from ARIak 2015. Category 4 screening levels have been adopted by the EA and have been included as new guidance.

SGV states that "for general surface contamination and to simplify the assessment the SGV's for inorganic mercury can normally be compared with chemical analysis for total mercury content..." Based on the latter, SGV for elemental mercury (170mg/kg) in the soil assessment is used

SUMMARY OF CONTAMINATION ANALYSIS: TPH

Project Name	Mondi Site, Rasmbottom
Project No	19ECH016
Date	25/06/2019

[illegible]

TPH	Non Value	Range	ARISA 2017 (mg/kg)	ARISA 2017 (mg/kg)	DEFRA CASL 2017
	Test		Residential with Home	Residential with Home	
	Year		Grown Produce	Grown Produce	
	US ₀	Largest Value Smallest Value	1% SOL WHO/FAO Free Product*	1% SOL WHO/FAO Free Product*	1% SOL WHO/FAO Free Product*
AR1-C5+C6	0.00	-0.00 to <0.00	42.7	269	
AR1-C5+C6	0.00	-0.00 to <0.00	99.3	248	
AR1-C5+C6	0.00	-0.00 to <0.00	13.9	294	
AR1-C5+C6	2.74	>0.07 to <1	385	1180	
AR1-C5+C6	7.21	>0.07 to <1	81.7	430	
AR1-C5+C6	30.26	>0.09 to <1			
AR1-C5+C6	141.05	>0.10 to <1			
Total Aliphatics	178.62	>0.11 to <1	21300	26100	
AR1-C5+C7	0.00	-0.12 to <0.00	0.017	<0.001	
AR1-C5+C7	0.00	-0.13 to <0.00	15.3	780	
AR1-C5+C7	0.01	-0.14 to <1	20.5	232	
AR1-C5+C7	5.35	>0.10 to <1	70	480	
AR1-C5+C7	17.07	>0.16 to <1	160	830	
AR1-C5+C7	84.72	>0.17 to <1	319	140	
AR1-C5+C7	177.83	>0.18 to <1	1120	1710	
Total Aromatics	273.67	>0.19 to <1			
TPH (L & M)					
BTX-E Benzene	1.00	>0.21 to <0.05	0.667	63.3	6.871
BTX-E Toluene	1.00	>0.22 to <0.05	113	783	
BTX-E Ethyl Benzene	1.00	>0.23 to <0.05	0.943	43.5	
BTX-E m & p Xylene	1.00	>0.24 to <0.04	2.1	312	
BTX-E o Xylene	1.00	>0.25 to <0.05	26.4	256	
MTBE	1.00	>0.26 to <0.05	27.6	220	

	UU Drinking Water Guidelines
	PE Threshold
Total BTX & MTBE	0.1
EC5-EC10 Ali-Aro	2
EC10-EC16 Ali-Aro	10
EC16-EC40 Ali-Aro	500

PRODUCT WAS OBSERVED DURING FIELDWORK- SEE 'GUIDANCE NOTES ON CONTAMINATION'.

Project Name	Mondi Site, Rasmbottom
Project No	19ECH016
Date	25/06/19

[illegible]

PAH	Mean Value Test	Range	Aflatoxin B7 (mg/kg) Residential with Home Green Produce		Aflatoxin B7 (mg/kg) Residential with Home Green Produce		DEBRA's CASE 2017
			US ₁₀₀	Largest Value (mg/kg)	Smallest Value (mg/kg)	% 10M WITHOUT FEE Product	
Acenaphthene	1.70	1.500 - 1.900	-0.01	608	2760	-	
Acenaphthylene	0.10	0.06 - 0.01	-	-	-	-	
Anthracene	2.33	1.500 - 0.02	10200	26300	-	-	
Benzo[a]anthracene	0.95	0.900 - 0.01	4.52	4.52	4.54	-	
Benzo[a]fluoranthene	4.78	3.400 - 0.04	1.51	1.51	2.05	4.95	
Benzo[b]fluoranthene	2.42	38.00 - 0.05	7.72	9.83	-	-	
Benzo[k]fluoranthene	5.44	1.700 - 0.05	16.2	1.60	-	-	
Benzo[a]pyrene	2.35	1.500 - 0.07	8.4	18.6	-	-	
Chrysene	4.58	30.00 - 0.06	95.5	927	-	-	
Dibenz[a,h]anthracene	0.59	6.10 - 0.04	0.838	1	-	-	
Fluoranthene	10.47	7.400 - 0.08	93	2610	-	-	
Indeno[1,2,3-cd]pyrene	1.56	10.00 - 0.01	793	2610	-	-	
Indeno[1,2,3-cd]pyrene	2.11	15.00 - 0.03	7.31	9.75	-	-	
Naphthalene	1.65	13.00 - 0.03	0.829	12.2	-	-	
Phenanthrene	6.69	0.100 - 0.01	-	-	-	-	
Phenanthrene	8.95	89.00 - 0.07	668	2100	-	-	

Results expressed as mg/kg air dried unless otherwise stated

* - The calculations for the mean value test include outliers

*** THESE RESULTS PRESENTED ARE ASSESSED UNDER THE COMBINED CLEA ASSESSMENT CRITERION AS OUTLINED WITHIN SR4 ASSUMING NO FREE PRODUCT WAS OBSERVED DURING FIELDWORK. SEE 'GUIDANCE NOTES ON CONTAMINATION'.

NOTES:

For the Purpose of this investigation- results will be assessed against **RESIDENTIAL GUIDELINES WITH HOMEGROWN PRODUCE WITH NO FREE PRODUCT.**



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Analytical Report Number : 19-48411

Project / Site name:	Mondi Site, Ramsbottom	Samples received on:	03/07/2019
Your job number:	19ECH016	Samples instructed on:	03/07/2019
Your order number:	BG3372	Analysis completed by:	10/07/2019
Report Issue Number:	1	Report issued on:	10/07/2019
Samples Analysed:	12 soil samples		

Signed:

Rexona Rahman
Head of Customer Services
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: 19-48411

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259378	1259379	1259380	1259381	1259382
Sample Reference				TP17	TP17	TP16	TP14	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	1.50	0.60	0.50	1.55
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
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	%	N/A	NONE	9.4	18	21	14	14
Total mass of sample received	kg	0.001	NONE	1.2	1.3	1.2	1.3	1.6

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Amosite	-	Chrysotile	Amosite & Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	0.002	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	0.002	< 0.001	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.7	8.3	10.9	10.7	8.1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	120	110	730	640	130
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.058	0.057	0.36	0.32	0.067
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	57.8	57.3	365	321	66.8
Organic Matter	%	0.1	MCERTS	4.9	1.7	4.5	2.9	1.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.34	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.46	< 0.05	0.44	0.24	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.83	< 0.05	0.49	0.31	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.91	< 0.05	0.52	0.36	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.92	< 0.05	< 0.05	0.30	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.60	< 0.05	< 0.05	0.24	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.0	< 0.05	< 0.05	0.28	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.32	< 0.05	< 0.05	0.12	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.70	< 0.05	< 0.05	0.25	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.40	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.52	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	7.14	< 0.80	1.45	2.10	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	16	13	16	7.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.3	0.7	0.4	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	19	34	21	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	140	47	130	440	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	71	72	150	190	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	38	22	24	23	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	120	690	260	62

Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number	1259378	1259379	1259380	1259381	1259382
Sample Reference	TP17	TP17	TP16	TP14	TP14
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.60	1.50	0.60	0.50	1.55
Date Sampled	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	3.2	< 1.0	5.6	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	9.3	< 2.0	18	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	23	< 8.0	120	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	94	< 8.0	1100	74	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	130	< 10	1300	78	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	3.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	55	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	19	< 10	440	44	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	23	< 10	500	48	< 10

TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Analytical Report Number: 19-48411

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259378	1259379	1259380	1259381	1259382
Sample Reference				TP17	TP17	TP16	TP14	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	1.50	0.60	0.50	1.55
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

VOCs

Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Chloroethane	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0	-
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0	-
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0	-
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0	-
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Styrene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Tri bromomethane	µg/kg	1	NONE	< 1.0	-	< 1.0	< 1.0	-
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-

Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259378	1259379	1259380	1259381	1259382
Sample Reference				TP17	TP17	TP16	TP14	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	1.50	0.60	0.50	1.55
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	< 0.1	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	< 0.2	< 0.2	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	< 0.2	< 0.2	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Naphthalene	mg/kg	0.05	MCERTS	0.34	-	< 0.05	< 0.05	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	< 0.1	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	< 0.1	< 0.1	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
2-Methylnaphthalene	mg/kg	0.1	NONE	0.7	-	< 0.1	< 0.1	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	< 0.3	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Phenanthrene	mg/kg	0.05	MCERTS	0.46	-	0.44	0.24	-
Anthracene	mg/kg	0.05	MCERTS	0.11	-	< 0.05	< 0.05	-
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Fluoranthene	mg/kg	0.05	MCERTS	0.83	-	0.49	0.31	-
Pyrene	mg/kg	0.05	MCERTS	0.91	-	0.52	0.36	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	< 0.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.92	-	< 0.05	0.30	-
Chrysene	mg/kg	0.05	MCERTS	0.60	-	< 0.05	0.24	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.0	-	< 0.05	0.28	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.32	-	< 0.05	0.12	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.70	-	< 0.05	0.25	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.40	-	< 0.05	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.52	-	< 0.05	< 0.05	-



Analytical Report Number: 19-48411

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259378	1259379	1259380	1259381	1259382
Sample Reference				TP17	TP17	TP16	TP14	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	1.50	0.60	0.50	1.55
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Analytical Report Number: 19-48411

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259383	1259384	1259385	1259386	1259387
Sample Reference				TP15	TP15	TP18	TP18 D	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.90	0.50	1.30	0.50
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
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	%	N/A	NONE	10	14	15	16	9.1
Total mass of sample received	kg	0.001	NONE	1.4	1.3	1.1	1.5	1.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	-	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	-	< 0.001

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	8.2	8.6	7.6	8.8
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	110	78	420	-	59
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.056	0.039	0.21	0.053	0.029
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	56.0	39.2	209	-	29.4
Organic Matter	%	0.1	MCERTS	3.7	2.0	4.1	-	1.1

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	1.4	0.56	0.49	-	0.23
Anthracene	mg/kg	0.05	MCERTS	0.60	0.16	0.13	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	2.4	0.66	1.0	-	0.34
Pyrene	mg/kg	0.05	MCERTS	2.2	0.79	0.97	-	0.32
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.0	0.70	0.90	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	1.2	0.44	0.56	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.4	0.60	0.71	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.76	0.16	0.43	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.3	0.45	0.68	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.57	< 0.05	0.35	-	< 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	0.64	< 0.05	0.43	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	14.3	4.52	6.66	-	0.89
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	16	30	-	3.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.3	0.4	-	0.6
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	-	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	22	24	-	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	120	54	130	-	45
Lead (aqua regia extractable)	mg/kg	1	MCERTS	73	73	240	-	39
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3	< 0.3	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	24	40	-	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	88	70	170	-	190

Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259383	1259384	1259385	1259386	1259387
Sample Reference				TP15	TP15	TP18	TP18 D	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.90	0.50	1.30	0.50
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	130
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	-	130
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	33	< 10	23	-	35
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	43	< 10	31	-	35
TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	-	< 1.0

Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259383	1259384	1259385	1259386	1259387
Sample Reference				TP15	TP15	TP18	TP18 D	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.90	0.50	1.30	0.50
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Chloroethane	µg/kg	1	NONE	< 1.0	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Styrene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Tribromomethane	µg/kg	1	NONE	< 1.0	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-

Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259383	1259384	1259385	1259386	1259387
Sample Reference				TP15	TP15	TP18	TP18 D	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.90	0.50	1.30	0.50
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	1.4	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	0.60	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	2.4	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	2.2	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.0	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	1.2	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.4	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.76	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.3	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.57	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.64	-	-	-	-



Analytical Report Number: 19-48411

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259383	1259384	1259385	1259386	1259387
Sample Reference				TP15	TP15	TP18	TP18 D	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.90	0.50	1.30	0.50
Date Sampled				02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Analytical Report Number: 19-48411

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259388	1259389			
Sample Reference				TP11	TP12			
Sample Number				None Supplied	None Supplied			
Depth (m)				1.40	0.45			
Date Sampled				02/07/2019	02/07/2019			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1			
Moisture Content	%	N/A	NONE	17	12			
Total mass of sample received	kg	0.001	NONE	1.7	1.1			

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile			
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected			
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.095			
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.095			

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	9.5			
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	220	710			
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.11	0.35			
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	111	355			
Organic Matter	%	0.1	MCERTS	0.9	2.6			

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.1			
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.26			
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.4			
Pyrene	mg/kg	0.05	MCERTS	< 0.05	1.3			
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.87			
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.64			
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.86			
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.31			
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.73			
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.38			
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.49			

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	8.26			
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.7	37			
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.7			
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2			
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	31			
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	180			
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	160			
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	34			
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.3	< 1.0			
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	190			

Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259388	1259389			
Sample Reference				TP11	TP12			
Sample Number				None Supplied	None Supplied			
Depth (m)				1.40	0.45			
Date Sampled				02/07/2019	02/07/2019			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
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-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	1.4			
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	5.5			
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	17			
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	87			
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	110			
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	47			
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	57			
TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0			

Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259388	1259389			
Sample Reference				TP11	TP12			
Sample Number				None Supplied	None Supplied			
Depth (m)				1.40	0.45			
Date Sampled				02/07/2019	02/07/2019			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0			
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0			
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0			
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0			
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0			
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0			
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0			
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0			
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0			
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0			
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0			
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0			
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0			
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0			
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0			
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0			
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0			
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,1,1,2-Tetrachloroethane	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			
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0			
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0			
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0			
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0			
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0			
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0			
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0			
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0			
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0			
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0			
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0			

Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259388	1259389			
Sample Reference				TP11	TP12			
Sample Number				None Supplied	None Supplied			
Depth (m)				1.40	0.45			
Date Sampled				02/07/2019	02/07/2019			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1			
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2			
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2			
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1			
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1			
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1			
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3			
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.1			
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.26			
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.4			
Pyrene	mg/kg	0.05	MCERTS	< 0.05	1.3			
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3			
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.87			
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.64			
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.86			
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.31			
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.73			
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.38			
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.49			



Analytical Report Number: 19-48411

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3372

Lab Sample Number				1259388	1259389			
Sample Reference				TP11	TP12			
Sample Number				None Supplied	None Supplied			
Depth (m)				1.40	0.45			
Date Sampled				02/07/2019	02/07/2019			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					



Analytical Report Number : 19-48411

Project / Site name: Mondri Site, Ramsbottom

* 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 *
1259378	TP17	None Supplied	0.60	Grey loam and sand with gravel and rubble.
1259379	TP17	None Supplied	1.50	Brown clay and sand.
1259380	TP16	None Supplied	0.60	Brown clay and sand with rubble and brick.
1259381	TP14	None Supplied	0.50	Brown loam and sand with rubble and vegetation.
1259382	TP14	None Supplied	1.55	Brown clay and sand.
1259383	TP15	None Supplied	1.00	Brown sand with rubble and gravel
1259384	TP15	None Supplied	1.90	Brown sand.
1259385	TP18	None Supplied	0.50	Brown sand with rubble and gravel
1259386	TP18 D	None Supplied	1.30	Grey clay and sand.
1259387	TP11	None Supplied	0.50	Brown loam and sand with rubble and vegetation.
1259388	TP11	None Supplied	1.40	Brown clay and sand.
1259389	TP12	None Supplied	0.45	Brown loam and sand with rubble.



Analytical Report Number: 19-48411
Project / Site name: Mondi Site, Ramsbottom
Your Order No: BG3372

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
1259378	TP17	0.60	139	Loose Fibres	Amosite	< 0.001	< 0.001
1259380	TP16	0.60	144	Loose Fibres & Loose Fibrous Debris	Chrysotile	0.002	0.002
1259381	TP14	0.50	132	Loose Fibres	Amosite & Chrysotile	< 0.001	< 0.001
1259383	TP15	1.00	176	Loose Fibres	Chrysotile	< 0.001	< 0.001
1259387	TP11	0.50	180	Loose Fibres	Chrysotile	< 0.001	< 0.001
1259389	TP12	0.45	133	Loose Fibrous Debris	Chrysotile	0.095	0.095

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Analytical Report Number : 19-48411

Project / Site name: Mondri Site, Ramsbottom

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
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
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	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
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests"	L009-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-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
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 based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/cleanup.	L088/76-PL	W	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	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 30°C.

Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
TP18		S	19-48411	1259385	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TP18		S	19-48411	1259385	b	Speciated EPA-16 PAHs in soil	L064-PL	b
TP18		S	19-48411	1259385	b	TPH in (Soil)	L076-PL	b
TP18		S	19-48411	1259385	b	TPHCWG (Soil)	L088/76-PL	b



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Analytical Report Number : 19-48009

Project / Site name:	Mondi Site, Ramsbottom	Samples received on:	02/07/2019
Your job number:	19ECH016	Samples instructed on:	02/07/2019
Your order number:	BG3367	Analysis completed by:	08/07/2019
Report Issue Number:	1	Report issued on:	08/07/2019
Samples Analysed:	14 soil samples		

Signed:

Zina Abdul Razzak
Senior Quality Specialist
For & on behalf of i2 Analytical Ltd.

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

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

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

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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: 19-48009

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3367

Lab Sample Number				1257402	1257403	1257404	1257405	1257406
Sample Reference				WS8	WS8	WS9	WS9	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.80	0.60	1.00	1.00
Date Sampled				01/07/2019	01/07/2019	01/07/2019	01/07/2019	01/07/2019
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	%	N/A	NONE	12	25	15	16	15
Total mass of sample received	kg	0.001	NONE	1.4	1.6	1.4	1.5	1.5

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	7.1	7.4	7.6	7.6
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	75	40	53	44	73
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.037	0.020	0.026	0.022	0.037
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	37.3	20.0	26.4	22.2	36.6
Organic Matter	%	0.1	MCERTS	4.6	1.3	5.4	1.9	4.2

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.89	< 0.05	0.22	< 0.05	0.46
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	1.8	< 0.05	< 0.05	< 0.05	4.4
Fluorene	mg/kg	0.05	MCERTS	1.5	< 0.05	< 0.05	< 0.05	6.3
Phenanthrene	mg/kg	0.05	MCERTS	11	< 0.05	1.6	1.0	41
Anthracene	mg/kg	0.05	MCERTS	2.1	< 0.05	0.23	0.19	11
Fluoranthene	mg/kg	0.05	MCERTS	14	< 0.05	0.74	0.69	34
Pyrene	mg/kg	0.05	MCERTS	13	< 0.05	0.82	0.67	37
Benzo(a)anthracene	mg/kg	0.05	MCERTS	6.5	< 0.05	0.43	0.33	20
Chrysene	mg/kg	0.05	MCERTS	5.3	< 0.05	0.63	0.54	17
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	5.1	< 0.05	0.33	< 0.05	12
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	2.7	< 0.05	0.17	< 0.05	7.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4.9	< 0.05	0.23	< 0.05	14
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.1	< 0.05	< 0.05	< 0.05	4.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.54	< 0.05	< 0.05	< 0.05	1.5
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.6	< 0.05	< 0.05	< 0.05	5.4

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	74.0	< 0.80	5.35	3.44	217
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	5.0	25	8.6	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.3	0.6	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	16	15	15	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	67	19	310	27	61
Lead (aqua regia extractable)	mg/kg	1	MCERTS	77	15	36	16	65
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	43	45	32	13	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	99	51	35	69

Analytical Report Number: 19-48009

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3367

Lab Sample Number				1257402	1257403	1257404	1257405	1257406
Sample Reference				WS8	WS8	WS9	WS9	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.80	0.60	1.00	1.00
Date Sampled				01/07/2019	01/07/2019	01/07/2019	01/07/2019	01/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	12
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	12
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	9.3	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	31	< 2.0	< 2.0	< 2.0	39
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	130	< 10	< 10	< 10	260
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	150	< 10	< 10	< 10	250
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	320	< 10	< 10	< 10	550
TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Analytical Report Number: 19-48009

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3367

Lab Sample Number				1257407	1257408	1257409	1257410	1257411
Sample Reference				WS11	WS12	WS13	WS14	WS15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.35	0.35	0.25	0.90
Date Sampled				01/07/2019	01/07/2019	01/07/2019	01/07/2019	01/07/2019
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	%	N/A	NONE	14	8.7	7.8	12	9.3
Total mass of sample received	kg	0.001	NONE	1.2	1.6	1.8	1.2	1.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.1	8.3	9.3	11.0	8.3
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	300	460	120	830	59
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.15	0.23	0.059	0.42	0.029
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	148	228	59.1	417	29.3
Organic Matter	%	0.1	MCERTS	8.2	2.9	0.8	2.5	0.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	7.7	13	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	3.4	4.5	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	3.0	5.3	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	16	20	< 0.05	0.63	< 0.05
Anthracene	mg/kg	0.05	MCERTS	3.5	10	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	17	26	< 0.05	0.66	< 0.05
Pyrene	mg/kg	0.05	MCERTS	15	23	< 0.05	0.55	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	8.1	8.5	< 0.05	0.28	< 0.05
Chrysene	mg/kg	0.05	MCERTS	8.8	8.5	< 0.05	0.31	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	8.3	7.8	< 0.05	0.28	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	3.2	5.0	< 0.05	0.19	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	7.2	7.2	< 0.05	0.24	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.8	3.5	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.75	0.88	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.4	4.5	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	108	149	< 0.80	3.14	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	42	6.6	6.9	14	10
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2	< 0.2	0.5	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	15	21	36	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	160	39	40	66	36
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130	52	31	110	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	49	20	26	20	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	2.7	< 1.0	< 1.0	< 1.0	1.8
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	140	77	68	210	51

Analytical Report Number: 19-48009

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3367

Lab Sample Number				1257407	1257408	1257409	1257410	1257411
Sample Reference				WS11	WS12	WS13	WS14	WS15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.35	0.35	0.25	0.90
Date Sampled				01/07/2019	01/07/2019	01/07/2019	01/07/2019	01/07/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	4.2	< 1.0	< 1.0	11	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	10	10	< 2.0	17	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	38	30	< 8.0	48	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	150	120	16	260	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	210	160	16	340	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	14	14	< 1.0	7.6	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	21	28	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	110	97	< 10	15	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	210	160	< 10	230	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	350	300	< 10	250	< 10

TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Analytical Report Number: 19-48009

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3367

Lab Sample Number				1257412	1257413	1257414	1257415	
Sample Reference				WS16	WS16	WS17	WS18	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.75	2.00	0.45	0.35	
Date Sampled				01/07/2019	01/07/2019	01/07/2019	01/07/2019	
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	%	N/A	NONE	14	34	7.1	8.7	
Total mass of sample received	kg	0.001	NONE	1.5	1.6	1.6	1.4	

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	7.6	8.9	10.9	
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	150	460	69	900	
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.073	0.23	0.035	0.45	
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	72.5	232	34.5	448	
Organic Matter	%	0.1	MCERTS	2.2	5.0	1.0	3.6	

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	0.43	0.17	< 0.05	
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.21	0.25	< 0.05	
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.21	0.26	< 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	0.85	< 0.80	< 0.80	
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	140	160	5.0	8.5	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.2	0.8	
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	19	10	25	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	140	320	38	120	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	470	1100	76	49	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.6	< 0.3	< 0.3	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	36	13	79	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	72	54	230	

Analytical Report Number: 19-48009

Project / Site name: Mondi Site, Ramsbottom

Your Order No: BG3367

Lab Sample Number				1257412	1257413	1257414	1257415	
Sample Reference				WS16	WS16	WS17	WS18	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.75	2.00	0.45	0.35	
Date Sampled				01/07/2019	01/07/2019	01/07/2019	01/07/2019	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	18	
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	18	
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	58	
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	97	

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	37	
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	21	
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	15	
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	87	
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	160	

TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	
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Analytical Report Number : 19-48009

Project / Site name: Mondri Site, Ramsbottom

* 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 *
1257402	WS8	None Supplied	0.50	Brown clay and sand with gravel.
1257403	WS8	None Supplied	1.80	Brown clay.
1257404	WS9	None Supplied	0.60	Brown clay and sand with gravel.
1257405	WS9	None Supplied	1.00	Brown clay and sand with gravel.
1257406	WS10	None Supplied	1.00	Brown clay and sand.
1257407	WS11	None Supplied	0.50	Brown clay and sand with gravel.
1257408	WS12	None Supplied	0.35	Brown sand with gravel.
1257409	WS13	None Supplied	0.35	Grey clay and sand with gravel.
1257410	WS14	None Supplied	0.25	Brown sand with gravel and brick.
1257411	WS15	None Supplied	0.90	Brown clay and sand with gravel.
1257412	WS16	None Supplied	0.75	Brown sand with gravel.
1257413	WS16	None Supplied	2.00	Brown clay and sand with gravel.
1257414	WS17	None Supplied	0.45	Brown loam and sand with gravel.
1257415	WS18	None Supplied	0.35	Brown loam and sand with gravel.

Analytical Report Number : 19-48009

Project / Site name: Mondri Site, Ramsbottom

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

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
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
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	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
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests""	L009-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-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
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 based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
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

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.



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Analytical Report Number : 19-47608

Project / Site name:	Mondi Site, Ramsbottom	Samples received on:	27/06/2019
Your job number:	19ECH016	Samples instructed on:	27/06/2019
Your order number:		Analysis completed by:	04/07/2019
Report Issue Number:	1	Report issued on:	04/07/2019
Samples Analysed:	24 soil samples		

Signed: 

Zina Abdul Razzak
Senior Quality Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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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: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255612	1255613	1255614	1255615	1255616
Sample Reference				TP1	TP1	TP2	TP3	TP3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.50	0.15	1.50
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
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	%	N/A	NONE	15	18	18	21	18
Total mass of sample received	kg	0.001	NONE	1.4	1.5	1.4	1.3	1.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	Chrysotile & Amosite	Chrysotile & Amosite	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	< 0.001	< 0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	< 0.001	< 0.001	< 0.001

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.6	8.1	7.6	7.5
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	76	1400	73	320	1500
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.038	0.68	0.037	0.16	0.77
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	38.0	679	36.5	161	768
Organic Matter	%	0.1	MCERTS	7.0	5.3	5.2	5.9	4.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	1.1	1.3	1.0	3.5	8.6
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.32	0.43
Acenaphthene	mg/kg	0.05	MCERTS	3.1	3.5	1.9	5.6	13
Fluorene	mg/kg	0.05	MCERTS	2.2	2.7	1.2	4.3	10
Phenanthrene	mg/kg	0.05	MCERTS	18	17	11	32	61
Anthracene	mg/kg	0.05	MCERTS	5.3	3.9	3.2	7.0	15
Fluoranthene	mg/kg	0.05	MCERTS	33	22	20	42	74
Pyrene	mg/kg	0.05	MCERTS	32	20	19	39	69
Benzo(a)anthracene	mg/kg	0.05	MCERTS	16	12	9.6	25	39
Chrysene	mg/kg	0.05	MCERTS	15	9.1	8.4	19	30
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	17	13	13	28	38
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	9.6	3.8	3.2	7.0	18
Benzo(a)pyrene	mg/kg	0.05	MCERTS	15	10	9.3	23	34
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	8.2	4.7	4.7	9.7	15
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2.4	1.4	1.5	3.0	4.1
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	9.1	5.5	5.4	11	17

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	186	130	112	260	446
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	30	27	25	21
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.9	0.7	0.6	0.8	0.7
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	36	50	33	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	110	130	170	150	84
Lead (aqua regia extractable)	mg/kg	1	MCERTS	290	280	260	250	220
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	< 0.3	1.0	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	33	33	39	37
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	280	240	250	280	210

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number	1255612	1255613	1255614	1255615	1255616
Sample Reference	TP1	TP1	TP2	TP3	TP3
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	1.00	0.50	0.15	1.50
Date Sampled	25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	2.8	< 1.0	1.6	2.3
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	4.4	29	4.6	12	15
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	12	170	55	100	54
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	44	490	210	310	300
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	61	690	270	430	370
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	3.8	8.5	5.7	7.8	15
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	31	40	25	43	62
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	210	280	170	270	400
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	490	580	550	620	650
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	730	900	750	940	1100
TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255612	1255613	1255614	1255615	1255616
Sample Reference				TP1	TP1	TP2	TP3	TP3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.50	0.15	1.50
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

VOCs

Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,1,2-Tetrachloroethane	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
Styrene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255612	1255613	1255614	1255615	1255616
Sample Reference				TP1	TP1	TP2	TP3	TP3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.50	0.15	1.50
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

SVOCs

Aniline	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	1.3	-	-	8.6
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	1.2	-	-	6.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	0.43
Acenaphthene	mg/kg	0.05	MCERTS	-	3.5	-	-	13
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	1.6	-	-	6.5
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	2.7	-	-	10
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	17	-	-	61
Anthracene	mg/kg	0.05	MCERTS	-	3.9	-	-	15
Carbazole	mg/kg	0.3	MCERTS	-	1.5	-	-	6.0
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	0.8	-	-	1.5
Fluoranthene	mg/kg	0.05	MCERTS	-	22	-	-	74
Pyrene	mg/kg	0.05	MCERTS	-	20	-	-	69
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	12	-	-	39
Chrysene	mg/kg	0.05	MCERTS	-	9.1	-	-	30
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	13	-	-	38
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	3.8	-	-	18
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	10	-	-	34
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	4.7	-	-	15
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	1.4	-	-	4.1
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	5.5	-	-	17

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Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255617	1255618	1255619	1255620	1255621
Sample Reference				TP4	TP5	TP5	TP5	TP5 D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	1.70	2.25	2.25
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
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	13	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	7.6	5.6	18	28	34
Total mass of sample received	kg	0.001	NONE	1.6	1.5	1.3	1.8	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Detected	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	< 0.001	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.4	7.8	7.3	7.1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	230	110	930	800	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.11	0.055	0.46	0.40	0.55
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	115	55.0	465	400	-
Organic Matter	%	0.1	MCERTS	0.8	0.3	6.2	5.1	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.84	0.58	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	0.45	< 0.05	2.5	0.63	-
Fluorene	mg/kg	0.05	MCERTS	0.31	< 0.05	1.6	0.91	-
Phenanthrene	mg/kg	0.05	MCERTS	1.7	< 0.05	13	1.1	-
Anthracene	mg/kg	0.05	MCERTS	0.39	< 0.05	3.0	0.57	-
Fluoranthene	mg/kg	0.05	MCERTS	2.4	< 0.05	15	1.8	-
Pyrene	mg/kg	0.05	MCERTS	2.2	< 0.05	14	2.4	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.3	< 0.05	8.2	2.1	-
Chrysene	mg/kg	0.05	MCERTS	1.2	< 0.05	5.9	1.3	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.4	< 0.05	6.9	1.5	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.49	< 0.05	3.7	0.74	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.2	< 0.05	6.8	1.8	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.54	< 0.05	3.0	0.55	-
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	0.63	< 0.05	3.5	0.65	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	14.2	< 0.80	87.6	16.4	-
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.3	6.5	46	53	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.5	< 0.2	-
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	17	28	38	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	32	28	240	130	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	34	120	170	170	-
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	26	20	57	28	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	94	47	250	76	-

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Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255617	1255618	1255619	1255620	1255621
Sample Reference				TP4	TP5	TP5	TP5	TP5 D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	1.70	2.25	2.25
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	3.1	< 1.0	2.3	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	7.9	< 2.0	11	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	22	< 8.0	27	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	41	< 8.0	110	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	74	< 10	150	13	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	1.6	< 1.0	3.6	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	9.0	< 2.0	22	7.8	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	33	< 10	170	54	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	58	< 10	270	160	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	100	< 10	460	220	-
TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	-

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Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255617	1255618	1255619	1255620	1255621
Sample Reference				TP4	TP5	TP5	TP5	TP5 D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	1.70	2.25	2.25
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

VOCs

Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Chloroethane	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1,1,2-Tetrachloroethane	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	-	-
Styrene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Tribromomethane	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255617	1255618	1255619	1255620	1255621
Sample Reference				TP4	TP5	TP5	TP5	TP5 D
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	1.70	2.25	2.25
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	< 0.2	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	< 0.2	-	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	0.84	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	-	0.8	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	0.45	-	2.5	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	1.1	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Fluorene	mg/kg	0.05	MCERTS	0.31	-	1.6	-	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Phenanthrene	mg/kg	0.05	MCERTS	1.7	-	13	-	-
Anthracene	mg/kg	0.05	MCERTS	0.39	-	3.0	-	-
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	0.8	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	0.8	-	-
Fluoranthene	mg/kg	0.05	MCERTS	2.4	-	15	-	-
Pyrene	mg/kg	0.05	MCERTS	2.2	-	14	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.3	-	8.2	-	-
Chrysene	mg/kg	0.05	MCERTS	1.2	-	5.9	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.4	-	6.9	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.49	-	3.7	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.2	-	6.8	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.54	-	3.0	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.63	-	3.5	-	-

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255622	1255623	1255624	1255625	1255626
Sample Reference				TP6	TP7	TP8	TP9	TP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.50	1.00	0.20	0.50
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
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	36	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	14	4.0	8.6	15	16
Total mass of sample received	kg	0.001	NONE	1.1	1.7	1.2	1.2	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	0.001	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	0.001	< 0.001

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	9.2	10.7	9.4	9.4
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	280	170	280	300	290
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.14	0.084	0.14	0.15	0.15
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	139	83.7	142	150	146
Organic Matter	%	0.1	MCERTS	7.8	0.3	2.0	4.4	2.7

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.44	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	1.4	< 0.05	< 0.05	0.26	0.24
Anthracene	mg/kg	0.05	MCERTS	0.29	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	2.2	< 0.05	< 0.05	0.35	0.36
Pyrene	mg/kg	0.05	MCERTS	2.4	< 0.05	< 0.05	0.36	0.38
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	< 0.05	< 0.05	0.29	0.30
Chrysene	mg/kg	0.05	MCERTS	1.7	< 0.05	< 0.05	0.18	0.26
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.9	< 0.05	< 0.05	< 0.05	0.33
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.0	< 0.05	< 0.05	< 0.05	0.20
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.9	< 0.05	< 0.05	< 0.05	0.28
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.90	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	17.3	< 0.80	< 0.80	1.44	2.35
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	33	2.1	6.4	15	18
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	< 0.2	< 0.2	0.8	1.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	59	17	18	33	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	230	18	58	760	150
Lead (aqua regia extractable)	mg/kg	1	MCERTS	970	12	36	430	170
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.5	0.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	42	22	25	26	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	220	55	52	1100	360

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255622	1255623	1255624	1255625	1255626
Sample Reference				TP6	TP7	TP8	TP9	TP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.50	1.00	0.20	0.50
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1.1	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	2.2	5.5	2.6
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	8.2	18	11
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	33	220	120
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	44	250	130
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1.9	2.1
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	3.2	< 2.0	< 2.0	5.6	6.3
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	16	< 10	< 10	14	10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	50	< 10	< 10	150	83
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	70	< 10	< 10	170	100
TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255622	1255623	1255624	1255625	1255626
Sample Reference				TP6	TP7	TP8	TP9	TP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.50	1.00	0.20	0.50
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

VOCs

Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Chloroethane	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1,1,2-Tetrachloroethane	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	-	-
Styrene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Tribromomethane	µg/kg	1	NONE	< 1.0	-	< 1.0	-	-
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	< 1.0	-	-

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255622	1255623	1255624	1255625	1255626
Sample Reference				TP6	TP7	TP8	TP9	TP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.50	1.00	0.20	0.50
Date Sampled				25/06/2019	25/06/2019	25/06/2019	25/06/2019	25/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	< 0.2	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	< 0.2	-	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Naphthalene	mg/kg	0.05	MCERTS	0.44	-	< 0.05	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	0.6	-	< 0.1	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Phenanthrene	mg/kg	0.05	MCERTS	1.4	-	< 0.05	-	-
Anthracene	mg/kg	0.05	MCERTS	0.29	-	< 0.05	-	-
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Fluoranthene	mg/kg	0.05	MCERTS	2.2	-	< 0.05	-	-
Pyrene	mg/kg	0.05	MCERTS	2.4	-	< 0.05	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	-	< 0.05	-	-
Chrysene	mg/kg	0.05	MCERTS	1.7	-	< 0.05	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.9	-	< 0.05	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.0	-	< 0.05	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.9	-	< 0.05	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.90	-	< 0.05	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	-	< 0.05	-	-

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255627	1255628	1255629	1255630	1255631
Sample Reference				WS1	WS1	WS1 D	WS2	WS7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.55	2.75	4.20	0.60	0.95
Date Sampled				26/06/2019	26/06/2019	26/06/2019	25/06/2019	26/06/2019
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	%	N/A	NONE	16	36	20	6.2	15
Total mass of sample received	kg	0.001	NONE	1.1	1.6	1.3	1.7	1.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	-	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.002	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.002	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10.2	8.0	7.7	11.2	8.9
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	360	720	-	220	180
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.18	0.36	0.11	0.11	0.092
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	181	361	-	112	92.4
Organic Matter	%	0.1	MCERTS	6.3	7.1	-	0.3	2.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.31	5.3	-	< 0.05	0.94
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.66	-	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	5.0	-	< 0.05	1.3
Fluorene	mg/kg	0.05	MCERTS	< 0.05	6.7	-	< 0.05	0.92
Phenanthrene	mg/kg	0.05	MCERTS	1.0	8.8	-	< 0.05	5.7
Anthracene	mg/kg	0.05	MCERTS	0.15	3.0	-	< 0.05	1.1
Fluoranthene	mg/kg	0.05	MCERTS	1.3	3.8	-	< 0.05	5.9
Pyrene	mg/kg	0.05	MCERTS	1.3	4.8	-	< 0.05	5.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.2	3.6	-	< 0.05	3.5
Chrysene	mg/kg	0.05	MCERTS	0.95	2.3	-	< 0.05	2.6
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.2	2.4	-	< 0.05	3.2
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.54	0.58	-	< 0.05	1.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.1	2.3	-	< 0.05	2.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.46	0.63	-	< 0.05	1.3
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	0.51	0.78	-	< 0.05	1.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	9.95	50.5	-	< 0.80	37.3
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	67	19	-	1.9	43
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.5	-	< 0.2	1.0
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	-	< 1.2	1.6
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	160	110	-	20	220
Copper (aqua regia extractable)	mg/kg	1	MCERTS	180	110	-	20	430
Lead (aqua regia extractable)	mg/kg	1	MCERTS	670	200	-	29	1100
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	1.6	-	< 0.3	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	54	35	-	18	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	130	-	48	400

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255627	1255628	1255629	1255630	1255631
Sample Reference				WS1	WS1	WS1 D	WS2	WS7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.55	2.75	4.20	0.60	0.95
Date Sampled				26/06/2019	26/06/2019	26/06/2019	25/06/2019	26/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	10	-	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	15	-	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	11	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	1.1	-	1.4	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	18	-	5.9	3.2
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	35	-	9.5	10
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	18	75	-	39	29
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	23	130	-	55	43
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	0.083	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	7.0	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	4.2	94	-	< 2.0	4.4
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	13	170	-	< 10	18
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	58	270	-	< 10	38
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	75	540	-	< 10	60
TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	-	< 1.0	< 1.0

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255627	1255628	1255629	1255630	1255631
Sample Reference				WS1	WS1	WS1 D	WS2	WS7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.55	2.75	4.20	0.60	0.95
Date Sampled				26/06/2019	26/06/2019	26/06/2019	25/06/2019	26/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

VOCs

Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	10	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	15	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	< 1.0	11	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	10	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	37	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255627	1255628	1255629	1255630	1255631
Sample Reference				WS1	WS1	WS1 D	WS2	WS7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.55	2.75	4.20	0.60	0.95
Date Sampled				26/06/2019	26/06/2019	26/06/2019	25/06/2019	26/06/2019
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.31	5.3	-	-	0.94
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	-	-	0.4
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	3.3	-	-	0.7
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.66	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	5.0	-	-	1.3
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	1.6	-	-	0.8
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	6.7	-	-	0.92
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	1.0	8.8	-	-	5.7
Anthracene	mg/kg	0.05	MCERTS	0.15	3.0	-	-	1.1
Carbazole	mg/kg	0.3	MCERTS	< 0.3	1.0	-	-	0.8
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	0.5	-	-	0.6
Fluoranthene	mg/kg	0.05	MCERTS	1.3	3.8	-	-	5.9
Pyrene	mg/kg	0.05	MCERTS	1.3	4.8	-	-	5.2
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.2	3.6	-	-	3.5
Chrysene	mg/kg	0.05	MCERTS	0.95	2.3	-	-	2.6
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.2	2.4	-	-	3.2
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.54	0.58	-	-	1.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.1	2.3	-	-	2.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.46	0.63	-	-	1.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.51	0.78	-	-	1.5

Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255632	1255633	1255735	1255736	
Sample Reference				WS7	WS6	TP4	TP10	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				1.80	0.55	1.00	1.75	
Date Sampled				26/06/2019	26/06/2019	25/06/2019	25/06/2019	
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	%	N/A	NONE	16	5.4	17	20	
Total mass of sample received	kg	0.001	NONE	1.5	1.4	1.2	1.7	

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	Not-detected	
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	11.8	7.3	7.6	
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	110	190	87	140	
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.055	0.094	0.044	0.071	
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	55.2	94.4	43.6	71.0	
Organic Matter	%	0.1	MCERTS	1.5	0.5	2.6	2.2	

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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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.0	1.8	12	9.5	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.2	0.2	0.2	
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	17	16	21	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	17	120	27	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	22	19	24	
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	22	9.8	21	24	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	61	37	63	67	

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Lab Sample Number				1255632	1255633	1255735	1255736	
Sample Reference				WS7	WS6	TP4	TP10	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				1.80	0.55	1.00	1.75	
Date Sampled				26/06/2019	26/06/2019	25/06/2019	25/06/2019	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	2.5	2.5	2.3	< 2.0	
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	9.3	< 8.0	< 8.0	
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	9.5	37	13	13	
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	20	49	22	21	

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	

TPH (C5 - C10)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	
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Analytical Report Number: 19-47608

Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255632	1255633	1255735	1255736	
Sample Reference				WS7	WS6	TP4	TP10	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				1.80	0.55	1.00	1.75	
Date Sampled				26/06/2019	26/06/2019	25/06/2019	25/06/2019	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

VOCs

Chloromethane	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
Chloroethane	µg/kg	1	NONE	-	-	< 1.0	< 1.0	
Bromomethane	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
Vinyl Chloride	µg/kg	1	NONE	-	-	< 1.0	< 1.0	
Trichlorofluoromethane	µg/kg	1	NONE	-	-	< 1.0	< 1.0	
1,1-Dichloroethene	µg/kg	1	NONE	-	-	< 1.0	< 1.0	
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Trichloromethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	< 1.0	< 1.0	
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Tetrachloromethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Trichloroethene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Dibromomethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Bromodichloromethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
Tetrachloroethene	µg/kg	1	NONE	-	-	< 1.0	< 1.0	
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
Chlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,1,1,2-Tetrachloroethane	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	
Styrene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Tribromomethane	µg/kg	1	NONE	-	-	< 1.0	< 1.0	
o-Xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Isopropylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Bromobenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0	< 1.0	

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Project / Site name: Mondi Site, Ramsbottom

Lab Sample Number				1255632	1255633	1255735	1255736	
Sample Reference				WS7	WS6	TP4	TP10	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				1.80	0.55	1.00	1.75	
Date Sampled				26/06/2019	26/06/2019	25/06/2019	25/06/2019	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	< 0.1	< 0.1	
Phenol	mg/kg	0.2	ISO 17025	-	-	< 0.2	< 0.2	
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
4-Methylphenol	mg/kg	0.2	NONE	-	-	< 0.2	< 0.2	
Isophorone	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
4-Chloroaniline	mg/kg	0.1	NONE	-	-	< 0.1	< 0.1	
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	< 0.1	< 0.1	
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	< 0.1	< 0.1	
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Acenaphthene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	< 0.3	< 0.3	
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
Fluorene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Azobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
Phenanthrene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Carbazole	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	
Anthraquinone	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	
Fluoranthene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Pyrene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	< 0.3	< 0.3	
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Chrysene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	



Analytical Report Number: **19-47608**
Project / Site name: **Mondi Site, Ramsbottom**
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
1255613	TP1	1.00	122	Loose Fibres	Chrysotile & Amosite	< 0.001	< 0.001
1255614	TP2	0.50	119	Loose Fibres	Chrysotile & Amosite	< 0.001	< 0.001
1255615	TP3	0.15	118	Loose Fibres	Chrysotile & Amosite	< 0.001	< 0.001
1255616	TP3	1.50	128	Loose Fibres	Chrysotile	< 0.001	< 0.001
1255617	TP4	0.50	142	Loose Fibres	Chrysotile	< 0.001	< 0.001
1255619	TP5	1.70	155	Loose Fibres	Chrysotile	< 0.001	< 0.001
1255625	TP9	0.20	139	Loose Fibrous Debris	Chrysotile	0.001	0.001
1255626	TP10	0.50	161	Loose Fibres	Chrysotile	< 0.001	< 0.001
1255627	WS1	0.55	131	Loose Fibrous Debris	Chrysotile	0.002	0.002

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Analytical Report Number : 19-47608

Project / Site name: Mondri Site, Ramsbottom

* 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 *
1255612	TP1	None Supplied	0.10	Brown loam and clay with vegetation and gravel
1255613	TP1	None Supplied	1.00	Grey clay and sand with gravel and vegetation.
1255614	TP2	None Supplied	0.50	Brown clay and loam with gravel and vegetation.
1255615	TP3	None Supplied	0.15	Brown loam and clay with vegetation and gravel
1255616	TP3	None Supplied	1.50	Brown sandy clay with gravel and vegetation.
1255617	TP4	None Supplied	0.50	Light brown sand with gravel.
1255618	TP5	None Supplied	0.40	Light brown sand with gravel.
1255619	TP5	None Supplied	1.70	Black sandy gravel with stones and clinker**
1255620	TP5	None Supplied	2.25	Brown clay and sand.
1255621	TP5 D	None Supplied	2.25	Grey clay and sand.
1255622	TP6	None Supplied	0.50	Grey gravelly sand with clinker.
1255623	TP7	None Supplied	0.50	Grey sand with stones and gravel.
1255624	TP8	None Supplied	1.00	Brown sand with gravel and rubble.
1255625	TP9	None Supplied	0.20	Brown loam and sand with vegetation and gravel.
1255626	TP10	None Supplied	0.50	Brown loam and sand with vegetation and rubble.
1255627	WS1	None Supplied	0.55	Brown sand with gravel and clinker
1255628	WS1	None Supplied	2.75	Grey clay and sand with gravel.
1255629	WS1 D	None Supplied	4.20	Brown clay and sand.
1255630	WS2	None Supplied	0.60	Grey sand with rubble and gravel.
1255631	WS7	None Supplied	0.95	Brown clay and sand with chalk and gravel
1255632	WS7	None Supplied	1.80	Brown clay and sand.
1255633	WS6	None Supplied	0.55	Brown sand with gravel and rubble.
1255735	TP4	None Supplied	1.00	Brown clay and sand.
1255736	TP10	None Supplied	1.75	Brown clay and sand.

** NON MCERTS MATRIX

Analytical Report Number : 19-47608

Project / Site name: Mondri Site, Ramsbottom

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
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
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	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
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests"	L009-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-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
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 based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
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
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	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 30°C.

**Kris Rodway**

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Analytical Report Number : 19-58026

Project / Site name:	Mondi Site, Ramsbottom	Samples received on:	05/09/2019
Your job number:	19ECH016	Samples instructed on:	05/09/2019
Your order number:	BG3460	Analysis completed by:	11/09/2019
Report Issue Number:	1	Report issued on:	11/09/2019
Samples Analysed:	6 water samples		

Signed: 

Zina Abdul Razzak
Senior Quality Specialist
For & on behalf of i2 Analytical Ltd.

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

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

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

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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: 19-58026

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3460

Lab Sample Number	1308528	1308529	1308530	1308531	1308532
Sample Reference	US1	MS1	MS1b	MS2	MS3
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	04/09/2019	04/09/2019	04/09/2019	04/09/2019	04/09/2019
Time Taken	1300	1340	1330	1310	1320
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

General Inorganics

pH	pH Units	N/A	ISO 17025	7.8	7.7	7.8	7.4	7.5
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	29500	13600	29900	15200	14500
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	12.8	2.45	13.1	1.95	2.82

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.75	0.43	0.98	0.29	0.61
Boron (dissolved)	µg/l	10	ISO 17025	22	< 10	21	< 10	< 10
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	< 0.02	0.05	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.7	0.4	1.4	0.7	0.5
Copper (dissolved)	µg/l	0.5	ISO 17025	12	5.6	10	3.4	12
Lead (dissolved)	µg/l	0.2	ISO 17025	2.1	0.4	2.0	0.3	0.8
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.2	< 0.5	4.0	0.6	0.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	< 0.6	< 0.6	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	9.6	4.8	14	3.2	8.5

Monoaromatics & Oxygenates

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0



Analytical Report Number: 19-58026

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3460

Lab Sample Number	1308528	1308529	1308530	1308531	1308532
Sample Reference	US1	MS1	MS1b	MS2	MS3
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	04/09/2019	04/09/2019	04/09/2019	04/09/2019	04/09/2019
Time Taken	1300	1340	1330	1310	1320
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

Petroleum Hydrocarbons

TPH1 (C10 - C40)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
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TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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



Analytical Report Number: 19-58026

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3460

Lab Sample Number	1308533						
Sample Reference	DS1						
Sample Number	None Supplied						
Depth (m)	None Supplied						
Date Sampled	04/09/2019						
Time Taken	1240						
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status				

General Inorganics

pH	pH Units	N/A	ISO 17025	7.8				
Total Cyanide	µg/l	10	ISO 17025	< 10				
Sulphate as SO ₄	µg/l	45	ISO 17025	29800				
Sulphide	µg/l	5	NONE	< 5.0				
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	10.8				

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10				
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01				
Fluorene	µg/l	0.01	ISO 17025	< 0.01				
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01				
Anthracene	µg/l	0.01	ISO 17025	< 0.01				
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Pyrene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Chrysene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01				

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16				
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.72				
Boron (dissolved)	µg/l	10	ISO 17025	22				
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.05				
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.2				
Copper (dissolved)	µg/l	0.5	ISO 17025	11				
Lead (dissolved)	µg/l	0.2	ISO 17025	2.0				
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05				
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.4				
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6				
Zinc (dissolved)	µg/l	0.5	ISO 17025	11				

Monoaromatics & Oxygenates

Benzene	µg/l	1	ISO 17025	< 1.0				
Toluene	µg/l	1	ISO 17025	< 1.0				
Ethylbenzene	µg/l	1	ISO 17025	< 1.0				
p & m-xylene	µg/l	1	ISO 17025	< 1.0				
o-xylene	µg/l	1	ISO 17025	< 1.0				
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0				



Analytical Report Number: 19-58026

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3460

Lab Sample Number				1308533				
Sample Reference				DS1				
Sample Number				None Supplied				
Depth (m)				None Supplied				
Date Sampled				04/09/2019				
Time Taken				1240				
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Petroleum Hydrocarbons

TPH1 (C10 - C40)	µg/l	10	NONE	< 10				
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TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10				

TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10				

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



Analytical Report Number : 19-58026

Project / Site name: Mondri Site, Ramsbottom

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L0738-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 *for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser. Accredited matrices: SW PW GW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

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.

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Analytical Report Number : 19-49517

Project / Site name:	Mondi Site, Ramsbottom	Samples received on:	12/07/2019
Your job number:	19ECH016	Samples instructed on:	12/07/2019
Your order number:	BG3386	Analysis completed by:	18/07/2019
Report Issue Number:	1	Report issued on:	18/07/2019
Samples Analysed:	8 water samples		

Signed: *Karolina Marek*

Karolina Marek
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

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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: 19-49517

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3386

Lab Sample Number	1265291	1265292	1265293	1265294	1265295
Sample Reference	WS1	WS8	WS16	US1	MS1
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	11/07/2019	11/07/2019	11/07/2019	11/07/2019	11/07/2019
Time Taken	1100	1140	1030	1155	1050
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

General Inorganics

pH	pH Units	N/A	ISO 17025	7.9	7.3	7.6	7.8	7.6
Total Cyanide	µg/l	10	ISO 17025	14	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	67500	24600	18100	55700	16500
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	8.07	3.84	1.15	5.28	1.30

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Analytical Report Number: 19-49517

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3386

Lab Sample Number				1265291	1265292	1265293	1265294	1265295
Sample Reference				WS1	WS8	WS16	US1	MS1
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				11/07/2019	11/07/2019	11/07/2019	11/07/2019	11/07/2019
Time Taken				1100	1140	1030	1155	1050
Analytical Parameter (Water Analysis)				Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	9.35	0.86	6.48	0.75	0.48
Boron (dissolved)	µg/l	10	ISO 17025	100	49	28	28	< 10
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.05	0.05	0.04	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.8	2.9	3.7	2.1	1.2
Copper (dissolved)	µg/l	0.5	ISO 17025	5.3	2.1	5.5	6.2	6.8
Lead (dissolved)	µg/l	0.2	ISO 17025	0.6	0.5	3.6	0.4	0.5
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.3	8.6	2.2	2.5	0.8
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	0.9	1.4	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.1	3.5	8.0	6.2	8.4

Monoaromatics & Oxygenates

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH1 (C10 - C40)	µg/l	10	NONE	41	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	26	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	15	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	41	< 10	< 10	< 10	< 10

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



Analytical Report Number: 19-49517

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3386

Lab Sample Number	1265296	1265297	1265298		
Sample Reference	MS2	MS3	DS1		
Sample Number	None Supplied	None Supplied	None Supplied		
Depth (m)	None Supplied	None Supplied	None Supplied		
Date Sampled	11/07/2019	11/07/2019	11/07/2019		
Time Taken	1115	1130	1215		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

General Inorganics

pH	pH Units	N/A	ISO 17025	7.7	7.6	7.8		
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10		
Sulphate as SO ₄	µg/l	45	ISO 17025	18400	16500	50100		
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0		
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	1.22	1.13	5.56		

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10		
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16		
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Analytical Report Number: 19-49517

Project / Site name: Mondri Site, Ramsbottom

Your Order No: BG3386

Lab Sample Number	1265296	1265297	1265298		
Sample Reference	MS2	MS3	DS1		
Sample Number	None Supplied	None Supplied	None Supplied		
Depth (m)	None Supplied	None Supplied	None Supplied		
Date Sampled	11/07/2019	11/07/2019	11/07/2019		
Time Taken	1115	1130	1215		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.48	0.43	0.75		
Boron (dissolved)	µg/l	10	ISO 17025	< 10	< 10	27		
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	0.04		
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.6	1.2	2.0		
Copper (dissolved)	µg/l	0.5	ISO 17025	6.1	12	6.0		
Lead (dissolved)	µg/l	0.2	ISO 17025	0.2	1.0	1.1		
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05		
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.7	1.0	4.5		
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6		
Zinc (dissolved)	µg/l	0.5	ISO 17025	9.3	3.1	12		

Monoaromatics & Oxygenates

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		

Petroleum Hydrocarbons

TPH1 (C10 - C40)	µg/l	10	NONE	< 10	< 10	< 10		
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TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10		

TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10		

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



Analytical Report Number : 19-49517

Project / Site name: Mondri Site, Ramsbottom

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L0738-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 *for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser. Accredited matrices: SW PW GW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

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.

APPENDIX G

- (i) Geotechnical Testing Results (N/A)

APPENDIX H

(i) Gas Monitoring Data

Date of Monitoring: 11/07/19

Notes: Monitoring order is left to right across the table Monitoring should be for not less than 3 minutes. However, if high concentrations of gases are initially recorded, monitoring should be for up to 10 minutes

Relevant Information at the Time of Monitoring	
Monitored by:	RD
Weather:	Overcast with dark cloud, dry, cool, calm.
Equipment Used:	GA5000
	Solinst Mini Interface Meter
Visible signs of damage/stress:	N/A
Other Comments/Observations:	Pressure steady.

Date of Monitoring: 7/8/19

Notes: Monitoring order is left to right across the table Monitoring should be for not less than 3 minutes. However, if high concentrations of gases are initially recorded, monitoring should be for up to 10 minutes

Relevant Information at the Time of Monitoring	
Monitored by:	RD
Weather:	Blue sky with heavy cloud, occasional rain with sunny intervals, cool, wet.
Equipment Used:	GA5000
	Solinst Mini Interface Meter
Visible signs of damage/stress:	N/A
Other Comments/Observations:	Pressure rising.

Date of Monitoring: 20/08/19

Notes:
Monitoring order is left to right across the table
Monitoring should be for not less than 3 minutes. However, if high concentrations of gases are initially recorded, monitoring should be for up to 10 minutes

Relevant Information at the Time of Monitoring	
Monitored by:	RD
Weather:	Blue sky with moderate cloud and sunny intervals, cool, damp.
Equipment Used:	GA5000
	Solinst Mini Interface Meter
Visible signs of damage/stress:	N/A
Other Comments/Observations:	Pressure rising.

Date of Monitoring: 04/09/19

Notes: Monitoring order is left to right across the table Monitoring should be for not less than 3 minutes. However, if high concentrations of gases are initially recorded, monitoring should be for up to 10 minutes

Relevant Information at the Time of Monitoring	
Monitored by:	RD
Weather:	Overcast with moderate cloud, heavy rain, calm, cool, wet.
Equipment Used:	GA5000
	Solinst Mini Interface Meter
Visible signs of damage/stress:	WS8 - vehicle parked in front of access.
Other Comments/Observations:	Pressure stable.

Date of Monitoring: 24/09/19

Notes: Monitoring order is left to right across the table Monitoring should be for not less than 3 minutes. However, if high concentrations of gases are initially recorded, monitoring should be for up to 10 minutes

Relevant Information at the Time of Monitoring	
Monitored by:	RD
Weather:	Overcast with moderate cloud, occasional drizzle, calm, cool, wet.
Equipment Used:	GA5000
	Solinst Mini Interface Meter
Visible signs of damage/stress:	N/A
Other Comments/Observations:	Pressure rising.

Date of Monitoring: 23/10/19

Notes: Monitoring order is left to right across the table Monitoring should be for not less than 3 minutes. However, if high concentrations of gases are initially recorded, monitoring should be for up to 10 minutes
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Relevant Information at the Time of Monitoring	
Monitored by:	RD
Weather:	Overcast with light fog, dry, calm, cool.
Equipment Used:	GA5000
	Solinst Mini Interface Meter
Visible signs of damage/stress:	N/A
Other Comments/Observations:	Pressure falling.

APPENDIX I

(i) Conceptual Model

The report aims to identify land which could potentially be affected by contamination, such that it could affect the value or re-use of the land, or such that mitigation would be required for certain proposed end uses of the land.

The assessment also aims to identify land which would be regarded as 'contaminated land' under the terms of the Environmental Protection Act 1990, Part IIa. This act includes a stricter test for contaminated land than that outlined above. Land is considered to be contaminated if either:

- the land is causing significant harm to people, ecosystems or infrastructure; or
- there is a significant possibility that such harm could be caused; or
- Pollution of controlled waters is being, or is likely to be, caused.

The following situations are defined as being where harm is to be regarded as significant:

- chronic or quite toxic effect, serious injury or death to humans;
- irreversible or other adverse harm to the ecological system;
- substantial damage to or failure of buildings;
- death of, or disease or other physical damage affecting, livestock or crops;
- Pollution of controlled waters.

The risk assessment uses a 'Source-Pathway-Receptor' methodology for assessing whether a source of contamination could potentially lead to harmful consequences. This means that there needs to be a pollutant linkage from source to receptor for harm to be caused, this linkage consisting of:

- a source of pollution;
- a pathway for the pollutant to move along;
- A receptor that is affected by the pollutant.

As an example, the pollutant source could be an identified leak of oil or an area of dumped waste.



The pathways could include transport of the contaminant by groundwater, surface water, windblown dust, or vapours, and for human receptors will include the means, by which contaminants enter the body, for example skin contact, ingestion and inhalation.

Receptors include people, other living organisms, the built environment and groundwater and surface waters (these latter two also being contaminant pathways).

The source-pathway-receptor methodology relationship allows an assessment of the environmental risk to be determined, based on the nature of the source, the degree of exposure of the receptor to the source and the sensitivity of the receptor.

This section of the report is based on the information set out in the previous sections of the report and should not be read independently of such sections.

Initial Conceptual Model

From the available information the preliminary conceptual model is visualised as follows:

Target (Receptor)	POTENTIAL SOURCE-PATHWAY LINKAGE
Site Users / Residents	Inhalation of soil gas, odours or dust.
	Ingestion of, and skin contact with, contaminated soil.
	Ingestion of contaminants in vegetables etc. or in soils adhering to vegetables, etc.
Construction/ Maintenance Workers.	Inhalation of soil gas, odours or dust
	Ingestion of, and skin contact with, contaminated soil
Plants	Adverse effects on growth caused by presence of contaminants in soil
Buildings and Structures	Flow of ground gas into buildings. Asphyxiation, toxicity, explosion and fire hazards
	Sulphate attack of foundations
	Hydrocarbons penetrating plastic water supply pipes
Groundwater	Migration of soluble contaminants into groundwater on or off site. Migration of oils into groundwater on or off site.
Surface Water	Migration of soluble contaminants and/or direct run-off of contaminants. Migration of oils into groundwater on or off site.

Initial Environmental Risk Assessment

General

It is accepted that an environmental risk assessment can be based on a source-pathway-target model. An examination is carried out as to whether a target will be at risk from a contamination source, that a source exists, and whether there are any pathways (routes of exposure) which might actually link the source to the target.

Environmental risk assessments rely heavily on numerical trigger concentrations or guidelines because exposure of targets to contamination is difficult to quantify directly. Quantification of risk is therefore mainly undertaken for general scenarios in order to derive trigger levels. These are derived for various contaminants for particular targets and routes of exposure. An example of a sensitive target would be users of a domestic back garden, where routes of exposure might be skin contact, dust inhalation, direct ingestion and indirect ingestion via cultivation and consumption of fruit and vegetables.

In March 2002, the first parts of the new CLEA risk assessment guidance were released by DEFRA/Environment Agency.

The risk assessment approach is an extension of the 'fit for use' concept whereby land is cleaned up to a standard fit for the proposed use, that is, so all remaining risks are acceptable. However, as well as being 'fit for use', the environmental risk assessment approach also addresses the soil and water environment so that these are also safeguarded where necessary. For example if a site was contaminated with heavy metals and the development comprised the proposed construction of hard standings and buildings only, the fit-for-use approach might require no remediation for the site. However, consideration of the wider environment needs to address whether groundwater is being contaminated, and if so whether remediation is required for this reason.

The following classification presented by CIRIA has been used in the assessment of risk:

Estimation of risk from consideration of magnitude, consequences and probabilities				
Probability	Consequences			
	Severe	Moderate	Mild	Minor
High	Very high	High	Moderate	Moderate / Low
Medium	High	Moderate	Moderate / Low	Low
Low	Moderate	Moderate / Low	Low	Very Low
Unlikely	Moderate / Low	Low	Very Low	Very Low

Reference: Contaminated Land Risk Management; A Guide to Good Practice, CIRIA C552:2001.

CIRIA C665 Situation A Ground Gas Conceptual Model

The risk table contained in C665 is basically a modified risk assessment from CIRIA 152 1995, by which a conceptual model and semi-quantitative risk assessment can be made.

APPENDIX J

(i) Notes on Ground Gas

Ground Gas

The Building Regulations and BRE Report 212 state that precautions are not mandatory against carbon dioxide unless 5.0% volume is exceeded. These documents do not give a threshold level for methane, but Baker suggests that this level is 0.1% volume. For methane up to 1.0% volume, and carbon dioxide above 5.0% volume, the Building Regulations and BRE Report state that passive measures may be adopted. Above 1.0% methane further specific guidance must be sought.

CIRIA Report 149 gives further guidance on the appropriate precautions for various gas regimes, called characteristic situations in this report. In the DETR Guide for Design by Ove Arup, various types of passive measures are assessed for performance with different gas regimes. The assessments used computational fluid dynamic (CFD) modelling.

A gas regime is essentially defined by two parameters:

- i) The concentration of the gas (e.g. % methane)
- ii) The emission rate of the gas from the ground.

The fact that two parameters are used is problematic if the site is to be classified on the basis of Table 28 in CIRIA Report 149. This is because high gas concentrations are often encountered which fall into an onerous gas regime; whereas the low flow rates which are also frequently encountered fall into less onerous gas regimes.

In order to use the Guide for Design to decide if passive measures are suitable, it is necessary to combine the gas concentration and the emission rate.

Three recent publications are used for ground gas risk assessment:

- CIRIA C665 (2007) for high rise residential / flats,
- 'Guidance on Evaluation of Development Proposals on Sites Where Methane and Carbon Dioxide are Present' Report Edition No.04 March 2007 NHBC – designed for use with low rise residential properties,
- BS8485:2015 (June 2015) 'Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings'

These documents improve upon the approach used in previous CIRIA and Wilson /Card Papers, by placing emphasis on gas flow rates, but still retain some reliance on the gas concentrations themselves.

CIRIA C665 Situation A Ground Gas Conceptual Model

The risk table contained in C665 is basically a modified risk assessment from CIRIA 152 1995, by which a conceptual model and semi-quantitative risk assessment can be made.

High Rise / Flats (CIRIA 665 Table 8.5)

Characteristic Situation (CIRIA Report 149)	Risk Classification	Gas Screening Value (CH₄ or CO₂) (l/hr) ¹	Additional Factors	Typical Source of Generation
1	Very Low Risk	<0.07	Typically methane $\leq 1\%v/v$ and/or carbon dioxide $\leq 5\%v/v$. Otherwise consider increase to Situation 2	Natural soils with low Organic content. "Typical" Made Ground
2	Low risk	<0.7	Borehole flow rate not to exceed 70l/hr. Otherwise consider increase to Situation 3	Natural soil, high peat/organic content. "Typical" Made Ground
3	Moderate Risk	<3.5		Old landfill, inert waste, Mine working flooded
4	Moderate to High Risk	<15	Quantitative risk assessment required to evaluate scope of protective measures	Mine working susceptible to flooding, completed landfill (WMP 26B criteria)
5	High Risk	<70		Mine working unflooded inactive with shallow workings near surface
6	Very High Risk	>70		Recent landfill site
Notes: 1. Gas screening value: litres of gas/hour is calculated by multiplying the gas concentration (%) by the measured borehole flow rate (l/hr); 2. Site characterisation should be based on gas monitoring of concentrations and borehole flow rates for the minimum periods as defined within CIRIA Report 665; 3. Source of gas and generation potential/performance must be identified; 4. Soil gas investigation to be in accordance with guidance contained within CIRIA Report 665; 5. If there is no detectable flow, use the limit of detection of the instrument; 6. The boundaries between the Partners in Technology classifications do not fit exactly with the boundaries for the above classification.				

Typical scope of protective measures (extract from CIRIA Report 665 Table 8.6)

Characteristic Situation (from Table 8.5)	Number of Levels of Protection	Typical Scope of Protective Measures for Residential Building (not low-rise traditional housing) ¹
1	None	No special precautions
2	2	a) Reinforced concrete cast in situ floor slab (suspended, non-suspended or raft) with at least 1200g DPM and under-floor venting b) Beam and block or pre-cast concrete and 2000 g DPM/reinforced gas membrane and under-floor venting. All joints and penetrations sealed.
3	2	All types of floor slab as above. All joints and penetrations sealed. Proprietary gas resistant membrane and passively ventilated or positively pressurised under-floor sub-space.
4	3	All types of floor slab as above. All joints and penetrations sealed. Proprietary gas resistant membrane and passively ventilated under-floor subspace or positively pressurised under-floor sub-space, over-site capping or blinding and in ground venting layer
5	4	Reinforced concrete cast in situ floor slab (suspended, non-suspended or raft). All joints and penetrations sealed. Proprietary gas resistant membrane and ventilated or positively pressurised under-floor sub-space, over-site capping and in ground venting layer and in ground venting wells or barriers.
6	5	Not suitable unless gas regime is reduced first and quantitative risk assessment carried out to assess design of protection measures in conjunction with foundation design.

Notes:

1. Not suitable for use with low rise traditional housing. (Use the NHBC document instead);
2. Typical scope of protective measures may be rationalised for specific developments on the basis of quantitative risk assessments;
3. Note the type of protection is given for illustration purposes only. Information on the detailing and construction of passive protection measures is given in BR414 (Johnson, 2001). Individual site specific designs should provide the same number of separate protective methods for any given characteristic situation. See CIRIA Report 49;
4. In all cases there should be minimum penetration of ground slabs by services and minimum number of confined spaces such as cupboards above the ground slab. Any confined spaces should be ventilated;
5. Foundation design must minimise differential settlement particularly between structural elements and ground-bearing slabs;
6. Commercial buildings with basement car parks, provided with ventilation in accordance with the Building Regulations, may not require gas protection for Characteristic Situations 3 and 4;
7. Floor slabs should provide an acceptable formation on which to lay the gas membrane. If a block beam floor is used it should be well detailed so it has no voids in it that membranes have to span, and all holes for service penetrations should be filled. The minimum density of the blocks should be 600kg/m³ and the top surface should have a 4:1 ratio sand to cement grout brushed into all joints before placing any membrane (this is also good practice to stabilise the floor and should be carried out regardless of the need for ground gas membranes);
8. The ground gas-resistant membrane can also act as the damp-proof membrane;
9. Based on Building Regulations Approved Document C (Office of the Deputy Prime Minister, 2004a), which states that "a membrane below the concrete could be formed with a sheet of polyethylene, which should be at least 300µ thick (1200 gauge)". Please note the alteration from 300mm (as stated in the Approved Document C) to 300µ, as 300mm is a typographical error that has been recognised and corrected for within this report and CIRIA Report 665.

Low Rise Residential (NHBC)

Table 14.1: Gas Risk Assessment - Traffic Lights with Typical Maximum Concentrations and Gas Screening Values

Classification	Methane ¹		Carbon Dioxide ¹	
	Typical Maximum Concentration ³ (%v/v)	Gas Screening Value ^{2,4} (l/hr)	Typical Maximum Concentration ³ (%v/v)	Gas Screening Value ^{2,4} (l/hr)
Green	1	0.13	5	0.78
Amber 1	5	0.63	10	1.60
Amber 2	20	1.60	30	3.10
Red				

Notes:

1. The worst-case ground gas regime identified on the site, either methane or carbon dioxide, at the worst case temporal conditions that the site may be expected to encounter will be the decider as to what Traffic Light is allocated;
2. Borehole Gas Volume Flow Rate, in litres per hour as defined in Wilson and Card (1999), is the borehole flow rate multiplied by the concentration in the air stream of the particular gas being considered;
3. The Typical Maximum Concentrations can be exceeded in certain circumstances should the Conceptual Site Model indicate it is safe to do so;
4. The Gas Screening Value thresholds should not generally be exceeded without the completion of a detailed ground gas risk assessment taking into account site-specific conditions.

Table 14.2: Ground Gas Protection Measures Required for the Traffic Lights

Traffic Light	Ground Gas Protection Measures Required
Green	Ground gas protection measures are not required. (note based on standard NHBC house detail with 150mm void space under suspended floor)
Amber 1	Low-level ground gas protection measures are required, using a membrane and ventilated sub-floor void that creates a permeability contrast to limit the ingress of gas into buildings. Gas protection measures are to be installed as prescribed in BRE 414. Ventilation of the sub-floor void should be designed to provide a minimum of one complete volume change per 24 hours.
Amber 2	High-level ground gas protection measures are required, creating a permeability contrast to prevent ingress of gas into buildings. Gas protection measures are to be installed as prescribed in BRE 414. Membranes used should always be fitted by a specialist contractor and should be fully certified (see Appendix G). As with Amber 1, ventilation of the sub-floor void should be designed to provide a minimum of one complete volume change per 24 hours.
Red	Standard residential housing is not normally acceptable without further Ground Gas Risk Assessment and/or possible remedial mitigation measures to reduce/remove the source of the ground gases. In certain circumstances, active protection methods could be applied, but only when there is a legal agreement assuring the management and maintenance of the system for the life of the property.

BS8485:2015 Code of Practice for design of protective measures for CH₄ and CO₂ ground gases for new buildings

Table 3 page 21: Building Types

	Type A	Type B	Type C	Type D
Ownership	Private	Private or commercial/public, possible multiple	Commercial/Public	Commercial/Industrial
Control (change of use, structural alterations, ventilation)	None	Some but not all	Full	Full
Room Sizes	Small	Small/medium	Small to large	large industrial/retail park style

Type A) Private ownership with no building management controls on alterations to the internal structure, the use of rooms, the ventilation of the rooms or the structural fabric of the building. Some small rooms present. Probably conventional building construction (rather than civil engineering). Examples include private housing and some retail premises.

Type B) Private or commercial property with central building management control of any alterations to the buildings or its uses but limited or no central building management control of the maintenance of the building, including gas protection measures. Multiple occupancy. Small to medium size rooms with passive ventilation of rooms and other internal spaces throughout the ground floor and basement areas. May be conventional building or civil engineering construction. Examples include managed apartments, multiple occupancy offices, some retail premises and parts of public buildings (such as schools, hospitals and leisure centres) and parts of hotels.

Type C) Commercial building with central building management control of any alterations to the building or its uses and central building management control of the maintenance of the building, including the gas protection measures. Small to large rooms with active ventilation or good passive ventilation of all rooms and other internal spaces throughout ground floor and basement areas. Probably civil engineering construction. Examples include offices, some retail premises and parts of some public buildings (such as schools, hospitals, leisure centres and parts of hotels).

Type D) Industrial style building having large volume internal spaces that are well ventilated. Corporate ownership with building management controls on alterations to the ground floor and basement of the building and on maintenance of ground gas protective measures. Probably civil engineering construction. Examples are retail park sales buildings, factory shop floors, warehouses. (Small rooms within these style buildings should be separately categorised as Type B or Type C).

Table 4 page 22: Gas Protection Score by CS and Type of Building

Characteristic Gas Situation, CS	NHBC Traffic Light	Required Gas Protection High Risk			
		High Risk		Medium Risk	Low Risk
		Type A Building	Type B Building	Type C Building	Type D Building
1	Green	0	0	0	0
2	Amber 1	3.5	3.5	2.5	1.5
3	Amber 2	4.5	4	3	2.5
4	Red	6.5 A)	5.5 A)	4.5	3.5
5		- B)	6.5 A)	5.5	4.5
6		- B)	- B)	7.5	6.5

NOTE Traffic light indications are taken from NHBC Report No: 10627-R01 (04) [3] and are mainly applicable to low-rise residential housing. These are for comparative purposes but the boundaries between the traffic light indications and CS values do not coincide.

- A) Residential buildings should not be built on CS4 or higher sites unless the type of construction or site circumstances allow additional levels of protection to be incorporated e.g. high performance ventilation or pathway intervention measures, and an associated sustainable system of management of maintenance of the gas control system e.g. in institutional and/or fully service contractual situations.
- B) The gas hazard is too high for this empirical method to be used to define the gas protection measures.

Selection of Appropriate Measures Section 7.2 BS8485:2015

Structural Barriers - Table 5 Gas Protection Scores for Structural Barriers pg 23

Floor and Substructure Design (Annex A)	Score ^{A)}
Precast suspended segmental subfloor (i.e. beam and block)	0
Cast in situ ground bearing floor slab (with nominal mesh reinforcement)	0.5
Cast in situ monolithic reinforced ground bearing raft or reinforced cast in situ suspended floor slab with minimal penetrations	1 or 1.5 ^{B)}
Basement floor and walls conforming to BS 8210:2009 Grade 2 waterproofing ^{C)}	2
Basement floor and walls conforming to BS 8210:2009 Grade 3 waterproofing ^{C)}	2.5
A) the scores are conditional on breaches of floor slabs etc being effectively sealed B) to achieve the score of 1.5 the raft or suspended slab should be well reinforced to control cracking and have minimal penetrations in cast in (A2.2.2) C) the score is conditional on the waterproofing not being used on the use of geosynthetic clay liner waterproofing product (see C3 Note 4)	

Ventilation Measures

Ventilation protection measures should be one of five types and points can only be scored for one of these measures;

- Pressure relief pathway only (no effective dispersal layer)
- Passive dispersal layer
- Active dispersal layer (fan suction)
- Active positive pressurisation (air blanket)
- Ventilated basement substructure present.

Note 1 - for Type A buildings active ventilation measures are inappropriate

Note 2 - There are a wide range of different media used to form gas dispersal layer for both passive and active systems, and are more likely to be developed

Note 3 - The types of media include expanded polystyrene void formers, geocomposite void formers, no (low) fines gravel and drains formed by perforated pipes or geocomposites.

Note 4 - The continuity of the media beneath the floor slab might be interrupted by ground beams, pile caps, edge beams and other intrusions extending below the level of the media blanket, which might significantly reduce the effectiveness of the dispersal layer.

Note 5 - The effective volume of the gas dispersal layer might be reduced by its placement on a soft layer (for example sand binding) which reduces its gas permeability and dispersal effectiveness. The effective volume would also be reduced or eliminated if the media became flooded with groundwater or clay heave.

Note 6 - The performance of passive systems can be significantly affected by the number and type of side ventilation terminals. Common side terminals are airbricks, low level vents and high level vent stacks. Guidance on side ventilation is given in Annex B

Table 6 Gas Protection Measures for Ventilation Protection Measures

Protection Element/System	Score	Comments
a) Pressure relief pathway (usually formed of low fines gravel or with a thin geocomposite blanket or strips terminating in a gravel trench external to the building).	0.5	Whenever possible a pressure relief pathway (as a min) should be installed in all gas protection measures systems. If the layer has a low perm and/or is not terminated in a venting trench (or similar) then the score is zero.
b) Passive sub floor dispersal layer: Very good performance Good performance Media used to provide dispersal layer are *Clear void *Polystyrene void former blanket *Geocomposite void former blanket *No fines gravel layer with gas drains *No fines gravel layer	2.5 1.5	Performance criteria for methane and carbon dioxide are shown in Fig B.6 and B.7 respectively. The ventilation effectiveness of different media depends on the number of different factors including the transmissivity of the medium, the width of the building, the side ventilation spacing and type and thickness of the layer. The selected score should be assigned taking into account the recommendations in Annex B. Passive ventilation should be designed to meet at least good performance, see Annex B.
c) Active dispersal layer , usually comprising fans with active abstraction (suction) from a subfloor dilution layer, with roof level vents. The dilution layer may comprise a clear void or be formed of geocomposite or polystyrene void formers.	1.5-2.5	This system relies on continued serviceability of the pumps, therefore alarm and response systems should be in place. There should be a robust management systems in place to ensure the continued maintenance of the system, including pumps and vents. Active ventilation should always be designed for good performance as described in Annex B.
d) Active pressurisation by the creation of a blanket of external fresh air beneath the building floor slab by pumps supplying air to the points across the central footprint of the building into a permeable layer, usually formed of a thin geocomposite blanket.	1.5-2.5	This system relies on continued operation of the pumps, therefore alarm and response systems in place. The score assigned should be based on the coverage of the building footprint and the redundancy of the system. Active ventilation should always be designed to meet at least good performance.

Gas Membranes

Gas resistant membranes should be;

- Sufficiently impervious to methane (CH₄) and carbon dioxide (CO₂)
- Capable after installation of providing a complete barrier to the entry of the relevant gas
- Sufficiently durable to remain serviceable for the anticipated life of the building and duration of gas emissions
- Sufficiently strong to withstand in service stresses (e.g. due to ground settlement if placed below floor slab)
- Sufficiently strong to withstand the installation process and following construction activities until covered (e.g. penetration from steel fibres in fibre reinforced concrete, penetration of reinforcement ties, tearing due to working above it and dropping of tools)
- Chemically resistant to degradation by other contaminants that might be present

Note 1 – a methane gas transmission rate of <40ml/day/m²atm(avg) for sheets and joints (BSISO15105-1) usually considered sufficient

Note 2 – Guidance on the relevant properties of a), c) and e) is provided in CIRIA C748 [10]

Note 3 – Advice on membrane selection is in Annex C.

Note 4 – The installation and subsequent protection of the membrane are key factors in its performance. A poorly installed membrane cannot perform, however a well detailed and irrespective of the performance of the material. Historically ref was made to verification and integrity testing without any referenced documents against which to judge. The verification process is now described in CIRIA C735 [N1] and as such confidence in the installation can be measured. The process removes the uncertainty of unqualified or inexperienced installation operatives by requiring a **verification plan** to be drawn up prior to installation, with frequency and type of verification being dependent on the qualifications of the operatives, site risk and design criteria. (see 8.3.2 pg 30)

Note 5 – Current guidance on verification recommendations takes in account the risk of the overall design and confidence of installation and sets a frequency and level of verification appropriate.

Protection Element/System	Score	Comments
Gas resistant membrane meeting all of the following criteria:	2	The performance of the membranes is heavily dependent on the quality and design of the installation, resistance to damage after installation and integrity of joints. For example a minimum 0.4mm thickness (equivalent 370g/m ² for polyethylene) reinforced membrane (virgin polymer) meets performance in Table 7 (see C3). If a membrane is installed that does not meet all the criteria in Column 1 the score is Zero
* sufficiently impervious to the gases with a methane gas transmission rate <40ml/day/m ² atm(avg) for sheet and joints BS ISO15105-1		
*sufficiently durable to remain servicable for the anticipated life of the building and duration of gas emissions		
*sufficiently strong to withstand in-service stresses (eg settlement if placed below floor slab)		
*e) Sufficiently strong to withstand the installation process and following construction activities until covered (e.g. penetration from steel fibres in fibre reinforced concrete, penetration of reinforcement ties, tearing due to working above it and dropping of tools		
*capable after installation of providing a complete barrier to the entry of relevant gases		
*verified in accordance with CIRIA C735 [N1]		

In-Ground Pathway Intervention - A sites in-ground pathways from offsite sources should be investigated for migratory gases – **Note 1** methods of pathway intervention include simple vertical membrane installations, vent trenches, rows of stone columns, activated trenches and proprietary systems. **Note 2** – for residential dwellings, management and maintenance is only acceptable where pathway intervention measures (e.g. venting trenches) are beyond the extent of the buildings, on or close to the boundary of the property in a position where access can be guaranteed.

Detailed Design – Once the design measures have been selected in accordance with Section 7.2, these should be developed into a detailed design supported by detailed drawings and specifications. The design should be described in the design report Section 8.3.

APPENDIX K

(i) Off-site Disposal of Surplus Soil Guidance Notes

The disposal of waste (including surplus soils and contaminated soils) to landfill sites is governed by the *Landfill (England & Wales) Regulations 2002*, the *Hazardous Waste Technical Guidance document WM2 (2003)* and associated legislation.

One of the aims of the above legislation is to encourage waste producers (including developers disposing of surplus soils etc) to reduce their waste (and not just discard and disown it). This can be achieved by recycling or reusing the waste. In the case of contaminated sites where leaving contaminated material in-situ poses a risk to a potential receptor such as groundwater resources, further testing and assessment for such risk could reduce the quantities requiring disposal. If there is still unacceptable risk from contaminated soil being left in place, then it may be possible to reduce the risk to an acceptable level (such that the material can be left in place) by in-situ or ex-situ clean-up of the soils.

Before waste can be disposed of, the producer of the waste must undertake a number of steps. '*Initial Waste Testing and Characterisation*' is firstly undertaken to determine whether the waste is non-hazardous or hazardous. The exceptions are that some wastes such as coal tars, 'tank bottom sludge's', etc are immediately classed as hazardous, regardless of any testing or threshold concentrations.

Any inert or hazardous waste destined for landfill must undergo '*Compliance Testing*' using the Waste Acceptance Criteria (WAC). There are different inert and hazardous WAC limits relating to landfill sites that are correspondingly licensed to accept inert or hazardous waste.

If the '*Initial Waste Testing and Characterisation*' shows a waste to be hazardous, then it is a requirement that the material be tested against the WAC-hazardous suite of tests. If it passes the WAC-hazardous testing, then it can be taken to a hazardous waste landfill site. If the material fails the WAC-hazardous testing, then the material must be treated before undergoing re-characterisation, further WAC-hazardous testing and then potential disposal at a hazardous waste disposal site.

If the '*Initial Waste Testing and Characterisation*' shows a waste to be non-hazardous, then it can be taken to a non-hazardous waste landfill site, without further testing. The producer may however decide to undertake WAC-inert testing, in an attempt to reclassify the waste as inert, in which case the waste could then go to an inert landfill site.

The volumes of soils associated with potential hotspots on a site (be they hazardous or non-hazardous) which might require off-site disposal, could potentially be reduced by further on-site sampling and subsequent testing.

With regard to the *Compliance Testing*, it should be noted that some landfill sites are permitted to increase the standard WAC-hazardous/inert limit concentrations, such that they might accept waste that would normally fail such limits.

We would recommend that the contamination testing results (including the history of the site) be presented to the proposed landfills, to determine if they will accept waste generated at the site and what classification they would impose.

Waste Classification Report



L2X7R-USUCD-PPA5U

Job name

Mondi Site

Description/Comments

Project

19ECH016

Site

Mondi Site

Related Documents

#	Name	Description
None		

Waste Stream Template

Betts Suite B - Env Lab Template

Classified by

Name:
Beverley Lewis
Date:
26 Nov 2019 16:51 GMT
Telephone:
01244 288 179

Company:
betts geoenvironmental ltd
Unit 6-7, Old Marsh Farm Barn
Welsh Rd, Sealand
Deeside
CH5 2LY

Report

Created by: Beverley Lewis
Created date: 26 Nov 2019 16:51 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	TP1	0.1	Non Hazardous		3
2	TP1[2]	1.00	Non Hazardous		6
3	TP2	0.50	Non Hazardous		9
4	TP3	0.15	Non Hazardous		12
5	TP3[2]	1.50	Hazardous	HP 7, HP 11	15
6	TP4	0.50	Non Hazardous		18
7	TP5	0.40	Non Hazardous		21
8	TP5[2]	1.70	Non Hazardous		23
9	TP5[3]	2.25	Non Hazardous		26
10	TP6	0.50	Non Hazardous		29
11	TP7	0.50	Non Hazardous		32
12	TP8	1.00	Non Hazardous		34

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
13	TP9	0.20	Hazardous	HP 14	36
14	TP10	0.50	Non Hazardous		39
15	WS1	0.55	Non Hazardous		42
16	WS1[2]	2.75	Non Hazardous	HP 7	45
17	WS2	0.60	Non Hazardous		48
18	WS7	0.95	Hazardous		50
19	WS7[2]	1.80	Non Hazardous	HP 8	53
20	WS6	0.55	Hazardous		55
21	TP4[2]	1.00	Non Hazardous		57
22	TP10[2]	1.75	Non Hazardous	HP 7	59
23	WS8	0.50	Non Hazardous		61
24	WS8[2]	1.80	Non Hazardous		64
25	WS9	0.60	Non Hazardous	HP 7	66
26	WS9[2]	1.00	Non Hazardous		68
27	WS10	1.00	Non Hazardous		70
28	WS11	0.50	Non Hazardous	HP 7	73
29	WS12	0.35	Non Hazardous		76
30	WS13	0.35	Non Hazardous		79
31	WS14	0.25	Non Hazardous	HP 7	81
32	WS15	0.90	Non Hazardous		84
33	WS16	0.75	Non Hazardous		86
34	WS16[2]	2.00	Hazardous	HP 7	88
35	WS17	0.45	Non Hazardous		90
36	WS18	0.35	Non Hazardous		92
37	TP17	0.6	Non Hazardous	HP 7	95
38	TP17[2]	1.5	Non Hazardous		98
39	TP16	0.6	Non Hazardous		100
40	TP14	0.5	Non Hazardous	HP 7	103
41	TP14[2]	1.55	Non Hazardous		106
42	TP15	1	Non Hazardous		108
43	TP15[2]	1.9	Non Hazardous	HP 7	111
44	TP18	0.5	Non Hazardous		113
45	TP11	0.5	Non Hazardous		116
46	TP11[2]	1.4	Non Hazardous	HP 7	119
47	TP12	0.45	Non Hazardous		121

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Appendix B: Rationale for selection of metal species	125
Appendix C: Version	126

Classification of sample: TP1

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

Sample details

Sample Name:	LoW Code:
TP1	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.1 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				7.6	pH		7.6	pH	7.6 pH		
2	arsenic { arsenic trioxide }				21	mg/kg	1.32	27.727	mg/kg	0.00277 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				110	mg/kg	1.126	123.848	mg/kg	0.0124 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	290	mg/kg		290	mg/kg	0.029 %		
	082-001-00-6											
7	mercury { mercury dichloride }				0.7	mg/kg	1.353	0.947	mg/kg	0.0000947 %		
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				27	mg/kg	2.976	80.359	mg/kg	0.00804 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				280	mg/kg	2.469	691.403	mg/kg	0.0691 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	asbestos				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5									
12	acenaphthene				3.1	mg/kg		3.1	mg/kg	0.00031 %		
		201-469-6	83-32-9									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
13	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
14	anthracene	204-371-1	120-12-7		5.3 mg/kg		5.3 mg/kg	0.00053 %			
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	16 mg/kg		16 mg/kg	0.0016 %			
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	15 mg/kg		15 mg/kg	0.0015 %			
17	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	17 mg/kg		17 mg/kg	0.0017 %			
18	benzo[ghi]perylene	205-883-8	191-24-2		9.1 mg/kg		9.1 mg/kg	0.00091 %			
19	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	9.6 mg/kg		9.6 mg/kg	0.00096 %			
20	chrysene	601-048-00-0	205-923-4	218-01-9	15 mg/kg		15 mg/kg	0.0015 %			
21	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	2.4 mg/kg		2.4 mg/kg	0.00024 %			
22	fluoranthene	205-912-4	206-44-0		33 mg/kg		33 mg/kg	0.0033 %			
23	fluorene	201-695-5	86-73-7		2.2 mg/kg		2.2 mg/kg	0.00022 %			
24	indeno[123-cd]pyrene	205-893-2	193-39-5		8.2 mg/kg		8.2 mg/kg	0.00082 %			
25	naphthalene	601-052-00-2	202-049-5	91-20-3	1.1 mg/kg		1.1 mg/kg	0.00011 %			
26	phenanthrene	201-581-5	85-01-8		18 mg/kg		18 mg/kg	0.0018 %			
27	pyrene	204-927-3	129-00-0		32 mg/kg		32 mg/kg	0.0032 %			
28	TPH (C6 to C40) petroleum group		TPH		730 mg/kg		730 mg/kg	0.073 %			
29	benzene	601-020-00-8	200-753-7	71-43-2	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
30	toluene	601-021-00-3	203-625-9	108-88-3	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
31	ethylbenzene	601-023-00-4	202-849-4	100-41-4	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
33	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	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]	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
34	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
Total:									0.214 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.073%)

Classification of sample: TP1[2]

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

Sample details

Sample Name:	TP1[2]	LoW Code:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	1.00 m	Chapter:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
		Entry:	

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				7.6 pH		7.6	pH	7.6 pH		
2	arsenic { arsenic trioxide }				30 mg/kg	1.32	39.61	mg/kg	0.00396 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.7 mg/kg	1.142	0.8	mg/kg	0.00008 %		
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				130 mg/kg	1.126	146.365	mg/kg	0.0146 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	280 mg/kg		280	mg/kg	0.028 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				33 mg/kg	2.976	98.217	mg/kg	0.00982 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				240 mg/kg	2.469	592.631	mg/kg	0.0593 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	asbestos				<0.001 mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5								
12	acenaphthene				3.5 mg/kg		3.5	mg/kg	0.00035 %		
		201-469-6	83-32-9								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
13	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
14	anthracene	204-371-1	120-12-7		3.9 mg/kg		3.9 mg/kg	0.00039 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6		12 mg/kg		12 mg/kg	0.0012 %		
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		10 mg/kg		10 mg/kg	0.001 %		
17	benzo[b]fluoranthene	601-034-00-4	205-911-9		13 mg/kg		13 mg/kg	0.0013 %		
18	benzo[ghi]perylene	205-883-8	191-24-2		5.5 mg/kg		5.5 mg/kg	0.00055 %		
19	benzo[k]fluoranthene	601-036-00-5	205-916-6		3.8 mg/kg		3.8 mg/kg	0.00038 %		
20	chrysene	601-048-00-0	205-923-4		9.1 mg/kg		9.1 mg/kg	0.00091 %		
21	dibenz[a,h]anthracene	601-041-00-2	200-181-8		1.4 mg/kg		1.4 mg/kg	0.00014 %		
22	fluoranthene	205-912-4	206-44-0		22 mg/kg		22 mg/kg	0.0022 %		
23	fluorene	201-695-5	86-73-7		2.7 mg/kg		2.7 mg/kg	0.00027 %		
24	indeno[123-cd]pyrene	205-893-2	193-39-5		4.7 mg/kg		4.7 mg/kg	0.00047 %		
25	naphthalene	601-052-00-2	202-049-5		1.3 mg/kg		1.3 mg/kg	0.00013 %		
26	phenanthrene	201-581-5	85-01-8		17 mg/kg		17 mg/kg	0.0017 %		
27	pyrene	204-927-3	129-00-0		20 mg/kg		20 mg/kg	0.002 %		
28	TPH (C6 to C40) petroleum group		TPH		900 mg/kg		900 mg/kg	0.09 %		
29	benzene	601-020-00-8	200-753-7		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
30	toluene	601-021-00-3	203-625-9		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
31	ethylbenzene	601-023-00-4	202-849-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
32	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
33	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
34	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.22 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.09%)

Classification of sample: TP2

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

Sample details

Sample Name:	TP2	LoW Code:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	0.50 m	Chapter:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
		Entry:	

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				8.1 pH		8.1 pH	8.1 pH		
2	arsenic { arsenic trioxide }				27 mg/kg	1.32	35.649 mg/kg	0.00356 %		
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				0.6 mg/kg	1.142	0.685 mg/kg	0.0000685 %		
	048-002-00-0	215-146-2	1306-19-0							
4	copper { dicopper oxide; copper (I) oxide }				170 mg/kg	1.126	191.401 mg/kg	0.0191 %		
	029-002-00-X	215-270-7	1317-39-1							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	260 mg/kg		260 mg/kg	0.026 %		
	082-001-00-6									
7	mercury { mercury dichloride }				1 mg/kg	1.353	1.353 mg/kg	0.000135 %		
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				33 mg/kg	2.976	98.217 mg/kg	0.00982 %		
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
10	zinc { zinc sulphate }				250 mg/kg	2.469	617.324 mg/kg	0.0617 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
11	asbestos				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
12	acenaphthene				1.9 mg/kg		1.9 mg/kg	0.00019 %		
		201-469-6	83-32-9							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
13	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
14	anthracene	204-371-1	120-12-7		3.2 mg/kg		3.2 mg/kg	0.00032 %			
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	9.6 mg/kg		9.6 mg/kg	0.00096 %			
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	9.3 mg/kg		9.3 mg/kg	0.00093 %			
17	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	13 mg/kg		13 mg/kg	0.0013 %			
18	benzo[ghi]perylene	205-883-8	191-24-2		5.4 mg/kg		5.4 mg/kg	0.00054 %			
19	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	3.2 mg/kg		3.2 mg/kg	0.00032 %			
20	chrysene	601-048-00-0	205-923-4	218-01-9	8.4 mg/kg		8.4 mg/kg	0.00084 %			
21	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	1.5 mg/kg		1.5 mg/kg	0.00015 %			
22	fluoranthene	205-912-4	206-44-0		20 mg/kg		20 mg/kg	0.002 %			
23	fluorene	201-695-5	86-73-7		1.2 mg/kg		1.2 mg/kg	0.00012 %			
24	indeno[123-cd]pyrene	205-893-2	193-39-5		4.7 mg/kg		4.7 mg/kg	0.00047 %			
25	naphthalene	601-052-00-2	202-049-5	91-20-3	1 mg/kg		1 mg/kg	0.0001 %			
26	phenanthrene	201-581-5	85-01-8		11 mg/kg		11 mg/kg	0.0011 %			
27	pyrene	204-927-3	129-00-0		19 mg/kg		19 mg/kg	0.0019 %			
28	TPH (C6 to C40) petroleum group		TPH		750 mg/kg		750 mg/kg	0.075 %			
29	benzene	601-020-00-8	200-753-7	71-43-2	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
30	toluene	601-021-00-3	203-625-9	108-88-3	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
31	ethylbenzene	601-023-00-4	202-849-4	100-41-4	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
33	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	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]	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
34	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
Total:									0.208 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.075%)

Classification of sample: TP3



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

Sample details

Sample Name:	LoW Code:
TP3	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.15 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				7.6 pH		7.6	pH	7.6 pH		
2	arsenic { arsenic trioxide }				25 mg/kg	1.32	33.008	mg/kg	0.0033 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.8 mg/kg	1.142	0.914	mg/kg	0.0000914 %		
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				150 mg/kg	1.126	168.883	mg/kg	0.0169 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	250 mg/kg		250	mg/kg	0.025 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				39 mg/kg	2.976	116.074	mg/kg	0.0116 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				280 mg/kg	2.469	691.403	mg/kg	0.0691 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	asbestos				<0.001 mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5								
12	acenaphthene				5.6 mg/kg		5.6	mg/kg	0.00056 %		
		201-469-6	83-32-9								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
13	acenaphthylene	205-917-1	208-96-8		0.32 mg/kg		0.32 mg/kg	0.000032 %			
14	anthracene	204-371-1	120-12-7		7 mg/kg		7 mg/kg	0.0007 %			
15	benzo[a]anthracene	601-033-00-9	200-280-6		25 mg/kg		25 mg/kg	0.0025 %			
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		23 mg/kg		23 mg/kg	0.0023 %			
17	benzo[b]fluoranthene	601-034-00-4	205-911-9		28 mg/kg		28 mg/kg	0.0028 %			
18	benzo[ghi]perylene	205-883-8	191-24-2		11 mg/kg		11 mg/kg	0.0011 %			
19	benzo[k]fluoranthene	601-036-00-5	205-916-6		7 mg/kg		7 mg/kg	0.0007 %			
20	chrysene	601-048-00-0	205-923-4		19 mg/kg		19 mg/kg	0.0019 %			
21	dibenz[a,h]anthracene	601-041-00-2	200-181-8		3 mg/kg		3 mg/kg	0.0003 %			
22	fluoranthene	205-912-4	206-44-0		42 mg/kg		42 mg/kg	0.0042 %			
23	fluorene	201-695-5	86-73-7		4.3 mg/kg		4.3 mg/kg	0.00043 %			
24	indeno[123-cd]pyrene	205-893-2	193-39-5		9.7 mg/kg		9.7 mg/kg	0.00097 %			
25	naphthalene	601-052-00-2	202-049-5		3.5 mg/kg		3.5 mg/kg	0.00035 %			
26	phenanthrene	201-581-5	85-01-8		32 mg/kg		32 mg/kg	0.0032 %			
27	pyrene	204-927-3	129-00-0		39 mg/kg		39 mg/kg	0.0039 %			
28	TPH (C6 to C40) petroleum group		TPH		940 mg/kg		940 mg/kg	0.094 %			
29	benzene	601-020-00-8	200-753-7		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
30	toluene	601-021-00-3	203-625-9		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
31	ethylbenzene	601-023-00-4	202-849-4		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
33	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
34	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
Total:									0.247 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

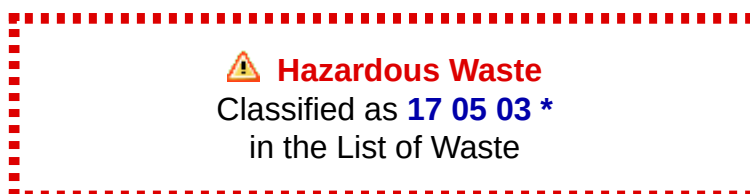
Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.094%)

Classification of sample: TP3[2]



Sample details

Sample Name:	LoW Code:
TP3[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.50 m	Entry:
	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.11%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.11%)

Determinands

Moisture content: **0% No Moisture Correction applied (MC)**

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH		PH		7.5 pH		7.5 pH	7.5 pH		
2	arsenic { arsenic trioxide }				21 mg/kg	1.32	27.727 mg/kg	0.00277 %		
	033-003-00-0	215-481-4	1327-53-3							
3	cadmium { cadmium oxide }				0.7 mg/kg	1.142	0.8 mg/kg	0.00008 %		
	048-002-00-0	215-146-2	1306-19-0							
4	copper { dicopper oxide; copper (I) oxide }				84 mg/kg	1.126	94.575 mg/kg	0.00946 %		
	029-002-00-X	215-270-7	1317-39-1							
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	220 mg/kg		220 mg/kg	0.022 %		
	082-001-00-6									
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				37 mg/kg	2.976	110.122 mg/kg	0.011 %		
	028-035-00-7	238-766-5	14721-18-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %			<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				210 mg/kg	2.469	518.552 mg/kg	0.0519 %			
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	asbestos				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5								
12	acenaphthene				13 mg/kg		13 mg/kg	0.0013 %			
		201-469-6	83-32-9								
13	acenaphthylene				0.43 mg/kg		0.43 mg/kg	0.000043 %			
		205-917-1	208-96-8								
14	anthracene				15 mg/kg		15 mg/kg	0.0015 %			
		204-371-1	120-12-7								
15	benzo[a]anthracene				39 mg/kg		39 mg/kg	0.0039 %			
	601-033-00-9	200-280-6	56-55-3								
16	benzo[a]pyrene; benzo[def]chrysene				34 mg/kg		34 mg/kg	0.0034 %			
	601-032-00-3	200-028-5	50-32-8								
17	benzo[b]fluoranthene				38 mg/kg		38 mg/kg	0.0038 %			
	601-034-00-4	205-911-9	205-99-2								
18	benzo[ghi]perylene				17 mg/kg		17 mg/kg	0.0017 %			
		205-883-8	191-24-2								
19	benzo[k]fluoranthene				18 mg/kg		18 mg/kg	0.0018 %			
	601-036-00-5	205-916-6	207-08-9								
20	chrysene				30 mg/kg		30 mg/kg	0.003 %			
	601-048-00-0	205-923-4	218-01-9								
21	dibenz[a,h]anthracene				4.1 mg/kg		4.1 mg/kg	0.00041 %			
	601-041-00-2	200-181-8	53-70-3								
22	fluoranthene				74 mg/kg		74 mg/kg	0.0074 %			
		205-912-4	206-44-0								
23	fluorene				10 mg/kg		10 mg/kg	0.001 %			
		201-695-5	86-73-7								
24	indeno[123-cd]pyrene				15 mg/kg		15 mg/kg	0.0015 %			
		205-893-2	193-39-5								
25	naphthalene				8.6 mg/kg		8.6 mg/kg	0.00086 %			
	601-052-00-2	202-049-5	91-20-3								
26	phenanthrene				61 mg/kg		61 mg/kg	0.0061 %			
		201-581-5	85-01-8								
27	pyrene				69 mg/kg		69 mg/kg	0.0069 %			
		204-927-3	129-00-0								
28	TPH (C6 to C40) petroleum group				1100 mg/kg		1100 mg/kg	0.11 %			
			TPH								
29	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
30	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
31	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
32	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]								
33	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2]	95-47-6 [1] 106-42-3 [2]								

CONSULTING ENGINEERS											
#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
			203-576-3 [3] 215-535-7 [4]	108-38-3 [3] 1330-20-7 [4]							
34	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane					<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								
Total:									0.253 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.11%)

Classification of sample: TP4

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

Sample details

Sample Name:	TP4	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	0.50 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				8.3 pH		8.3	pH	8.3 pH		
2	arsenic { arsenic trioxide }				7.3 mg/kg	1.32	9.638	mg/kg	0.000964 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				32 mg/kg	1.126	36.028	mg/kg	0.0036 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	34 mg/kg		34	mg/kg	0.0034 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				26 mg/kg	2.976	77.383	mg/kg	0.00774 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				94 mg/kg	2.469	232.114	mg/kg	0.0232 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	asbestos				<0.001 mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5								
12	acenaphthene				0.45 mg/kg		0.45	mg/kg	0.000045 %		
		201-469-6	83-32-9								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
13	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
14	anthracene	204-371-1	120-12-7		0.39 mg/kg		0.39 mg/kg	0.000039 %		
15	benzo[a]anthracene	601-033-00-9	200-280-6		1.3 mg/kg		1.3 mg/kg	0.00013 %		
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		1.2 mg/kg		1.2 mg/kg	0.00012 %		
17	benzo[b]fluoranthene	601-034-00-4	205-911-9		1.4 mg/kg		1.4 mg/kg	0.00014 %		
18	benzo[ghi]perylene	205-883-8	191-24-2		0.63 mg/kg		0.63 mg/kg	0.000063 %		
19	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.49 mg/kg		0.49 mg/kg	0.000049 %		
20	chrysene	601-048-00-0	205-923-4		1.2 mg/kg		1.2 mg/kg	0.00012 %		
21	dibenz[a,h]anthracene	601-041-00-2	200-181-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluoranthene	205-912-4	206-44-0		2.4 mg/kg		2.4 mg/kg	0.00024 %		
23	fluorene	201-695-5	86-73-7		0.31 mg/kg		0.31 mg/kg	0.000031 %		
24	indeno[123-cd]pyrene	205-893-2	193-39-5		0.54 mg/kg		0.54 mg/kg	0.000054 %		
25	naphthalene	601-052-00-2	202-049-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
26	phenanthrene	201-581-5	85-01-8		1.7 mg/kg		1.7 mg/kg	0.00017 %		
27	pyrene	204-927-3	129-00-0		2.2 mg/kg		2.2 mg/kg	0.00022 %		
28	TPH (C6 to C40) petroleum group		TPH		100 mg/kg		100 mg/kg	0.01 %		
29	benzene	601-020-00-8	200-753-7		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
30	toluene	601-021-00-3	203-625-9		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
31	ethylbenzene	601-023-00-4	202-849-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
32	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
33	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
34	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.0515 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.01%)

Classification of sample: TP5

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

Sample details

Sample Name:	LoW Code:
TP5	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.40 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.4	pH		8.4	pH	8.4 pH		
2	arsenic { arsenic trioxide }				6.5	mg/kg	1.32	8.582	mg/kg	0.000858 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				28	mg/kg	1.126	31.525	mg/kg	0.00315 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	120	mg/kg		120	mg/kg	0.012 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				20	mg/kg	2.976	59.525	mg/kg	0.00595 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				47	mg/kg	2.469	116.057	mg/kg	0.0116 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
12	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
13	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7									
14	benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value		MIC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number										
15		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										
16		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-034-00-4	205-911-9	205-99-2										
17	■	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-883-8	191-24-2										
18		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-036-00-5	205-916-6	207-08-9										
19		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-048-00-0	205-923-4	218-01-9										
20		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										
21	■	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-912-4	206-44-0										
22	■	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			201-695-5	86-73-7										
23	■	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-893-2	193-39-5										
24		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
25	■	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			201-581-5	85-01-8										
26	■	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			204-927-3	129-00-0										
27	■	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD	
				TPH										
28		benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-020-00-8	200-753-7	71-43-2										
29		toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-021-00-3	203-625-9	108-88-3										
30	■	ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-023-00-4	202-849-4	100-41-4										
31		xylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-022-00-9	202-422-2 [1]	95-47-6 [1]										
			203-396-5 [2]	106-42-3 [2]										
			203-576-3 [3]	108-38-3 [3]										
			215-535-7 [4]	1330-20-7 [4]										
32		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-022-00-9	202-422-2 [1]	95-47-6 [1]										
			203-396-5 [2]	106-42-3 [2]										
			203-576-3 [3]	108-38-3 [3]										
			215-535-7 [4]	1330-20-7 [4]										
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		603-181-00-X	216-653-1	1634-04-4										
Total:												0.0358 %		

Key

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

Classification of sample: TP5[2]

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

Sample details

Sample Name:	LoW Code:
TP5[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.70 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				7.8	pH		7.8	pH	7.8 pH		
2	arsenic { arsenic trioxide }				46	mg/kg	1.32	60.735	mg/kg	0.00607 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				240	mg/kg	1.126	270.213	mg/kg	0.027 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	170	mg/kg		170	mg/kg	0.017 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				57	mg/kg	2.976	169.647	mg/kg	0.017 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				250	mg/kg	2.469	617.324	mg/kg	0.0617 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	asbestos				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5									
12	acenaphthene				2.5	mg/kg		2.5	mg/kg	0.00025 %		
		201-469-6	83-32-9									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
13	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
14	anthracene	204-371-1	120-12-7		3 mg/kg		3 mg/kg	0.0003 %			
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	8.2 mg/kg		8.2 mg/kg	0.00082 %			
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	6.8 mg/kg		6.8 mg/kg	0.00068 %			
17	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	6.9 mg/kg		6.9 mg/kg	0.00069 %			
18	benzo[ghi]perylene	205-883-8	191-24-2		3.5 mg/kg		3.5 mg/kg	0.00035 %			
19	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	3.7 mg/kg		3.7 mg/kg	0.00037 %			
20	chrysene	601-048-00-0	205-923-4	218-01-9	5.9 mg/kg		5.9 mg/kg	0.00059 %			
21	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	fluoranthene	205-912-4	206-44-0		15 mg/kg		15 mg/kg	0.0015 %			
23	fluorene	201-695-5	86-73-7		1.6 mg/kg		1.6 mg/kg	0.00016 %			
24	indeno[123-cd]pyrene	205-893-2	193-39-5		3 mg/kg		3 mg/kg	0.0003 %			
25	naphthalene	601-052-00-2	202-049-5	91-20-3	0.84 mg/kg		0.84 mg/kg	0.000084 %			
26	phenanthrene	201-581-5	85-01-8		13 mg/kg		13 mg/kg	0.0013 %			
27	pyrene	204-927-3	129-00-0		14 mg/kg		14 mg/kg	0.0014 %			
28	TPH (C6 to C40) petroleum group		TPH		460 mg/kg		460 mg/kg	0.046 %			
29	benzene	601-020-00-8	200-753-7	71-43-2	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
30	toluene	601-021-00-3	203-625-9	108-88-3	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
31	ethylbenzene	601-023-00-4	202-849-4	100-41-4	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
33	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	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]	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
34	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
Total:									0.185 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.046%)

Classification of sample: TP5[3]

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

Sample details

Sample Name:	LoW Code:
TP5[3]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.25 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				7.3 pH		7.3	pH	7.3 pH		
2	arsenic { arsenic trioxide }				53 mg/kg	1.32	69.977	mg/kg	0.007 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				130 mg/kg	1.126	146.365	mg/kg	0.0146 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	170 mg/kg		170	mg/kg	0.017 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				28 mg/kg	2.976	83.335	mg/kg	0.00833 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				76 mg/kg	2.469	187.667	mg/kg	0.0188 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				0.63 mg/kg		0.63	mg/kg	0.000063 %		
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				0.57 mg/kg		0.57	mg/kg	0.000057 %		
		204-371-1	120-12-7								
14	benzo[a]anthracene				2.1 mg/kg		2.1	mg/kg	0.00021 %		
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzo[a]pyrene; benzo[def]chrysene				1.8 mg/kg		1.8 mg/kg	0.00018 %		
	601-032-00-3	200-028-5	50-32-8							
16	benzo[b]fluoranthene				1.5 mg/kg		1.5 mg/kg	0.00015 %		
	601-034-00-4	205-911-9	205-99-2							
17	benzo[ghi]perylene				0.65 mg/kg		0.65 mg/kg	0.000065 %		
		205-883-8	191-24-2							
18	benzo[k]fluoranthene				0.74 mg/kg		0.74 mg/kg	0.000074 %		
	601-036-00-5	205-916-6	207-08-9							
19	chrysene				1.3 mg/kg		1.3 mg/kg	0.00013 %		
	601-048-00-0	205-923-4	218-01-9							
20	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							
21	fluoranthene				1.8 mg/kg		1.8 mg/kg	0.00018 %		
		205-912-4	206-44-0							
22	fluorene				0.91 mg/kg		0.91 mg/kg	0.000091 %		
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				0.55 mg/kg		0.55 mg/kg	0.000055 %		
		205-893-2	193-39-5							
24	naphthalene				0.58 mg/kg		0.58 mg/kg	0.000058 %		
	601-052-00-2	202-049-5	91-20-3							
25	phenanthrene				1.1 mg/kg		1.1 mg/kg	0.00011 %		
		201-581-5	85-01-8							
26	pyrene				2.4 mg/kg		2.4 mg/kg	0.00024 %		
		204-927-3	129-00-0							
27	TPH (C6 to C40) petroleum group				220 mg/kg		220 mg/kg	0.022 %		
			TPH							
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
31	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]							
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]							
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0906 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.022%)

Classification of sample: TP6

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

Sample details

Sample Name:	TP6	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	0.50 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.3	pH		8.3	pH	8.3 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	33	mg/kg	1.32	43.571	mg/kg	0.00436 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
4	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	230	mg/kg	1.126	258.954	mg/kg	0.0259 %		
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			970	mg/kg		970	mg/kg	0.097 %		
7	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
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	42	mg/kg	2.976	125.003	mg/kg	0.0125 %		
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
10	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]	220	mg/kg	2.469	543.245	mg/kg	0.0543 %		
11	acenaphthene		201-469-6	83-32-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	acenaphthylene		205-917-1	208-96-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	anthracene		204-371-1	120-12-7	0.29	mg/kg		0.29	mg/kg	0.000029 %		
14	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.2	mg/kg		2.2	mg/kg	0.00022 %		

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
15	benzo[a]pyrene; benzo[def]chrysene				1.9	mg/kg		1.9	mg/kg	0.00019 %		
	601-032-00-3	200-028-5	50-32-8									
16	benzo[b]fluoranthene				1.9	mg/kg		1.9	mg/kg	0.00019 %		
	601-034-00-4	205-911-9	205-99-2									
17	benzo[ghi]perylene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
		205-883-8	191-24-2									
18	benzo[k]fluoranthene				1	mg/kg		1	mg/kg	0.0001 %		
	601-036-00-5	205-916-6	207-08-9									
19	chrysene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
	601-048-00-0	205-923-4	218-01-9									
20	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									
21	fluoranthene				2.2	mg/kg		2.2	mg/kg	0.00022 %		
		205-912-4	206-44-0									
22	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				0.9	mg/kg		0.9	mg/kg	0.00009 %		
		205-893-2	193-39-5									
24	naphthalene				0.44	mg/kg		0.44	mg/kg	0.000044 %		
	601-052-00-2	202-049-5	91-20-3									
25	phenanthrene				1.4	mg/kg		1.4	mg/kg	0.00014 %		
		201-581-5	85-01-8									
26	pyrene				2.4	mg/kg		2.4	mg/kg	0.00024 %		
		204-927-3	129-00-0									
27	TPH (C6 to C40) petroleum group				70	mg/kg		70	mg/kg	0.007 %		
			TPH									
28	benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
29	toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
30	ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
31	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]									
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]									
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.204 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.007%)

Classification of sample: TP7



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

Sample details

Sample Name:	LoW Code:
TP7	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.50 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				9.2 pH		9.2	pH	9.2 pH		
2	arsenic { arsenic trioxide }				2.1 mg/kg	1.32	2.773	mg/kg	0.000277 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				18 mg/kg	1.126	20.266	mg/kg	0.00203 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	12 mg/kg		12	mg/kg	0.0012 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				22 mg/kg	2.976	65.478	mg/kg	0.00655 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				55 mg/kg	2.469	135.811	mg/kg	0.0136 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7								
14	benzo[a]anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	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							
16	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
17	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
18	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
19	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
20	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							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
26	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
27	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
31	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]							
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]							
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0259 %		

Key

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

Classification of sample: TP8

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

Sample details

Sample Name:	LoW Code:
TP8	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.00 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				10.7 pH		10.7	pH	10.7 pH		
2	arsenic { arsenic trioxide }				6.4 mg/kg	1.32	8.45	mg/kg	0.000845 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				58 mg/kg	1.126	65.302	mg/kg	0.00653 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	36 mg/kg		36	mg/kg	0.0036 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				25 mg/kg	2.976	74.407	mg/kg	0.00744 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				52 mg/kg	2.469	128.403	mg/kg	0.0128 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7								
14	benzo[a]anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	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							
16	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
17	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
18	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
19	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
20	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							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
26	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
27	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
31	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]							
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]							
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0335 %		

Key

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

Classification of sample: TP9

 **Hazardous Waste**
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:	LoW Code:
TP9	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 03 * (Soil and stones containing hazardous substances)
0.20 m	

Hazard properties

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

zinc sulphate: (compound conc.: 0.272%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				9.4	pH		9.4	pH	9.4 pH		
2	arsenic { arsenic trioxide }				15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
3	cadmium { cadmium oxide }				0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	copper { dicopper oxide; copper (I) oxide }				760	mg/kg	1.126	855.675	mg/kg	0.0856 %		
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	430	mg/kg		430	mg/kg	0.043 %		
7	mercury { mercury dichloride }				0.5	mg/kg	1.353	0.677	mg/kg	0.0000677 %		
8	nickel { nickel chromate }				26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
9	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
10	zinc { zinc sulphate }				1100	mg/kg	2.469	2716.226	mg/kg	0.272 %		
11	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
13	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
14	benzo[a]anthracene				0.29 mg/kg		0.29 mg/kg	0.000029 %			
	601-033-00-9	200-280-6	56-55-3								
15	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								
16	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
17	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
18	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
19	chrysene				0.18 mg/kg		0.18 mg/kg	0.000018 %			
	601-048-00-0	205-923-4	218-01-9								
20	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								
21	fluoranthene				0.35 mg/kg		0.35 mg/kg	0.000035 %			
		205-912-4	206-44-0								
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
25	phenanthrene				0.26 mg/kg		0.26 mg/kg	0.000026 %			
		201-581-5	85-01-8								
26	pyrene				0.36 mg/kg		0.36 mg/kg	0.000036 %			
		204-927-3	129-00-0								
27	TPH (C6 to C40) petroleum group				170 mg/kg		170 mg/kg	0.017 %			
			TPH								
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
31	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]								
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]								
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								
Total:									0.428 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.017%)

Classification of sample: TP10

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

Sample details

Sample Name:	LoW Code:	
TP10	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.50 m		

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				9.4	pH		9.4	pH	9.4 pH		
2	arsenic { arsenic trioxide }				18	mg/kg	1.32	23.766	mg/kg	0.00238 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				150	mg/kg	1.126	168.883	mg/kg	0.0169 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	170	mg/kg		170	mg/kg	0.017 %		
	082-001-00-6											
7	mercury { mercury dichloride }				0.8	mg/kg	1.353	1.083	mg/kg	0.000108 %		
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				23	mg/kg	2.976	68.454	mg/kg	0.00685 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				360	mg/kg	2.469	888.947	mg/kg	0.0889 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	asbestos				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5									
12	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
13	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
14	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.3 mg/kg		0.3 mg/kg	0.00003 %			
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.28 mg/kg		0.28 mg/kg	0.000028 %			
17	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.33 mg/kg		0.33 mg/kg	0.000033 %			
18	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.2 mg/kg		0.2 mg/kg	0.00002 %			
20	chrysene	601-048-00-0	205-923-4	218-01-9	0.26 mg/kg		0.26 mg/kg	0.000026 %			
21	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	fluoranthene	205-912-4	206-44-0		0.36 mg/kg		0.36 mg/kg	0.000036 %			
23	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
24	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
26	phenanthrene	201-581-5	85-01-8		0.24 mg/kg		0.24 mg/kg	0.000024 %			
27	pyrene	204-927-3	129-00-0		0.38 mg/kg		0.38 mg/kg	0.000038 %			
28	TPH (C6 to C40) petroleum group		TPH		100 mg/kg		100 mg/kg	0.01 %			
29	benzene	601-020-00-8	200-753-7	71-43-2	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
30	toluene	601-021-00-3	203-625-9	108-88-3	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
31	ethylbenzene	601-023-00-4	202-849-4	100-41-4	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
33	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	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]	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
34	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
Total:									0.144 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.01%)

Classification of sample: WS1

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

Sample details

Sample Name:	LoW Code:
WS1	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.55 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				10.2 pH		10.2	pH	10.2 pH		
2	arsenic { arsenic trioxide }				67 mg/kg	1.32	88.462	mg/kg	0.00885 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				180 mg/kg	1.126	202.66	mg/kg	0.0203 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	670 mg/kg		670	mg/kg	0.067 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				54 mg/kg	2.976	160.718	mg/kg	0.0161 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				150 mg/kg	2.469	370.394	mg/kg	0.037 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				0.15 mg/kg		0.15	mg/kg	0.000015 %		
		204-371-1	120-12-7								
14	benzo[a]anthracene				1.2 mg/kg		1.2	mg/kg	0.00012 %		
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
15	benzo[a]pyrene; benzo[def]chrysene				1.1 mg/kg		1.1 mg/kg		0.00011 %		
	601-032-00-3	200-028-5	50-32-8								
16	benzo[b]fluoranthene				1.2 mg/kg		1.2 mg/kg		0.00012 %		
	601-034-00-4	205-911-9	205-99-2								
17	benzo[ghi]perylene				0.51 mg/kg		0.51 mg/kg		0.000051 %		
		205-883-8	191-24-2								
18	benzo[k]fluoranthene				0.54 mg/kg		0.54 mg/kg		0.000054 %		
	601-036-00-5	205-916-6	207-08-9								
19	chrysene				0.95 mg/kg		0.95 mg/kg		0.000095 %		
	601-048-00-0	205-923-4	218-01-9								
20	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								
21	fluoranthene				1.3 mg/kg		1.3 mg/kg		0.00013 %		
		205-912-4	206-44-0								
22	fluorene				<0.05 mg/kg		<0.05 mg/kg		<0.000005 %		<LOD
		201-695-5	86-73-7								
23	indeno[123-cd]pyrene				0.46 mg/kg		0.46 mg/kg		0.000046 %		
		205-893-2	193-39-5								
24	naphthalene				0.31 mg/kg		0.31 mg/kg		0.000031 %		
	601-052-00-2	202-049-5	91-20-3								
25	phenanthrene				1 mg/kg		1 mg/kg		0.0001 %		
		201-581-5	85-01-8								
26	pyrene				1.3 mg/kg		1.3 mg/kg		0.00013 %		
		204-927-3	129-00-0								
27	TPH (C6 to C40) petroleum group				75 mg/kg		75 mg/kg		0.0075 %		
			TPH								
28	benzene				<1 mg/kg		<1 mg/kg		<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
29	toluene				<1 mg/kg		<1 mg/kg		<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3								
30	ethylbenzene				<1 mg/kg		<1 mg/kg		<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4								
31	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]								
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]								
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg		<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								
Total:									0.159 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0075%)

Classification of sample: WS1[2]

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

Sample details

Sample Name:	LoW Code:	
WS1[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
2.75 m		

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				8 pH		8 pH		8pH		
2	arsenic { arsenic trioxide }				19 mg/kg	1.32	25.086 mg/kg		0.00251 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.5 mg/kg	1.142	0.571 mg/kg		0.0000571 %		
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				110 mg/kg	1.126	123.848 mg/kg		0.0124 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308 mg/kg		<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	200 mg/kg		200 mg/kg		0.02 %		
	082-001-00-6										
7	mercury { mercury dichloride }				1.6 mg/kg	1.353	2.166 mg/kg		0.000217 %		
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				35 mg/kg	2.976	104.169 mg/kg		0.0104 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg		<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				130 mg/kg	2.469	321.009 mg/kg		0.0321 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				5 mg/kg		5 mg/kg		0.0005 %		
		201-469-6	83-32-9								
12	acenaphthylene				0.66 mg/kg		0.66 mg/kg		0.000066 %		
		205-917-1	208-96-8								
13	anthracene				3 mg/kg		3 mg/kg		0.0003 %		
		204-371-1	120-12-7								
14	benzo[a]anthracene				3.6 mg/kg		3.6 mg/kg		0.00036 %		
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
15	benzo[a]pyrene; benzo[def]chrysene				2.3	mg/kg		2.3	mg/kg	0.00023 %		
	601-032-00-3	200-028-5	50-32-8									
16	benzo[b]fluoranthene				2.4	mg/kg		2.4	mg/kg	0.00024 %		
	601-034-00-4	205-911-9	205-99-2									
17	benzo[ghi]perylene				0.78	mg/kg		0.78	mg/kg	0.000078 %		
		205-883-8	191-24-2									
18	benzo[k]fluoranthene				0.58	mg/kg		0.58	mg/kg	0.000058 %		
	601-036-00-5	205-916-6	207-08-9									
19	chrysene				2.3	mg/kg		2.3	mg/kg	0.00023 %		
	601-048-00-0	205-923-4	218-01-9									
20	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									
21	fluoranthene				3.8	mg/kg		3.8	mg/kg	0.00038 %		
		205-912-4	206-44-0									
22	fluorene				6.7	mg/kg		6.7	mg/kg	0.00067 %		
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				0.63	mg/kg		0.63	mg/kg	0.000063 %		
		205-893-2	193-39-5									
24	naphthalene				5.3	mg/kg		5.3	mg/kg	0.00053 %		
	601-052-00-2	202-049-5	91-20-3									
25	phenanthrene				8.8	mg/kg		8.8	mg/kg	0.00088 %		
		201-581-5	85-01-8									
26	pyrene				4.8	mg/kg		4.8	mg/kg	0.00048 %		
		204-927-3	129-00-0									
27	TPH (C6 to C40) petroleum group				540	mg/kg		540	mg/kg	0.054 %		
			TPH									
28	benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
29	toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
30	ethylbenzene				10	mg/kg		10	mg/kg	0.001 %		
	601-023-00-4	202-849-4	100-41-4									
31	xylene				15	mg/kg		15	mg/kg	0.0015 %		
	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]									
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				11	mg/kg		11	mg/kg	0.0011 %		
	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]									
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.141 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

ethylbenzene: (conc.: 0.001%)

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

Because of determinands:

TPH (C6 to C40) petroleum group: (conc.: 0.054%)

xylene: (conc.: 0.0015%)

o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]: (conc.: 0.0011%)

Classification of sample: WS2

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

Sample details

Sample Name:	LoW Code:
WS2	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.60 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				11.2 pH		11.2	pH	11.2 pH		
2	arsenic { arsenic trioxide }				1.9 mg/kg	1.32	2.509	mg/kg	0.000251 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				20 mg/kg	1.126	22.518	mg/kg	0.00225 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	29 mg/kg		29	mg/kg	0.0029 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				18 mg/kg	2.976	53.573	mg/kg	0.00536 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				48 mg/kg	2.469	118.526	mg/kg	0.0119 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7								
14	benzo[a]anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	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							
16	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
17	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
18	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
19	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
20	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							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
26	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
27	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
31	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]							
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]							
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0248 %		

Key

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

Classification of sample: WS7

 **Hazardous Waste**
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:	LoW Code:
WS7	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 03 * (Soil and stones containing hazardous substances)
0.95 m	

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.11%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.9	pH		8.9	pH	8.9 pH		
2	arsenic { arsenic trioxide }				43	mg/kg	1.32	56.774	mg/kg	0.00568 %		
3	cadmium { cadmium oxide }				1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
4	copper { dicopper oxide; copper (I) oxide }				430	mg/kg	1.126	484.132	mg/kg	0.0484 %		
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				1.6	mg/kg	1.923	3.077	mg/kg	0.000308 %		
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	1100	mg/kg		1100	mg/kg	0.11 %		
7	mercury { mercury dichloride }				0.7	mg/kg	1.353	0.947	mg/kg	0.0000947 %		
8	nickel { nickel chromate }				17	mg/kg	2.976	50.597	mg/kg	0.00506 %		
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
10	zinc { zinc sulphate }				400	mg/kg	2.469	987.719	mg/kg	0.0988 %		
11	acenaphthene				1.3	mg/kg		1.3	mg/kg	0.00013 %		

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
12	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
13	anthracene	204-371-1	120-12-7		1.1 mg/kg		1.1 mg/kg	0.00011 %		
14	benzo[a]anthracene	601-033-00-9	200-280-6		3.5 mg/kg		3.5 mg/kg	0.00035 %		
15	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		2.8 mg/kg		2.8 mg/kg	0.00028 %		
16	benzo[b]fluoranthene	601-034-00-4	205-911-9		3.2 mg/kg		3.2 mg/kg	0.00032 %		
17	benzo[ghi]perylene	205-883-8	191-24-2		1.5 mg/kg		1.5 mg/kg	0.00015 %		
18	benzo[k]fluoranthene	601-036-00-5	205-916-6		1.4 mg/kg		1.4 mg/kg	0.00014 %		
19	chrysene	601-048-00-0	205-923-4		2.6 mg/kg		2.6 mg/kg	0.00026 %		
20	dibenz[a,h]anthracene	601-041-00-2	200-181-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	fluoranthene	205-912-4	206-44-0		5.9 mg/kg		5.9 mg/kg	0.00059 %		
22	fluorene	201-695-5	86-73-7		0.92 mg/kg		0.92 mg/kg	0.000092 %		
23	indeno[123-cd]pyrene	205-893-2	193-39-5		1.3 mg/kg		1.3 mg/kg	0.00013 %		
24	naphthalene	601-052-00-2	202-049-5		0.94 mg/kg		0.94 mg/kg	0.000094 %		
25	phenanthrene	201-581-5	85-01-8		5.7 mg/kg		5.7 mg/kg	0.00057 %		
26	pyrene	204-927-3	129-00-0		5.2 mg/kg		5.2 mg/kg	0.00052 %		
27	TPH (C6 to C40) petroleum group		TPH		60 mg/kg		60 mg/kg	0.006 %		
28	benzene	601-020-00-8	200-753-7		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
29	toluene	601-021-00-3	203-625-9		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
30	ethylbenzene	601-023-00-4	202-849-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
31	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
Total:								0.279 %		

Key

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

Supplementary Hazardous Property Information

HP 2: Oxidizing "waste which may, generally by providing oxygen, cause or contribute to the combustion of other materials"

Force this Hazardous property to non hazardous because Concentration of Chromium VI is very low therefore has been discounted

Hazard Statements hit:

Ox. Sol. 1; H271 "May cause fire or explosion; strong oxidiser."

Because of determinand:

chromium(VI) oxide: (compound conc.: 0.0003%)

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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.006%)

Classification of sample: WS7[2]

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

Sample details

Sample Name:	LoW Code:
WS7[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.80 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

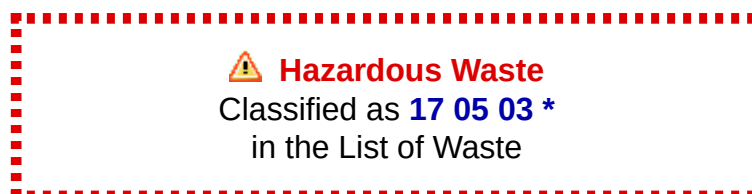
#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.5	pH		8.5	pH	8.5 pH		
2	arsenic { arsenic trioxide }				6	mg/kg	1.32	7.922	mg/kg	0.000792 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				21	mg/kg	1.126	23.644	mg/kg	0.00236 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	16	mg/kg		16	mg/kg	0.0016 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				22	mg/kg	2.976	65.478	mg/kg	0.00655 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				61	mg/kg	2.469	150.627	mg/kg	0.0151 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
12	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
13	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7									
14	benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value		MIC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number										
15		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										
16		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-034-00-4	205-911-9	205-99-2										
17	■	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-883-8	191-24-2										
18		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-036-00-5	205-916-6	207-08-9										
19		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-048-00-0	205-923-4	218-01-9										
20		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										
21	■	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-912-4	206-44-0										
22	■	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			201-695-5	86-73-7										
23	■	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-893-2	193-39-5										
24		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
25	■	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			201-581-5	85-01-8										
26	■	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			204-927-3	129-00-0										
27	■	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD	
				TPH										
28		benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-020-00-8	200-753-7	71-43-2										
29		toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-021-00-3	203-625-9	108-88-3										
30	■	ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-023-00-4	202-849-4	100-41-4										
31		xylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-022-00-9	202-422-2 [1]	95-47-6 [1]										
			203-396-5 [2]	106-42-3 [2]										
			203-576-3 [3]	108-38-3 [3]										
			215-535-7 [4]	1330-20-7 [4]										
32		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-022-00-9	202-422-2 [1]	95-47-6 [1]										
			203-396-5 [2]	106-42-3 [2]										
			203-576-3 [3]	108-38-3 [3]										
			215-535-7 [4]	1330-20-7 [4]										
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		603-181-00-X	216-653-1	1634-04-4										
Total:												0.0286 %		

Key

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

Classification of sample: WS6



Sample details

Sample Name:	LoW Code:
WS6	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.55 m	Entry:
	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 8: Corrosive "waste which on application can cause skin corrosion"

pH; pH "Assumed to be irritant/corrosive because of pH value"

Because of determinand:

pH: (conc.: 11.8 pH)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				11.8	pH		11.8	pH	11.8 pH		
2	arsenic { arsenic trioxide }				1.8	mg/kg	1.32	2.377	mg/kg	0.000238 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				0.2	mg/kg	1.142	0.228	mg/kg	0.0000228 %		
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				17	mg/kg	1.126	19.14	mg/kg	0.00191 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	22	mg/kg		22	mg/kg	0.0022 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				9.8	mg/kg	2.976	29.167	mg/kg	0.00292 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				37	mg/kg	2.469	91.364	mg/kg	0.00914 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
12	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
13	anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7								
14	benzo[a]anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3								
15	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								
16	benzo[b]fluoranthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2								
17	benzo[ghi]perylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2								
18	benzo[k]fluoranthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9								
19	chrysene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9								
20	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								
21	fluoranthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0								
22	fluorene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7								
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5								
24	naphthalene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3								
25	phenanthrene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8								
26	pyrene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0								
27	TPH (C6 to C40) petroleum group				<10 mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH								
28	benzene				<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
29	toluene				<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3								
30	ethylbenzene				<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4								
31	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]								
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]								
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4								
Total:									0.0186 %		

Key

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

Classification of sample: TP4[2]

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

Sample details

Sample Name:	LoW Code:
TP4[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.00 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				7.3	pH		7.3	pH	7.3 pH		
2	arsenic { arsenic trioxide }				12	mg/kg	1.32	15.844	mg/kg	0.00158 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				0.2	mg/kg	1.142	0.228	mg/kg	0.0000228 %		
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				120	mg/kg	1.126	135.107	mg/kg	0.0135 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	19	mg/kg		19	mg/kg	0.0019 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				21	mg/kg	2.976	62.502	mg/kg	0.00625 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				63	mg/kg	2.469	155.566	mg/kg	0.0156 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
12	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
13	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7									
14	benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value		MIC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number										
15		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										
16		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-034-00-4	205-911-9	205-99-2										
17	■	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-883-8	191-24-2										
18		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-036-00-5	205-916-6	207-08-9										
19		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-048-00-0	205-923-4	218-01-9										
20		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										
21	■	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-912-4	206-44-0										
22	■	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			201-695-5	86-73-7										
23	■	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-893-2	193-39-5										
24		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
25	■	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			201-581-5	85-01-8										
26	■	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			204-927-3	129-00-0										
27	■	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD	
				TPH										
28		benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-020-00-8	200-753-7	71-43-2										
29		toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-021-00-3	203-625-9	108-88-3										
30	■	ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-023-00-4	202-849-4	100-41-4										
31		xylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-022-00-9	202-422-2 [1]	95-47-6 [1]										
			203-396-5 [2]	106-42-3 [2]										
			203-576-3 [3]	108-38-3 [3]										
			215-535-7 [4]	1330-20-7 [4]										
32		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-022-00-9	202-422-2 [1]	95-47-6 [1]										
			203-396-5 [2]	106-42-3 [2]										
			203-576-3 [3]	108-38-3 [3]										
			215-535-7 [4]	1330-20-7 [4]										
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		603-181-00-X	216-653-1	1634-04-4										
Total:												0.041 %		

Key

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

Classification of sample: TP10[2]

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

Sample details

Sample Name:	LoW Code:	
TP10[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.75 m		

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				7.6	pH		7.6	pH	7.6 pH		
2	arsenic { arsenic trioxide }				9.5	mg/kg	1.32	12.543	mg/kg	0.00125 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				0.2	mg/kg	1.142	0.228	mg/kg	0.0000228 %		
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				27	mg/kg	1.126	30.399	mg/kg	0.00304 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	24	mg/kg		24	mg/kg	0.0024 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				24	mg/kg	2.976	71.43	mg/kg	0.00714 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				67	mg/kg	2.469	165.443	mg/kg	0.0165 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
12	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
13	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7									
14	benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value		MIC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number										
15		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										
16		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-034-00-4	205-911-9	205-99-2										
17	■	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-883-8	191-24-2										
18		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-036-00-5	205-916-6	207-08-9										
19		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-048-00-0	205-923-4	218-01-9										
20		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										
21	■	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-912-4	206-44-0										
22	■	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			201-695-5	86-73-7										
23	■	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			205-893-2	193-39-5										
24		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
25	■	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			201-581-5	85-01-8										
26	■	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
			204-927-3	129-00-0										
27	■	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD	
				TPH										
28		benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-020-00-8	200-753-7	71-43-2										
29		toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-021-00-3	203-625-9	108-88-3										
30	■	ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-023-00-4	202-849-4	100-41-4										
31		xylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-022-00-9	202-422-2 [1]	95-47-6 [1]										
			203-396-5 [2]	106-42-3 [2]										
			203-576-3 [3]	108-38-3 [3]										
			215-535-7 [4]	1330-20-7 [4]										
32		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		601-022-00-9	202-422-2 [1]	95-47-6 [1]										
			203-396-5 [2]	106-42-3 [2]										
			203-576-3 [3]	108-38-3 [3]										
			215-535-7 [4]	1330-20-7 [4]										
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		603-181-00-X	216-653-1	1634-04-4										
Total:												0.0326 %		

Key

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

Classification of sample: WS8

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

Sample details

Sample Name:	LoW Code:	
WS8	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.50 m		

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				7.2	pH		7.2	pH	7.2 pH		
2	arsenic { arsenic trioxide }				13	mg/kg	1.32	17.164	mg/kg	0.00172 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				0.3	mg/kg	1.142	0.343	mg/kg	0.0000343 %		
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				67	mg/kg	1.126	75.435	mg/kg	0.00754 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	77	mg/kg		77	mg/kg	0.0077 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				43	mg/kg	2.976	127.979	mg/kg	0.0128 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
10	zinc { zinc sulphate }				100	mg/kg	2.469	246.93	mg/kg	0.0247 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	acenaphthene				1.8	mg/kg		1.8	mg/kg	0.00018 %		
		201-469-6	83-32-9									
12	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
13	anthracene				2.1	mg/kg		2.1	mg/kg	0.00021 %		
		204-371-1	120-12-7									
14	benzo[a]anthracene				6.5	mg/kg		6.5	mg/kg	0.00065 %		
	601-033-00-9	200-280-6	56-55-3									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
15	benzo[a]pyrene; benzo[def]chrysene				4.9	mg/kg		4.9	mg/kg	0.00049 %		
	601-032-00-3	200-028-5	50-32-8									
16	benzo[b]fluoranthene				5.1	mg/kg		5.1	mg/kg	0.00051 %		
	601-034-00-4	205-911-9	205-99-2									
17	benzo[ghi]perylene				2.6	mg/kg		2.6	mg/kg	0.00026 %		
		205-883-8	191-24-2									
18	benzo[k]fluoranthene				2.7	mg/kg		2.7	mg/kg	0.00027 %		
	601-036-00-5	205-916-6	207-08-9									
19	chrysene				5.3	mg/kg		5.3	mg/kg	0.00053 %		
	601-048-00-0	205-923-4	218-01-9									
20	dibenz[a,h]anthracene				0.54	mg/kg		0.54	mg/kg	0.000054 %		
	601-041-00-2	200-181-8	53-70-3									
21	fluoranthene				14	mg/kg		14	mg/kg	0.0014 %		
		205-912-4	206-44-0									
22	fluorene				1.5	mg/kg		1.5	mg/kg	0.00015 %		
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				2.1	mg/kg		2.1	mg/kg	0.00021 %		
		205-893-2	193-39-5									
24	naphthalene				0.89	mg/kg		0.89	mg/kg	0.000089 %		
	601-052-00-2	202-049-5	91-20-3									
25	phenanthrene				11	mg/kg		11	mg/kg	0.0011 %		
		201-581-5	85-01-8									
26	pyrene				13	mg/kg		13	mg/kg	0.0013 %		
		204-927-3	129-00-0									
27	TPH (C6 to C40) petroleum group				320	mg/kg		320	mg/kg	0.032 %		
			TPH									
28	benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
29	toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
30	ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
31	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]									
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]									
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.095 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.032%)

Classification of sample: WS8[2]

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

Sample details

Sample Name:	WS8[2]	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	1.80 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				7.1 pH		7.1	pH	7.1 pH		
2	arsenic { arsenic trioxide }				5 mg/kg	1.32	6.602	mg/kg	0.00066 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.3 mg/kg	1.142	0.343	mg/kg	0.0000343 %		
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				19 mg/kg	1.126	21.392	mg/kg	0.00214 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	15 mg/kg		15	mg/kg	0.0015 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				45 mg/kg	2.976	133.932	mg/kg	0.0134 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				99 mg/kg	2.469	244.46	mg/kg	0.0244 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7								
14	benzo[a]anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	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							
16	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
17	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
18	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
19	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
20	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							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
26	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
27	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
31	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]							
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]							
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0444 %		

Key

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

Classification of sample: WS9

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

Sample details

Sample Name:	LoW Code:
WS9	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.60 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				7.4 pH		7.4	pH	7.4 pH		
2	arsenic { arsenic trioxide }				25 mg/kg	1.32	33.008	mg/kg	0.0033 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				0.6 mg/kg	1.142	0.685	mg/kg	0.0000685 %		
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				310 mg/kg	1.126	349.025	mg/kg	0.0349 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	36 mg/kg		36	mg/kg	0.0036 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				32 mg/kg	2.976	95.24	mg/kg	0.00952 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				51 mg/kg	2.469	125.934	mg/kg	0.0126 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				0.23 mg/kg		0.23	mg/kg	0.000023 %		
		204-371-1	120-12-7								
14	benzo[a]anthracene				0.43 mg/kg		0.43	mg/kg	0.000043 %		
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzo[a]pyrene; benzo[def]chrysene				0.23 mg/kg		0.23 mg/kg	0.000023 %		
	601-032-00-3	200-028-5	50-32-8							
16	benzo[b]fluoranthene				0.33 mg/kg		0.33 mg/kg	0.000033 %		
	601-034-00-4	205-911-9	205-99-2							
17	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
18	benzo[k]fluoranthene				0.17 mg/kg		0.17 mg/kg	0.000017 %		
	601-036-00-5	205-916-6	207-08-9							
19	chrysene				0.63 mg/kg		0.63 mg/kg	0.000063 %		
	601-048-00-0	205-923-4	218-01-9							
20	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							
21	fluoranthene				0.74 mg/kg		0.74 mg/kg	0.000074 %		
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	naphthalene				0.22 mg/kg		0.22 mg/kg	0.000022 %		
	601-052-00-2	202-049-5	91-20-3							
25	phenanthrene				1.6 mg/kg		1.6 mg/kg	0.00016 %		
		201-581-5	85-01-8							
26	pyrene				0.82 mg/kg		0.82 mg/kg	0.000082 %		
		204-927-3	129-00-0							
27	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
31	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]							
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]							
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0667 %		

Key

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

Classification of sample: WS9[2]

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

Sample details

Sample Name:	LoW Code:
WS9[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.00 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				7.6 pH		7.6	pH	7.6 pH		
2	arsenic { arsenic trioxide }				8.6 mg/kg	1.32	11.355	mg/kg	0.00114 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	30.399	mg/kg	0.00304 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	16 mg/kg		16	mg/kg	0.0016 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				13 mg/kg	2.976	38.691	mg/kg	0.00387 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				35 mg/kg	2.469	86.425	mg/kg	0.00864 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				0.19 mg/kg		0.19	mg/kg	0.000019 %		
		204-371-1	120-12-7								
14	benzo[a]anthracene				0.33 mg/kg		0.33	mg/kg	0.000033 %		
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
15	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								
16	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
17	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
18	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
19	chrysene				0.54 mg/kg		0.54 mg/kg	0.000054 %			
	601-048-00-0	205-923-4	218-01-9								
20	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								
21	fluoranthene				0.69 mg/kg		0.69 mg/kg	0.000069 %			
		205-912-4	206-44-0								
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
25	phenanthrene				1 mg/kg		1 mg/kg	0.0001 %			
		201-581-5	85-01-8								
26	pyrene				0.67 mg/kg		0.67 mg/kg	0.000067 %			
		204-927-3	129-00-0								
27	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
31	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]								
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]								
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								
Total:									0.0208 %		

Key

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

Classification of sample: WS10

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

Sample details

Sample Name:	LoW Code:
WS10	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.00 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				7.6 pH		7.6	pH	7.6 pH		
2	arsenic { arsenic trioxide }				14 mg/kg	1.32	18.485	mg/kg	0.00185 %		
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
4	copper { dicopper oxide; copper (I) oxide }				61 mg/kg	1.126	68.679	mg/kg	0.00687 %		
	029-002-00-X	215-270-7	1317-39-1								
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	65 mg/kg		65	mg/kg	0.0065 %		
	082-001-00-6										
7	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel chromate }				21 mg/kg	2.976	62.502	mg/kg	0.00625 %		
	028-035-00-7	238-766-5	14721-18-7								
9	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
10	zinc { zinc sulphate }				69 mg/kg	2.469	170.381	mg/kg	0.017 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	acenaphthene				4.4 mg/kg		4.4	mg/kg	0.00044 %		
		201-469-6	83-32-9								
12	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
13	anthracene				11 mg/kg		11	mg/kg	0.0011 %		
		204-371-1	120-12-7								
14	benzo[a]anthracene				20 mg/kg		20	mg/kg	0.002 %		
	601-033-00-9	200-280-6	56-55-3								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	benzo[a]pyrene; benzo[def]chrysene				14 mg/kg		14 mg/kg	0.0014 %		
	601-032-00-3	200-028-5	50-32-8							
16	benzo[b]fluoranthene				12 mg/kg		12 mg/kg	0.0012 %		
	601-034-00-4	205-911-9	205-99-2							
17	benzo[ghi]perylene				5.4 mg/kg		5.4 mg/kg	0.00054 %		
		205-883-8	191-24-2							
18	benzo[k]fluoranthene				7.9 mg/kg		7.9 mg/kg	0.00079 %		
	601-036-00-5	205-916-6	207-08-9							
19	chrysene				17 mg/kg		17 mg/kg	0.0017 %		
	601-048-00-0	205-923-4	218-01-9							
20	dibenz[a,h]anthracene				1.5 mg/kg		1.5 mg/kg	0.00015 %		
	601-041-00-2	200-181-8	53-70-3							
21	fluoranthene				34 mg/kg		34 mg/kg	0.0034 %		
		205-912-4	206-44-0							
22	fluorene				6.3 mg/kg		6.3 mg/kg	0.00063 %		
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				4.3 mg/kg		4.3 mg/kg	0.00043 %		
		205-893-2	193-39-5							
24	naphthalene				0.46 mg/kg		0.46 mg/kg	0.000046 %		
	601-052-00-2	202-049-5	91-20-3							
25	phenanthrene				41 mg/kg		41 mg/kg	0.0041 %		
		201-581-5	85-01-8							
26	pyrene				37 mg/kg		37 mg/kg	0.0037 %		
		204-927-3	129-00-0							
27	TPH (C6 to C40) petroleum group				550 mg/kg		550 mg/kg	0.055 %		
			TPH							
28	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
30	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
31	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]							
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]							
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.116 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- 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 The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.055%)

Classification of sample: WS11

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

Sample details

Sample Name:	LoW Code:
WS11	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.50 m	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				7.1	pH		7.1	pH	7.1 pH		
2	arsenic { arsenic trioxide }				42	mg/kg	1.32	55.454	mg/kg	0.00555 %		
	033-003-00-0	215-481-4	1327-53-3									
3	cadmium { cadmium oxide }				0.4	mg/kg	1.142	0.457	mg/kg	0.0000457 %		
	048-002-00-0	215-146-2	1306-19-0									
4	copper { dicopper oxide; copper (I) oxide }				160	mg/kg	1.126	180.142	mg/kg	0.018 %		
	029-002-00-X	215-270-7	1317-39-1									
5	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	130	mg/kg		130	mg/kg	0.013 %		
	082-001-00-6											
7	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
8	nickel { nickel chromate }				49	mg/kg	2.976	145.837	mg/kg	0.0146 %		
	028-035-00-7	238-766-5	14721-18-7									
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				2.7	mg/kg	2.554	6.895	mg/kg	0.000689 %		
	034-002-00-8											
10	zinc { zinc sulphate }				140	mg/kg	2.469	345.701	mg/kg	0.0346 %		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
11	acenaphthene				3.4	mg/kg		3.4	mg/kg	0.00034 %		
		201-469-6	83-32-9									
12	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
13	anthracene				3.5	mg/kg		3.5	mg/kg	0.00035 %		
		204-371-1	120-12-7									
14	benzo[a]anthracene				8.1	mg/kg		8.1	mg/kg	0.00081 %		
	601-033-00-9	200-280-6	56-55-3									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
15	benzo[a]pyrene; benzo[def]chrysene				7.2	mg/kg		7.2	mg/kg	0.00072 %		
	601-032-00-3	200-028-5	50-32-8									
16	benzo[b]fluoranthene				8.3	mg/kg		8.3	mg/kg	0.00083 %		
	601-034-00-4	205-911-9	205-99-2									
17	benzo[ghi]perylene				3.4	mg/kg		3.4	mg/kg	0.00034 %		
		205-883-8	191-24-2									
18	benzo[k]fluoranthene				3.2	mg/kg		3.2	mg/kg	0.00032 %		
	601-036-00-5	205-916-6	207-08-9									
19	chrysene				8.8	mg/kg		8.8	mg/kg	0.00088 %		
	601-048-00-0	205-923-4	218-01-9									
20	dibenz[a,h]anthracene				0.75	mg/kg		0.75	mg/kg	0.000075 %		
	601-041-00-2	200-181-8	53-70-3									
21	fluoranthene				17	mg/kg		17	mg/kg	0.0017 %		
		205-912-4	206-44-0									
22	fluorene				3	mg/kg		3	mg/kg	0.0003 %		
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				2.8	mg/kg		2.8	mg/kg	0.00028 %		
		205-893-2	193-39-5									
24	naphthalene				7.7	mg/kg		7.7	mg/kg	0.00077 %		
	601-052-00-2	202-049-5	91-20-3									
25	phenanthrene				16	mg/kg		16	mg/kg	0.0016 %		
		201-581-5	85-01-8									
26	pyrene				15	mg/kg		15	mg/kg	0.0015 %		
		204-927-3	129-00-0									
27	TPH (C6 to C40) petroleum group				350	mg/kg		350	mg/kg	0.035 %		
			TPH									
28	benzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
29	toluene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
30	ethylbenzene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
31	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]									
32	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<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]									
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.133 %		

Key

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- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

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

Force this Hazardous property to non hazardous because The hazard phase HP3(i) refers to flammable liquids however as the material is a solid this is not applicable and has been discounted

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.035%)