Materials Management

i) Asbestos Identification and Quantification

Asbestos fibres were positively identified in seventeen of sixty-three soil samples tested. Eleven of these samples recorded <0.001% $^{w}/_{w}$ asbestos and are likely to present a low risk to construction workers by aerial dispersion if disturbed during the works. Five soil samples recorded concentrations of asbestos fibres in soils ranging from 0.001-0.026% $^{w}/_{w}$.

One soil sample identified Chrysotile asbestos hard/cement type material in WS13A at 1.50m below ground level (bgl), approximately 138.31m AOD. This fragment has recorded a concentration of 0.312% $^{w}/_{w}$ but reflects the ACM % and not fibre % in surrounding soils.

The interim Phase 2 report recommends that the Principal Contractor should procure and act upon an Asbestos Management Plan for all site works were site soils are likely to be disturbed. Furthermore, it is considered that the Asbestos Management plan should allow for an Asbestos Containing Material (ACM) watching brief, picking and disposal operation during excavations. Soils having asbestos fibre identified at greater than 0.1% w/w and ACM having asbestos content at greater than 0.1% w/w determines a Hazardous Waste classification for disposal.

In the completed works a cover system, of minimum 600mm thickness, comprising 'suitable for use' topsoil, and subsoil is to be provided in all soft landscaped areas to break the source-pathway-receptor linkage between soils containing asbestos fibres and the proposed site end users. It is also recommended that a Hi-Vis contamination membrane or additional stone break layer underlies the cover system.

ii) Re-use of Site Soils

With reference to the risk assessment undertaken on the environmental chemistry results obtained as part of 2021intrusive investigation it is considered that there will be no relevant contaminant linkages after the buildings hard standing, gas protection and cover system are constructed and therefore there is no specific requirement to remove Made Ground or naturally occurring soils from site.

The re-use of site-won soils may be undertaken if the following principles are met:

i) the soils are suitable for use in their final location;
ii) the soils are geotechnically suitable for their intended use
iii) the re-use of a finite volume of material is required by the needs of the development as approved by the Local Planning Authority, e.g. cut and fill required to generate the approved developable area;
iv) the volume of the material being re-used is audited; and
v) approval from the relevant regulatory authorities has been sought.

These principles are outlined within the CL:AIRE publication The Definition of Waste – Development Industry Code of Practice (v2) (Ref. 1). Soils may be reused under the control of a Materials Management Plan compiled in accordance with the Code of Practice.

The classification as Hazardous Waste of soils with asbestos fibres present does not, on its own, determine the need to remove such soils from site. Again, they may be reused under the control of a Materials Management Plan compiled in accordance with The Definition of Waste - Development Industry Code of Practice.

Note that ACM are manufactured products and are, when encountered in soil by the picking exercise or by other means, defined as waste and must be removed from site and transported to a suitably licenced waste facility for disposal.

iii) Bituminous Surfacing Material (Tarmac) Waste Classification

Six samples of the bituminous surfacing material, generally described as tarmac, were collected from across the site as a representative sample and tested in the laboratory for a broad range of contaminants that could reasonably be expected to be present on site due to its previous use.

The samples were collected from HD01, TT04 TT05, TT06, TT07 and WS03, at depths of 0.05-0.10m bgl. Following the procedure set out for Black top' (road surface) waste in "Guidance on the classification and assessment of waste (1st edition 2015) - Technical Guidance WM3" (Ref. 2), the content of the compound Benzo(a)pyrene was used as a marker for coal tar.

This procedure applies only to Asphalt material classified in the List of Wastes as,

- 17 03 01* bituminous mixtures containing coal tar
- 17 03 02 bituminous mixtures other than those mentioned in 17 03 01

Where the concentration of benzo[a]pyrene is at or above 50 ppm (mg/kg) in the 'black top' alone (excluding other material) then the amount of coal tar should be considered to be sufficient (0.1% or more) for the material to be hazardous and thus coded 17 03 01*. Any sampling of 'black top' would need to ensure that layers with different concentrations of benzo[a]pyrene are identified and sampled.

Benzo(a)pyrene was not determined in any of the six samples at above 50mg/kg.

In addition, coal tar was not identified in any of the six samples by laboratory testing.

This is indicative of the surfacing material being laid post 1980 without a tar binder and would not be classed as Hazardous Waste by this parameter and would be required to be disposed as Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill (usually described as Non-Hazardous classification)

iv) Made Ground Waste Classification

As previously mentioned, the document, "Guidance of the classification and Assessment of Waste - Technical Guidance WM3 (1st Edition 2015) is to be referred to by the Waste Producer to sure that they discharge their Duty of Care effectively and correctly.

This preliminary assessment of possible waste classification of the made ground soils encountered on site has been carried out utilising environmental chemistry results (total concentrations) for input in the waste soils Characterisation Assessment Tool, CAT WASTE Soil, developed by McArdle and Atkins.

This online tool gives a rapid assessment of contaminated soils and their classification as either Hazardous or Non-Hazardous waste (Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill). Persistent Organic Pollutants (POP's) were not tested for as part of the investigation, however based on the Conceptual Site Model the risk of these being present on the site is considered low.

Eight two samples were screened using the Waste Soils Characterisation Assessment Tool, CAT WASTE Soil comprising six bituminous surfacing samples (tarmac), sixty-three Made Ground soil samples and thirteen naturally occurring soil samples.

The assessment revealed that eleven of the made ground and one of the naturally occurring soil samples analysed were identified as Hazardous waste for off-site disposal. The remaining sixty- four samples have been classified as likely to be 'Non-Hazardous' waste.

The soil samples identified as hazardous are detailed below:

Exploratory Hole	Sample Depth m bgl (m AOD)	Hazardous Property	Notes
CP01	2.80 (135.93)	HP8 – Corrosive	Black clayey gravel Made Ground

Exploratory Hole	Sample Depth m bgl (m AOD)	Hazardous Property	Notes
CP01	3.15 (135.58)	HP7 – Carcinogenic HP11 – Mutagenic	Natural sand, underlying Made Ground to 3.10m bgl.
CP11	0.15 (138.60)	HP14 – Ecotoxic	Brown clayey gravel Made Ground
TT05	1.30 (137.78)	H7 – Carcinogenic HP11 – Mutagenic HP14 – Ecotoxic	Black sandy clay and clayey gravelly sand Made Ground, hydrocarbon odour
TT10	1.00 (138.80)	HP14 – Ecotoxic	Dark brown gravelly cobbly sand Made Ground with ash and clinker, slight hydrocarbon odour
TT10	2.00 (137.80)	HP14 – Ecotoxic	
TT10	2.30 (137.50)	H7 – Carcinogenic HP11 – Mutagenic HP14 – Ecotoxic	Grey sandy clay Made Ground, hydrocarbon odour
TTF	0.10 (140.46)	HP8 – Corrosive	Concrete
WS13A	1.50 (138.31)	H7 – Carcinogenic HP11 – Mutagenic	Black gravelly sand Made Ground with ash and clinker
WS13A	2.80 (137.01)	H7 – Carcinogenic HP11 – Mutagenic HP14 – Ecotoxic	Black sandy clay Made Ground, hydrocarbon odour
WS15	2.20 (137.57)	H7 – Carcinogenic HP11 – Mutagenic HP14 – Ecotoxic	Black sandy clay Made Ground, hydrocarbon odour
WS20	2.00 (137.78)	H7 – Carcinogenic HP11 – Mutagenic HP14 – Ecotoxic	Black sandy clay Made Ground, hydrocarbon odour

Approximately 14% of the made ground samples taken in the Apartment zone and 20% of samples taken in the Housing zone would likely be classed as Hazardous Waste

v) Waste Acceptance Criteria (WAC) Testing

In anticipation that soils will need to be removed from the site during the cut and fill operation, samples were taken from the most likely areas on the site for Waste Acceptance Criteria (WAC). Two stage solid and leachate hazardous WAC testing was undertaken on six samples collected from tarmac across the site:

- WS03 at 0.10m bgl;
- HD01 at 0.10m bgl;
- TT04 at 0.05m bgl;
- TT05 at 0.05m bgl;
- TT06 at 0.10m bgl; and
- TT07 at 0.05m bgl

However, these WAC tests are not required as the waste classification for the bituminous surfacing material is not likely to be Hazardous. It is advised that these WAC results are not disclosed to any disposal facility to avoid confusion.

vi) Closure

The preliminary classification provided herein is an initial guide to likely classification of soil and tarmac surfacing material if considered for waste disposal. The waste producer (Principal Contractor/Earthworks Contractor) has a duty of care for ensuring adequate classification of the actual material to be disposed off site in accordance with "Guidance on the classification and assessment of waste (1st edition 2015) - Technical Guidance WM3".

Soils described as made ground have been given a preliminary likely classification as Hazardous waste for disposal so WAC testing of these samples will be required if the classification is to be used now to determine a potential disposal facility at this stage.

If naturally occurring soils are being considered for offsite disposal as Inert waste, Waste Acceptance Criteria (WAC) testing will be required with confirmation of acceptability from the receiving landfill.

Landfill operators are not obliged to accept waste and, if they were to do so, may have specific requirements beyond those outlined above prior to acceptance. Landfill operators should be contacted to confirm classifications or otherwise.

We hope the foregoing and associated enclosures satisfy your current requirements but if you need any further advice please do not hesitate to contact us.

Yours sincerely,



Siobhán Hyde
Senior Geo-Environmental Engineer
For and on behalf of
Curtins Consulting Ltd

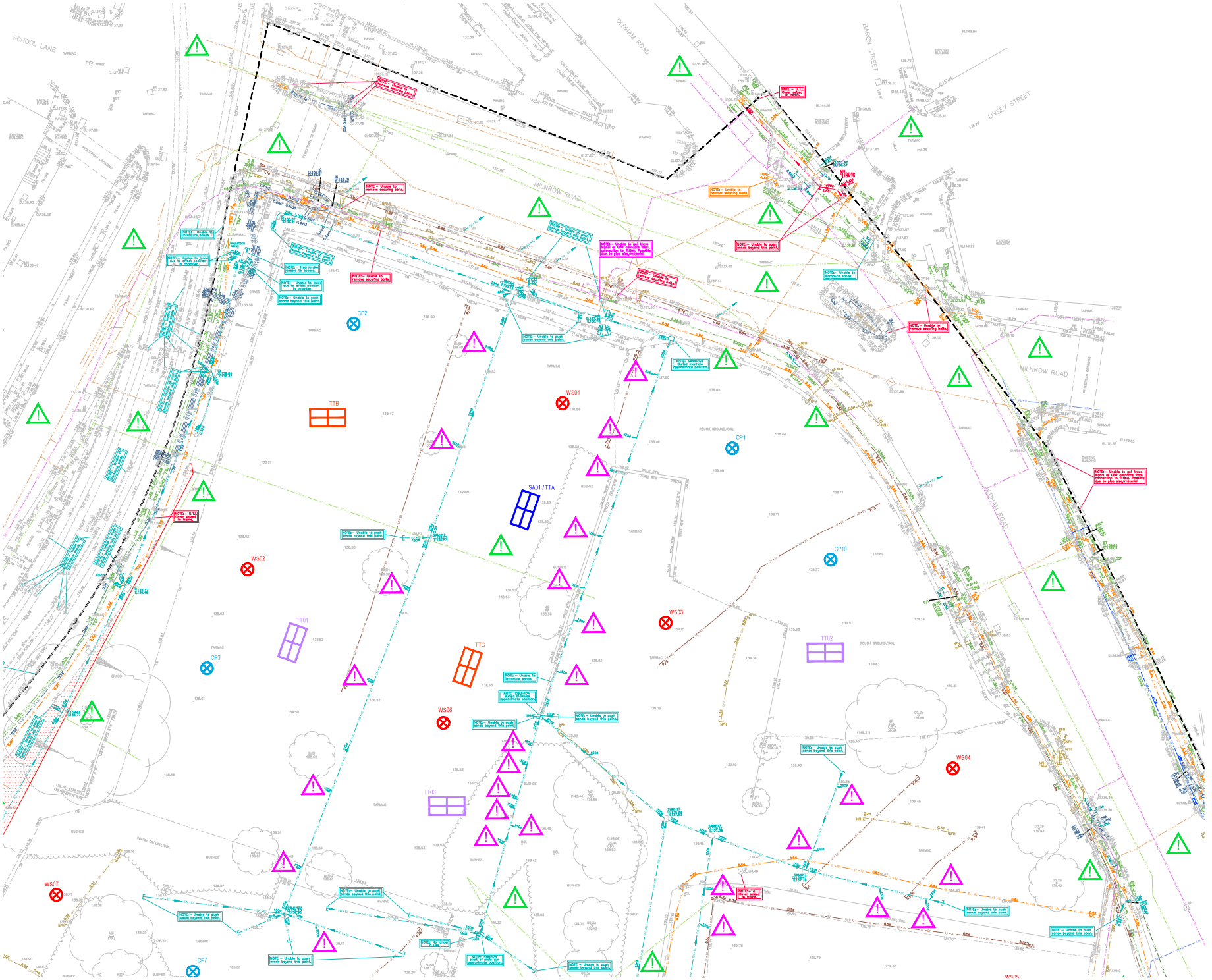
References

1. Contaminated Land: Applications in Real Environments (CL:AIRE) (2011) *Definition of Waste Code of Practice* (Version 2).
2. Environment Agency (2015) *Guidance on the Classification and Assessment of Waste Technical Guidance WM3* (1st Edition 2015)

Appendices

- Curtins (2021) *Proposed Exploratory Hole Location Plan Sheet 1,* ref. 075882-CUR-00-XX-DR-GE-004-V03
- Curtins (2021) *Proposed Exploratory Hole Location Plan Sheet 2,* ref. 075882-CUR-00-XX-DR-GE-005-V03
- Curtins (2021) *Proposed Exploratory Hole Location Plan Sheet 3,* ref. 075882-CUR-00-XX-DR-GE-006-V03
- Curtins (2021) *Proposed Exploratory Hole Location Plan Sheet 4,* ref. 075882-CUR-00-XX-DR-GE-007-V03
- Cable Percussion Borehole Logs, CP01 – CP14
- Window Sample Borehole Logs, WS01 – WS22
- Machine Excavated Trial Pit Logs, TTA-TTG and TT01-TT10
- i2 Environmental Chemistry Analysis Results (Soil)
  - Final Analytical Test Report 21-61537-1
  - Final Analytical Test Report 21-62553-2

- Final Analytical Test Report 21-62997-1
- Final Analytical Test Report 21-63793-2
- Final Analytical Test Report 21-65647-1
- Final Analytical Test Report 21-66217-1
- Final Analytical Test Report 21-66218-1
- Final Analytical Test Report 21-66221-1 + WAC testing results
- Final Analytical Test Report 21-66814-2
- Final Analytical Test Report 21-67236-1
- Final Analytical Test Report 21-67238-1 + WAC testing results
- Final Analytical Test Report 21-67782-1
- Final Analytical Test Report 21-67783-1 + WAC testing results
- Final Analytical Test Report 21-37964-2
- Final Analytical Test Report 21-68612-1



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CP — DENOTES CABLE PERCUSSION BOREHOLES UP TO 30m BGL

HD — DENOTES HAND EXCAVATED PIT TO 1.20m BGL

TTA - TTG — DENOTES TRIAL TRENCHES UP TO 3.5m BGL TO RECORD GROUND FLOOR SLAB THICKNESS AND INSPECT EXISTING FOUNDATIONS

TT1 - TT10 — DENOTES TRIAL TRENCHES UP TO 3.5m BGL TO LOCATE CANAL WALLS. REFER TO LOGS TT06A TO TT06F FOR EXTENT OF TT06 TRIAL TRENCH, TT07A TO TT07C FOR TT07 EXTENT AND TT08A TO TT08B FOR TT08 EXTENT

SA01 — DENOTES SOAKAWAY

DENOTES AREA OF TFGM BOUNDARY INTO THE SITE

Rev.	Description	Date:	By:	Chkd:
V03	UPDATED TO INCLUDE ADDITIONAL / MOVED EXPLORATORY HOLES FOLLOWING SI WORKS	05/07/21	NG	SH
V02	ISSUED FOR INFORMATION	15/02/21	NG	SH

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Status: SUITABLE FOR INFORMATION — S2

Project: NEIGHBOURHOOD, ROCHDALE

Drg Title: PROPOSED EXPLORATORY HOLE LOCATION PLAN SHEET 1

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	15/02/21	N. GILL	S. HYDE	S. HYDE

Scale: 1:200

Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
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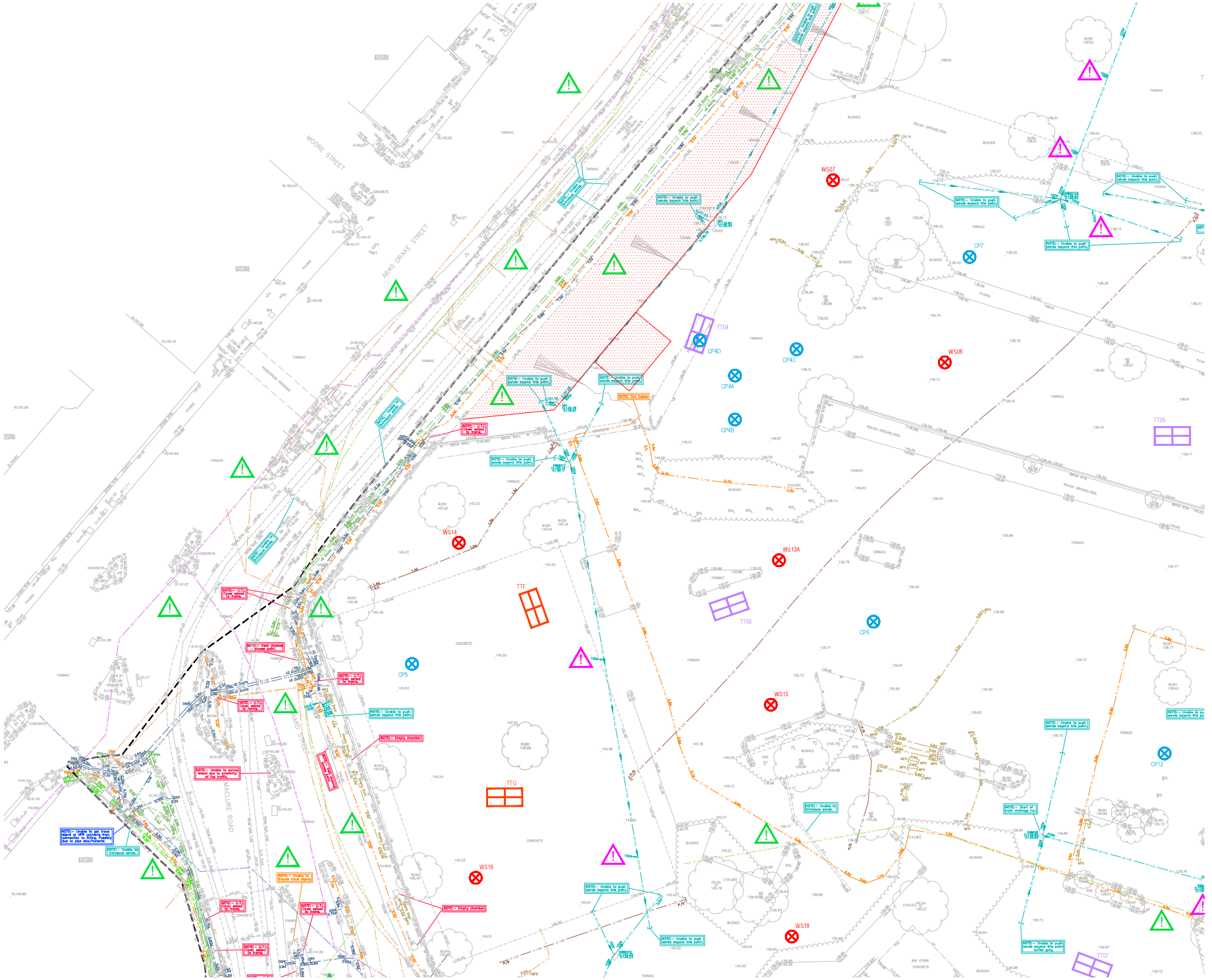

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Project: NEIGHBOURHOOD, ROCHDALE

Drg Title: PROPOSED EXPLORATORY HOLE LOCATION PLAN SHEET 2

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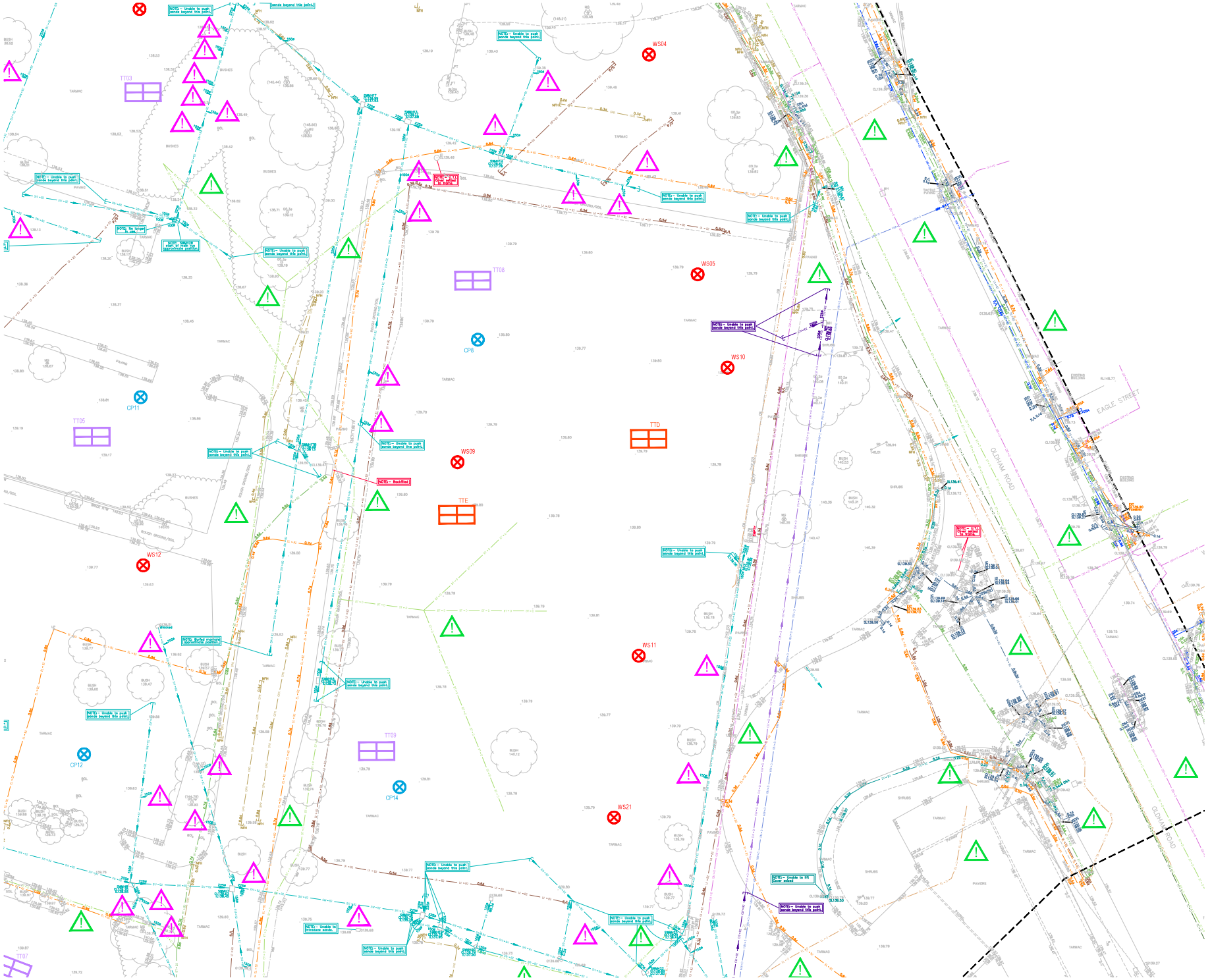

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SA01 DENOTES SOAKAWAY

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Project: NEIGHBOURHOOD, ROCHDALE

Drg Title: PROPOSED EXPLORATORY HOLE LOCATION PLAN SHEET 3

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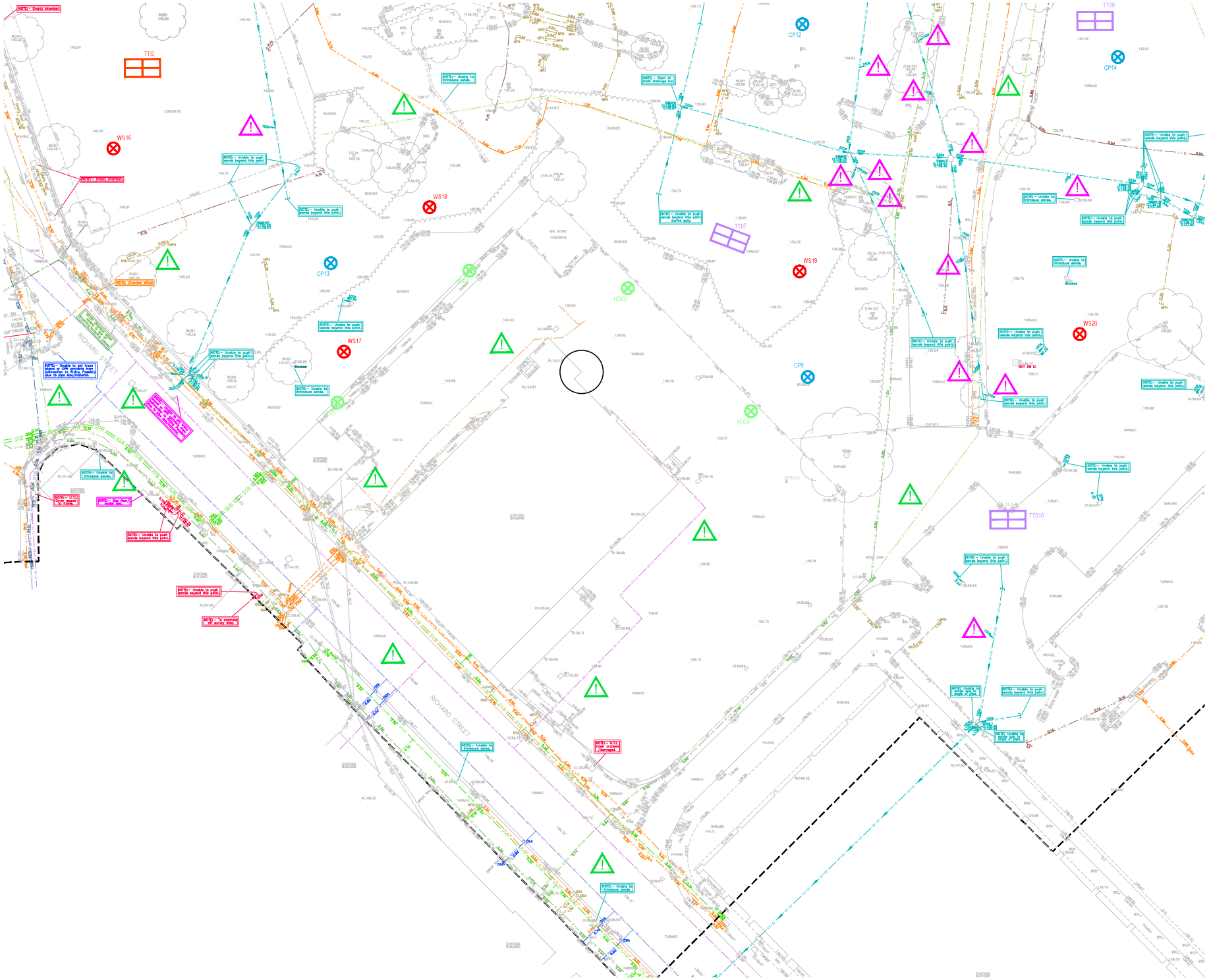

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Project: NEIGHBOURHOOD, ROCHDALE

Drg Title: PROPOSED EXPLORATORY HOLE LOCATION PLAN SHEET 4

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Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
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Borehole Log

Borehole No. **CP01**

Sheet 1 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389996.00 - 413050.00	Hole Type CP
Location: Rochdale		Level: 138.73	Scale 1:50
Client: Willmott Dixon		Dates: 11/03/2021 - 12/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.15	138.58		TOPSOIL: Grass over a brown, slightly sandy, slightly gravelly, silty clay with frequent rootlets. Gravel is fine to medium and sub-angular to angular of siltstone, mudstone and rare brick.
		1.20		N=7 (1,1/1,2,1,3)				MADE GROUND: Loose black very clayey gravel with occasional cobbles. Gravel is medium to coarse, and sub-angular to angular of brick and siltstone. Cobbles are angular of broken brick.
		2.00		N=36 (7,7/9,11,7,9)				
		2.80	ES					
		3.00		N=10 (1,2/2,2,3,3)				
		3.00 - 3.45	D		3.10	135.63		Loose brown mottled orange slightly gravelly, silty, medium to coarse SAND. Gravel is medium to coarse and rounded to sub-rounded of siltstone, mudstone and sandstone.
		3.15	ES					
		4.00		N=9 (1,1/2,2,2,3)				
		4.00 - 4.45	B					
	▼							
		5.00		N=7 (1,1/1,2,2,2)				
		5.00 - 5.45	B					
		5.00 - 5.45	D					
					5.80	132.93		Loose dark brown very silty fine to coarse SAND.
		6.00		N=6 (1,1/1,2,1,2)				
		6.00 - 6.45	B					
		6.00 - 6.45	D					
		6.80	D		6.80	131.93		Firm grey/brown slightly silty, slightly sandy, slightly gravelly, CLAY. Gravel is fine to medium and sub-rounded of siltstone and mudstone.
		7.50 - 7.95	U100	Ublow=32				
					8.10	130.63		Medium dense grey/brown silty, very clayey, fine to medium SAND.
		8.70	D					
		9.00		N=15 (2,3/3,3,4,5)				

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 4.60m bgl which had risen to 4.11m bgl after 20 minutes and 13.40m bgl which had risen to 12.90m bgl after 20 minutes.

Borehole Log

Borehole No. **CP01** Sheet 2 of 3

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389996.00 - 413050.00	Hole Type CP
Location:	Rochdale		Level:	138.73	Scale 1:50
Client:	Willmott Dixon		Dates:	11/03/2021 - 12/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50		N=15 (3,3/3,4,4,4)				
		10.50 - 10.95	D					
		11.20	D		11.20	127.53		Firm grey/brown slightly sandy, silty CLAY.
		12.00 - 12.45	U100	Ublow=15				
		12.40	D		12.40	126.33		Loose grey/brown very silty fine to medium SAND.
	▼	13.50	D		13.50	125.23		Firm grey/brown slightly sandy, very silty CLAY.
		13.50		N=8 (1,1/2,2,2,2)				
		13.50 - 13.95	B					
		15.00		N=10 (1,1/2,2,3,3)	15.00	123.73		Loose brown slightly gravelly, silty fine to medium SAND. Gravel is fine and sub-rounded of coal.
		16.50		N=9 (1,2/2,2,2,3)				
		17.20	D		17.20	121.53		Firm slightly silty CLAY.
		18.00 - 18.45	U100	Ublow=37				
		18.45 - 18.70	D					
		19.50		N=11 (1,2/2,3,3,3)				
		19.50 - 19.95	D					

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 4.60m bgl which had risen to 4.11m bgl after 20 minutes and 13.40m bgl which had risen to 12.90m bgl after 20 minutes.

Borehole Log

Borehole No. **CP01**

Sheet 3 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389996.00 - 413050.00	Hole Type CP
Location: Rochdale		Level: 138.73	Scale 1:50
Client: Willmott Dixon		Dates: 11/03/2021 - 12/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		20.40	D					
		21.00		N=9 (2,1/2,2,2,3)				
		22.00	D					
		22.50	D					
		22.50		N=12 (1,2/2,3,3,4)				
		23.40	D					
		24.00 - 24.45	U100	Ublow=42				
		25.00		N=50 (25 for 135mm/50 for 255mm)				*Very stiff from 25.00m*
		25.00 - 25.45	D		25.45	113.28		End of borehole at 25.45 m

21 22 23 24 25 26 27 28 29 30

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 4.60m bgl which had risen to 4.11m bgl after 20 minutes and 13.40m bgl which had risen to 12.90m bgl after 20 minutes.

AGS

Borehole Log

Borehole No. **CP02**

Sheet 1 of 4

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389952.00 - 413064.00	Hole Type CP
Location: Rochdale		Level: 138.51	Scale 1:50
Client: Willmott Dixon		Dates: 04/03/2021 - 08/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20 - 0.40	D		0.20	138.31		MADE GROUND: Dark grey asphalt.
		0.30 - 0.35	ES		0.30	138.21		MADE GROUND: Dark grey gravel. Gravel is fine to medium and sub-angular to angular of concrete and stone fill.
		0.40 - 1.20	D					MADE GROUND: Loose dark brown slightly sandy gravel. Gravel is fine to coarse and sub-angular to angular of brick, concrete, sandstone, mudstone, siltstone and rare coal.
		1.20	D					
		1.20		N=9 (1,2/2,2,2,3)				
		2.00		N=47 (12,10/10,13,12,12)	2.00	136.51		MADE GROUND: Firm brown clay with high cobble content. Cobbles are sub-angular of brick and concrete.
		2.00 - 2.45	D					
		2.40	D		2.40	136.11		MADE GROUND: Firm brown clay with high boulder content. Boulders are sub-rounded to sub-angular of sandstone.
		3.00		N=44 (12,13/13,10,10,11)				
		3.00 - 3.45	D					
		4.00		N=4 (1,1/1,1,1,1)	3.90	134.61		MADE GROUND: Soft black sandy, gravelly clay with medium peat content. Gravel is medium to angular of brick. Peat is dark brown and fibreous.
		4.00 - 4.45	D					
	▼	5.00		N=5 (1,0/1,1,1,2)				
	▼	5.00 - 5.45	D					
		6.00		N=7 (1,1/2,2,1,2)	6.00	132.51		Soft dark brown silty CLAY with high peat content. Peat is fibreous with vegetation.
		6.00 - 6.45	D					
		6.50	D		6.50	132.01		Soft dark brown slightly gravelly, silty CLAY with medium peat content. Peat is fibreous with vegetation. Gravel is fine to medium and sub-rounded of sandstone.
		6.90	D		6.90	131.61		Soft grey silty, gravelly CLAY with occasional peat content. Peat is fibreous. Gravel is fine and sub-rounded to rounded of sandstone and siltstone.
		7.50		N=8 (3,3/2,2,2,2)	7.50	131.01		Soft grey very clayey very sandy SILT. Sand is fine to medium.
		7.50 - 7.95	D					
		9.00		N=8 (1,1/2,2,2,2)				
		9.00 - 9.45	D					

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Damp material noted at 5.20m bgl and 23.50m bgl.

Borehole Log

Borehole No. **CP02**

Sheet 2 of 4

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389952.00 - 413064.00	Hole Type CP
Location: Rochdale		Level: 138.51	Scale 1:50
Client: Willmott Dixon		Dates: 04/03/2021 - 08/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50 10.50 - 10.95	 D	N=7 (1,1/2,1,2,2)				
		12.00 12.00 - 12.45	 D	N=9 (1,1/2,2,2,3)				
		13.50 13.50 - 13.95	 B	N=13 (3,3/3,3,3,4)				
		15.00 15.00 - 15.45	 B	N=12 (2,3/3,3,3,3)				
		16.50 16.50 - 16.95 16.50 - 16.95	 B D	N=14 (1,2/3,3,4,4)				
		17.20	B		17.20	121.31		Firm brown slightly sandy, very silty CLAY.
		18.00 - 18.45	U100	Ublow=32				
		18.45	D					
		19.50 19.50 - 19.95	 D	N=11 (1,2/2,3,3,3)				

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Damp material noted at 5.20m bgl and 23.50m bgl.

AGS

Borehole Log

Borehole No. **CP02**

Sheet 3 of 4

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389952.00 - 413064.00	Hole Type CP
Location: Rochdale		Level: 138.51	Scale 1:50
Client: Willmott Dixon		Dates: 04/03/2021 - 08/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		21.00 - 21.45	U100	Ublow=35				
		21.45	D		21.50	117.01		Firm brown very sandy, very silty CLAY.
		22.50		N=12 (2,3/3,3,3,3)				
		22.50 - 22.95	D					
	▼	23.60	D		23.60	114.91		Firm slightly sandy gravelly CLAY. Gravel is fine to medium and sub-rounded of sandstone, siltstone and rare coal.
		24.00 - 24.45	U100	Ublow=48				
		25.50	D		25.50	113.01		Very Stiff brown sandy gravelly CLAY. Gravel is fine to medium and sub-rounded of sandstone and rare coal. Occasional sand bands with sand medium to coarse.
		25.50		50 (15 for 105mm/50 for 170mm)				
		26.50	D					
		27.00 - 27.45	U100	Ublow=110				
		27.45	D		27.40	111.11		Very Stiff brown slightly sandy, gravelly CLAY. Gravel is fine to medium and sub-rounded of sandstone, mudstone and siltstone.
		28.50		N=50 (10,13/50 for 255mm)				
		28.50 - 28.95	D					
		29.50	D					
					30.00	108.51		

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Damp material noted at 5.20m bgl and 23.50m bgl.

Borehole Log

Borehole No. **CP02**

Sheet 4 of 4

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389952.00 - 413064.00	Hole Type CP
Location:	Rochdale		Level:	138.51	Scale 1:50
Client:	Willmott Dixon		Dates:	04/03/2021 - 08/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		30.00		N=50 (25 for 145mm/50 for 245mm)				
		30.00 - 30.45	D					End of borehole at 30.45 m

31 32 33 34 35 36 37 38 39 40

Remarks

Service clearance handpit undertaken to 1.20m bgl. Damp material noted at 5.20m bgl and 23.50m bgl.

AGS

Borehole Log

Borehole No. **CP03**

Sheet 1 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389936.00 - 413025.00	Hole Type CP
Location: Rochdale		Level: 138.56	Scale 1:50
Client: Willmott Dixon		Dates: 09/03/2021 - 10/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.22	138.34		MADE GROUND: Grey concrete.
		0.60 - 0.62	ES		0.55	138.01		MADE GROUND: Brown slightly clayey gravel with high cobble content. Gravel is medium to coarse and angular to sub-angular of concrete. Cobbles of sub-angular concrete.
		1.20		N=24 (2,4/4,7,6,7)				MADE GROUND: Medium dense dark brown slightly sandy gravel. Gravel is fine to coarse and angular to sub-angular of brick, concrete, siltstone and mudstone.
	▼	2.00		N=33 (25 for 105mm/15,9,5,4)	2.00	136.56		MADE GROUND: Medium dense grey gravel with high cobble content. Gravel is fine to coarse and angular to sub-angular of concrete and sandstone.
		3.00		N=21 (5,6/7,7,5,2)				
		4.00		N=5 (1,0/1,1,1,2)	4.00	134.56		
		4.00 - 4.45	D		4.30	134.26		Loose dark grey slightly gravelly, very clayey silty SAND with high peat content. Sand is fine to medium. Peat is fibreous. Gravel is medium and rounded of siltstone and sandstone.
		4.55	ES					Soft dark grey slightly gravelly very sandy very clayey SILT with occasional peat content. Peat is fibreous. Gravel is medium and rounded of siltstone.
		5.00		N=9 (1,1/5,1,1,2)	5.00	133.56		
		5.00 - 5.45	B					Loose grey slightly clayey, SAND and GRAVEL. Gravel is medium to coarse and sub-angular to sub-rounded of mudstone and sandstone.
		5.00 - 5.45	D					
		6.00		N=15 (1,2/3,3,4,5)				
		6.00 - 6.45	B					
		6.80	D		6.80	131.76		Firm brown slightly sandy, very silty CLAY.
		7.50 - 7.95	U100	Ublow=32				
	▼				7.90	130.66		Loose brown slightly clayey, fine to medium SAND.
		9.00	D		9.00	129.56		Medium dense grey/brown silty, very clayey, fine to medium SAND.
		9.00		N=8 (1,1/1,2,2,3)				
		9.00 - 9.45	B					

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 2.50m bgl which had risen to 1.80m bgl after 20 minutes and 8.00m bgl which had risen to 7.10m after 20 minutes.

AGS

Borehole Log

Borehole No. **CP03**

Sheet 2 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389936.00 - 413025.00	Hole Type CP
Location: Rochdale		Level: 138.56	Scale 1:50
Client: Willmott Dixon		Dates: 09/03/2021 - 10/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50		N=10 (1,1/2,2,3,3)				
		12.00		N=12 (1,2/2,3,3,4)				
		13.50		N=11 (1,2/2,3,3,3)				
		13.50 - 13.95	D		13.70	124.86		Firm brown very sandy, very silty CLAY.
		14.00	D					
		15.00		N=11 (1,2/3,3,2,3)	14.80	123.76		Medium dense brown slightly gravelly, very silty, fine to medium SAND. Gravel is fine to medium and sub-rounded of coal.
		15.00 - 15.45	D					
		16.50		N=17 (3,3/4,4,4,5)				
		18.00		N=12 (1,2/3,3,3,3)				
		18.60	D		18.60	119.96		Firm brown very silty CLAY.
		19.50 - 19.95	U100	Ublow=35				
		19.95 - 20.20	D					

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 2.50m bgl which had risen to 1.80m bgl after 20 minutes and 8.00m bgl which had risen to 7.10m after 20 minutes.

Borehole Log

Borehole No. **CP03**
Sheet 3 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389936.00 - 413025.00	Hole Type CP
Location: Rochdale		Level: 138.56	Scale 1:50
Client: Willmott Dixon		Dates: 09/03/2021 - 10/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		21.00		N=13 (1,2/3,3,3,4)				
		22.00	D					
		22.50		N=42 (5,7/8,11,11,12)	22.40	116.16		Dense brown clayey, very silty, fine to coarse SAND.
		22.50 - 22.95	B					
		23.20	D		23.20	115.36		Very stiff brown silty CLAY.
		24.00		N=41 (10,12/10,10,10,11)				
		24.50	D					
		25.00		N=39 (4,7/9,9,10,11)				
					25.45	113.11		End of borehole at 25.45 m

21 22 23 24 25 26 27 28 29 30

Remarks
Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 2.50m bgl which had risen to 1.80m bgl after 20 minutes and 8.00m bgl which had risen to 7.10m after 20 minutes.

AGS

Borehole Log

Borehole No.
CP04
Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389903.00 - 412974.00	Hole Type CP
Location:	Rochdale		Level:	139.93	Scale 1:50
Client:	Willmott Dixon		Dates:	10/03/2020 - 11/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10	139.83		MADE GROUND: Grey concrete.
					0.50	139.43		MADE GROUND: Grey gravel of medium to coarse angular concrete.
					0.58	139.35		MADE GROUND: Cobble of concrete.
		1.20		0 (75 for 55mm/0 for 0mm)	1.20	138.73		MADE GROUND: Black very silty, very clayey gravel. Gravel is fine to coarse and angular to sub-angular of brick, concrete, sandstone, siltstone and mudstone. (Strong hydrocarbon odour)
					1.30	138.63		MADE GROUND: Grey concrete.
								End of borehole at 1.30 m

Remarks
Service clearance handpit undertaken to 1.20m bgl. Terminated on possible concrete slab from 1.25m to1.30m bgl. No groundwater encountered.

Borehole Log

Borehole No.
CP04A
Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389908.00 - 412977.00	Hole Type CP
Location:	Rochdale		Level:	139.69	Scale 1:50
Client:	Willmott Dixon		Dates:	18/03/2021 - 18/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.09	139.60		MADE GROUND: Grey concrete.
					0.45	139.24		MADE GROUND: Black very silty, very clayey gravel. Gravel is fine to coarse and angular to sub-angular of brick, concrete, sandstone, siltstone and mudstone.
					0.46	139.23		MADE GROUND: Grey concrete.
								End of borehole at 0.46 m

Remarks
Service clearance handpit undertaken to 0.46m bgl. Terminated on possible concrete slab at 0.46m bgl. No groundwater encountered.

Borehole Log

Borehole No.
CP04B
Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389908.00 - 412972.00	Hole Type CP
Location:	Rochdale		Level:	139.88	Scale 1:50
Client:	Willmott Dixon		Dates:	18/03/2021 - 18/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.09	139.79		MADE GROUND: Grey concrete.
					0.42	139.46		MADE GROUND: Black very silty, very clayey gravel. Gravel is fine to coarse and angular to sub-angular of brick, concrete, sandstone, siltstone and mudstone.
					0.43	139.45		MADE GROUND: Grey concrete.
								End of borehole at 0.43 m

Remarks
Service clearance handpit undertaken to 0.43m bgl. Terminated on possible concrete slab at 0.43m bgl. No groundwater encountered.

Borehole Log

Borehole No.
CP04C
Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389915.00 - 412980.00	Hole Type CP
Location:	Rochdale		Level:	139.30	Scale 1:50
Client:	Willmott Dixon		Dates:	18/03/2021 - 18/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.09	139.21		MADE GROUND: Grey concrete.
								MADE GROUND: Grey/brown slightly clayey gravel with occasional cobbles. Gravel is medium to coarse and angular of concrete and brick. Cobbles of angular concrete and brick.
					0.85	138.45		MADE GROUND: Grey concrete.
					0.88	138.42		End of borehole at 0.88 m

Remarks
Service clearance handpit undertaken to 0.88m bgl. Terminated on possible concrete slab at 0.88 bgl. No groundwater encountered.

Borehole Log

Borehole No. **CP04D**

Sheet 1 of 4

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389904.00 - 412981.00	Hole Type CP
Location: Rochdale		Level: 139.67	Scale 1:50
Client: Willmott Dixon		Dates: 23/03/2021 - 25/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20	139.47		MADE GROUND: Black tarmacadam.
					0.50	139.17		MADE GROUND: Greyish/yellowish brown sand and gravel. Gravel is fine and medium angular to subangular sandstone and concrete.
					1.00	138.67		MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to rounded sandstone, mudstone, brick and slate. Rare pockets of grey sandy clay.
					1.60	138.07		MADE GROUND: Orangish brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular sandstone, rare brick and rare slate. Rare to occasional boulders of sandstone and mudstone.
					2.40	137.27		MADE GROUND: Grey and dark grey slightly silty fine and medium sand. Rare gravel of brick. Slight organic odour.
					2.80	136.87		MADE GROUND: Sandstone boulder.
		3.50 3.50 - 3.95	D	N=9 (3,2/3,2,2,2)				Loose grey medium and coarse SAND.
		4.00 4.00 - 4.45 4.00 - 4.45	Bulk D	N=5 (1,1/1,1,2,1)	3.90	135.77		Loose greyish brown sandy SILT. Rare fine and medium subrounded to rounded gravel of sandstone and mudstone.
		5.00 5.00 - 5.50	D	N=12 (2,3/3,3,3,3)				*Medium dense from 5.00m bgl.*
		6.00 - 6.45	U		6.00	133.67		Firm brown slightly sandy silty CLAY. Rare fine and medium subrounded to rounded gravel of sandstone and mudstone.
		6.50	D					
		7.50 7.50 - 8.00	D	N=14 (3,3/4,3,3,4)				
		9.00 - 9.45	U					
		9.50	D					

Continued on next sheet

Remarks

Followed on from TT04. Groundwater recorded at 11.50m bgl, rising to 11.00m after 20 minutes, and 24.50m bgl rising to 24.00m bgl after 20 minutes.

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Borehole Log

Borehole No. **CP04D**

Sheet 2 of 4

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389904.00 - 412981.00	Hole Type CP
Location: Rochdale		Level: 139.67	Scale 1:50
Client: Willmott Dixon		Dates: 23/03/2021 - 25/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50		N=13 (3,3/3,4,3,3)				
		10.50 - 10.95	D					
		11.00	D					
	▼				11.50	128.17		Medium dense greyish brown silty fine SAND.
		12.00		N=11 (2,2/3,2,3,3)				
		12.00 - 12.45	D					
		13.00 - 13.95	D					
		13.50		N=14 (2,3/3,4,3,3,4)				
		14.00	Bulk					
		15.00		N=14 (3,3/4,3,3,4)				
		15.00 - 15.45	D					
		16.50		N=17 (3,4/4,4,5,4)				
		16.50 - 16.95	D					
		18.00	Bulk					*Pockets of sandy SILT/CLAY from 18.00m bgl.*
		18.00		N=20 (3,3/4,5,5,6)				
		18.00 - 18.45	D					
					18.60	121.07		Stiff brown and greyish brown silty slightly sandy CLAY. Laminations in clay.
		19.50 - 19.95	U					
		20.00	D					

Continued on next sheet

Remarks

Followed on from TT04. Groundwater recorded at 11.50m bgl, rising to 11.00m after 20 minutes, and 24.50m bgl rising to 24.00m bgl after 20 minutes.

Borehole Log

Borehole No. **CP04D**
Sheet 3 of 4

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389904.00 - 412981.00	Hole Type CP
Location: Rochdale		Level: 139.67	Scale 1:50
Client: Willmott Dixon		Dates: 23/03/2021 - 25/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		21.00 21.00 - 21.45	D	N=25 (5,5/6,5,7,7)				
		22.50 - 22.95	U					
		23.00	D					
		24.00 24.00 - 24.50	D	N=26 (5,6/6,6,7,7)	24.00	115.67		Stiff brown sandy SILT.
	▼							
		25.50 25.50 - 26.00	D	N=26 (5,6/7,6,7,6)				
					26.50	113.17		Stiff brown slightly sandy slightly gravelly CLAY. Gravel is fine and medium subangular to subrounded sandstone and mudstone of mixed lithologies.
		27.00 - 27.45	U					
		28.50 28.50	D	N=47 (6,8/10,12,13,12)				*Very stiff from 28.50m bgl.*
		30.00	D		30.00	109.67		

Continued on next sheet

Remarks
Followed on from TT04. Groundwater recorded at 11.50m bgl, rising to 11.00m after 20 minutes, and 24.50m bgl rising to 24.00m bgl after 20 minutes.

AGS

Borehole Log

Borehole No. **CP04D**

Sheet 4 of 4

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389904.00 - 412981.00	Hole Type CP
Location:	Rochdale		Level:	139.67	Scale 1:50
Client:	Willmott Dixon		Dates:	23/03/2021 - 25/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		30.00		N=50 (6,8/50 for 255mm)				End of borehole at 30.41 m

31
32
33
34
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40

Remarks
Followed on from TT04. Groundwater recorded at 11.50m bgl, rising to 11.00m after 20 minutes, and 24.50m bgl rising to 24.00m bgl after 20 minutes.

AGS

Borehole Log

Borehole No. **CP05**

Sheet 1 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389871.00 - 412944.00	Hole Type CP
Location: Rochdale		Level: 140.57	Scale 1:50
Client: Willmott Dixon		Dates: 15/03/2021 - 16/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20	140.37		MADE GROUND: Grey concrete.
								MADE GROUND: Medium dense yellow/grey very sandy gravel. Gravel is medium to coarse and sub-angular of concrete and sandstone.
		1.20		N=16 (2,3/3,4,4,5)				
					1.50	139.07		MADE GROUND: Loose brown slightly clayey, very gravelly sand. Gravel is medium to coarse and sub-angular of concrete and sandstone.
		2.00		N=8 (1,1/1,2,2,3)				
		2.50	ES					
		3.00		N=16 (1,2/3,4,4,5)	3.00	137.57		Medium dense brown very gravelly, fine to coarse SAND. Gravel is fine to medium and sub-angular of sandstone.
		4.00	ES					
		4.00		N=23 (2,3/5,5,6,7)				
		4.00 - 4.45	D					
		5.00		N=9 (1,2/2,2,2,3)				
		5.00 - 5.45	B		5.10	135.47		Medium dense brown medium to coarse SAND.
		6.00		N=15 (3,3/3,3,4,5)				
		6.00 - 6.45	B					
		6.90	D		6.90	133.67		Firm brown sandy, very silty CLAY.
		7.50		N=12 (3,2/3,3,3,3)	7.50	133.07		Medium dense orange/brown slightly clayey, very silty, fine to medium SAND.
		7.50 - 7.95	B					
		8.40	D		8.40	132.17		Stiff brown slightly sandy, very silty CLAY.
		9.00 - 9.45	U100	Ublow=28				
		9.45 - 9.70	D					
								Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 3.00m to 8.00m bgl. Damp material was noted at 13.50m bgl.

Borehole Log

Borehole No. **CP05**

Sheet 2 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389871.00 - 412944.00	Hole Type CP
Location: Rochdale		Level: 140.57	Scale 1:50
Client: Willmott Dixon		Dates: 15/03/2021 - 16/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50		N=17 (2,3/4,4,5,5,4)				
		12.00 - 12.45	D					
		12.00 - 12.45	U100	Ublow=41				
		12.45 - 12.70	D					
	▼	13.50		N=24 (4,5/6,6,6,6)	13.50	127.07		Medium dense brown slightly clayey, very sandy SILT.
		13.50 - 13.95	B					
		15.00		N=22 (3,5/5,5,6,6)				
		15.00 - 15.45	B					
		16.50		N=21 (2,3/4,5,6,6)	16.50	124.07		Medium dense brown slightly silty, gravelly, fine to medium SAND. Gravel is fine to medium and sub-angular coal.
		16.50 - 16.95	B					
		18.00		N=20 (2,4/4,5,5,6)				
		18.00 - 18.45	B					
		19.50		N=9 (1,1/2,2,2,3)				*Loose from 19.50m*
		19.50 - 19.95	B					

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 3.00m to 8.00m bgl. Damp material was noted at 13.50m bgl.

Borehole Log

Borehole No. **CP05**

Sheet 3 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389871.00 - 412944.00	Hole Type CP
Location: Rochdale		Level: 140.57	Scale 1:50
Client: Willmott Dixon		Dates: 15/03/2021 - 16/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		20.40	D		20.40	120.17		Firm brown slightly silty CLAY.
		21.00 - 21.45	U100	Ublow=60				
		22.50		N=17 (3,3/4,4,4,5)	22.50	118.07		Stiff brown slightly sandy, very silty CLAY.
		22.50 - 22.95	D					
		24.00		N=15 (2,3/3,4,4,4)				
		24.00 - 24.45	D					
		25.00		N=14 (2,2/3,4,4,4)				
		25.00 - 25.45	D					
					25.45	115.12		End of borehole at 25.45 m

21 22 23 24 25 26 27 28 29 30

Remarks

Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 3.00m to 8.00m bgl. Damp material was noted at 13.50m bgl.

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Borehole Log

Borehole No. **CP06**

Sheet 1 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389924.00 - 412950.00	Hole Type CP
Location: Rochdale		Level: 139.89	Scale 1:50
Client: Willmott Dixon		Dates: 12/03/2021 - 15/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.05	139.84		MADE GROUND: Grey concrete.
								MADE GROUND: Slightly clayey gravel with high cobble content. Gravel is medium to coarse and angular to sub-angular of concrete. Cobbles of angular concrete.
		0.90	ES		0.80	139.09		MADE GROUND: Medium dense black clayey gravel with high cobble content. Gravel is medium to coarse of concrete and asphalt. Cobbles of angular concrete.
		1.20		N=17 (2,3/4,4,4,5)				
		2.00		N=15 (1,3/4,5,3,3)				
					2.50	137.39		Firm grey/brown very silty CLAY with pockets of peat. Peat is fibreous with vegetation.
		3.00		N=15 (3,3/3,3,4,5)	3.00	136.89		Firm dark brown very silty CLAY with low content of peat. Peat is fibreous.
		3.00 - 3.45	D					
		3.50 - 4.00	B		3.50	136.39		Loose grey slightly clayey, very silty, fine to medium SAND.
		4.00		N=8 (1,2/2,2,2,2)				
					4.80	135.09		Dense grey slightly clayey, sandy GRAVEL with occasional cobbles. Gravel is coarse and sub-rounded to rounded of siltstone and mudstone. Cobbles of sub-rounded siltstone and mudstone.
		5.00		N=27 (3,5/7,7,6,7)				
		6.00		N=21 (2,3/5,5,5,6)				
		7.50		N=9 (1,2/2,2,2,3)	7.50	132.39		Loose brown fine to coarse SAND.
		7.50 - 7.95	D					
		9.00		N=11 (2,2/3,3,2,3)				*Medium dense from 9.00m*
		9.60 - 10.00	B		9.60	130.29		Firm grey/brown slightly sandy, very silty CLAY.

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. No water strike encountered.

Borehole Log

Borehole No. **CP06**
Sheet 2 of 2

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389924.00 - 412950.00	Hole Type CP
Location:	Rochdale		Level:	139.89	Scale 1:50
Client:	Willmott Dixon		Dates:	12/03/2021 - 15/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50 - 10.95	U100	Ublow=17				
		12.00 12.00 - 12.45	D	N=13 (3,3/3,3,3,4)	12.00	127.89		Medium dense brown very silty, fine to medium SAND.
		13.50 13.50 - 13.95	D	N=14 (2,2/3,3,4,4)				
		14.00 - 14.50	B					
		15.00 15.00 - 15.45	D	N=17 (1,3/4,4,5,4)				
		16.50		N=12 (2,2/3,3,3,3)				
		18.00		N=15 (2,3/3,4,4,4)				
		19.50		N=17 (2,3/4,5,4,4)				
					20.00	119.89		End of borehole at 20.00 m

Remarks
Service clearance handpit undertaken to 1.20m bgl. No water strike encountered.

Borehole Log

Borehole No. **CP07**

Sheet 1 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389934.00 - 412990.00	Hole Type CP
Location: Rochdale		Level: 138.47	Scale 1:50
Client: Willmott Dixon		Dates: 16/03/2021 - 17/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.09	138.38		MADE GROUND: Dark grey asphalt.
								MADE GROUND: Dark brown slightly sandy, very clayey, gravel with occasional cobbles. Gravel is fine to coarse and angular to sub-angular of brick, concrete, siltstone and mudstone. Cobbles of angular half bricks.
		1.20		N=16 (2,3/3,4,4,5)	1.20	137.27		
		1.50 - 2.00	B		1.50	136.97		MADE GROUND: Medium dense black very gravel, very clayey silt with occasional cobble content. Gravel is medium to coarse and sub-angular to sub-rounded of siltstone and mudstone. Cobbles of angular brick, concrete and metal.
		2.00	D					
		2.00		N=16 (3,3/4,4,3,5)				*Strong hydrocarbon odour from 1.20m to 4.00m*
		2.20	ES					MADE GROUND: Medium dense black slightly gravelly, very clayey silt with pockets of peat and occasional cobbles. Peat is fibreous. Gravel is medium to coarse of brick. Cobbles of angular brick.
		3.00		N=6 (1,1/2,1,2,1)				*Loose from 3.00m*
		4.00		N=7 (1,1/2,2,1,2)	4.00	134.47		
		4.00 - 4.50	B					Loose brown very gravelly, fine to medium SAND. Gravel is medium to coarse and sub-angular to sub-rounded of rare coal, siltstone, mudstone and sandstone.
		5.00		N=6 (1,1/1,2,1,2)				
		6.00	D		6.00	132.47		
		6.00		N=11 (2,2/2,3,3,3)				Firm brown slightly silty CLAY.
		6.00 - 6.50	B					
		7.50 - 7.95	U100	Ublow=24				
		8.00	D		8.10	130.37		
		8.50 - 9.00	B					Medium dense brown very silty, fine to medium SAND.
		9.00		N=15 (2,2/3,3,4,5)				
								Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 3.00m bgl. Damp material was noted at 10.00m bgl.

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Borehole Log

Borehole No. **CP07**
Sheet 2 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389934.00 - 412990.00	Hole Type CP
Location: Rochdale		Level: 138.47	Scale 1:50
Client: Willmott Dixon		Dates: 16/03/2021 - 17/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50		N=14 (1,2/2,3,4,5)				
		12.00		N=13 (1,2/2,2,4,5)	12.00	126.47		Medium dense brown very gravelly, fine to medium SAND. Gravel is fine to coarse and sub-angular of sandstone, siltstone, mudstone and rare coal.
		13.50 13.50 - 13.95	D	N=12 (2,1/2,2,3,5)	13.50	124.97		Firm brown very sandy SILT.
		15.00 15.00 - 15.50	B	N=15 (2,2/2,3,5,5)				
		16.50		N=19 (2,2/3,3,6,7)				
		17.50 - 18.00	B		17.50	120.97		Very Stiff brown slightly silty CLAY.
		18.00 18.00	D	N=28 (4,5/6,7,7,8)				
		19.50 - 19.95	U100	Ublow=39				
		20.00	D		20.00	118.47		End of borehole at 20.00 m

Remarks
Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 3.00m bgl. Damp material was noted at 10.00m bgl.

Borehole Log

Borehole No. **CP08**

Sheet 1 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390002.00 - 412981.00	Hole Type CP
Location: Rochdale		Level: 139.83	Scale 1:50
Client: Willmott Dixon		Dates: 08/03/2021 - 09/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.22	139.61		MADE GROUND: Grey concrete.
		0.40	ES					MADE GROUND: Medium dense brown very clayey gravel with high cobble content. Gravel is medium to coarse and sub-angular of concrete and sandstone. Cobbles were sub-angular of concrete.
		1.20 1.20	B	N=18 (3,3/4,4,4,6)				
		2.00		N=21 (4,4/4,5,5,7)				
		3.00		N=38 (3,7/9,9,10,10)	2.90 3.00	136.93 136.83		MADE GROUND: Dense grey concrete with rebar 2mm thick.
		3.70 - 4.00	B		3.70	136.13		MADE GROUND: Dense black/red clayey gravel. Gravel is angular to sub-angular and medium to coarse of brick and concrete.
		3.80 4.00	ES	N=14 (2,2/3,3,4,4)				Medium dense brown very clayey, fine to medium SAND.
		5.00		N=14 (1,2/3,3,4,4)	5.00	134.83		Loose brown slightly gravelly, silty, fine to medium SAND. Gravel is medium and sub-rounded of coal.
		6.00		N=7 (2,2/1,2,2,2)				
		7.50		N=9 (1,1/2,2,3,2)				
		9.00		N=11 (2,2/2,3,3,3)				
		9.50 - 10.00	B					

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 3.70m to 13.50m bgl. No water strikes encountered.

Borehole Log

Borehole No. **CP08** Sheet 2 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390002.00 - 412981.00	Hole Type CP
Location: Rochdale		Level: 139.83	Scale 1:50
Client: Willmott Dixon		Dates: 08/03/2021 - 09/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50		N=10 (1,3/2,3,2,3)				
		11.20 - 12.00	B		11.20	128.63		Firm brown silty CLAY.
		12.00 - 12.45	U100	Ublow=17				
		13.50		N=23 (3,4/5,5,6,7)	13.50	126.33		Stiff brown very sandy, very silty CLAY.
		15.00 15.00 - 15.45	D	N=24 (3,3/5,5,6,8)				
		16.00 - 16.50	B		16.00	123.83		Very Stiff brown slightly clayey, very sandy SILT.
		16.50 16.50 - 16.95	D	N=26 (3,4/5,5,7,9)				
		18.00 18.00 - 18.45	D	N=25 (2,3/5,6,6,8)				
		19.50 19.50 - 19.95	D	N=29 (2,5/6,7,7,9)				
					20.00	119.83		End of borehole at 20.00 m

Remarks
Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 3.70m to 13.50m bgl. No water strikes encountered.

Borehole Log

Borehole No. **CP09**

Sheet 1 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389957.00 - 412894.00	Hole Type CP
Location: Rochdale		Level: 139.84	Scale 1:50
Client: Willmott Dixon		Dates: 09/03/2021 - 10/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10	139.74		MADE GROUND: Grey concrete.
		0.50	ES					MADE GROUND: Brown very clayey gravel with occasional cobbles. Gravel is fine to coarse and angular to sub-angular of concrete. Cobbles are angular of concrete.
		1.20		N=8 (1,2/2,2,2,2)	1.20	138.64		MADE GROUND: Loose black very ashy gravel. Gravel is fine to coarse and angular of brick, ash, clinker and concrete.
		2.00		N=7 (1,1/1,2,2,2)				
		3.00 3.00 - 3.45	D	N=3 (1,0/1,0,1,1)	3.00	136.84		MADE GROUND: Very Soft dark grey slightly gravelly, slightly sandy, very silty clay. Gravel is sub-rounded to rounded of siltstone.
		4.00 4.00 - 4.45	B	N=23 (3,3/5,6,6,6)	4.00	135.84		Medium dense brown very sandy GRAVEL with occasional cobbles. Gravel is sub-angular to sub-rounded and medium to coarse of siltstone, mudstone and sandstone. Cobbles were sub-rounded of siltstone and mudstone.
		5.00		N=28 (4,4/6,7,7,8)				
	▼	6.00		N=30 (3,5/7,7,7,9)	6.00	133.84		Medium dense brown slightly sandy GRAVEL with occasional cobbles. Gravel medium to coarse of siltstone, sandstone and mudstone. Cobbles of rounded to well-rounded siltstone and mudstone.
		6.50 - 7.50	B					
		7.50		N=9 (1,2/2,2,2,3)	7.50	132.34		Loose light brown slightly gravelly, medium to coarse SAND. Gravel is fine and sub-rounded of siltstone and mudstone.
		9.00		N=8 (1,2/2,2,2,2)				
					10.00	129.84		

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 4.00m to 7.50m bgl. Damp material was noted at 6.00m bgl.

AGS

Borehole Log

Borehole No. **CP09** Sheet 2 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389957.00 - 412894.00	Hole Type CP
Location: Rochdale		Level: 139.84	Scale 1:50
Client: Willmott Dixon		Dates: 09/03/2021 - 10/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50 - 10.95	U100	Ublow=14				Firm brown very silty CLAY.
		12.00 12.00 - 12.45	D	N=18 (3,4/4,4,4,6)				
		13.50		N=16 (3,4/4,4,4,4)	13.50	126.34		Medium dense brown silty, medium to coarse SAND.
		15.00 15.00 - 15.45	D	N=19 (3,4/4,4,5,6)				
		16.50 16.50 - 16.95	D	N=15 (2,2/3,3,4,5)				
		17.00 - 17.50	B					
		18.00 18.00 - 18.45	D	N=20 (3,4/4,5,5,6)				
		19.50 19.50 - 19.95	D	N=23 (4,4/5,5,6,7)	19.50	120.34		Stiff brown sandy, very silty CLAY.
					20.00	119.84		End of borehole at 20.00 m

Remarks
Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 4.00m to 7.50m bgl. Damp material was noted at 6.00m bgl.

Borehole Log

Borehole No. **CP10**

Sheet 1 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390007.00 - 413037.00	Hole Type CP
Location: Rochdale		Level: 139.25	Scale 1:50
Client: Willmott Dixon		Dates: 22/03/2021 - 23/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20	139.05		Grass over TOPSOIL: Dark brown slightly silty fine and medium sand.
		0.50	ES					MADE GROUND: Dark brown slightly silty gravelly fine to coarse sand. Rare cobbles of brick and concrete. Gravel is fine to coarse angular to subrounded brick, slate, cinder block fragments, rare rebar/metal fragments, rare ash.
		1.20		N=9 (2,2/2,2,3,2)	1.20	138.05		
		2.00	ES					MADE GROUND: Brown and dark brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subrounded brick, slate, cinder block fragments, rare rebar/metal fragments, rare ash.
		2.00		N=8 (3,2/2,2,2,2)				
	▼	3.00		N=8 (2,2/2,2,2,2)	2.70	136.55		Loose brown silty slightly gravelly fine and medium SAND. Gravel is fine and medium subangular to rounded sandstone.
		4.00		N=8 (3,3/2,2,2,2)	4.00	135.25		Loose brown gravelly fine to coarse SAND. Gravel is fine and medium subangular to rounded sandstone and mudstone of mixed lithologies and rare coal.
		4.00 - 4.45	D					
		5.00		N=18 (3,4/4,5,4,5)				*Medium dense from 5.00m bgl to 5.45m bgl.*
		5.00 - 5.45	D					
		6.00		N=7 (1,1/1,2,2,2)				
		6.50 - 6.95	Bulk					
		7.50		N=10 (2,3/2,2,3,3)				
		8.60 - 9.45	D		8.60	130.65		Firm brown slightly clayey sandy SILT.
		9.00		N=17 (2,3/4,5,4,4)				

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Groundwater recorded at 3.00m bgl, rising to 1.00m bgl after 20 minutes, and 12.50m bgl, rising to 10.00m bgl after 20 minutes.

Borehole Log

Borehole No. **CP10** Sheet 2 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390007.00 - 413037.00	Hole Type CP
Location: Rochdale		Level: 139.25	Scale 1:50
Client: Willmott Dixon		Dates: 22/03/2021 - 23/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50	D					*U100 90% recovery.*
		10.50 - 10.95	U					
		12.00		N=13 (4,4/3,3,4,3)				
		12.00 - 12.45	D		12.30	126.95		Loose brown silty fine SAND.
		13.50		N=9 (2,2/3,2,2,2)				
		14.00	Bulk					
		15.00		N=16 (3,4/4,3,4,5)				*Medium dense from 15.00m bgl.*
		15.00 - 15.45	D					
		16.40 - 16.95	D		16.40	122.85		Firm brown slightly sandy silty CLAY. Rare fine gravel of coal.
		16.50		N=19 (3,3/4,5,5,5)				
		18.00 - 18.45	U					
		18.50	D					
		19.50		N=27 (5,6/6,6,7,8)				
		19.50 - 19.95	D					
					20.00	119.25		End of borehole at 20.00 m

Remarks

Service clearance handpit undertaken to 1.20m bgl. Groundwater recorded at 3.00m bgl, rising to 1.00m bgl after 20 minutes, and 12.50m bgl, rising to 10.00m bgl after 20 minutes.

Borehole Log

Borehole No. **CP11**

Sheet 1 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389963.00 - 412974.00	Hole Type CP
Location: Rochdale		Level: 138.75	Scale 1:50
Client: Willmott Dixon		Dates: 17/03/2021 - 18/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.15	ES		0.09	138.66		MADE GROUND: Dark grey asphalt.
								MADE GROUND: Medium dense brown slightly clayey gravel. Gravel is fine to coarse and angular to sub-angular of brick, concrete, asphalt, siltstone, sandstone and mudstone.
		1.20		N=21 (10,10/7,5,4,5)				
					1.70	137.05		MADE GROUND: Firm brown clay with cobbles. Cobbles are angular of brick.
		2.00		N=11 (1,1/1,3,3,4)	2.00	136.75		Firm brown slightly silty CLAY.
		2.00 - 2.45	D					
		2.30	ES					
		3.00		N=13 (1,2/3,3,3,4)	3.00	135.75		Medium dense brown slightly gravelly, slightly silty, medium to coarse SAND. Gravel is fine to medium and sub-rounded of coal.
		3.00 - 3.45	B					
		4.00		N=9 (1,2/2,2,2,3)				*Loose from 4.00m*
		4.00 - 4.45	B					
		5.00		N=9 (1,1/2,2,2,3)				
		5.00 - 5.45	B					
		5.00 - 5.45	D					
		6.00		N=11 (2,2/2,2,3,4)				
		6.00 - 6.45	B					
		7.50		N=5 (1,1/1,1,1,2)				
		7.50 - 7.95	B					
		9.00		N=15 (1,2/3,4,4,4)	9.00	129.75		Firm brown slightly sandy, very silty CLAY.
		9.00 - 9.45	D					
								Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 3.5m bgl which had risen to 2.80m bgl after 20 minutes.

AGS

Borehole Log

Borehole No. **CP11**

Sheet 2 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389963.00 - 412974.00	Hole Type CP
Location: Rochdale		Level: 138.75	Scale 1:50
Client: Willmott Dixon		Dates: 17/03/2021 - 18/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50 - 10.95	U100	Ublow=25				
	▼	12.00		N=15 (2,3/3,4,4,4)	12.00	126.75		Medium dense brown slightly sandy, very clayey SILT.
		12.00 - 12.45	B					
		13.50		N=6 (1,1/1,2,2,1)				*Loose between 13.50 to 15.00m*
		13.50 - 13.95	B					
		13.50 - 13.95	D					
		15.00		N=13 (2,2/3,3,3,4)				*Medium dense from 15.00m*
		15.00 - 15.45	B					
		15.00 - 15.45	D					
		16.50		N=14 (1,2/2,3,4,5)				
		16.50 - 16.95	B					
		16.50 - 16.95	D					
		18.00		N=9 (1,2/2,2,2,3)	18.10	120.65		Loose brown silty, fine to medium SAND.
		18.00 - 18.45	D					
		19.50 - 19.95	U100	Ublow=22	19.50	119.25		Firm brown very silty CLAY.
		19.95 - 20.20	D					
								Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 3.5m bgl which had risen to 2.80m bgl after 20 minutes.

Borehole Log

Borehole No.
CP11
Sheet 3 of 3

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389963.00 - 412974.00	Hole Type CP
Location:	Rochdale		Level:	138.75	Scale 1:50
Client:	Willmott Dixon		Dates:	17/03/2021 - 18/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					20.45	118.30		End of borehole at 20.45 m

Remarks
Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 3.5m bgl which had risen to 2.80m bgl after 20 minutes.

Borehole Log

Borehole No. **CP12**

Sheet 1 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389957.00 - 412934.00	Hole Type CP
Location: Rochdale		Level: 139.68	Scale 1:50
Client: Willmott Dixon		Dates: 10/03/2021 - 11/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.12	139.56		MADE GROUND: Grey concrete.
								MADE GROUND: Brown very clayey gravel with occasional cobbles. Gravel is fine to coarse and angular to sub-angular of concrete and siltstone. Cobbles are angular of concrete.
		1.10 1.20	ES	N=9 (2,2/2,2,2,3)	1.00	138.68		MADE GROUND: Loose black ashy clayey gravel. Gravel is fine to coarse and angular to sub-angular of ash, brick, concrete, siltstone, mudstone and sandstone.
		2.00		N=9 (1,1/2,2,2,3)				
		3.00		N=7 (1,1/1,2,2,2)	3.00	136.68		Loose light brown slightly silty, very gravelly, fine to coarse SAND. Gravel is medium to coarse and sub-angular to sub-rounded of sandstone, siltstone and mudstone.
		3.50 - 4.00	B					
		4.00		N=5 (1,0/1,1,2,1)				
	▼							
		5.00		N=19 (3,3/4,4,5,6)				*Medium dense from 5.00m*
		6.00		N=28 (3,5/6,7,7,8)				
		7.50 7.50 - 7.95	D	N=3 (1,0/1,1,0,1)	7.50	132.18		Very loose brown gravelly, medium to coarse SAND. Gravel is fine and sub-rounded of coal.
		9.00 9.00 - 9.45	D	N=6 (1,1/1,2,1,2)	8.90	130.78		Soft brown slightly sandy, silty CLAY.
								Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 4.70m bgl which had risen to 4.00m bgl after 20 minutes. Damp material was noted at 12.20m bgl.

Borehole Log

Borehole No. **CP12**
Sheet 2 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389957.00 - 412934.00	Hole Type CP
Location: Rochdale		Level: 139.68	Scale 1:50
Client: Willmott Dixon		Dates: 10/03/2021 - 11/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50 10.50 - 10.95	D	N=12 (2,2/3,3,3,3)				*Firm between 10.50 to 13.50m*
		12.00 12.00 - 12.45	D	N=12 (1,3/2,3,3,4)				
		13.50 13.50 - 13.95	D	N=16 (2,2/3,4,4,5)				*Stiff from 13.50m*
		15.00 15.00 - 15.45	D	N=10 (2,2/2,2,3,3)	15.00	124.68		Firm brown slightly clayey, sandy SILT.
		16.50 16.50 - 16.95	D	N=12 (1,2/3,3,3,3)				
		18.00 18.00 - 18.45	D	N=20 (3,5/5,5,5,5)				*Stiff from 18.00m*
		19.50 19.50 - 19.95	D	N=22 (3,4/5,5,6,6)	19.50	120.18		Stiff brown very silty CLAY.
					20.00	119.68		End of borehole at 20.00 m

Remarks
Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 4.70m bgl which had risen to 4.00m bgl after 20 minutes. Damp material was noted at 12.20m bgl.

Borehole Log

Borehole No. **CP13**

Sheet 1 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389903.00 - 412907.00	Hole Type CP
Location: Rochdale		Level: 140.08	Scale 1:50
Client: Willmott Dixon		Dates: 15/03/2021 - 16/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.17	139.91		MADE GROUND: Grey concrete.
					0.70	139.38		MADE GROUND: Dark brown very clayey gravel. Gravel is medium to coarse and sub-angular of brick, concrete, siltstone and mudstone.
		1.20		N=18 (3,5/4,5,4,5)				MADE GROUND: Medium dense black very clayey gravel. Gravel is fine to coarse and angular to sub-angular of brick, concrete, sandstone and siltstone.
		1.50	ES					
		2.00		N=20 (4,4/5,5,5,5)				
		3.00		N=2 (1,0/0,1,0,1)	3.00	137.08		
		3.00 - 3.45	D					Very soft black very silty CLAY with high content of peat. Peat is fibreous with vegetation.
					3.60	136.48		Medium dense brown very gravelly, fine to medium SAND. Gravel is fine to coarse and sub-rounded of sandstone, siltstone and mudstone.
		4.00	ES					
		4.00		N=20 (3,5/5,4,5,6)				
		5.00		N=24 (5,6/6,7,6,5)				
		6.00		N=7 (3,2/2,1,2,2)				*Loose from 6.00m*
		7.50		N=15 (2,3/3,4,4,4)	7.50	132.58		Medium dense brown very gravelly, fine to medium SAND. Gravel is fine to coarse and sub-rounded of sandstone, siltstone, mudstone and rare coal.
		7.50 - 7.95	D					
		8.00 - 8.50	B					
		9.00 - 9.45	U100	Ublow=26				
		9.50	D		9.50	130.58		Stiff brown slightly sandy, silty CLAY.

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 13.50m bgl which had risen to 11.80m bgl after 20 minutes.

Borehole Log

Borehole No. **CP13**

Sheet 2 of 2

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389903.00 - 412907.00	Hole Type CP
Location: Rochdale		Level: 140.08	Scale 1:50
Client: Willmott Dixon		Dates: 15/03/2021 - 16/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50 10.50 - 10.95	D	N=18 (2,3/4,4,5,5)				
		12.00		N=12 (1,2/2,3,3,4)	12.00	128.08		Firm brown very sandy SILT.
	▼	13.50 13.50 - 13.95	D	N=11 (2,2/2,3,3,3)				
		14.00 - 14.50	B					
		15.00 15.00 - 15.45	D	N=13 (2,2/2,3,4,4)				
		16.50 16.50 - 16.95	D	N=14 (1,2/2,3,4,5)				
		18.00 18.00 - 18.45	D	N=15 (1,1/2,2,4,7)				*Stiff from 18.00m*
		19.50 19.50 - 19.95	D	N=22 (2,2/3,5,6,8)				
					20.00	120.08		End of borehole at 20.00 m

11 12 13 14 15 16 17 18 19 20

Remarks

Service clearance handpit undertaken to 1.20m bgl. Water seepage noted at 13.50m bgl which had risen to 11.80m bgl after 20 minutes.

AGS

Borehole Log

Borehole No. **CP14**

Sheet 1 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389992.00 - 412930.00	Hole Type CP
Location: Rochdale		Level: 139.82	Scale 1:50
Client: Willmott Dixon		Dates: 18/03/2021 - 19/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.19	139.63		MADE GROUND: Grey concrete.
		0.70	ES					MADE GROUND: Dense yellow/grey very sandy gravel with occasional cobbles. Gravel is medium to coarse and angular to sub-angular of brick, concrete, sandstone and siltstone. Cobbles angular to sub-angular of sandstone and siltstone.
		1.20		N=48 (4,5/7,7,13,21)				
		1.50 - 2.00	B					
		2.00		50 (10,12/50 for 145mm)				
		2.50 - 3.00	B					
					2.80	137.02		
		3.00		N=7 (1,1/2,1,2,2)	3.00	136.82		MADE GROUND: Medium dense red/brown very sandy gravel with occasional cobbles. Gravel is medium to coarse and sub-angular of brick and concrete with rare rebar. Cobbles of angular broken brick and concrete.
		3.00 - 3.50	B					
		3.10	ES					Loose red/brown fine to coarse SAND.
	▼	4.00		N=8 (1,2/2,2,2,2)	4.00	135.82		Loose brown SAND and GRAVEL with occasional cobbles. Gravel is fine to medium and sub-angular to sub-rounded of coal, siltstone and mudstone. Cobbles of sub-angular of siltstone.
		5.00	D					
		5.00		N=11 (2,3/3,2,3,3)				
		6.00		N=11 (2,3/3,3,3,2)				
		6.50 - 7.00	B					
		7.50		N=6 (2,0/1,1,2,2)				
		9.00		N=8 (1,1/2,2,2,2)				

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 6.00m bgl. Damp material was noted at 4.00m bgl.

AGS

Borehole Log

Borehole No. **CP14**

Sheet 2 of 3

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389992.00 - 412930.00	Hole Type CP
Location: Rochdale		Level: 139.82	Scale 1:50
Client: Willmott Dixon		Dates: 18/03/2021 - 19/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50 10.50	D	N=9 (2,1/2,2,3,2)				
		12.00		N=13 (2,2/3,3,3,4)				*Medium dense from 12.00m*
		12.80 - 13.40	B		12.80	127.02		Firm brown very silty CLAY.
		13.50 13.50	D	N=15 (2,1/3,4,4,4)				
					13.90	125.92		Firm brown very sandy, very silty CLAY.
		15.00 15.00	D	N=8 (1,1/1,2,2,3)				
		15.00 - 15.50	B					
		16.50 16.50	D	N=13 (1,2/2,2,3,6)				
		18.00 18.00	D	N=17 (2,2/3,3,4,7)				*Stiff from 18.00m*
		19.00 - 19.50	B		19.00	120.82		Very Stiff brown slightly silty CLAY.
		19.50 - 19.95	U100	Ublow=62				
		20.00	D					

Continued on next sheet

Remarks

Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 6.00m bgl. Damp material was noted at 4.00m bgl.

Borehole Log

Borehole No.
CP14
Sheet 3 of 3

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389992.00 - 412930.00	Hole Type CP
Location:	Rochdale		Level:	139.82	Scale 1:50
Client:	Willmott Dixon		Dates:	18/03/2021 - 19/03/2021	Logged By RT

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		20.00		N=28 (4,5/6,6,7,9)	20.45	119.37		End of borehole at 20.45 m

Remarks
Service clearance handpit undertaken to 1.20m bgl. Drillers added water from 6.00m bgl. Damp material was noted at 4.00m bgl.

Borehole Log

Borehole No. **WS01**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389976.00 - 413055.00	Hole Type WS
Location:	Rochdale		Level:	138.56	Scale 1:50
Client:	Willmott Dixon		Dates:	30/03/2021 - 30/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.40	ES		0.15	138.41		MADE GROUND: Reinforced concrete.
					0.16	138.40		Blue liner layer.
					0.36	138.20		MADE GROUND: Greyish brown sand and gravel. Gravel is fine to coarse angular concrete.
					0.51	138.05		MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subrounded brick, concrete and sandstone.
					0.54	138.02		MADE GROUND: Concrete slab/boulder.
								End of borehole at 0.54 m

Remarks

Hand excavated service clearance pit to 0.54m bgl. Concrete at the base of prevented progression of the clearance pit.

Borehole Log

Borehole No. **WS02**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389940.00 - 413036.00	Hole Type WS
Location: Rochdale		Level: 138.55	Scale 1:50
Client: Willmott Dixon		Dates: 30/03/2021 - 30/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20	138.35		MADE GROUND: Reinforced concrete.
					0.21	138.34		Blue liner layer.
		0.50	ES		0.42	138.13		MADE GROUND: Grey sand, gravel and cobbles of concrete.
		1.00 - 2.00	Bulk					Loose brown gravelly fine to coarse SAND. Gravel is fine to coarse subrounded to rounded sandstone and mudstone.
		1.20		N=8 (2,2/2,2,2,2)				
					1.90	136.65		
		2.00		N=3 (1,0/1,0,1,1)				Very loose grey silty slightly gravelly fine to coarse SAND. Gravel is fine and medium angular to rounded coal and sandstone.
		2.00 - 4.00	Bulk					
		3.00		N=2 (1,1/0,1,0,1)				
		4.00		N=10 (1,1/1,1,4,4)	4.00	134.55		
		4.00 - 4.40	ES					Very soft dark brown pseudofibrous PEAT. Frequent plant debris.
					4.40	134.15		Medium dense grey silty fine and medium SAND.
		5.00		N=20 (2,2/5,5,5,5)				
					5.45	133.10		End of borehole at 5.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. No groundwater encountered.

Borehole Log

Borehole No. **WS03**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389988.00 - 413030.00	Hole Type WS
Location: Rochdale		Level: 139.19	Scale 1:50
Client: Willmott Dixon		Dates: 30/03/2021 - 30/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10	ES		0.22	138.97		MADE GROUND: Black tarmacadam.
		0.30	ES		0.60	138.59		MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to rounded sandstone and concrete.
		1.20		N=8 (2,3/3,1,2,2)				Loose light brown gravelly fine to coarse SAND. Gravel is fine to coarse angular to rounded sandstone and concrete.
		1.50 - 3.00	Bulk		1.50	137.69		Medium dense orangish brown locally slightly silty fine and medium SAND.
		2.00		N=13 (3,3/3,3,3,4)				
	▼	3.00		N=12 (3,3/3,3,3,3)	3.00	136.19		Medium dense orangish brown and light brown medium and coarse SAND.
	▼	4.00		N=3 (0,0/0,1,1,1)	4.00	135.19		Very loose orangish brown and light brown medium and coarse SAND.
		5.00		N=4 (1,0/1,0,1,2)	4.50	134.69		Very loose lightly brown slightly silty fine to coarse SAND.
					5.45	133.74		End of borehole at 5.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Sand deposits recorded as damp at 3.30m bgl. Water strike recorded at 4.00m bgl.

Borehole Log

Borehole No. **WS04**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	390021.00 - 413013.00	Hole Type WS
Location:	Rochdale		Level:	139.50	Scale 1:50
Client:	Willmott Dixon		Dates:	01/04/2021 - 01/04/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES		0.07	139.43		MADE GROUND: Black tarmacadam.
					0.35	139.15		MADE GROUND: Greyish brown sand and gravel. Gravel is fine to coarse angular to subangular concrete and sandstone.
		1.20		N=8 (2,1/2,2,2,2)	1.20	138.30		Orangish brown gravelly medium and coarse SAND. Gravel is fine to coarse subrounded to rounded sandstone and mudstone.
		2.00		N=2 (2,1/0,1,0,1)	1.80	137.70		Loose orangish brown medium and coarse SAND.
		2.50	D		2.40	137.10		Very loose light brown slightly silty fine to coarse SAND.
		3.00		N=2 (0,1/0,1,0,1)				Very soft light brown sandy SILT.
	▼				3.50	136.00		Very loose light brown gravelly medium and coarse SAND. Gravel is fine to coarse subrounded to rounded sandstone and mudstone. Rare rounded cobbles of sandstone.
		4.00		N=6 (0,0/1,2,1,2)	4.00	135.50		Loose light brown silty fine and medium SAND.
					5.45	134.05		End of borehole at 5.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Water strike at 3.50m bgl. Borehole collapsed from 4.00m to 5.45m bgl.

AGS

Borehole Log

Borehole No. **WS05**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	390026.00 - 412988.00	Hole Type WS
Location:	Rochdale		Level:	139.82	Scale 1:50
Client:	Willmott Dixon		Dates:	30/03/2021 - 30/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.70	ES		0.19	139.62		MADE GROUND: Reinforced concrete.
					0.20	139.62		Blue liner layer.
					0.28	139.54		MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular concrete and sandstone.
					0.50	139.32		MADE GROUND: Light brown sand, gravel and cobbles of sandstone.
					0.88	138.94		MADE GROUND: Brown gravelly cobbly fine to coarse sand. Gravel is fine to coarse angular to subrounded brick, concrete, sandstone and slate.
					0.89	138.93		MADE GROUND: Cobble obstruction.
								End of borehole at 0.89 m

Remarks

Hand excavated service clearance pit to 0.88m bgl. Cobble obstruction prevented progression of service clearance pit.

Borehole Log

Borehole No. **WS06**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389963.00 - 413018.00	Hole Type WS
Location:	Rochdale		Level:	138.58	Scale 1:50
Client:	Willmott Dixon		Dates:	30/03/2021 - 30/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.17	138.41		MADE GROUND: Reinforced concrete.
					0.18	138.40		Blue liner layer.
		0.60	ES		0.55	138.03		MADE GROUND: Grey sand gravel and cobbles of sandstone and concrete.
		1.20		N=24 (6,6/6,6,6,6)				MADE GROUND: Dark brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular brick, concrete, plastic and breeze block fragments.
		1.60 - 2.00	ES					
		2.00		N=22 (6,5/5,5,6,6)				
					2.45	136.13		End of borehole at 2.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Window sample barrel deviated on cobbles in made ground. Could not progress further. No groundwater encountered.

Borehole Log

Borehole No. **WS07**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389919.00 - 412999.00	Hole Type WS
Location:	Rochdale		Level:	138.57	Scale 1:50
Client:	Willmott Dixon		Dates:	31/03/2021 - 31/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05	ES		0.10	138.47		MADE GROUND: Black tarmacadam.
		0.40	ES		0.33	138.24		MADE GROUND: Greyish brown sand and gravel. Gravel is fine to coarse angular concrete and sandstone. Rare cobble of sandstone (sub-base).
					0.50	138.07		MADE GROUND: Dark brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subrounded brick, concrete and sandstone.
		1.20		N=13 (2,2/3,3,3,4)				Medium dense light brown gravelly fine to coarse sand. Gravel is fine to coarse subangular to rounded sandstone and mudstone.
					1.50	137.07		Very loose dark brown organic fine and medium SAND. Rare pockets of amorphous peat.
		2.00	D					
		2.00		N=1 (0,0/1,0,0,0)				
		3.00		N=1 (0,1/0,0,0,1)	3.00	135.57		Medium dense grey and greyish brown slightly gravelly medium and coarse SAND. Gravel is fine and medium angular to subrounded coal, sandstone and mudstone.
		3.50	D					
		4.00		N=14 (3,3/3,3,4,4)				
		5.00		N=8 (2,2/2,2,2,2)				*Loose from 5.00m bgl.*
					5.45	133.12		End of borehole at 5.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. No groundwater encountered.

Borehole Log

Borehole No. **WS08**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389932.00 - 412978.00	Hole Type WS
Location:	Rochdale		Level:	139.00	Scale 1:50
Client:	Willmott Dixon		Dates:	31/03/2021 - 31/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.60	ES		0.08	138.92		MADE GROUND: Black tarmacadam.
					0.34	138.66		MADE GROUND: Greyish brown sand and gravel. Gravel is fine to coarse angular concrete and sandstone. Rare cobble of sandstone (sub-base).
					0.75	138.25		MADE GROUND: Dark brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular brick, concrete, sandstone, rare ash, rare clinker, glass and wood.
					0.80	138.20		MADE GROUND: Concrete obstruction.
								End of borehole at 0.80 m

Remarks

Hand excavated service clearance pit to 0.80m bgl. Concrete obstruction at base of pit prevented further progression.

AGS

Borehole Log

Borehole No. **WS09**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389999.00 - 412967.00	Hole Type WS
Location:	Rochdale		Level:	139.84	Scale 1:50
Client:	Willmott Dixon		Dates:	29/03/2021 - 29/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.50	ES		0.24	139.60		MADE GROUND: Reinforced concrete.
					0.25	139.59		Blue liner layer.
		1.20		N=34 (8,9/7,9,9,9)				MADE GROUND: Brown and yellowish brown sand, gravel and cobbles of sandstone.
					1.65	138.19		End of borehole at 1.65 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Window sample barrel could not progress through cobbles at 1.65m bgl. No groundwater encountered.

Borehole Log

Borehole No. **WS10**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	390030.00 - 412978.00	Hole Type WS
Location:	Rochdale		Level:	139.83	Scale 1:50
Client:	Willmott Dixon		Dates:	29/03/2021 - 29/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30	ES		0.24	139.59		MADE GROUND: Reinforced concrete.
					0.25	139.58		Blue liner layer.
					0.56	139.27		MADE GROUND: Light brown sand, gravel, cobbles and boulders of sandstone.
					1.00	138.83		Brown silty fine and medium SAND. Rare rounded cobbles of sandstone.
		1.20		N=1 (1,0/0,1,0,0)				Very loose orangish brown fine to coarse SAND.
		2.00		N=1 (0,0/1,0,0,0)				
		3.00		N=0 (0,0/0,0,0,0)				
		3.50 - 5.00	Bulk		3.50	136.33		Very loose brown gravelly medium and coarse SAND. Gravel is fine and medium subangular to rounded sandstone, mudstone and coal.
	▼	4.00		N=0 (0,0/0,0,0,0)				
		5.00		N=17 (0,0/3,4,5,5)				
					5.45	134.38		End of borehole at 5.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Water strike recorded at 4.00m bgl.

AGS

Borehole Log

Borehole No. **WS11**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	390020.00 - 412945.00	Hole Type WS
Location:	Rochdale		Level:	139.84	Scale 1:50
Client:	Willmott Dixon		Dates:	29/03/2021 - 29/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20	139.64		MADE GROUND: Reinforced concrete.
					0.21	139.63		Blue liner layer.
					0.45	139.39		MADE GROUND: Light brown sand, gravel and cobbles of sandstone.
		1.20		N=2 (0,0/0,0,1,1)				MADE GROUND: Brown sand, gravel and cobbles. Gravel is fine to coarse angular to subrounded sandstone and concrete. Cobbles of sandstone.
					1.30	138.54		Very loose dark brown silty fine and medium organic SAND. Rare plant debris.
					1.60	138.24		Very loose brown silty fine and medium SAND. Rare plant debris.
					1.80	138.04		Medium dense light brown and greyish light brown fine and medium SAND.
		2.00		N=19 (2,3/4,5,5,5)				
		3.00		N=24 (2,6/6,6,6,6)				
					3.60	136.24		Medium dense light brown gravelly medium and coarse SAND. Gravel is fine and medium subangular to rounded sandstone, mudstone and rare coal.
		4.00		N=14 (6,5/5,3,3,3)				
					5.00	134.84		End of borehole at 5.00 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Water seepage at 3.60m bgl.

Borehole Log

Borehole No. **WS12**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389963.00 - 412955.00	Hole Type WS
Location:	Rochdale		Level:	139.70	Scale 1:50
Client:	Willmott Dixon		Dates:	01/04/2021 - 01/04/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES		0.10	139.60		MADE GROUND: Black tarmacadam.
					0.37	139.33		MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subrounded concrete, sandstone and rare brick.
		1.20		N=10 (2,2/2,2,3,3)				Medium dense orangish brown fine to coarse SAND. Rare fine and medium angular gravel of coal.
		2.00		N=16 (4,4/4,4,4,4)	2.00	137.70		Medium dense light brown slightly silty fine to coarse SAND.
		3.00		N=12 (3,3/3,3,3,3)				
		4.00		N=6 (2,2/1,2,1,2)				*Loose from 4.00m bgl.*
					4.45	135.25		End of borehole at 4.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. No groundwater encountered. Borehole collapsed to 3.00m bgl.

Borehole Log

Borehole No. **WS13A**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389913.00 - 412956.00	Hole Type WS
Location:	Rochdale		Level:	139.81	Scale 1:50
Client:	Willmott Dixon		Dates:	31/03/2021 - 31/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.05	139.76		MADE GROUND: Black tarmacadam.
					0.20	139.61		MADE GROUND: Concrete.
					0.50	139.31		MADE GROUND: Grey and yellowish brown sand and gravel. Gravel is fine to coarse angular to subangular sandstone.
		1.20		N=10 (3,3/3,3,2,2)				MADE GROUND: Black gravelly fine to coarse sand. Gravel is fine to coarse ash, clinker, sandstone and brick.
	▼	1.50	ES					
		2.00		N=1 (1,0/0,0,1,0)				
					2.70	137.11		
		2.80	ES					MADE GROUND: Black silty slightly sandy clay. Hydrocarbon odour.
					3.00	136.81		End of borehole at 3.00 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Hydrocarbon odour noted in made ground soils from 2.70m to 3.00m bgl. Water seepage at 1.80m bgl. Window Sample hole not completed within WS13 due to potential service moved to WS13A.

AGS

Borehole Log

Borehole No. **WS14**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389876.00 - 412958.00	Hole Type WS
Location:	Rochdale		Level:	140.38	Scale 1:50
Client:	Willmott Dixon		Dates:	31/03/2021 - 31/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.07	140.30		MADE GROUND: Black tarmacadam.
					0.18	140.20		MADE GROUND: Greyish brown gravelly fine to coarse sand. Occasional cobbles. Gravel is fine to coarse angular to subrounded concrete and sandstone.
					0.44	139.94		MADE GROUND: Yellowish brown sand gravel and cobbles of sandstone.
					0.53	139.84		MADE GROUND: Concrete.
								End of borehole at 0.53 m

Remarks

Hand excavated service clearance pit to 0.53m bgl. Concrete encountered across the base of the pit preventing further progression.

Borehole Log

Borehole No. **WS15**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389915.00 - 412940.00	Hole Type WS
Location: Rochdale		Level: 139.77	Scale 1:50
Client: Willmott Dixon		Dates: 31/03/2021 - 31/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.04	139.73		MADE GROUND: Black tarmacadam.
					0.30	139.47		MADE GROUND: Concrete.
		0.60	ES					MADE GROUND: Black coarse sand and gravel. Gravel is fine angular ash and clinker.
		1.20		N=9 (2,2/2,2,2,3)	1.00	138.77		MADE GROUND: Dark brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular brick, concrete, ash, clinker, sandstone and coal.
		1.80	ES					
		2.00		N=3 (1,0/1,0,1,1)	2.00	137.77		MADE GROUND: Black silty slightly sandy clay. Hydrocarbon odour.
		2.20	ES					
					2.50	137.27		Very soft dark brown silty fine and medium organic SAND. Occasional plant debris/wood fragments.
		3.00		N=1 (1,0/0,1,0,0)				
					3.40	136.37		Dense grey slightly silty fine and medium SAND.
		4.00		N=30 (4,5/6,7,8,9)				
					4.30	135.47		Dense greyish brown fine to coarse SAND.
		4.50		N=40 (8,8/9,9,10,12)				
					5.00	134.77		End of borehole at 5.00 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Hydrocarbon odour noted in made ground soils from 2.00m - 2.50m bgl. No groundwater encountered.

Borehole Log

Borehole No. **WS16**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389878.00 - 412920.00	Hole Type WS
Location:	Rochdale		Level:	140.57	Scale 1:50
Client:	Willmott Dixon		Dates:	01/04/2021 - 01/04/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.70	ES		0.23	140.34		MADE GROUND: Reinforced concrete.
					0.24	140.33		Blue liner layer. MADE GROUND: Yellowish brown sand gravel and cobbles of sandstone. Rare brick.
					1.20	139.37		End of borehole at 1.20 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. High power readings identified when CAT scanning base of excavation. Terminated borehole on this basis.

Borehole Log

Borehole No. **WS17**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389905.00 - 412897.00	Hole Type WS
Location:	Rochdale		Level:	140.07	Scale 1:50
Client:	Willmott Dixon		Dates:	01/04/2021 - 01/04/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20	139.87		MADE GROUND: Black tarmacadam.
					0.40	139.67		MADE GROUND: Greyish brown sand and gravel. Gravel is fine to coarse angular to subangular concrete and sandstone.
		0.70	ES					
					1.00	139.07		MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subrounded brick, concrete and sandstone.
		1.20		N=9 (2,2/2,2,2,3)				Loose brown gravelly fine to coarse SAND. Gravel is fine to coarse subangular to rounded sandstone.
		2.00		N=9 (1,1/2,1,5,1)				
		3.00		N=12 (3,3/3,3,3,3)	3.00	137.07		Medium dense light greyish brown and light brown fine to coarse SAND.
		4.00		N=19 (4,4/4,5,5,5)				
		5.00		N=18 (3,3/3,5,5,5)				
					5.45	134.62		End of borehole at 5.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. No groundwater encountered.

Borehole Log

Borehole No. **WS18**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389914.00 - 412913.00	Hole Type WS
Location:	Rochdale		Level:	139.98	Scale 1:50
Client:	Willmott Dixon		Dates:	01/04/2021 - 01/04/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.15	139.83		MADE GROUND: Black tarmacadam.
					0.22	139.76		MADE GROUND: Greyish brown gravelly fine to coarse sand. Gravel is fine and medium concrete.
					0.60	139.38		MADE GROUND: Grey sand gravel and cobbles of sandstone, concrete and limestone.
					0.70	139.28		MADE GROUND: Dark greyish brown gravelly cobbly fine to coarse sand. Gravel is fine to coarse angular to subangular concrete, sandstone and mudstone. Cobbles of concrete.
								End of borehole at 0.70 m

Remarks

Hand excavated service clearance pit to 0.70m bgl. Concrete obstruction identified at base of pit preventing further excavation.

Borehole Log

Borehole No. **WS19**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389956.00 - 412906.00	Hole Type WS
Location: Rochdale		Level: 139.80	Scale 1:50
Client: Willmott Dixon		Dates: 01/04/2021 - 01/04/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.11	139.69		MADE GROUND: Black tarmacadam.
		0.30	ES					MADE GROUND: Greyish brown sand and gravel. Gravel is fine to coarse angular to subangular concrete, sandstone and limestone.
		0.70	ES		0.60	139.20		Very loose orangish brown gravelly fine to coarse SAND. Gravel is fine to coarse subangular to rounded sandstone and mudstone. Rare coal.
		1.20		N=2 (1,2/0,1,0,1)	1.40	138.40		Very loose grey slightly silty fine to coarse SAND.
		2.00		N=4 (1,2/1,1,1,1)				
		3.00		N=8 (1,2/1,1,3,3)				*Loose from 3.00m bgl.*
					3.20	136.60		Loose light greyish brown silty fine SAND. Rare band of black silty sand.
					3.80	136.00		Loose light brown fine to coarse SAND.
		4.00		N=8 (2,2/2,2,2,2)	4.00	135.80		Medium dense greyish brown slightly gravelly fine to coarse SAND. Gravel is fine and medium subangular to rounded sandstone and mudstone.
		5.00		N=12 (7,7/5,3,2,2)				
					5.45	134.35		End of borehole at 5.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Water strike at 4.00m bgl.

AGS

Borehole Log

Borehole No. **WS20**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	389988.00 - 412899.00	Hole Type WS
Location:	Rochdale		Level:	139.78	Scale 1:50
Client:	Willmott Dixon		Dates:	29/03/2021 - 29/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.26	139.52		MADE GROUND: Reinforced concrete.
					0.27	139.51		Blue liner layer.
								MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular concrete, brick, sandstone and limestone.
		1.20		N=16 (2,2/4,3,4,5)	1.00	138.78		MADE GROUND: Brown and black gravelly fine and medium sand. Gravel is fine to coarse angular to subangular brick, sandstone and wood fragments.
	▼				1.70	138.08		*Cobble in made ground caused sampler to deviate to one side.*
		2.00		N=5 (0,0/0,0,2,3)	1.90	137.88		MADE GROUND: Black and dark brown fine and medium sand.
					2.20	137.58		MADE GROUND: Black silty slightly sandy clay. Hydrocarbon odour.
					2.45	137.33		Loose light brown fine and medium SAND.
								End of borehole at 2.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Hydrocarbon odour noted within made ground soils from 1.90m to 2.20m bgl. Water seepage at 1.90m bgl. Progression of borehole terminated due to deviation of window sample barrel in made ground soils.

Borehole Log

Borehole No. **WS21**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390017.00 - 412926.00	Hole Type WS
Location: Rochdale		Level: 139.84	Scale 1:50
Client: Willmott Dixon		Dates: 29/03/2021 - 29/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.21	139.63		MADE GROUND: Reinforced concrete.
					0.22	139.62		Blue liner layer.
		0.70	ES					MADE GROUND: Brown sand, gravel and cobbles of sandstone and concrete.
					0.90	138.94		Light brown fine and medium SAND.
		1.20		N=0 (0,0/0,0,0,0)	1.20	138.64		Very loose dark brown silty fine and medium organic SAND. Pockets of amorphous peat. Rare plant debris. Slight organic odour.
					1.70	138.14		Very loose brown slightly silty fine and medium SAND. Rare plant debris.
		2.00		N=3 (0,0/0,0,1,2)	2.00	137.84		Medium dense light brown and greyish light brown silty fine and medium SAND. Rare pockets of silty slightly sandy clay. Rare rounded sandstone cobbles.
		3.00		N=16 (4,4/4,4,4,4)				
		3.20 - 5.00	Bulk		3.20	136.64		Loose yellowish brown gravelly medium and coarse SAND. Gravel is fine and medium angular to rounded sandstone, mudstone and coal.
		4.00		N=8 (2,2/2,2,2,2)				
		5.00		N=4 (2,2/1,1,1,1)				
					5.45	134.39		End of borehole at 5.45 m

Remarks

Hand excavated service clearance pit to 1.20m bgl. Water seepage at 3.20m bgl.

Borehole Log

Borehole No. **WS22**

Sheet 1 of 1

Project Name:	Rochdale Neighbourhood	Project No. 075882	Co-ords:	390001.00 - 413046.00	Hole Type WS
Location:	Rochdale		Level:	138.92	Scale 1:50
Client:	Willmott Dixon		Dates:	30/03/2021 - 30/03/2021	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.50	ES		0.16	138.76		Grass over TOPSOIL: Brown silty fine sand. Occasional to frequent rootlets.
					0.65	138.27		MADE GROUND: Brown gravelly fine to coarse sand. Occasional brick cobbles. Gravel is fine to coarse angular to subrounded concrete, brick, sandstone, slate and glass.
								End of borehole at 0.65 m

Remarks

Hand excavated service clearance pit to 0.65m bgl. Possible ACM identified in arisings. A sample was obtained (0.50m) and scheduled for asbestos screening. Borehole terminated.

AGS

Trial Pit Log

Trialpit No
SA01/TTA
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389972.00 - 413043.00 Level: 138.54	Date 22/03/2021
Location: Rochdale		Dimensions (m): 3.5 x 1.2, Depth 3.40	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.25	138.29		MADE GROUND: Reinforced concrete.
				0.26	138.28		Blue liner layer.
	0.80	ES					MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular brick, concrete, sandstone and slate. Occasional cobbles of sandstone and mudstone. Rare to occasional boulders of sandstone.
	1.60	Bulk					
				2.00	136.54		Dark brown silty fine and medium organic SAND. Rare pockets of amorphous peat. Rare organic matter/plant debris. Slight organic odour.
				2.40	136.14		Light grey slightly silty fine to coarse SAND. Rare fine to coarse gravel of rounded sandstone.
				3.40	135.14		End of pit at 3.40 m

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Remarks: Vacuum excavation to 1.20m bgl. No groundwater encountered. Soakaway test undertaken in excavation.

Stability:

Trial Pit Log

Trialpit No
TTB
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389950.00 - 413053.00 Level: 138.52	Date 23/03/2021
Location: Rochdale		Dimensions (m): 3 × 1.2, Depth 3.51	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.30	138.22		MADE GROUND: Reinforced concrete.
				0.31	138.21		Blue liner layer.
	1.00	ES					MADE GROUND: Brown gravelly fine to coarse sand. Rare cobbles of brick concrete, sandstone and wood. Rare boulders of concrete and sandstone. Gravel is fine to coarse angular to subrounded brick, concrete, wood, slate and sandstone. *Large sandstone boulder from 0.50m to 0.90m bgl.*
				2.30	136.22		MADE GROUND: Orangish light brown slightly gravelly fine to coarse sand. Gravel is fine and medium subangular to subrounded sandstone.
				3.50	135.02		Sandstone obstruction.
				3.51	135.01		End of pit at 3.51 m

1 2 3 4

Remarks: Vacuum excavation to 1.20m bgl. Sandstone obstruction at 3.50m bgl. No groundwater encountered.

Stability:

AGS

Trial Pit Log

Trialpit No: **TTC**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389965.00 - 413025.00 Level: 138.56	Date 23/03/2021
Location: Rochdale		Dimensions (m): 2.5 × 1, Depth 3.40	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES					MADE GROUND: Reinforced concrete.
				0.28	138.28		
				0.29	138.27		Blue liner layer.
	0.60	ES					MADE GROUND: Brown gravelly fine to coarse sand. Rare to occasional cobbles of brick and concrete. Gravel is fine to coarse angular to subrounded sandstone, concrete, mudstone and brick.
				1.20	137.36		Grey and orange slightly sandy silty CLAY.
				1.40	137.16		Brown and grey slightly gravelly sandy silty CLAY. Gravel is fine and medium angular to subrounded sandstone.
				1.80	136.76		Loose brown silty organic fine and medium SAND. Rare plant debris. Rare pockets of pseudofibrous peat.
				1.90	136.66		*Extends 1.50m into excavation from southern side wall.*
	2.00 - 3.00	Bulk					Light greyish brown slightly silty to silty medium and coarse SAND.
							Excavation sidewall collapse from 2.30m bgl.
▼				3.40	135.16		End of pit at 3.40 m

1 2 3 4

Remarks: Vacuum excavation to 1.20m bgl. Groundwater seepage recorded at 3.30m bgl.

Stability:

AGS

Trial Pit Log

Trialpit No
TTD
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390021.00 - 412969.00 Level: 139.85	Date 22/03/2021
Location: Rochdale		Dimensions (m): 2.8 × 1.2 Depth 3.60	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05	ES					MADE GROUND: Reinforced concrete.
				0.25	139.60		Blue liner layer.
				0.26	139.58		MADE GROUND: Yellowish brown sand and gravel. Gravel is fine to coarse angular to subrounded sandstone.
				0.50	139.34		Geotextile layer.
				0.51	139.34		Yellowish brown SAND and GRAVEL. Gravel is fine to coarse subangular to rounded sandstone of mixed lithologies.
	0.80	ES		0.75	139.10		Dark greyish brown fine to coarse SAND.
				1.20	138.65		Orangish brown fine to coarse SAND.
	1.40 - 2.20	Bulk		1.40	138.44		Light brown slightly gravelly fine to coarse SAND. Gravel is fine and medium subrounded to rounded sandstone. Rare silty pockets.
				2.20	137.65		Orange slightly gravelly medium and coarse SAND. Gravel is fine to coarse subrounded to rounded sandstone.
				2.90	136.94		Light brown gravelly medium and coarse SAND. Rare to occasional cobbles of sandstone. Gravel is fine to coarse subrounded to rounded sandstone.
				3.60	136.24		End of pit at 3.60 m

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Remarks: Vacuum excavation to 1.20m bgl. No groundwater encountered.

Stability:

AGS

Trial Pit Log

Trialpit No
TTE
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389999.00 - 412961.00 Level: 139.85	Date 25/03/2021
Location: Rochdale		Dimensions (m): 2.5 x 1 Depth 3.10	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.23	139.62		MADE GROUND: Reinforced concrete.
				0.24	139.61		Blue liner layer.
							MADE GROUND: Light brown and brown sandy gravel, cobbles and boulders of sandstone. Rare brick. Rare tarmac fragments.
				0.70	139.15		MADE GROUND: Concrete slab.
				0.90	138.95		MADE GROUND: Light brown and brown sandy gravel, cobbles and boulders of sandstone. Rare brick.
	1.00	ES					
	1.20 - 1.80	Bulk		1.20	138.65		MADE GROUND: Orangish brown and brown sandy gravel, cobbles and boulders of sandstone. Rare brick.
	1.40	ES					
				2.50	137.35		MADE GROUND: Concrete/sandstone slab.
				2.70	137.15		White geotextile cloth layer.
	2.80	ES		2.71	137.14		MADE GROUND: Brown gravelly cobbly fine to coarse sand. Gravel is fine to coarse angular to subrounded brick, concrete, ash, ash, wood and metal pieces.
				3.10	136.75		End of pit at 3.10 m

Remarks: Vacuum excavation to 1.20m bgl. Concrete slab at 0.70m to 0.90m bgl. Excavation terminated at 3.10m bgl due to concrete obstruction. No groundwater encountered.

Stability:

Trial Pit Log

Trialpit No: **TTF**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389885.00 - 412951.00 Level: 140.56	Date 24/03/2021
Location: Rochdale		Dimensions (m): 3 × 1, Depth 3.50	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	ES					MADE GROUND: Reinforced concrete.
				0.30	140.26		Blue liner layer.
				0.31	140.25		MADE GORUND: Light brown gravelly cobbly fine to coarse sand. Gravel is fine to coarse angular to subangular sandstone. Cobbles of sandstone. Rare boulder of sandstone.
				0.80	139.76		Geotextile mesh.
				0.81	139.75		MADE GROUND: Sandstone flags. *Sandstone flags may be indicative of floor level associated with historic land use.*
	1.10 - 1.50	Bulk		1.10	139.46		MADE GROUND: Brown gravelly cobbly fine to coarse sand. Gravel is fine to coarse angular to subrounded sandstone, concrete, brick, coal and rare slate. Cobbles of sandstone and concrete.
	1.20	ES					
	1.50 - 2.60	Bulk		1.50	139.06		Light brown gravelly medium and coarse SAND. Gravel is fine to coarse subrounded to rounded of mixed lithologies.
	1.70	ES					
				2.60	137.96		Soft brown sandy slightly organic CLAY. Rare plant debris/roots.
				2.80	137.76		Light brown slightly silty to silty fine and medium SAND.
				3.50	137.06		End of pit at 3.50 m

1 2 3 4

Remarks: Vacuum excavation to 1.20m bgl. Sandstone flags broken through with breaker at 0.80m bgl. No groundwater encountered.

Stability:

Trial Pit Log

Trialpit No
TTG
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389882.00 - 412929.00 Level: 140.54	Date 24/03/2021
Location: Rochdale		Dimensions (m): 3 × 1, Depth 3.50	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							MADE GROUND: Reinforced concrete.
				0.25	140.29		
	0.30 - 1.00	Bulk		0.26	140.28		Blue liner layer.
	0.40	ES					MADE GROUND: Brown sandy gravel and cobbles of sandstone. Rare brick, concrete, slate and wood.
				1.00	139.54		Geotextile mesh.
				1.01	139.53		MADE GROUND: Sandstone flags. *Sandstone flags may be indicative of floor level associated with historic land use.*
				1.35	139.19		MADE GROUND: Black and purplish red sand and gravel. Gravel is fine to coarse angular to subangular brick, ash, rare concrete, rare clinker and rare coal.
	1.50	ES					
				1.80	138.74		Brown fine and medium SAND.
				2.50	138.04		Brown and dark brown silty fine to coarse slightly organic SAND. Rare plant debris/rootlets.
	2.60	D					
				2.80	137.74		Light brown gravelly medium and coarse SAND. Gravel is fine to coarse subrounded to rounded of mixed lithologies.
				3.30	137.24		Light brown, with pockets of grey, slightly silty to silty fine and medium SAND.
				3.50	137.04		End of pit at 3.50 m

Remarks: Vacuum excavation to 1.20m bgl. Sandstone flags broken through with breaker at 1.00m bgl. No groundwater encountered.

Stability:

Trial Pit Log

Trialpit No **TT01**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389946.00 - 413027.00 Level: 138.55	Date 23/03/2021
Location: Rochdale		Dimensions (m): Depth 3.30 — 5 × 1	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20	138.34		MADE GROUND: Reinforced concrete.
				0.21	138.34		Blue liner layer.
							MADE GROUND: Brown and greyish brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular concrete and sandstone.
				0.70	137.84		MADE GROUND: Brown sandy gravel, cobbles and boulders of sandstone, brick and rare concrete.
	1.00 - 2.00	Bulk					
	1.50	ES					
				2.50	136.04		MADE GROUND: Sandstone boulders.
▼				2.70	135.84		Brown pseudofibrous PEAT. Organic odour.
				3.10	135.44		Brown SAND and GRAVEL. Gravel is medium and coarse subrounded and rounded sandstone.
				3.30	135.24		End of pit at 3.30 m

Remarks: Vacuum excavation to 1.20m bgl. Possible canal wall encountered at the north of the excavation. Groundwater encountered at 2.70m bgl. Refer to cross-section and photographic record for additional information.

Stability:

Trial Pit Log

Trialpit No **TT02**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390006.00 - 413027.00 Level: 139.63	Date 22/03/2021
Location: Rochdale		Dimensions (m): Depth 3.40 — 5 × 1.2	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							Grass over TOPSOIL: Brown slightly silty fine and medium sand.
				0.20	139.43		
				0.30	139.33		MADE GROUND: Greyish brown slightly gravelly fine to coarse sand. Gravel is fine and medium angular to subrounded brick, concrete and coal.
							MADE GROUND: Grey sand and gravel. Gravel is fine to coarse angular to rounded sandstone and mudstone.
				0.60	139.03		MADE GROUND: Yellowish brown sand and gravel. Gravel is fine to coarse angular to subangular sandstone.
				0.80	138.83		Light brown slightly silty fine and medium SAND. Rare gravel of rounded fine and medium sandstone. Rare pockets of grey and orange silty sand and sandy silt.
							MADE GROUND: Dark brown slightly gravelly fine and medium SAND. Gravel is fine to coarse angular to rounded brick, sandstone and mudstone.
							In centre of excavation only.
				3.40	136.23		End of pit at 3.40 m

Remarks: Vacuum excavation to 1.20m bgl. Canal wall not identified in excavation. No groundwater encountered.

Stability:

Trial Pit Log

Trialpit No **TT03**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389963.00 - 413009.00 Level: 138.56	Date 23/03/2021
Location: Rochdale		Dimensions (m): 4.5 x 1, Depth 3.40	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20	138.36		MADE GROUND: Reinforced concrete.
				0.70	137.86		MADE GROUND: Brown sand, gravel and cobbles. Gravel is fine to coarse angular to subrounded sandstone, concrete and rare plastic. Cobbles of sandstone.
	1.40	ES					MADE GROUND: Brown sandy gravel, cobbles and boulders of concrete, brick, sandstone, slate and metal fragments.
							Planar sandstone boulder recovered at 1.50m bgl.
				1.70	136.86		Light brown fine to coarse SAND.
	2.10	Bulk					*Sidewall collapse from 1.70m to 3.40m bgl.*
▼				3.30	135.26		Brown medium and coarse SAND.
				3.40	135.16		End of pit at 3.40 m

Remarks: Vacuum excavation to 1.20m bgl. Canal wall not encountered in the excavation. Deposits recorded as wet from 3.30m bgl.

Stability:

Trial Pit Log

Trialpit No **TT04**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389904.00 - 412981.00 Level: 139.67	Date 22/03/2021
Location: Rochdale		Dimensions (m): Depth 3.30 — 4 × 1	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05	ES		0.20	139.47		MADE GROUND: Black tarmacadam.
				0.50	139.17		MADE GROUND: Greyish/yellowish brown sand and gravel. Gravel is fine and medium angular to subangular sandstone and concrete.
				1.00	138.67		MADE GROUND: Brown gravelly fine to coarse sand. Gravel is fine to coarse angular to rounded sandstone, mudstone, brick and slate. Rare pockets of grey sandy clay.
	1.20	ES		1.60	138.07		MADE GROUND: Orangish brown gravelly fine to coarse sand. Gravel is fine to coarse angular to subangular sandstone, rare brick and rare slate. Rare to occasional boulders of sandstone and mudstone. *MADE GROUND: Grey clay.* *Western excavation sidewall only.* *3 x Vertical timber post from 1.20m bgl to 2.80m bgl, at 2.00m, 4.00m and 5.00m east of site fenceline.*
▼	2.00	ES		2.40	137.27		MADE GROUND: Grey and dark grey slightly silty fine and medium sand. Rare gravel of brick. Slight organic odour.
▼				2.80	136.87		MADE GROUND: Sandstone boulder.
				3.30	136.37		Loose grey medium and coarse SAND. End of pit at 3.30 m

Remarks: Vacuum excavation to 1.20m bgl. Possible canal wall identified at the eastern wall of the excavation, beneath tarmac sub-base. Water inflow from behind wall at 1.90m bgl. Water seepage at 2.70m bgl. Refer to cross section and photographic log for additional information.

Stability:

Trial Pit Log

Trialpit No **TT05**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389958.00 - 412970.00 Level: 139.08	Date 26/03/2021
Location: Rochdale		Dimensions (m): Depth 3.10 — 5 × 1	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05	ES					MADE GROUND: Black tarmacadam.
				0.15	138.93		MADE GROUND: Grey sand and gravel of concrete and sandstone (sub-base).
				0.30	138.78		MADE GROUND: Brown sand, gravel, cobbles and boulders of sandstone, concrete and rare brick.
							Brick wall, 0.40m width, approximately 3m from western pit side wall, orientated north to south. Consistent ground conditions to the east and west of the wall.
▼				1.20	137.88		
	1.30	ES					MADE GROUND: Black sandy clay and clayey slightly gravelly sand. Gravel is fine to coarse angular to subangular wood, glass, ash and rare brick. Rare cobbles of wood fragments. Hydrocarbon odour
				1.90	137.18		Grey fine and medium SAND.
				2.10	136.98		Soft light brown silty slightly sandy CLAY.
	2.30	ES					
				3.10	135.98		End of pit at 3.10 m

Remarks: Vacuum excavation to 1.20m bgl. Canal wall not encountered. Brick wall identified c. 3m from western edge of excavation at approximately 0.60m bgl. Wall orientated approximately north to south. Hydrocarbon odour in made ground soils from 1.20m - 1.90m bgl. Water seepage at 1.20m bgl. Refer to cross section and photographic log for additional information.

Stability:

Trial Pit Log

Trialpit No
TT06A
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389907.00 - 412951.00 Level: 139.92	Date 24/03/2021
Location: Rochdale		Dimensions (m): 8 × 0.9 Depth 2.50	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15	139.77		MADE GROUND: Black tarmacadam.
				0.40	139.52		MADE GROUND: Greyish light brown sand and gravel. Gravel is fine to coarse angular to subrounded concrete (sub-base).
				0.60	139.32		MADE GROUND: Brown gravelly cobble sand. Gravel and cobbles fine to coarse angular to subrounded concrete and sandstone.
▼				1.40	138.52		MADE GROUND: Brown gravelly sand. Gravel is fine to coarse angular to subangular brick, concrete, sandstone and coal. Occasional cobbles of brick, concrete and sandstone. Rare boulders of brick and sandstone.
							Light greyish brown and brown fine to coarse SAND. Pockets of silty fine to coarse sand.
							Orangish brown fine to coarse SAND.
				2.50	137.42		End of pit at 2.50 m

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Remarks: Vacuum excavation to 1.20m bgl. Possible canal wall identified approximately 2.80m south of northern edge of excavation. Service pipe identified in northern portion of excavation (TT06D), cased in concrete. Deposits recorded as damp from 1.40m bgl. Refer to cross section and photographic log for additional information.

Stability:

AGS

Trial Pit Log

Trialpit No
TT06B
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389907.00 - 412951.00 Level: 139.92	Date 24/03/2021
Location: Rochdale		Dimensions (m): 8 × 0.9, Depth 2.30	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15	139.77		MADE GROUND: Black tarmacadam.
				0.40	139.52		MADE GROUND: Greyish light brown sand and gravel. Gravel is fine to coarse angular to subrounded concrete (sub-base).
				0.60	139.32		MADE GROUND: Brown gravelly cobble sand. Gravel and cobbles fine to coarse angular to subrounded concrete and sandstone.
				1.40	138.52		MADE GROUND: Brown gravelly sand. Gravel is fine to coarse angular to subangular brick, concrete, sandstone and coal. Occasional cobbles of brick, concrete and sandstone. Rare boulders of brick and sandstone.
				2.30	137.62		MADE GROUND: Brick wall. End of pit at 2.30 m

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Remarks: Vacuum excavation to 1.20m bgl. Possible canal wall identified approximately 2.80m south of northern edge of excavation. Service pipe identified in northern portion of excavation (TT06D), cased in concrete. Deposits recorded as damp from 1.40m bgl. Refer to cross section and photographic log for additional information.

Stability:

AGS

Trial Pit Log

Trialpit No **TT06C** Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389907.00 - 412951.00 Level: 139.92	Date 24/03/2021
Location: Rochdale		Dimensions (m): Depth 1.40, 8, 0.9	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15	139.77		MADE GROUND: Black tarmacadam.
				0.40	139.52		MADE GROUND: Greyish light brown sand and gravel. Gravel is fine to coarse angular to subrounded concrete (sub-base).
				0.60	139.32		MADE GROUND: Brown gravelly cobble sand. Gravel and cobbles fine to coarse angular to subrounded concrete and sandstone.
				0.90	139.02		MADE GROUND: Brown gravelly sand. Gravel is fine to coarse angular to subangular brick, concrete, sandstone and coal. Occasional cobbles of brick, concrete and sandstone. Rare boulders of brick and sandstone.
				1.40	138.52		MADE GROUND: Brick wall. End of pit at 1.40 m

1 2 3 4

Remarks: Vacuum excavation to 1.20m bgl. Possible canal wall identified approximately 2.80m south of northern edge of excavation. Service pipe identified in northern portion of excavation (TT06D), cased in concrete. Deposits recorded as damp from 1.40m bgl. Refer to cross section and photographic log for additional information.

Stability:

AGS

Trial Pit Log

Trialpit No
TT06D
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389907.00 - 412951.00 Level: 139.92	Date 24/03/2021
Location: Rochdale		Dimensions (m): 8 × 0.9, Depth 0.90	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15	139.77		MADE GROUND: Black tarmacadam.
				0.40	139.52		MADE GROUND: Greyish light brown sand and gravel. Gravel is fine to coarse angular to subrounded concrete (sub-base).
				0.60	139.32		MADE GROUND: Brown gravelly cobble sand. Gravel and cobbles fine to coarse angular to subrounded concrete and sandstone.
				0.90	139.02		MADE GROUND: Brown gravelly sand. Gravel is fine to coarse angular to subangular brick, concrete, sandstone and coal. Occasional cobbles of brick, concrete and sandstone. Rare boulders of brick and sandstone.
				0.95	138.97		MADE GROUND: Clay pipe. Cased in concrete. End of pit at 0.90 m

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Remarks: Vacuum excavation to 1.20m bgl. Possible canal wall identified approximately 2.80m south of northern edge of excavation. Service pipe identified in northern portion of excavation (TT06D), cased in concrete. Deposits recorded as damp from 1.40m bgl. Refer to cross section and photographic log for additional information.

Stability:

AGS

Trial Pit Log

Trialpit No
TT06E
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389907.00 - 412951.00 Level: 139.92	Date 24/03/2021
Location: Rochdale		Dimensions (m): Depth 0.45 — 8 × 0.9	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15	139.77		MADE GROUND: Black tarmacadam.
				0.40	139.52		MADE GROUND: Greyish light brown sand and gravel. Gravel is fine to coarse angular to subrounded concrete (sub-base).
				0.45	139.47		MADE GROUND: Brick wall. End of pit at 0.45 m

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Remarks: Vacuum excavation to 1.20m bgl. Possible canal wall identified approximately 2.80m south of northern edge of excavation. Service pipe identified in northern portion of excavation (TT06D), cased in concrete. Deposits recorded as damp from 1.40m bgl. Refer to cross section and photographic log for additional information.

Stability:

Trial Pit Log

Trialpit No
TT06F
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389907.00 - 412951.00 Level: 139.92	Date 24/03/2021
Location: Rochdale		Dimensions (m): 8 × 0.9, Depth 0.45	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15	139.77		MADE GROUND: Black tarmacadam.
				0.40	139.52		MADE GROUND: Greyish light brown sand and gravel. Gravel is fine to coarse angular to subrounded concrete (sub-base).
				0.45	139.47		MADE GROUND: Sandstone boulders. End of pit at 0.45 m

Remarks: Vacuum excavation to 1.20m bgl. Possible canal wall identified approximately 2.80m south of northern edge of excavation. Service pipe identified in northern portion of excavation (TT06D), cased in concrete. Deposits recorded as damp from 1.40m bgl. Refer to cross section and photographic log for additional information.

Stability:

Trial Pit Log

Trialpit No
TT07A
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389948.00 - 412910.00 Level: 139.94	Date 26/03/2021
Location: Rochdale		Dimensions (m): 3 × 3, Depth 3.20	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20	139.74		MADE GROUND: Black tarmacadam.
				0.90	139.04		MADE GROUND: Brownish grey sand, gravel and cobbles of sandstone, concrete and brick.
▼				1.90	138.04		Brown/light brown gravelly fine to coarse SAND. Gravel is fine to coarse subangular to rounded sandstone and mudstone of mixed lithologies.
				3.20	136.74		Grey silty fine and medium SAND. End of pit at 3.20 m

1 2 3 4

Remarks: Vacuum excavation to 1.20m bgl. Sandstone boulder obstructions encountered on northern and western side walls. Obstructions unlikely to be associated with canal wall due to depth, extent and orientation. Water seepage at 1.90m bgl from western sidewall. Refer to plan view sketch and photographic log for additional information.

Stability:

AGS

Trial Pit Log

Trialpit No
TT07B
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389948.00 - 412910.00 Level: 139.94	Date 26/03/2021
Location: Rochdale		Dimensions (m): 3 × 3, Depth 3.20	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20	139.74		MADE GROUND: Black tarmacadam.
				0.70	139.24		MADE GROUND: Brownish grey sand, gravel and cobbles of sandstone, concrete and brick.
				2.40	137.54		MADE GROUND: Sandstone boulders.
				3.20	136.74		Grey silty fine and medium SAND. End of pit at 3.20 m

1
2
3
4

Remarks: Vacuum excavation to 1.20m bgl. Sandstone boulder obstructions encountered on northern and western side walls. Obstructions unlikely to be associated with canal wall due to depth, extent and orientation. Water seepage at 1.90m bgl from western sidewall. Refer to plan view sketch and photographic log for additional information.

Stability:

Trial Pit Log

Trialpit No
TT07C
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389948.00 - 412910.00 Level: 139.94	Date 26/03/2021
Location: Rochdale		Dimensions (m): 3 x 3 Depth 3.20	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20	139.74		MADE GROUND: Black tarmacadam.
				0.70	139.24		MADE GROUND: Brownish grey sand, gravel and cobbles of sandstone, concrete and brick.
				1.70	138.24		MADE GROUND: Sandstone boulders.
				3.20	136.74		Grey silty fine and medium SAND. End of pit at 3.20 m

Remarks: Vacuum excavation to 1.20m bgl. Sandstone boulder obstructions encountered on northern and western side walls. Obstructions unlikely to be associated with canal wall due to depth, extent and orientation. Water seepage at 1.90m bgl from western sidewall. Refer to plan view sketch and photographic log for additional information.

Stability:

Trial Pit Log

Trialpit No
TT08A
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390001.00 - 412987.00 Level: 139.86	Date 25/03/2021
Location: Rochdale		Dimensions (m): 2.3 x 1 Depth 2.20	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.20	139.66		MADE GROUND: Reinforced concrete.
				0.21	139.65		Blue liner layer.
							MADE GROUND: Light brown sand, gravel, cobbles and boulders of sandstone. Rare metal pieces.
	0.50 - 1.50	Bulk					
	1.00	ES					
				2.10	137.76		MADE GROUND: Concrete slab obstruction.
				2.20	137.66		End of pit at 2.20 m

1
2
3
4

Remarks: Vacuum excavation to 1.20m bgl. No evidence of canal wall identified in excavation. No groundwater encountered.

Stability:

AGS

Trial Pit Log

Trialpit No
TT08B
Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 390001.00 - 412987.00 Level: 139.86	Date 25/03/2021
Location: Rochdale		Dimensions (m): 3.5 × 1, Depth 2.20	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20	139.66		MADE GROUND: Reinforced concrete.
				0.21	139.65		Blue liner layer.
							MADE GROUND: Light brown sand, gravel, cobbles and boulders of sandstone. Rare metal pieces.
							MADE GROUND: Concrete footing, 0.40m width.
							MADE GROUND: Concrete footing, 1.22m width. Blue liner at the base of concrete.
				2.10	137.76		MADE GROUND: Concrete slab obstruction.
				2.20	137.66		End of pit at 2.20 m

Remarks: Vacuum excavation to 1.20m bgl. Possible strip footing identified, orientated approximately north to south, approximately 0.9m from western excavation side wall. No groundwater encountered. Refer to cross section, plan view sketch and photographic log for additional information.

Stability:

Trial Pit Log

Trialpit No **TT09**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389990.00 - 412934.00 Level: 139.86	Date 25/03/2021
Location: Rochdale		Dimensions (m): Depth 3.20	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20	139.66		MADE GROUND: Reinforced concrete.
				0.21	139.65		Blue liner layer. MADE GROUND: Orangish brown sand, gravel and cobbles of sandstone.
	0.80	ES		0.75	139.11		MADE GROUND: Grey sand and gravel. Gravel is fine to coarse angular to subangular concrete, sandstone and rare brick. Hydrocarbon odour.
				1.00	138.86		MADE GROUND: Light brown and brown sand, gravel, cobbles and boulders of sandstone.
				1.80	138.06		MADE GROUND: Brown gravelly cobbly fine to coarse sand. Gravel is fine to coarse angular to subangular brick, concrete, clinker, ash, wood, metal and sandstone. Cobbles of brick and concrete.
				2.60	137.26		White geotextile cloth layer.
				2.61	137.25		Light brown and orangish brown fine and medium SAND. Pockets of silty sand.
				3.20	136.66		End of pit at 3.20 m

Remarks: Vacuum excavation to 1.20m bgl. No evidence of canal wall identified in excavation. Hydrocarbon odour noted in made ground soils between 0.75m and 1.00m bgl. No groundwater encountered.

Stability:

Trial Pit Log

Trialpit No **TT10**

Sheet 1 of 1

Project Name: Rochdale Neighbourhood	Project No. 075882	Co-ords: 389979.00 - 412897.00 Level: 139.80	Date 25/03/2021
Location: Rochdale		Dimensions (m): Depth 3.20, 2.5, 1	Scale 1:20
Client: Willmott Dixon			Logged MH

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05	ES		0.20	139.60		MADE GROUND: Reinforced concrete.
				0.21	139.59		Grey liner layer.
							MADE GROUND: Grey and brown sand, gravel and cobbles of concrete and sandstone. *Concrete obstruction. Possible casing for underground services. 0.30m in width.*
				0.90	138.90		MADE GROUND: Dark brown gravelly cobbly fine to coarse sand. Gravel is fine to course angular to subangular brick, concrete, sandstone, ash, clinker, metal pieces, wood and plastic. Slight hydrocarbon odour.
▼	1.00	ES					
	2.00	ES					
				2.20	137.60		MADE GROUND: Grey sandy CLAY. Hydrocarbon odour.
	2.30	ES					
				2.50	137.30		Light brown fine and medium SAND.
	2.60	ES					
				3.20	136.60		End of pit at 3.20 m

Remarks: Vacuum excavation to 1.20m bgl. No evidence of canal wall in excavation. Hydrocarbon odour noted in made ground soils between 0.90m and 2.50m bgl. No groundwater encountered.
Possible pipe cased within concrete 0.70m from western edge of excavation area. See photographic log for additional information.

Stability:

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Analytical Report Number : 21-61537

Project / Site name:	Neighbourhood, Rochdale	**Samples received on:**	09/03/2021
Your job number:	075882	**Samples instructed on/ Analysis started on:**	09/03/2021
Your order number:	EBMA2728	**Analysis completed by:**	19/03/2021
Report Issue Number:	1	**Report issued on:**	19/03/2021
Samples Analysed:	5 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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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.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-61537
Project / Site name: Neighbourhood, Rochdale
Your Order No: EBMA2728

Lab Sample Number				1797281	1797282	1797283	1797284	1797285
Sample Reference				CP02	CP08	CP08	CP03	CP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.35	0.40-0.45	3.80-3.85	0.60-0.62	4.55-4.90
Date Sampled				06/03/2021	08/03/2021	08/03/2021	09/03/2021	09/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.3	13	18	7.8	17
Total mass of sample received	kg	0.001	NONE	1.2	1.2	1.2	2.0	2.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.3	8.8	7.3	8.1	7.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	300	150	190	93	230
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.15	0.074	0.094	0.047	0.12
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	mg/l	1.25	MCERTS	149	74.3	94.1	46.6	115
Organic Matter	%	0.1	MCERTS	2.7	0.4	2.4	1.2	3.3
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.24	< 0.05	< 0.05	0.74	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.42	< 0.05	< 0.05	1.6	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.34	< 0.05	< 0.05	0.84	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	3.2	0.48	< 0.05	7.3	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.66	< 0.05	< 0.05	1.2	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	4.5	0.45	< 0.05	10	< 0.05
Pyrene	mg/kg	0.05	MCERTS	3.9	0.38	< 0.05	9.4	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	0.17	< 0.05	4.5	< 0.05
Chrysene	mg/kg	0.05	MCERTS	1.9	0.17	< 0.05	4.1	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	2.2	0.16	< 0.05	4.1	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.78	0.07	< 0.05	2.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.8	0.15	< 0.05	3.7	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.90	< 0.05	< 0.05	1.9	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.26	< 0.05	< 0.05	0.62	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	< 0.05	< 0.05	2.1	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	24.2	2.03	< 0.80	54.1	< 0.80

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 21-61537
Project / Site name: Neighbourhood, Rochdale
Your Order No: EBMA2728

Lab Sample Number				1797281	1797282	1797283	1797284	1797285
Sample Reference				CP02	CP08	CP08	CP03	CP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.35	0.40-0.45	3.80-3.85	0.60-0.62	4.55-4.90
Date Sampled				06/03/2021	08/03/2021	08/03/2021	09/03/2021	09/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.2	3.9	4.4	12	7.9
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.3	< 0.2	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	0.4	0.8	0.4
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	16	16	14	18	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	65	20	25	76	29
Lead (aqua regia extractable)	mg/kg	1	MCERTS	55	15	9.9	120	11
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	18	17	16	21	27
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	95	64	49	230	66
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	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 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	13	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	15	< 2.0	< 2.0	20	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	19	< 10	< 10	32	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	30	< 10	< 10	45	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	63	< 10	< 10	110	< 10

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 21-61537
Project / Site name: Neighbourhood, Rochdale

* 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 *
1797281	CP02	None Supplied	0.30-0.35	Brown loam with gravel and vegetation.
1797282	CP08	None Supplied	0.40-0.45	Brown loam and clay with gravel and vegetation.
1797283	CP08	None Supplied	3.80-3.85	Brown clay and sand.
1797284	CP03	None Supplied	0.60-0.62	Brown loam and sand with vegetation.
1797285	CP03	None Supplied	4.55-4.90	Grey clay.

Analytical Report Number : 21-61537
Project / Site name: Neighbourhood, Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Analytical Report Number : 21-61537
Project / Site name: Neighbourhood, Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-61537
Project / Site name: Neighbourhood, Rochdale

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
CP03	None Supplied	S	1797284	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
CP03	None Supplied	S	1797284	b	TPHCWG (Soil)	L088/76-PL	b
CP03	None Supplied	S	1797285	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
CP03	None Supplied	S	1797285	b	TPHCWG (Soil)	L088/76-PL	b

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Analytical Report Number : 21-62553

Replaces Analytical Report Number: 21-62553, issue no. 1
Additional analysis undertaken.

Project / Site name:	Rochdale Neighbourhood	**Samples received on:**	12/03/2021
Your job number:		**Samples instructed on/ Analysis started on:**	15/03/2021
Your order number:	EBMA27	**Analysis completed by:**	31/03/2021
Report Issue Number:	2	**Report issued on:**	31/03/2021
Samples Analysed:	4 soil samples		

Signed: Karolina Marek

Karolina Marek
PL Head of 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.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-62553
Project / Site name: Rochdale Neighbourhood
Your Order No: EBMA27

Lab Sample Number				1802641	1802642	1802643	1802644
Sample Reference				CP09	CP12	CP01	CP01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.10	2.80	3.15
Date Sampled				09/03/2021	10/03/2021	11/03/2021	11/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	12	10	16
Total mass of sample received	kg	0.001	NONE	1.7	1.7	1.7	1.7
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	8.4	8.6	11.8	10.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	99	700	29	130
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.050	0.35	0.014	0.066
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	49.7	351	14.3	66.3
Organic Matter	%	0.1	MCERTS	0.5	2.2	1.0	0.3
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	1.8	1.9	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.21	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.30	4.8	1.9	0.25
Fluorene	mg/kg	0.05	MCERTS	0.30	3.2	1.5	0.23
Phenanthrene	mg/kg	0.05	MCERTS	2.2	27	9.2	1.2
Anthracene	mg/kg	0.05	MCERTS	0.53	5.6	2.2	0.32
Fluoranthene	mg/kg	0.05	MCERTS	2.8	36	13	1.9
Pyrene	mg/kg	0.05	MCERTS	2.6	32	11	1.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.2	15	5.4	0.78
Chrysene	mg/kg	0.05	MCERTS	1.2	13	4.8	0.68
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.0	12	4.2	0.63
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.73	7.1	2.9	0.41
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.0	11	4.1	0.62
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.48	4.7	1.8	0.29
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.5	0.58	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.50	5.4	2.0	0.31
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	14.9	181	66.7	9.21

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Analytical Report Number: 21-62553
Project / Site name: Rochdale Neighbourhood
Your Order No: EBMA27

Lab Sample Number				1802641	1802642	1802643	1802644
Sample Reference				CP09	CP12	CP01	CP01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.10	2.80	3.15
Date Sampled				09/03/2021	10/03/2021	11/03/2021	11/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.3	18	7.7	4.2
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	1.1	1.0	< 0.2
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	23	23	15	6.8
Copper (aqua regia extractable)	mg/kg	1	MCERTS	56	140	54	23
Lead (aqua regia extractable)	mg/kg	1	MCERTS	33	430	86	12
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	32	36	15	8.1
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	89	150	170	37
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	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
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	10	3.9	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	31	12	24
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	110	21	30
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	21	89	35	59
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	30	240	73	110

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

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Analytical Report Number: 21-62553
Project / Site name: Rochdale Neighbourhood
Your Order No: EBMA27

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-PL 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
1802642	CP12	1.10	139	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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

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Analytical Report Number : 21-62553
Project / Site name: Rochdale Neighbourhood

* 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 *
1802641	CP09	None Supplied	0.5	Brown clay and loam with gravel and vegetation.
1802642	CP12	None Supplied	1.1	Brown clay and loam with gravel.
1802643	CP01	None Supplied	2.8	Brown sandy clay with gravel.
1802644	CP01	None Supplied	3.15	Brown clay and sand with gravel.

Analytical Report Number : 21-62553
Project / Site name: Rochdale Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
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
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

Analytical Report Number : 21-62553
Project / Site name: Rochdale Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-62977

Project / Site name:	Rochdale Neighborhood	**Samples received on:**	16/03/2021
Your job number:		**Samples instructed on/ Analysis started on:**	16/03/2021
Your order number:	EBMA2730	**Analysis completed by:**	25/03/2021
Report Issue Number:	1	**Report issued on:**	25/03/2021
Samples Analysed:	5 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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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.

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Analytical Report Number: 21-62977
Project / Site name: Rochdale Neighborhood
Your Order No: EBMA2730

Lab Sample Number				1805061	1805062	1805063	1805064	1805065
Sample Reference				CP6	CP5	CP5	CP13	CP13
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	2.50	4.00	1.50	4.00
Date Sampled				11/03/2021	15/03/2021	15/03/2021	15/03/2021	15/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	9.5	9.8	16	8.6
Total mass of sample received	kg	0.001	NONE	1.5	1.5	1.5	1.5	2.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.9	7.1	7.7	8.0	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	440	62	48	250	22
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.22	0.031	0.024	0.12	0.011
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	mg/l	1.25	MCERTS	220	30.8	23.8	123	11.2
Organic Matter	%	0.1	MCERTS	1.5	1.1	2.5	3.0	1.1
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.66	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.26	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.0	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	1.0	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.55	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.43	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.51	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.17	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.42	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	5.00	< 0.80	< 0.80	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	5.6	6.4	22	3.1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	< 0.2	0.2	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 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	24	9.9	13	11	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	75	23	23	150	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	39	32	21	210	6.5
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	34	12	14	16	15
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	54	88	49	170	42

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Analytical Report Number: 21-62977
Project / Site name: Rochdale Neighborhood
Your Order No: EBMA2730

Lab Sample Number				1805061	1805062	1805063	1805064	1805065
Sample Reference				CP6	CP5	CP5	CP13	CP13
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	2.50	4.00	1.50	4.00
Date Sampled				11/03/2021	15/03/2021	15/03/2021	15/03/2021	15/03/2021
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	7.4	< 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	0.021
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	1.6	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	7.7	< 2.0	< 2.0	< 2.0	5.1
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	16	< 8.0	< 8.0	< 8.0	19
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	28	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	54	< 10	< 10	< 10	24
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	0.007	< 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	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	21	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	30	< 10	< 10	< 10

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 21-62977
Project / Site name: Rochdale Neighborhood

* 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 *
1805061	CP6	None Supplied	0.9	Brown sandy clay with gravel.
1805062	CP5	None Supplied	2.5	Brown clay and loam with gravel.
1805063	CP5	None Supplied	4	Brown clay and loam with gravel.
1805064	CP13	None Supplied	1.5	Brown sandy clay with gravel.
1805065	CP13	None Supplied	4	Brown sand with gravel.

Analytical Report Number : 21-62977
Project / Site name: Rochdale Neighborhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Analytical Report Number : 21-62977
Project / Site name: Rochdale Neighborhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-63793

Replaces Analytical Report Number: 21-63793, issue no. 1
Client references/information amended.

Project / Site name:	Rochdale Neighbourhood	**Samples received on:**	19/03/2021
Your job number:	075882	**Samples instructed on/ Analysis started on:**	19/03/2021
Your order number:	EBMA2731	**Analysis completed by:**	31/03/2021
Report Issue Number:	2	**Report issued on:**	06/04/2021
Samples Analysed:	5 soil samples		

Signed:

Joanna Wawrzeczko
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.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-63793
Project / Site name: Rochdale Neighbourhood
Your Order No: EBMA2731

Lab Sample Number				1809743	1809744	1809745	1809746	1809747
Sample Reference				CP7	CP11	CP11	CP14	CP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.20	0.15	2.30	0.70	3.10
Date Sampled				17/03/2021	17/03/2021	17/03/2021	18/03/2021	18/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	46	13	17	13	16
Total mass of sample received	kg	0.001	NONE	1.5	1.5	1.5	1.7	1.7
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.5	8.0	8.0	8.0	8.0
Total Cyanide	mg/kg	1	MCERTS	1.1	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	240	89	54	320
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.12	0.045	0.027	0.16
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	122	44.6	27.2	160
Ammoniacal Nitrogen as N	mg/kg	0.5	MCERTS	21	-	-	-	-
Ammoniacal Nitrogen as NH3	mg/kg	0.5	MCERTS	25	-	-	-	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	27	-	-	-	-
Organic Matter	%	0.1	MCERTS	6.8	2.9	1.4	0.7	1.0
Phenols by HPLC								
Catechol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-	-
Resorcinol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	< 0.30	-	-	-	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	< 0.20	-	-	-	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-	-
Phenol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	< 0.10	-	-	-	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	< 0.30	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	< 1.3	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	6.0	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	0.37	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	8.9	< 0.05	< 0.05	0.20
Fluorene	mg/kg	0.05	MCERTS	-	7.3	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	49	< 0.05	0.83	0.67
Anthracene	mg/kg	0.05	MCERTS	-	12	< 0.05	0.16	0.19
Fluoranthene	mg/kg	0.05	MCERTS	-	62	< 0.05	0.97	1.1
Pyrene	mg/kg	0.05	MCERTS	-	52	< 0.05	0.83	1.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	27	< 0.05	0.39	0.60
Chrysene	mg/kg	0.05	MCERTS	-	25	< 0.05	0.40	0.41
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	25	< 0.05	0.40	0.45
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	12	< 0.05	0.14	0.19
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	22	< 0.05	0.30	0.38
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	8.3	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	2.8	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	10	< 0.05	< 0.05	< 0.05
Total PAH								

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Analytical Report Number: 21-63793
Project / Site name: Rochdale Neighbourhood
Your Order No: EBMA2731

Lab Sample Number				1809743	1809744	1809745	1809746	1809747
Sample Reference				CP7	CP11	CP11	CP14	CP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.20	0.15	2.30	0.70	3.10
Date Sampled				17/03/2021	17/03/2021	17/03/2021	18/03/2021	18/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	332	< 0.80	4.42	5.29
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	40	92	7.1	4.5	4.6
Boron (water soluble)	mg/kg	0.2	MCERTS	1.2	0.3	0.5	0.4	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	2.6	< 0.2	0.4	< 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	31	17	28	12	10
Copper (aqua regia extractable)	mg/kg	1	MCERTS	200	490	36	13	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	630	1100	15	17	13
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.5	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	73	22	39	14	8.5
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	550	1300	78	50	28
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	3.0	2.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	18	8.7	2.2	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	55	26	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	350	130	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	430	170	12	< 10	< 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	7.8	7.3	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	8.4	35	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	90	210	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	210	270	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	310	530	< 10	< 10	< 10
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	-	-	-	-

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Analytical Report Number: 21-63793
Project / Site name: Rochdale Neighbourhood
Your Order No: EBMA2731

Lab Sample Number				1809743	1809744	1809745	1809746	1809747
Sample Reference				CP7	CP11	CP11	CP14	CP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.20	0.15	2.30	0.70	3.10
Date Sampled				17/03/2021	17/03/2021	17/03/2021	18/03/2021	18/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
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	-	-	-	-

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	-	-	-	-

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 21-63793
Project / Site name: Rochdale Neighbourhood
Your Order No: EBMA2731

Lab Sample Number				1809743	1809744	1809745	1809746	1809747
Sample Reference				CP7	CP11	CP11	CP14	CP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.20	0.15	2.30	0.70	3.10
Date Sampled				17/03/2021	17/03/2021	17/03/2021	18/03/2021	18/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
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	1.8	-	-	-	-
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	1.4	-	-	-	-
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	0.46	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	3.6	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	1.0	-	-	-	-
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	2.8	-	-	-	-
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	18	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	5.6	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	1.0	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	26	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	23	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	14	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	11	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	11	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	5.9	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	11	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.0	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.4	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.9	-	-	-	-

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 21-63793
Project / Site name: Rochdale Neighbourhood

* 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 *
1809743	CP7	None Supplied	2.2	Black clay and loam.
1809744	CP11	None Supplied	0.15	Brown loam and sand with gravel.
1809745	CP11	None Supplied	2.3	Brown clay.
1809746	CP14	None Supplied	0.7	Brown sandy loam with gravel.
1809747	CP14	None Supplied	3.1	Brown sandy loam with gravel.

Analytical Report Number : 21-63793
Project / Site name: Rochdale Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
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
Phenols, speciated, in soil, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
D.O. for Gravimetric Quant if free fibres detected	Dependent option for Gravimetric Quant if Screen/ID positive for free fibres	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
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
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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
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

Analytical Report Number : 21-63793
Project / Site name: Rochdale Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
Ammonia as NH3 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
Ammoniacal Nitrogen as N in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method,10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
Ammonium as NH4 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-65647

Project / Site name:	Rochdale, Neighbourhood	**Samples received on:**	29/03/2021
Your job number:	B175882	**Samples instructed on/ Analysis started on:**	29/03/2021
Your order number:		**Analysis completed by:**	09/04/2021
Report Issue Number:	1	**Report issued on:**	09/04/2021
Samples Analysed:	17 soil samples		

Signed: Karolina Marek

Karolina Marek
PL Head of 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.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820120	1820121	1820122	1820123	1820124
Sample Reference				TT10	TT10	TT10	TT10	TT08A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	2.30	2.60	1.00
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	25/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	25	46	7.8	10
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile & Amosite	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.001	0.004	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.001	0.004	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	7.7	7.4	7.4	8.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1.0	14	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	320
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	-	0.16
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	159
Ammoniacal Nitrogen as N	mg/kg	0.5	MCERTS	< 0.5	24	22	2.8	-
Ammoniacal Nitrogen as NH3	mg/kg	0.5	MCERTS	< 0.5	30	26	3.4	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	< 0.5	31	28	3.6	-
Organic Matter	%	0.1	MCERTS	4.4	4.6	14	0.6	0.9

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	< 0.10	< 0.10	-
Resorcinol	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	< 0.10	< 0.10	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	< 0.30	< 0.30	< 0.30	< 0.30	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	< 0.20	< 0.20	< 0.20	< 0.20	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	< 0.10	< 0.10	-
Phenol	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	< 0.10	< 0.10	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	< 0.10	< 0.10	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	< 0.30	< 0.30	< 0.30	< 0.30	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	< 1.3	< 1.3	< 1.3	< 1.3	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820120	1820121	1820122	1820123	1820124
Sample Reference				TT10	TT10	TT10	TT10	TT08A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	2.30	2.60	1.00
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	25/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	27	0.40	8.6	< 0.05	0.23
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.27	0.96	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	13	0.38	9.2	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	9.1	0.30	8.5	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	54	2.7	35	0.28	0.94
Anthracene	mg/kg	0.05	MCERTS	9.9	0.68	11	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	47	7.0	58	0.43	1.1
Pyrene	mg/kg	0.05	MCERTS	45	6.4	52	0.38	0.94
Benzo(a)anthracene	mg/kg	0.05	MCERTS	24	3.6	35	< 0.05	0.41
Chrysene	mg/kg	0.05	MCERTS	24	3.1	25	< 0.05	0.52
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	18	3.9	23	< 0.05	0.43
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	12	1.8	16	< 0.05	0.14
Benzo(a)pyrene	mg/kg	0.05	MCERTS	16	2.9	23	< 0.05	0.36
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	5.2	1.3	7.7	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2.2	0.38	3.0	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	7.0	1.9	9.8	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	312	37.0	325	1.09	5.05
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	26	53	62	3.3	3.0
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	3.8	2.9	< 0.2	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	2.3	3.0	3.8	< 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	27	68	37	6.0	10
Copper (aqua regia extractable)	mg/kg	1	MCERTS	270	490	320	24	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	1800	2400	1100	20	16
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6	0.5	4.0	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	28	63	96	6.5	8.5
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	5100	2100	780	40	39
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

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820120	1820121	1820122	1820123	1820124
Sample Reference				TT10	TT10	TT10	TT10	TT08A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	2.30	2.60	1.00
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	25/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
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	7.8	7.6	4.2	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	12	44	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	33	57	570	< 8.0	25
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	49	77	620	< 10	27
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	62	< 1.0	11	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	69	11	27	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	160	30	210	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	140	83	590	< 10	37
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	430	120	840	< 10	39
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	-
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	-
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	-
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 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	< 1.0	-
Cis-1,2-dichloroethene	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	-
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	-
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,1,1,2-Tetrachloroethane	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	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820120	1820121	1820122	1820123	1820124
Sample Reference				TT10	TT10	TT10	TT10	TT08A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	2.30	2.60	1.00
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	25/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	-
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	-

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
4-Methylphenol	mg/kg	0.2	NONE	2.3	< 0.2	< 0.2	< 0.2	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	1.5	< 0.3	< 0.3	< 0.3	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Naphthalene	mg/kg	0.05	MCERTS	27	0.40	8.6	< 0.05	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
2-Methylnaphthalene	mg/kg	0.1	NONE	15	0.4	4.2	< 0.1	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	1.2	< 0.1	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820120	1820121	1820122	1820123	1820124
Sample Reference				TT10	TT10	TT10	TT10	TT08A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	2.30	2.60	1.00
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	25/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.27	0.96	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	13	0.38	9.2	< 0.05	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	6.9	< 0.2	2.6	< 0.2	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Fluorene	mg/kg	0.05	MCERTS	9.1	0.30	8.5	< 0.05	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Phenanthrene	mg/kg	0.05	MCERTS	54	2.7	35	0.28	-
Anthracene	mg/kg	0.05	MCERTS	9.9	0.68	11	< 0.05	-
Carbazole	mg/kg	0.3	MCERTS	3.6	< 0.3	2.4	< 0.3	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Anthraquinone	mg/kg	0.3	MCERTS	0.8	< 0.3	< 0.3	< 0.3	-
Fluoranthene	mg/kg	0.05	MCERTS	47	7.0	58	0.43	-
Pyrene	mg/kg	0.05	MCERTS	45	6.4	52	0.38	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	24	3.6	35	< 0.05	-
Chrysene	mg/kg	0.05	MCERTS	24	3.1	25	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	18	3.9	23	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	12	1.8	16	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	16	2.9	23	< 0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	5.2	1.3	7.7	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2.2	0.38	3.0	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	7.0	1.9	9.8	< 0.05	-

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

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820125	1820126	1820127	1820128	1820129
Sample Reference				TTE	TTE	TTE	TT09	TT07
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.40	2.80	0.80	0.60
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	26/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.6	8.6	9.6	7.9	7.1
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	1.5

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	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	9.1	6.2	8.1	8.5	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	310	200	5300	160	99
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.15	0.10	2.7	0.078	0.050
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	153	100	2660	77.9	49.7
Ammoniacal Nitrogen as N	mg/kg	0.5	MCERTS	-	-	-	-	-
Ammoniacal Nitrogen as NH3	mg/kg	0.5	MCERTS	-	-	-	-	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	0.8	1.1	1.4	2.0	1.2

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	-	-	-	-	-
Resorcinol	mg/kg	0.1	ISO 17025	-	-	-	-	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	-	-	-	-	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	-	-	-	-	-
Phenol	mg/kg	0.1	ISO 17025	-	-	-	-	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	-	-	-	-	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	-	-	-	-	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820125	1820126	1820127	1820128	1820129
Sample Reference				TTE	TTE	TTE	TT09	TT07
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.40	2.80	0.80	0.60
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	26/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.5	3.4	0.78
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.2	1.0	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	4.4	10	0.64
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	5.5	8.9	0.53
Phenanthrene	mg/kg	0.05	MCERTS	1.1	0.39	22	31	5.6
Anthracene	mg/kg	0.05	MCERTS	0.30	< 0.05	7.4	9.6	1.4
Fluoranthene	mg/kg	0.05	MCERTS	1.3	0.34	21	31	6.3
Pyrene	mg/kg	0.05	MCERTS	1.1	0.30	18	25	5.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.47	< 0.05	9.4	11	2.6
Chrysene	mg/kg	0.05	MCERTS	0.53	< 0.05	6.9	7.8	2.4
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.47	< 0.05	5.2	8.6	2.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.27	< 0.05	4.4	5.9	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.39	< 0.05	6.2	8.5	1.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.9	3.6	0.68
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.69	1.1	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.6	4.8	0.90
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	5.88	1.03	118	172	32.6
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.4	3.0	7.9	8.6	9.5
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	1.0	0.3	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 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	11	11	16	23	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	17	58	52	87
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	17	180	82	180
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	8.8	9.3	14	26	35
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	42	39	260	120	110
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

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820125	1820126	1820127	1820128	1820129
Sample Reference				TTE	TTE	TTE	TT09	TT07
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.40	2.80	0.80	0.60
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	26/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
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	5.6	< 2.0	< 2.0	14	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	28	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	17	< 8.0	37	74	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	25	< 10	46	120	< 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	2.0	3.0	2.3
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	23	46	9.1
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	81	120	10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	110	130	24
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	210	300	46
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	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820125	1820126	1820127	1820128	1820129
Sample Reference				TTE	TTE	TTE	TT09	TT07
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.40	2.80	0.80	0.60
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	26/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
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	-

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	-	-	-	3.4	-
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	-	-	-	3.6	-
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	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820125	1820126	1820127	1820128	1820129
Sample Reference				TTE	TTE	TTE	TT09	TT07
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	1.40	2.80	0.80	0.60
Date Sampled				25/03/2021	25/03/2021	25/03/2021	25/03/2021	26/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	1.0	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	10	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	5.0	-
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	-	-	-	8.9	-
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	-	-	-	31	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	9.6	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	1.9	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	31	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	25	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	< 0.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	11	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	7.8	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	8.6	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	5.9	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	8.5	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	3.6	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	1.1	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	4.8	-

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

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820130	1820131	1820132	1820133	1820134
Sample Reference				TT07	TT05	TT05	WS20	WS20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.30	2.30	0.50	2.00
Date Sampled				26/03/2021	26/03/2021	26/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	51	16	6.6	45
Total mass of sample received	kg	0.001	NONE	2.0	1.5	1.7	1.7	1.0
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	0.003
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	< 0.001	0.003

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	8.2	8.0	8.4	7.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	3.9
Free Cyanide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	260	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.13	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	129	-	-	-	-
Ammoniacal Nitrogen as N	mg/kg	0.5	MCERTS	-	2.8	5.1	< 0.5	3.4
Ammoniacal Nitrogen as NH3	mg/kg	0.5	MCERTS	-	3.3	6.2	< 0.5	4.1
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	-	3.5	6.5	< 0.5	4.4
Organic Matter	%	0.1	MCERTS	1.9	11	2.3	1.0	14

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	-	< 0.10	< 0.10	< 0.10	< 0.10
Resorcinol	mg/kg	0.1	ISO 17025	-	< 0.10	< 0.10	< 0.10	< 0.10
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	-	< 0.30	< 0.30	< 0.30	< 0.30
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	-	< 0.20	< 0.20	< 0.20	< 0.20
2-Isopropylphenol	mg/kg	0.1	ISO 17025	-	< 0.10	< 0.10	< 0.10	< 0.10
Phenol	mg/kg	0.1	ISO 17025	-	< 0.10	< 0.10	< 0.10	< 0.10
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	-	< 0.10	< 0.10	< 0.10	< 0.10
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	-	< 0.30	< 0.30	< 0.30	< 0.30

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	-	< 1.3	< 1.3	< 1.3	< 1.3

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820130	1820131	1820132	1820133	1820134
Sample Reference				TT07	TT05	TT05	WS20	WS20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.30	2.30	0.50	2.00
Date Sampled				26/03/2021	26/03/2021	26/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	2.0	< 0.05	< 0.05	3.3
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	1.1	< 0.05	< 0.05	0.61
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	1.9	< 0.05	< 0.05	4.3
Fluorene	mg/kg	0.05	MCERTS	< 0.05	2.6	< 0.05	< 0.05	3.8
Phenanthrene	mg/kg	0.05	MCERTS	0.43	16	< 0.05	0.69	26
Anthracene	mg/kg	0.05	MCERTS	< 0.05	6.7	< 0.05	< 0.05	8.3
Fluoranthene	mg/kg	0.05	MCERTS	0.69	43	< 0.05	1.1	47
Pyrene	mg/kg	0.05	MCERTS	0.68	40	< 0.05	1.0	45
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.33	26	< 0.05	0.55	29
Chrysene	mg/kg	0.05	MCERTS	0.37	24	< 0.05	0.57	23
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.27	21	< 0.05	0.55	27
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.15	12	< 0.05	0.26	11
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.24	19	< 0.05	0.44	22
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	7.6	< 0.05	< 0.05	8.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	3.0	< 0.05	< 0.05	2.9
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	9.1	< 0.05	< 0.05	10
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	3.16	233	< 0.80	5.19	272
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.9	85	8.0	6.7	77
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.2	0.4	0.4	1.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.6	14	< 0.2	0.8	4.7
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	11	32	27	20	40
Copper (aqua regia extractable)	mg/kg	1	MCERTS	28	300	39	52	500
Lead (aqua regia extractable)	mg/kg	1	MCERTS	39	1300	16	56	620
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	1.6	< 0.3	< 0.3	1.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	100	35	26	98
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.4	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	230	7500	85	430	2300
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

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820130	1820131	1820132	1820133	1820134
Sample Reference				TT07	TT05	TT05	WS20	WS20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.30	2.30	0.50	2.00
Date Sampled				26/03/2021	26/03/2021	26/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
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	5.0	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	3.5
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	5.4	20	6.6	5.8	20
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	12	330	14	13	92
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	39	2100	32	42	1000
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	57	2500	53	61	1200
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	0.30	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	6.6	< 1.0	< 1.0	4.1
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	20	< 2.0	< 2.0	20
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	15	1000	< 10	< 10	150
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	33	2700	< 10	< 10	640
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	48	3800	< 10	< 10	810
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	< 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	< 1.0
Cis-1,2-dichloroethene	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
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	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

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820130	1820131	1820132	1820133	1820134
Sample Reference				TT07	TT05	TT05	WS20	WS20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.30	2.30	0.50	2.00
Date Sampled				26/03/2021	26/03/2021	26/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	300	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	180	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	2.0	< 0.05	< 0.05	3.3
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	1.6	< 0.1	< 0.1	2.8
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820130	1820131	1820132	1820133	1820134
Sample Reference				TT07	TT05	TT05	WS20	WS20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.30	2.30	0.50	2.00
Date Sampled				26/03/2021	26/03/2021	26/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Acenaphthylene	mg/kg	0.05	MCERTS	-	1.1	< 0.05	< 0.05	0.61
Acenaphthene	mg/kg	0.05	MCERTS	-	1.9	< 0.05	< 0.05	4.3
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	1.1	< 0.2	< 0.2	1.6
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	2.6	< 0.05	< 0.05	3.8
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	16	< 0.05	0.69	26
Anthracene	mg/kg	0.05	MCERTS	-	6.7	< 0.05	< 0.05	8.3
Carbazole	mg/kg	0.3	MCERTS	-	1.3	< 0.3	< 0.3	1.8
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	0.7
Fluoranthene	mg/kg	0.05	MCERTS	-	43	< 0.05	1.1	47
Pyrene	mg/kg	0.05	MCERTS	-	40	< 0.05	1.0	45
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	26	< 0.05	0.55	29
Chrysene	mg/kg	0.05	MCERTS	-	24	< 0.05	0.57	23
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	21	< 0.05	0.55	27
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	12	< 0.05	0.26	11
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	19	< 0.05	0.44	22
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	7.6	< 0.05	< 0.05	8.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	3.0	< 0.05	< 0.05	2.9
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	9.1	< 0.05	< 0.05	10

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

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820135	1820136
Sample Reference				WS11	WS11
Sample Number				None Supplied	None Supplied
Depth (m)				1.30-1.60	0.60
Date Sampled				29/03/2021	29/03/2021
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	%	0.01	NONE	59	10
Total mass of sample received	kg	0.001	NONE	0.50	1.7

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	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	6.8	8.2
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0
Free Cyanide	mg/kg	1	MCERTS	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	1100
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.13	0.55
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	550
Ammoniacal Nitrogen as N	mg/kg	0.5	MCERTS	-	-
Ammoniacal Nitrogen as NH3	mg/kg	0.5	MCERTS	-	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	-	-
Organic Matter	%	0.1	MCERTS	11	1.0

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	-	-
Resorcinol	mg/kg	0.1	ISO 17025	-	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	-	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	-	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	-	-
Phenol	mg/kg	0.1	ISO 17025	-	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	-	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	-	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820135	1820136
Sample Reference				WS11	WS11
Sample Number				None Supplied	None Supplied
Depth (m)				1.30-1.60	0.60
Date Sampled				29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	0.32
Acenaphthene	mg/kg	0.05	MCERTS	-	0.40
Fluorene	mg/kg	0.05	MCERTS	-	0.37
Phenanthrene	mg/kg	0.05	MCERTS	-	4.5
Anthracene	mg/kg	0.05	MCERTS	-	1.3
Fluoranthene	mg/kg	0.05	MCERTS	-	11
Pyrene	mg/kg	0.05	MCERTS	-	11
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	6.7
Chrysene	mg/kg	0.05	MCERTS	-	4.7
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	4.5
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	3.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	4.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	2.0
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	0.75
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	2.3
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	58.9
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	5.9
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	0.3
Chromium (hexavalent)	mg/kg	1.2	MCERTS	-	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	27
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	28
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	68
Monoaromatics & Oxygenates					
Benzene	µg/kg	1	MCERTS	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820135	1820136
Sample Reference				WS11	WS11
Sample Number				None Supplied	None Supplied
Depth (m)				1.30-1.60	0.60
Date Sampled				29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	7.5
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	8.5
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	9.2
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	25
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	6.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	29
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	37
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	71
VOCs					
Chloromethane	µg/kg	1	ISO 17025	-	-
Chloroethane	µg/kg	1	NONE	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-
Benzene	µg/kg	1	MCERTS	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-
Toluene	µg/kg	1	MCERTS	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820135	1820136
Sample Reference				WS11	WS11
Sample Number				None Supplied	None Supplied
Depth (m)				1.30-1.60	0.60
Date Sampled				29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	1	MCERTS	-	-
Styrene	µg/kg	1	MCERTS	-	-
Tribromomethane	µg/kg	1	NONE	-	-
o-Xylene	µg/kg	1	MCERTS	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1820135	1820136
Sample Reference				WS11	WS11
Sample Number				None Supplied	None Supplied
Depth (m)				1.30-1.60	0.60
Date Sampled				29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	MCERTS	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-

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

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Analytical Report Number: 21-65647
Project / Site name: Rochdale, Neighbourhood
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-PL 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
1820120	TT10	1.00	155	Loose Fibres	**Chrysotile**	0.001	**0.001**
1820121	TT10	2.00	110	Loose Fibres	**Chrysotile & Amosite**	0.004	**0.004**
1820127	TTE	2.80	140	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
1820128	TT09	0.80	150	Loose Fibres & Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**
1820133	WS20	0.50	147	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
1820134	WS20	2.00	139	Loose Fibres	**Chrysotile**	0.003	**0.003**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 21-65647
Project / Site name: Rochdale, Neighbourhood

* 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 *
1820120	TT10	None Supplied	1	Brown loam and clay with gravel and vegetation.
1820121	TT10	None Supplied	2	Brown loam and clay with gravel and vegetation.
1820122	TT10	None Supplied	2.3	Brown clay and loam with gravel.
1820123	TT10	None Supplied	2.6	Brown sand with gravel.
1820124	TT08A	None Supplied	1	Brown clay and sand with gravel.
1820125	TTE	None Supplied	1	Brown clay and sand with gravel.
1820126	TTE	None Supplied	1.4	Brown clay and sand with rubble.
1820127	TTE	None Supplied	2.8	Brown loam and clay with rubble and vegetation.
1820128	TT09	None Supplied	0.8	Brown clay and sand with rubble.
1820129	TT07	None Supplied	0.6	Brown clay with gravel.
1820130	TT07	None Supplied	0.1	Brown sand with gravel.
1820131	TT05	None Supplied	1.3	Brown clay and loam with gravel and vegetation.
1820132	TT05	None Supplied	2.3	Brown clay with gravel.
1820133	WS20	None Supplied	0.5	Brown loam and clay with rubble.
1820134	WS20	None Supplied	2	Black clay with coal and gravel
1820135	WS11	None Supplied	1.30-1.60	Brown clay and loam with gravel and vegetation.
1820136	WS11	None Supplied	0.6	Brown clay and sand with gravel and vegetation.

Analytical Report Number : 21-65647
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
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
Phenols, speciated, in soil, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
D.O. for Gravimetric Quant if free fibres detected	Dependent option for Gravimetric Quant if Screen/ID positive for free fibres	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
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
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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
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

Analytical Report Number : 21-65647
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
Ammonia as NH3 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
Ammoniacal Nitrogen as N in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method,10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
Ammonium as NH4 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
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
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
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-66217

Project / Site name:	Neighbourhood Rochdale	**Samples received on:**	29/03/2021
Your job number:	B075882	**Samples instructed on/ Analysis started on:**	29/03/2021
Your order number:	EBMA2796	**Analysis completed by:**	09/04/2021
Report Issue Number:	1	**Report issued on:**	09/04/2021
Samples Analysed:	1 soil sample		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-66217
Project / Site name: Neighbourhood Rochdale

Lab Sample Number				1823218
Sample Reference				TT10
Sample Number				None Supplied
Depth (m)				0.05
Date Sampled				25/03/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	0.71
Total mass of sample received	kg	0.001	NONE	2.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
General Inorganics				
pH - Automated	pH Units	N/A	MCERTS	9.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	47
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.023
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	23.3
Organic Matter	%	0.1	MCERTS	4.7
Total Phenols				
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
Speciated PAHs				
Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.44
Pyrene	mg/kg	0.05	MCERTS	0.86
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05
Total PAH				
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	1.30
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.6
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	4.3
Copper (aqua regia extractable)	mg/kg	1	MCERTS	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.0
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	3.0
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	26

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Analytical Report Number: 21-66217
Project / Site name: Neighbourhood Rochdale

Lab Sample Number				1823218
Sample Reference				TT10
Sample Number				None Supplied
Depth (m)				0.05
Date Sampled				25/03/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Monoaromatics & Oxygenates				
Benzene	µg/kg	1	MCERTS	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0
Petroleum Hydrocarbons				
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	12
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	820
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	830
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	17
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	95
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	2000
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	2100

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

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Analytical Report Number : 21-66217
Project / Site name: Neighbourhood Rochdale

* 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 *
1823218	TT10	None Supplied	0.05	Black loam with gravel and tar.

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Analytical Report Number : 21-66217
Project / Site name: Neighbourhood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-66217
Project / Site name: Neighbourhood Rochdale

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TT10	None Supplied	S	1823218	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TT10	None Supplied	S	1823218	b	Monohydric phenols in soil	L080-PL	b
TT10	None Supplied	S	1823218	b	Speciated EPA-16 PAHs in soil	L064-PL	b
TT10	None Supplied	S	1823218	b	TPHCWG (Soil)	L088/76-PL	b

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Analytical Report Number : 21-66218

Project / Site name:	Neigbourhood Rochdale	**Samples received on:**	29/03/2021
Your job number:	B075882	**Samples instructed on/ Analysis started on:**	29/03/2021
Your order number:	EBMA2797	**Analysis completed by:**	09/04/2021
Report Issue Number:	1	**Report issued on:**	09/04/2021
Samples Analysed:	2 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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asbestos	- 6 months from reporting

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Analytical Report Number: 21-66218
Project / Site name: Neigbourhood Rochdale

Lab Sample Number				1823219	1823220
Sample Reference				TT05	TT07
Sample Number				None Supplied	None Supplied
Depth (m)				0.05	0.05
Date Sampled				26/03/2021	26/03/2021
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	%	0.01	NONE	1.1	2.0
Total mass of sample received	kg	0.001	NONE	2.0	2.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
General Inorganics					
pH - Automated	pH Units	N/A	NONE	9.4	7.3
Total Cyanide	mg/kg	1	NONE	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	NONE	29	24
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	NONE	0.015	0.012
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	NONE	14.6	11.9
Organic Matter	%	0.1	NONE	4.1	5.3
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	NONE	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Fluorene	mg/kg	0.05	NONE	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05
Chrysene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	< 0.80	< 0.80
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	NONE	1.8	2.3
Boron (water soluble)	mg/kg	0.2	NONE	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	NONE	< 0.2	0.3
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	NONE	3.3	12
Copper (aqua regia extractable)	mg/kg	1	NONE	8.7	19
Lead (aqua regia extractable)	mg/kg	1	NONE	3.8	11
Mercury (aqua regia extractable)	mg/kg	0.3	NONE	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	NONE	2.0	6.6
Selenium (aqua regia extractable)	mg/kg	1	NONE	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	NONE	23	32

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Analytical Report Number: 21-66218
Project / Site name: Neigbourhood Rochdale

Lab Sample Number				1823219	1823220
Sample Reference				TT05	TT07
Sample Number				None Supplied	None Supplied
Depth (m)				0.05	0.05
Date Sampled				26/03/2021	26/03/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Monoaromatics & Oxygenates					
Benzene	µg/kg	1	NONE	< 1.0	< 1.0
Toluene	µg/kg	1	NONE	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0
p & m-xylene	µg/kg	1	NONE	< 1.0	< 1.0
o-xylene	µg/kg	1	NONE	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	NONE	< 1.0	< 1.0
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	NONE	9.4	54
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	NONE	36	140
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	NONE	890	2900
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	NONE	940	3100
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	NONE	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	NONE	85	150
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	NONE	2000	4600
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	NONE	2100	4700
Miscellaneous Organics					
Coal Tar		N/A	NONE	Not Identified	Not Identified
Total Residue	mg/kg	10	NONE	5700	12000

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

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Analytical Report Number : 21-66218
Project / Site name: Neigbourhood Rochdale

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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 *
1823219	TT05	None Supplied	0.05	Black tar with gravel.**
1823220	TT07	None Supplied	0.05	Black tar with gravel.**

** Non MCERTS Matrix

Analytical Report Number : 21-66218
Project / Site name: Neigbourhood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	NONE
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	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	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
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	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	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	NONE
Coal Tar in Soil	DCM Extraction with qualitative interpretation via GC/MS	In-house method	L064-PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	NONE

Analytical Report Number : 21-66218
Project / Site name: Neigbourhood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-66218
Project / Site name: Neigbourhood Rochdale

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TT05	None Supplied	S	1823219	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TT05	None Supplied	S	1823219	b	Coal Tar in Soil	L064-PL	b
TT05	None Supplied	S	1823219	b	Monohydric phenols in soil	L080-PL	b
TT05	None Supplied	S	1823219	b	Speciated EPA-16 PAHs in soil	L064-PL	b
TT05	None Supplied	S	1823219	b	TPHCWG (Soil)	L088/76-PL	b
TT07	None Supplied	S	1823220	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TT07	None Supplied	S	1823220	b	Coal Tar in Soil	L064-PL	b
TT07	None Supplied	S	1823220	b	Monohydric phenols in soil	L080-PL	b
TT07	None Supplied	S	1823220	b	Speciated EPA-16 PAHs in soil	L064-PL	b
TT07	None Supplied	S	1823220	b	TPHCWG (Soil)	L088/76-PL	b

Key: **a** - No sampling date **b** - Incorrect container
c - Holding time **d** - Headspace **e** - Temperature

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Analytical Report Number : 21-66221

Project / Site name:	Neighbourhood Rochdale	**Samples received on:**	29/03/2021
Your job number:	B075882	**Samples instructed on/ Analysis started on:**	29/03/2021
Your order number:	EBMA2798	**Analysis completed by:**	09/04/2021
Report Issue Number:	1	**Report issued on:**	09/04/2021
Samples Analysed:	2 10:1 WAC samples		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

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Waste Acceptance Criteria Analytical Results

Report No:	**21-66221**						
					Client:	**CURTINS**	
Location	**Neighbourhood Rochdale**						
Lab Reference (Sample Number)	1823230 / 1823231				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	26/03/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TT05						
Depth (m)	0.05						
Solid Waste Analysis							
TOC (%)**	2.0				3%	5%	6%
Loss on Ignition (%) **	4.0				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	940				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	8.3				--	>6	--
Acid Neutralisation Capacity (mol / kg)	4.2				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.0196			0.189	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	< 0.0004			< 0.0040	0.5	10	70
Copper *	0.0019			0.018	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004			< 0.0040	0.5	10	30
Nickel *	0.0015			0.015	0.4	10	40
Lead *	< 0.0010			< 0.010	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0029			0.028	4	50	200
Chloride *	5.0			48	800	15000	25000
Fluoride	0.098			0.95	10	150	500
Sulphate *	1.7			17	1000	20000	50000
TDS*	27			260	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	4.12			39.8	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	99						
Moisture (%)	1.1						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation
** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Waste Acceptance Criteria Analytical Results

Report No:	**21-66221**						
					Client:	**CURTINS**	
Location	**Neighbourhood Rochdale**						
Lab Reference (Sample Number)	1823232 / 1823233				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	26/03/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TT07						
Depth (m)	0.05						
Solid Waste Analysis							
TOC (%)**	2.1				3%	5%	6%
Loss on Ignition (%) **	6.3				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	2400				500	--	--
Total PAH (WAC-17) (mg/kg)	2.16				100	--	--
pH (units)**	8.2				--	>6	--
Acid Neutralisation Capacity (mol / kg)	1.1				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.149			1.47	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0005			0.0046	0.5	10	70
Copper *	0.0015			0.015	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004			< 0.0040	0.5	10	30
Nickel *	0.0020			0.020	0.4	10	40
Lead *	< 0.0010			< 0.010	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0030			0.030	4	50	200
Chloride *	5.2			51	800	15000	25000
Fluoride	0.10			1.0	10	150	500
Sulphate *	2.8			28	1000	20000	50000
TDS*	28			270	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	4.04			39.8	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	98						
Moisture (%)	2.0						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
Stated limits are for guidance only and i2 cannot be held responsible for any discrepencies with current legislation
** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
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Analytical Report Number : 21-66221
Project / Site name: Neighbourhood Rochdale

* 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 *
1823230	TT05	None Supplied	0.05	Black tar with gravel.**
1823232	TT07	None Supplied	0.05	Black tar with gravel.**

** Non MCERTS matrix

Analytical Report Number : 21-66221
Project / Site name: Neighbourhood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	NONE
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 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. MCERTS accredited except Coronene.	L064-PL	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025

Analytical Report Number : 21-66221
Project / Site name: Neighbourhood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-66221
Project / Site name: Neighbourhood Rochdale

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TT05	None Supplied	S	1823230	b	BTEX in soil (Monoaromatics)	L073B-PL	b
TT05	None Supplied	S	1823230	b	Mineral Oil (Soil) C10 - C40	L076-PL	b
TT05	None Supplied	S	1823230	b	PCB's By GC-MS in soil	L027-PL	b
TT05	None Supplied	S	1823230	b	Speciated WAC-17 PAHs in soil	L064-PL	b
TT05	None Supplied	S	1823230	b	Total BTEX in soil (Poland)	L073-PL	b
TT07	None Supplied	S	1823232	b	BTEX in soil (Monoaromatics)	L073B-PL	b
TT07	None Supplied	S	1823232	b	Mineral Oil (Soil) C10 - C40	L076-PL	b
TT07	None Supplied	S	1823232	b	PCB's By GC-MS in soil	L027-PL	b
TT07	None Supplied	S	1823232	b	Speciated WAC-17 PAHs in soil	L064-PL	b
TT07	None Supplied	S	1823232	b	Total BTEX in soil (Poland)	L073-PL	b

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Analytical Report Number : 21-66814

Replaces Analytical Report Number: 21-66814, issue no. 1
Additional analysis undertaken.

Project / Site name:	Neighbourhood Rochdale	**Samples received on:**	06/04/2021
Your job number:	B075882	**Samples instructed on/ Analysis started on:**	06/04/2021
Your order number:	EBMA2781	**Analysis completed by:**	05/05/2021
Report Issue Number:	2	**Report issued on:**	05/05/2021
Samples Analysed:	28 soil samples		

Signed:

Will Fardon
Technical Reviewer (CS 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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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826831	1826832	1826833	1826834	1826835
Sample Reference				WS09	WS10	WS21	WS05	WS03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.30	0.70	0.70	0.30
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.9	12	5.3	7.6	7.9
Total mass of sample received	kg	0.001	NONE	1.7	2.0	1.7	2.0	2.0
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	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	8.0	8.6	9.1	7.8	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	59	79	680	130	46
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.030	0.040	0.34	0.064	0.023
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	mg/l	1.25	MCERTS	29.5	39.7	342	63.6	23.0
Organic Matter	%	0.1	MCERTS	< 0.1	0.5	1.2	1.4	2.2

Total Phenols

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

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.85	< 0.05	2.1	< 0.05	2.7
Anthracene	mg/kg	0.05	MCERTS	0.33	< 0.05	0.53	< 0.05	0.88
Fluoranthene	mg/kg	0.05	MCERTS	1.0	< 0.05	4.2	< 0.05	6.2
Pyrene	mg/kg	0.05	MCERTS	0.88	< 0.05	3.9	< 0.05	5.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.48	< 0.05	2.0	< 0.05	3.1
Chrysene	mg/kg	0.05	MCERTS	0.48	< 0.05	2.4	< 0.05	2.9
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.45	< 0.05	2.4	< 0.05	2.9
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.30	< 0.05	1.5	< 0.05	2.8
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.51	< 0.05	2.5	< 0.05	3.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.90	< 0.05	1.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.36	< 0.05	0.45
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.2	< 0.05	1.6

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	5.32	< 0.80	24.0	< 0.80	33.4

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826831	1826832	1826833	1826834	1826835
Sample Reference				WS09	WS10	WS21	WS05	WS03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.30	0.70	0.70	0.30
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.3	4.8	6.0	3.6	10
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.3	< 0.2	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 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	11	15	18	13	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	23	27	20	50
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	16	23	27	160
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	11	19	21	12	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	40	57	50	50	82
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	2.2
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	8.5
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	39
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	57
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	5.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	14	< 10	15
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	19	< 10	63
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	38	< 10	78

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826831	1826832	1826833	1826834	1826835
Sample Reference				WS09	WS10	WS21	WS05	WS03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.30	0.70	0.70	0.30
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826831	1826832	1826833	1826834	1826835
Sample Reference				WS09	WS10	WS21	WS05	WS03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.30	0.70	0.70	0.30
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826831	1826832	1826833	1826834	1826835
Sample Reference				WS09	WS10	WS21	WS05	WS03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.30	0.70	0.70	0.30
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826831	1826832	1826833	1826834	1826835
Sample Reference				WS09	WS10	WS21	WS05	WS03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.30	0.70	0.70	0.30
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

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

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826836	1826837	1826838	1826839	1826840
Sample Reference				WS01	WS02	WS06	WS22	WS06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.50	0.60	0.50	1.60-2.00
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	10	12	16	6.9
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0
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	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	8.5	8.1	8.4	8.4	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	96	33	110	200	120
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.048	0.016	0.053	0.10	0.059
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	mg/l	1.25	MCERTS	48.0	16.4	52.7	101	58.7
Organic Matter	%	0.1	MCERTS	1.8	1.5	3.4	4.0	1.4
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.93	0.72	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	2.2	< 0.05	0.25	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.67	< 0.05	1.4	0.20	< 0.05
Fluorene	mg/kg	0.05	MCERTS	2.1	< 0.05	1.1	0.16	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	13	< 0.05	11	1.4	< 0.05
Anthracene	mg/kg	0.05	MCERTS	4.2	< 0.05	2.3	0.36	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	18	< 0.05	13	2.4	0.56
Pyrene	mg/kg	0.05	MCERTS	14	< 0.05	12	2.2	0.62
Benzo(a)anthracene	mg/kg	0.05	MCERTS	9.7	< 0.05	6.5	1.4	0.28
Chrysene	mg/kg	0.05	MCERTS	6.0	< 0.05	5.0	0.95	0.40
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	8.8	< 0.05	4.9	1.3	0.40
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	5.2	< 0.05	3.3	0.69	0.18
Benzo(a)pyrene	mg/kg	0.05	MCERTS	7.7	< 0.05	5.5	1.1	0.34
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.8	< 0.05	2.2	0.53	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.0	< 0.05	0.61	0.17	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.3	< 0.05	2.2	0.61	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	98.5	< 0.80	72.5	14.1	2.78

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826836	1826837	1826838	1826839	1826840
Sample Reference				WS01	WS02	WS06	WS22	WS06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.50	0.60	0.50	1.60-2.00
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.1	7.2	21	17	12
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.3	0.6	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	1.1	< 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	12	9.7	25	19	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	42	24	120	64	50
Lead (aqua regia extractable)	mg/kg	1	MCERTS	61	32	460	180	32
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.4	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	12	31	23	44
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	78	44	420	200	140
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	1.3	< 1.0	< 1.0	1.5	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	7.5	< 2.0	6.5	10	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	12	< 8.0	12	13	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	33	< 8.0	67	87	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	54	< 10	86	110	< 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	14	< 2.0	7.8	8.2	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	49	< 10	37	16	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	84	< 10	76	96	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	150	< 10	120	120	< 10

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826836	1826837	1826838	1826839	1826840
Sample Reference				WS01	WS02	WS06	WS22	WS06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.50	0.60	0.50	1.60-2.00
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826836	1826837	1826838	1826839	1826840
Sample Reference				WS01	WS02	WS06	WS22	WS06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.50	0.60	0.50	1.60-2.00
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826836	1826837	1826838	1826839	1826840
Sample Reference				WS01	WS02	WS06	WS22	WS06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.50	0.60	0.50	1.60-2.00
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826836	1826837	1826838	1826839	1826840
Sample Reference				WS01	WS02	WS06	WS22	WS06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.50	0.60	0.50	1.60-2.00
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

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

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826841	1826842	1826843	1826844	1826845
Sample Reference				WS02	WS15	WS15	WS15	TTA
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.00-4.40	2.20	0.60	1.80	1.60
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	67	55	5.3	14	8.5
Total mass of sample received	kg	0.001	NONE	0.50	1.2	1.0	2.0	2.0
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	Amosite	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Detected	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.026	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.026	-	< 0.001	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	6.6	8.4	7.8	8.2
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	1.1	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	3100	190	210	83
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	-	1.6	0.094	0.11	0.041
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	mg/l	1.25	MCERTS	-	1560	94.4	107	41.3
Organic Matter	%	0.1	MCERTS	12	13	1.4	4.4	2.8
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.32	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	0.36	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	1.7	< 0.05	0.77	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	1.3	< 0.05	0.50	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	6.5	< 0.05	6.0	0.49
Anthracene	mg/kg	0.05	MCERTS	-	1.7	< 0.05	1.1	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	13	< 0.05	9.3	1.5
Pyrene	mg/kg	0.05	MCERTS	-	11	< 0.05	8.3	1.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	12	< 0.05	4.9	1.0
Chrysene	mg/kg	0.05	MCERTS	-	10	< 0.05	3.3	0.66
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	15	< 0.05	4.3	0.85
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	5.0	< 0.05	2.1	0.46
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	10	< 0.05	4.0	0.72
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	5.9	< 0.05	1.8	0.37
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	1.9	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	7.7	< 0.05	2.4	0.43
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	104	< 0.80	49.0	7.84

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826841	1826842	1826843	1826844	1826845
Sample Reference				WS02	WS15	WS15	WS15	TTA
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.00-4.40	2.20	0.60	1.80	1.60
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	140	54	51	6.5
Boron (water soluble)	mg/kg	0.2	MCERTS	-	1.1	< 0.2	0.8	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	9.5	< 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	-	52	89	37	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	520	180	330	36
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	2100	77	900	45
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	3.5	0.3	1.1	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	85	110	53	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	2.6	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	5000	320	500	57
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	-	17	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	87	15	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	530	27	17	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	6400	110	96	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	7000	150	110	< 10
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	-	13	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	35	< 2.0	16	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	520	< 10	60	23
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	4900	< 10	110	29
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	5500	< 10	190	52

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826841	1826842	1826843	1826844	1826845
Sample Reference				WS02	WS15	WS15	WS15	TTA
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.00-4.40	2.20	0.60	1.80	1.60
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-
Tribromomethane	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	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826841	1826842	1826843	1826844	1826845
Sample Reference				WS02	WS15	WS15	WS15	TTA
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.00-4.40	2.20	0.60	1.80	1.60
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
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	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826841	1826842	1826843	1826844	1826845
Sample Reference				WS02	WS15	WS15	WS15	TTA
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.00-4.40	2.20	0.60	1.80	1.60
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-	< 0.05	< 0.05	0.32	-
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	-	< 0.1	< 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	-	0.36	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	1.7	< 0.05	0.77	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	0.3	-
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	-	1.3	< 0.05	0.50	-
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	-	6.5	< 0.05	6.0	-
Anthracene	mg/kg	0.05	MCERTS	-	1.7	< 0.05	1.1	-
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	0.5	-
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	-	13	< 0.05	9.3	-
Pyrene	mg/kg	0.05	MCERTS	-	11	< 0.05	8.3	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	< 0.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	12	< 0.05	4.9	-
Chrysene	mg/kg	0.05	MCERTS	-	10	< 0.05	3.3	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	15	< 0.05	4.3	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	5.0	< 0.05	2.1	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	10	< 0.05	4.0	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826841	1826842	1826843	1826844	1826845
Sample Reference				WS02	WS15	WS15	WS15	TTA
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				4.00-4.40	2.20	0.60	1.80	1.60
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	5.9	< 0.05	1.8	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	1.9	< 0.05	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	7.7	< 0.05	2.4	-

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

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826846	1826847	1826848	1826849	1826850
Sample Reference				TT03	WS07	WS13A	WS07	WS13A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.40	3.50	1.50	2.00	2.80
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	16	19	76	50
Total mass of sample received	kg	0.001	NONE	2.0	1.5	1.5	0.90	1.2
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	Chrysotile	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	Detected	-	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	0.312	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	0.312	-	< 0.001
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	10.0	7.0	8.8	6.1	6.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	110	-	7.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	530	-	490	-	4100
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.27	0.062	0.25	0.79	2.1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	mg/l	1.25	MCERTS	267	-	245	-	2070
Organic Matter	%	0.1	MCERTS	4.0	-	6.7	13	15
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	23	-	2.8
Acenaphthylene	mg/kg	0.05	MCERTS	0.70	-	11	-	2.4
Acenaphthene	mg/kg	0.05	MCERTS	0.60	-	13	-	17
Fluorene	mg/kg	0.05	MCERTS	0.37	-	15	-	16
Phenanthrene	mg/kg	0.05	MCERTS	3.2	-	84	-	110
Anthracene	mg/kg	0.05	MCERTS	1.1	-	25	-	17
Fluoranthene	mg/kg	0.05	MCERTS	6.3	-	96	-	84
Pyrene	mg/kg	0.05	MCERTS	6.4	-	98	-	76
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.7	-	60	-	35
Chrysene	mg/kg	0.05	MCERTS	2.8	-	44	-	34
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	4.7	-	64	-	53
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.8	-	27	-	58
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4.1	-	62	-	32
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.0	-	21	-	15
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.63	-	6.9	-	4.1
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.2	-	24	-	19
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	40.6	-	673	-	577

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826846	1826847	1826848	1826849	1826850
Sample Reference				TT03	WS07	WS13A	WS07	WS13A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.40	3.50	1.50	2.00	2.80
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	-	45	-	130
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	-	0.6	-	1.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.2	-	< 0.2	-	6.5
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	-	< 1.2	-	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	-	45	-	67
Copper (aqua regia extractable)	mg/kg	1	MCERTS	100	-	180	-	450
Lead (aqua regia extractable)	mg/kg	1	MCERTS	230	-	230	-	1600
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	2.6	-	1.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	-	69	-	85
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	490	-	200	-	2300
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	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
o-xylene	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
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	1.7	-	6.9	-	4.1
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	7.7	-	36	-	45
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	17	-	89	-	400
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	110	-	310	-	3500
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	140	-	440	-	3900
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	2.7	-	18	-	12
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	9.4	-	79	-	110
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	27	-	480	-	540
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	140	-	1600	-	3700
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	180	-	2200	-	4400

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826846	1826847	1826848	1826849	1826850
Sample Reference				TT03	WS07	WS13A	WS07	WS13A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.40	3.50	1.50	2.00	2.80
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826846	1826847	1826848	1826849	1826850
Sample Reference				TT03	WS07	WS13A	WS07	WS13A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.40	3.50	1.50	2.00	2.80
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
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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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826846	1826847	1826848	1826849	1826850
Sample Reference				TT03	WS07	WS13A	WS07	WS13A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.40	3.50	1.50	2.00	2.80
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-	-	3.1	-	< 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	-	-	3.0	-	< 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	-	-	2.8	-	< 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	-	-	4.6	-	< 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	-	-	23	-	2.8
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	-	-	16	-	9.4
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	-	-	11	-	2.4
Acenaphthene	mg/kg	0.05	MCERTS	-	-	13	-	17
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	7.4	-	5.3
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	-	-	15	-	16
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	-	-	84	-	110
Anthracene	mg/kg	0.05	MCERTS	-	-	25	-	17
Carbazole	mg/kg	0.3	MCERTS	-	-	9.4	-	3.7
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	3.6	-	5.0
Fluoranthene	mg/kg	0.05	MCERTS	-	-	96	-	84
Pyrene	mg/kg	0.05	MCERTS	-	-	98	-	76
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	< 0.3	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	60	-	35
Chrysene	mg/kg	0.05	MCERTS	-	-	44	-	34
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	64	-	53
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	27	-	58
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	62	-	32

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826846	1826847	1826848	1826849	1826850
Sample Reference				TT03	WS07	WS13A	WS07	WS13A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.40	3.50	1.50	2.00	2.80
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	21	-	15
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	6.9	-	4.1
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	24	-	19

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

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826851	1826852	1826853	1826854	1826855
Sample Reference				WS17	WS08	WS07	WS04	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.60	0.40	0.20	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.1	11	6.1	3.5	5.7
Total mass of sample received	kg	0.001	NONE	1.2	1.8	2.0	2.0	2.0
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	0.002	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	0.002	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.7	8.3	8.9	8.0	8.0
Total Cyanide	mg/kg	1	MCERTS	< 1.0	15	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	210	190	430	42	63
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.11	0.097	0.22	0.021	0.032
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	mg/l	1.25	MCERTS	107	96.9	217	20.8	31.5
Organic Matter	%	0.1	MCERTS	1.8	4.3	1.7	1.3	0.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	2.3	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	1.4	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	3.9	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	3.4	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.48	28	0.71	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	7.5	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.74	45	1.6	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.73	39	1.6	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.54	25	0.68	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.34	18	0.94	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.47	18	0.80	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.24	13	0.70	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.45	21	0.82	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.20	8.5	0.47	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	2.6	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.29	10	0.70	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	4.48	248	9.06	< 0.80	< 0.80

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826851	1826852	1826853	1826854	1826855
Sample Reference				WS17	WS08	WS07	WS04	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.60	0.40	0.20	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.5	26	8.6	5.2	2.2
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.2	0.4	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	1.4	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	17	36	19	23	7.1
Copper (aqua regia extractable)	mg/kg	1	MCERTS	33	100	84	53	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	320	130	16	9.4
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.5	0.6	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	40	23	33	6.0
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	68	350	240	84	25
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	16	4.9	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	26	9.4	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	19	140	45	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	19	180	60	< 10	< 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	9.6	1.8	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	22	6.3	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	11	180	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	130	240	61	10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	140	450	77	10	< 10

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826851	1826852	1826853	1826854	1826855
Sample Reference				WS17	WS08	WS07	WS04	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.60	0.40	0.20	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826851	1826852	1826853	1826854	1826855
Sample Reference				WS17	WS08	WS07	WS04	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.60	0.40	0.20	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826851	1826852	1826853	1826854	1826855
Sample Reference				WS17	WS08	WS07	WS04	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.60	0.40	0.20	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
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	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826851	1826852	1826853	1826854	1826855
Sample Reference				WS17	WS08	WS07	WS04	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.60	0.40	0.20	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

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

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826856	1826857	1826858
Sample Reference				WS12	WS19	WS19
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021
Time Taken				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
Moisture Content	%	0.01	NONE	3.9	4.6	8.0
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	8.2	8.2	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	160	51	64
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.082	0.026	0.032
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	mg/l	1.25	MCERTS	81.8	25.6	32.0
Organic Matter	%	0.1	MCERTS	2.0	0.6	2.9
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.29	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.34	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.31	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 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	< 0.05	< 0.05	< 0.05
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	0.94	< 0.80

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826856	1826857	1826858
Sample Reference				WS12	WS19	WS19
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.0	4.8	6.2
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	19	9.4
Copper (aqua regia extractable)	mg/kg	1	MCERTS	42	29	30
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	21	24
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	27	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	74	63	38
Monoaromatics & Oxygenates						
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Toluene	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
o-xylene	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
Petroleum Hydrocarbons						
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	21	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	21	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826856	1826857	1826858
Sample Reference				WS12	WS19	WS19
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
VOCs						
Chloromethane	µg/kg	1	ISO 17025	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826856	1826857	1826858
Sample Reference				WS12	WS19	WS19
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826856	1826857	1826858
Sample Reference				WS12	WS19	WS19
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
SVOCs						
Aniline	mg/kg	0.1	NONE	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1826856	1826857	1826858
Sample Reference				WS12	WS19	WS19
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.70
Date Sampled				29/03/2021	29/03/2021	29/03/2021
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-

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

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Analytical Report Number: 21-66814
Project / Site name: Neighbourhood Rochdale
Your Order No: EBMA2781

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-PL 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
1826836	WS01	0.40	164	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
1826838	WS06	0.60	163	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
1826842	WS15	2.20	101	Loose Fibres	**Chrysotile**	0.026	**0.026**
1826844	WS15	1.80	133	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
1826846	TT03	1.40	134	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
1826848	WS13A	1.50	111	Hard/Cement Type Material	**Chrysotile**	0.312	**0.312**
1826850	WS13A	2.80	103	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
1826852	WS08	0.60	122	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
1826853	WS07	0.40	133	Loose Fibres	**Chrysotile**	0.002	**0.002**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 21-66814
Project / Site name: Neighbourhood Rochdale

* 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 *
1826831	WS09	None Supplied	0.5	Brown loam and sand with gravel.
1826832	WS10	None Supplied	0.3	Brown loam and clay with gravel.
1826833	WS21	None Supplied	0.7	Brown loam and clay with gravel.
1826834	WS05	None Supplied	0.7	Brown loam and sand with gravel and brick.
1826835	WS03	None Supplied	0.3	Brown loam and clay with gravel.
1826836	WS01	None Supplied	0.4	Brown loam and clay with gravel and brick.
1826837	WS02	None Supplied	0.5	Brown sandy loam with gravel.
1826838	WS06	None Supplied	0.6	Brown sandy loam with gravel.
1826839	WS22	None Supplied	0.5	Brown sandy clay with gravel.
1826840	WS06	None Supplied	1.60-2.00	Grey clay with gravel.
1826841	WS02	None Supplied	4.00-4.40	Brown loam and clay.
1826842	WS15	None Supplied	2.2	Brown clay.
1826843	WS15	None Supplied	0.6	Brown sandy clay with gravel.
1826844	WS15	None Supplied	1.8	Brown clay with gravel.
1826845	TTA	None Supplied	1.6	Brown sandy clay with gravel.
1826846	TT03	None Supplied	1.4	Brown clay with gravel.
1826847	WS07	None Supplied	3.5	Grey sandy clay with gravel.
1826848	WS13A	None Supplied	1.5	Grey sandy clay with gravel.
1826849	WS07	None Supplied	2	Brown loam and clay.
1826850	WS13A	None Supplied	2.8	Brown clay.
1826851	WS17	None Supplied	0.7	Brown sandy clay with gravel.
1826852	WS08	None Supplied	0.6	Brown sandy clay with gravel.
1826853	WS07	None Supplied	0.4	Brown sandy clay with gravel.
1826854	WS04	None Supplied	0.2	Grey sandy clay.
1826855	WS16	None Supplied	0.7	Brown sandy clay with gravel.
1826856	WS12	None Supplied	0.2	Brown sandy clay with gravel.
1826857	WS19	None Supplied	0.3	Brown sandy clay with gravel.
1826858	WS19	None Supplied	0.7	Brown sandy clay with gravel.

Analytical Report Number : 21-66814
Project / Site name: Neighbourhood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
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
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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
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
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
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

Analytical Report Number : 21-66814
Project / Site name: Neighbourhood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-66814
Project / Site name: Neighbourhood Rochdale

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TT03	None Supplied	S	1826846	c	Total cyanide in soil	L080-PL	c
TTA	None Supplied	S	1826845	c	Total cyanide in soil	L080-PL	c
WS01	None Supplied	S	1826836	c	Total cyanide in soil	L080-PL	c
WS02	None Supplied	S	1826837	c	Total cyanide in soil	L080-PL	c
WS03	None Supplied	S	1826835	c	Total cyanide in soil	L080-PL	c
WS04	None Supplied	S	1826854	c	Total cyanide in soil	L080-PL	c
WS05	None Supplied	S	1826834	c	Total cyanide in soil	L080-PL	c
WS06	None Supplied	S	1826838	c	Total cyanide in soil	L080-PL	c
WS06	None Supplied	S	1826840	c	Total cyanide in soil	L080-PL	c
WS07	None Supplied	S	1826853	c	Total cyanide in soil	L080-PL	c
WS08	None Supplied	S	1826852	c	Total cyanide in soil	L080-PL	c
WS09	None Supplied	S	1826831	c	Total cyanide in soil	L080-PL	c
WS10	None Supplied	S	1826832	c	Total cyanide in soil	L080-PL	c
WS12	None Supplied	S	1826856	c	Total cyanide in soil	L080-PL	c
WS13A	None Supplied	S	1826848	c	Total cyanide in soil	L080-PL	c
WS13A	None Supplied	S	1826850	c	Total cyanide in soil	L080-PL	c
WS15	None Supplied	S	1826842	c	Total cyanide in soil	L080-PL	c
WS15	None Supplied	S	1826843	c	Total cyanide in soil	L080-PL	c
WS15	None Supplied	S	1826844	c	Total cyanide in soil	L080-PL	c
WS16	None Supplied	S	1826855	c	Total cyanide in soil	L080-PL	c
WS17	None Supplied	S	1826851	c	Total cyanide in soil	L080-PL	c
WS19	None Supplied	S	1826857	c	Total cyanide in soil	L080-PL	c
WS19	None Supplied	S	1826858	c	Total cyanide in soil	L080-PL	c
WS21	None Supplied	S	1826833	c	Total cyanide in soil	L080-PL	c
WS22	None Supplied	S	1826839	c	Total cyanide in soil	L080-PL	c

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Analytical Report Number : 21-67236

Project / Site name:	Rochdale, Neighbourhood	**Samples received on:**	25/03/2021
Your job number:	B175882	**Samples instructed on/ Analysis started on:**	06/04/2021
Your order number:		**Analysis completed by:**	16/04/2021
Report Issue Number:	1	**Report issued on:**	16/04/2021
Samples Analysed:	2 non soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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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.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-67236
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1829204	1829205
Sample Reference				TT04	TT06
Sample Number				None Supplied	None Supplied
Depth (m)				0.05	0.10
Date Sampled				25/03/2021	25/03/2021
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	%	0.01	NONE	0.73	0.78
Total mass of sample received	kg	0.001	NONE	1.2	2.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	NONE	8.4	8.6
Total Cyanide	mg/kg	1	NONE	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	NONE	24	22
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	NONE	0.012	0.011
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	NONE	11.8	11.2
Organic Matter	%	0.1	NONE	4.5	6.9

Total Phenols

Total Phenols (monohydric)	mg/kg	1	NONE	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Fluorene	mg/kg	0.05	NONE	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05
Chrysene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	< 0.80	< 0.80

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-67236
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1829204	1829205
Sample Reference				TT04	TT06
Sample Number				None Supplied	None Supplied
Depth (m)				0.05	0.10
Date Sampled				25/03/2021	25/03/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	NONE	1.3	2.1
Boron (water soluble)	mg/kg	0.2	NONE	0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	NONE	1.2	0.6
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	NONE	3.3	3.9
Copper (aqua regia extractable)	mg/kg	1	NONE	13	6.2
Lead (aqua regia extractable)	mg/kg	1	NONE	6.6	7.7
Mercury (aqua regia extractable)	mg/kg	0.3	NONE	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	NONE	2.8	3.3
Selenium (aqua regia extractable)	mg/kg	1	NONE	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	NONE	140	43
Monoaromatics & Oxygenates					
Benzene	µg/kg	1	NONE	< 1.0	< 1.0
Toluene	µg/kg	1	NONE	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0
p & m-xylene	µg/kg	1	NONE	< 1.0	< 1.0
o-xylene	µg/kg	1	NONE	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	NONE	< 1.0	< 1.0
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	NONE	150	260
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	NONE	290	510
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	NONE	3000	3800
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	NONE	3400	4600
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	NONE	100	170
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	NONE	300	440
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	NONE	3900	5800
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	NONE	4300	6400
Miscellaneous Organics					
Coal Tar		N/A	NONE	Not Identified	Not Identified
Total Residue	mg/kg	10	NONE	13000	20000

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

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Analytical Report Number : 21-67236
Project / Site name: Rochdale, Neighbourhood

* 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 *
1829204	TT04	None Supplied	0.05	Non Soil**
1829205	TT06	None Supplied	0.1	Non Soil**

** Non MCERTS Matrix

Analytical Report Number : 21-67236
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	NONE
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	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	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
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	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	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	NONE
Coal Tar in Soil	DCM Extraction with qualitative interpretation via GC/MS	In-house method	L064-PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	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 : 21-67236
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 21-67236
Project / Site name: Rochdale, Neighbourhood

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TT04	None Supplied	S	1829204	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TT04	None Supplied	S	1829204	bc	Coal Tar in Soil	L064-PL	b
TT04	None Supplied	S	1829204	bc	Monohydric phenols in soil	L080-PL	b
TT04	None Supplied	S	1829204	bc	Speciated EPA-16 PAHs in soil	L064-PL	b
TT04	None Supplied	S	1829204	bc	TPHCWG (Soil)	L088/76-PL	b
TT04	None Supplied	S	1829204	bc	Total cyanide in soil	L080-PL	c
TT06	None Supplied	S	1829205	c	Total cyanide in soil	L080-PL	c

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Analytical Report Number : 21-67238

Project / Site name:	Rochdale, Neighbourhood	**Samples received on:**	25/03/2021
Your job number:	B175882	**Samples instructed on/ Analysis started on:**	06/04/2021
Your order number:		**Analysis completed by:**	15/04/2021
Report Issue Number:	1	**Report issued on:**	15/04/2021
Samples Analysed:	2 10:1 WAC samples		

Signed: Karolina Marek

Karolina Marek
PL Head of 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.

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Waste Acceptance Criteria Analytical Results

Report No:	**21-67238**						
					Client: CURTINS		
Location	**Rochdale, Neighbourhood**						
Lab Reference (Sample Number)	1829220 / 1829221				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	25/03/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TT04						
Depth (m)	0.05						
Solid Waste Analysis							
TOC (%)**	2.6				3%	5%	6%
Loss on Ignition (%) **	5.6				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	2600				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	8.2				--	>6	--
Acid Neutralisation Capacity (mol / kg)	4.1				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1 mg/l			10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.0098			0.0980	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	< 0.0004			< 0.0040	0.5	10	70
Copper *	0.0058			0.058	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0008			0.0084	0.5	10	30
Nickel *	0.0017			0.017	0.4	10	40
Lead *	< 0.0010			< 0.010	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0054			0.054	4	50	200
Chloride *	0.40			4.0	800	15000	25000
Fluoride	< 0.050			< 0.50	10	150	500
Sulphate *	1.5			15	1000	20000	50000
TDS*	24			240	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	4.06			40.4	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	99						
Moisture (%)	0.76						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation
** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Waste Acceptance Criteria Analytical Results

Report No:	**21-67238**						
					Client: CURTINS		
Location	**Rochdale, Neighbourhood**						
Lab Reference (Sample Number)	1829222 / 1829223				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	25/03/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TT06						
Depth (m)	0.10						
Solid Waste Analysis							
TOC (%)**	4.0				3%	5%	6%
Loss on Ignition (%) **	7.0				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	2000				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	8.0				--	>6	--
Acid Neutralisation Capacity (mol / kg)	1.6				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1 mg/l			10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.0092			0.0913	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0010			0.0098	0.5	10	70
Copper *	0.0018			0.018	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0014			0.0142	0.5	10	30
Nickel *	0.0022			0.021	0.4	10	40
Lead *	0.0018			0.018	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0051			0.051	4	50	200
Chloride *	0.35			3.4	800	15000	25000
Fluoride	< 0.050			< 0.50	10	150	500
Sulphate *	0.95			9.4	1000	20000	50000
TDS*	22			220	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	3.14			31.0	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	99						
Moisture (%)	0.78						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
Stated limits are for guidance only and i2 cannot be held responsible for any discrepencies with current legislation
** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Analytical Report Number : 21-67238
Project / Site name: Rochdale, Neighbourhood

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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 *
1829220	TT04	None Supplied	0.05	Non Soil**
1829222	TT06	None Supplied	0.1	Non Soil**

** Non MCERTS matrix

Analytical Report Number : 21-67238
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	NONE
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 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. MCERTS accredited except Coronene.	L064-PL	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025

Analytical Report Number : 21-67238
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-67238
Project / Site name: Rochdale, Neighbourhood

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TT04	None Supplied	S	1829220	b	BTEX in soil (Monoaromatics)	L073B-PL	b
TT04	None Supplied	S	1829220	b	Mineral Oil (Soil) C10 - C40	L076-PL	b
TT04	None Supplied	S	1829220	b	PCB's By GC-MS in soil	L027-PL	b
TT04	None Supplied	S	1829220	b	Speciated WAC-17 PAHs in soil	L064-PL	b
TT04	None Supplied	S	1829220	b	Total BTEX in soil (Poland)	L073-PL	b

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Analytical Report Number : 21-67782

Project / Site name:	Neighbouthood Rochdale	**Samples received on:**	25/03/2021
Your job number:	B075882	**Samples instructed on/ Analysis started on:**	12/04/2021
Your order number:	EBMA2781	**Analysis completed by:**	15/04/2021
Report Issue Number:	1	**Report issued on:**	15/04/2021
Samples Analysed:	2 non soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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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.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-67782
Project / Site name: Neighbouthood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1832208	1832209
Sample Reference				WS03	HD01
Sample Number				None Supplied	None Supplied
Depth (m)				0.10	0.10
Date Sampled				30/03/2021	31/03/2021
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	%	0.01	NONE	0.07	0.02
Total mass of sample received	kg	0.001	NONE	2.0	2.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	NONE	9.0	9.0
Total Cyanide	mg/kg	1	NONE	< 1.0	< 1.0
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	NONE	0.0061	0.0056
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	NONE	12	11
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	NONE	6.1	5.6
Organic Matter	%	0.1	NONE	5.1	4.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	NONE	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	1.7	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	0.57	< 0.05
Fluorene	mg/kg	0.05	NONE	0.57	< 0.05
Phenanthrene	mg/kg	0.05	NONE	2.6	1.3
Anthracene	mg/kg	0.05	NONE	0.46	< 0.05
Fluoranthene	mg/kg	0.05	NONE	0.89	0.31
Pyrene	mg/kg	0.05	NONE	0.77	0.71
Benzo(a)anthracene	mg/kg	0.05	NONE	0.69	< 0.05
Chrysene	mg/kg	0.05	NONE	0.55	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.29	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.19	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	0.43	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	9.66	2.27

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	NONE	1.5	1.1
Boron (water soluble)	mg/kg	0.2	NONE	0.2	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	NONE	0.6	< 0.2
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	NONE	4.4	5.7
Copper (aqua regia extractable)	mg/kg	1	NONE	4.6	18
Lead (aqua regia extractable)	mg/kg	1	NONE	5.6	2.7
Mercury (aqua regia extractable)	mg/kg	0.3	NONE	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	NONE	2.2	28
Selenium (aqua regia extractable)	mg/kg	1	NONE	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	NONE	18	23

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Analytical Report Number: 21-67782
Project / Site name: Neighbouthood Rochdale
Your Order No: EBMA2781

Lab Sample Number				1832208	1832209
Sample Reference				WS03	HD01
Sample Number				None Supplied	None Supplied
Depth (m)				0.10	0.10
Date Sampled				30/03/2021	31/03/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Monoaromatics & Oxygenates					
Benzene	µg/kg	1	NONE	< 1.0	< 1.0
Toluene	µg/kg	1	NONE	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	NONE	< 1.0	< 1.0
p & m-xylene	µg/kg	1	NONE	< 1.0	< 1.0
o-xylene	µg/kg	1	NONE	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	NONE	< 1.0	< 1.0
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	NONE	< 1.0	17
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	NONE	82	160
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	NONE	170	430
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	NONE	3300	3600
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	NONE	3500	4200
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	NONE	< 1.0	11
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	NONE	90	98
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	NONE	250	490
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	NONE	5000	5800
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	NONE	5400	6400
Miscellaneous Organics					
Coal Tar		N/A	NONE	Not Identified	Not Identified
Total Residue	mg/kg	10	NONE	9100	17000

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

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Analytical Report Number : 21-67782
Project / Site name: Neighbouthood Rochdale

* 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 *
1832208	WS03	None Supplied	0.1	Non Soil**
1832209	HD01	None Supplied	0.1	Non Soil**

** Non MCERTS Matrix

Analytical Report Number : 21-67782
Project / Site name: Neighbouthood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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	NONE
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	NONE
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	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	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
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	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	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	NONE
Coal Tar in Soil	DCM Extraction with qualitative interpretation via GC/MS	In-house method	L064-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	NONE

Analytical Report Number : 21-67782
Project / Site name: Neighbouthood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-67782
Project / Site name: Neighbouthood Rochdale

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
HD01	None Supplied	S	1832209	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
HD01	None Supplied	S	1832209	bc	Coal Tar in Soil	L064-PL	b
HD01	None Supplied	S	1832209	bc	Monohydric phenols in soil	L080-PL	b
HD01	None Supplied	S	1832209	bc	Speciated EPA-16 PAHs in soil	L064-PL	b
HD01	None Supplied	S	1832209	bc	TPHCWG (Soil)	L088/76-PL	b
HD01	None Supplied	S	1832209	bc	Total cyanide in soil	L080-PL	c
WS03	None Supplied	S	1832208	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
WS03	None Supplied	S	1832208	bc	Coal Tar in Soil	L064-PL	b
WS03	None Supplied	S	1832208	bc	Monohydric phenols in soil	L080-PL	b
WS03	None Supplied	S	1832208	bc	Speciated EPA-16 PAHs in soil	L064-PL	b
WS03	None Supplied	S	1832208	bc	TPHCWG (Soil)	L088/76-PL	b
WS03	None Supplied	S	1832208	bc	Total cyanide in soil	L080-PL	c

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Analytical Report Number : 21-67783

Project / Site name:	Neighbouthood Rochdale	**Samples received on:**	25/03/2021
Your job number:	B075882	**Samples instructed on/ Analysis started on:**	12/04/2021
Your order number:	EBMA2781	**Analysis completed by:**	15/04/2021
Report Issue Number:	1	**Report issued on:**	15/04/2021
Samples Analysed:	2 10:1 WAC samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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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.

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Waste Acceptance Criteria Analytical Results

Report No:	**21-67783**						
					Client:	**CURTINS**	
Location	**Neighbouthood Rochdale**						
Lab Reference (Sample Number)	1832210 / 1832211				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	30/03/2021						
Sample ID	WS03				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.10						
Solid Waste Analysis							
TOC (%)**	4.6				3%	5%	6%
Loss on Ignition (%) **	8.2				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	2900				500	--	--
Total PAH (WAC-17) (mg/kg)	12.7				100	--	--
pH (units)**	9.0				--	>6	--
Acid Neutralisation Capacity (mol / kg)	3.2				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.0076			0.0756	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0007			0.0067	0.5	10	70
Copper *	0.0023			0.023	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004			< 0.0040	0.5	10	30
Nickel *	0.0019			0.019	0.4	10	40
Lead *	< 0.0010			< 0.010	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0057			0.057	4	50	200
Chloride *	0.84			8.4	800	15000	25000
Fluoride	< 0.050			< 0.50	10	150	500
Sulphate *	1.9			19	1000	20000	50000
TDS*	30			300	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	5.97			59.5	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	100						
Moisture (%)	0.07						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation
** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Waste Acceptance Criteria Analytical Results

Report No:	**21-67783**						
					Client: CURTINS		
Location	**Neighbouthood Rochdale**						
Lab Reference (Sample Number)	1832212 / 1832213				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	31/03/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	HD01						
Depth (m)	0.10						
Solid Waste Analysis							
TOC (%)**	3.5				3%	5%	6%
Loss on Ignition (%) **	7.4				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	2700				500	--	--
Total PAH (WAC-17) (mg/kg)	3.40				100	--	--
pH (units)**	7.7				--	>6	--
Acid Neutralisation Capacity (mol / kg)	1.6				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.0100			0.0999	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0006			0.0061	0.5	10	70
Copper *	0.0020			0.020	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004			< 0.0040	0.5	10	30
Nickel *	0.0030			0.030	0.4	10	40
Lead *	< 0.0010			< 0.010	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0034			0.034	4	50	200
Chloride *	1.0			10	800	15000	25000
Fluoride	< 0.050			< 0.50	10	150	500
Sulphate *	2.0			20	1000	20000	50000
TDS*	27			270	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	4.47			44.7	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	100						
Moisture (%)	0.02						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.
*= UKAS accredited (liquid eluate analysis only)
Stated limits are for guidance only and i2 cannot be held responsible for any discrepencies with current legislation
** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 21-67783
Project / Site name: Neighbouthood Rochdale

* 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 *
1832210	WS03	None Supplied	0.1	Non Soil**
1832212	HD01	None Supplied	0.1	Non Soil**

** Non MCERTS Matrix

Analytical Report Number : 21-67783
Project / Site name: Neighbouthood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	NONE
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 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. MCERTS accredited except Coronene.	L064-PL	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025

Analytical Report Number : 21-67783
Project / Site name: Neighbouthood Rochdale

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-67783
Project / Site name: Neighbouthood Rochdale

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
HD01	None Supplied	S	1832212	b	BTEX in soil (Monoaromatics)	L073B-PL	b
HD01	None Supplied	S	1832212	b	Mineral Oil (Soil) C10 - C40	L076-PL	b
HD01	None Supplied	S	1832212	b	PCB's By GC-MS in soil	L027-PL	b
HD01	None Supplied	S	1832212	b	Speciated WAC-17 PAHs in soil	L064-PL	b
HD01	None Supplied	S	1832212	b	Total BTEX in soil (Poland)	L073-PL	b
WS03	None Supplied	S	1832210	b	BTEX in soil (Monoaromatics)	L073B-PL	b
WS03	None Supplied	S	1832210	b	Mineral Oil (Soil) C10 - C40	L076-PL	b
WS03	None Supplied	S	1832210	b	PCB's By GC-MS in soil	L027-PL	b
WS03	None Supplied	S	1832210	b	Speciated WAC-17 PAHs in soil	L064-PL	b
WS03	None Supplied	S	1832210	b	Total BTEX in soil (Poland)	L073-PL	b

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Analytical Report Number : 21-67964

Replaces Analytical Report Number: 21-67964, issue no. 1
Additional analysis undertaken.

Project / Site name:	Rochdale, Neighbourhood	**Samples received on:**	25/03/2021
Your job number:	B175882	**Samples instructed on/ Analysis started on:**	12/04/2021
Your order number:	EBMA2837	**Analysis completed by:**	05/05/2021
Report Issue Number:	2	**Report issued on:**	05/05/2021
Samples Analysed:	16 soil samples		

Signed:

Joanna Wawrzeczko
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.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1833170	1833171	1833172	1833173	1833174
Sample Reference				TTD	SA01	TT04	TT01	TTB
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.80	1.20	1.50	1.00
Date Sampled				22/03/2021	22/03/2021	22/03/2021	23/03/2021	23/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	8.2	11	9.7	6.6
Total mass of sample received	kg	0.001	NONE	1.2	2.0	2.0	2.0	2.0

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

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.7	8.2	7.1	9.1	10.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	16	170	130	110	130
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0080	0.083	0.066	0.057	0.065
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	8.0	82.6	65.5	56.6	65.4
Organic Matter	%	0.1	MCERTS	6.8	2.0	2.6	1.3	1.4

Total Phenols

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

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.0	< 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	0.31	0.65	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.44	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.3	3.0	0.77	0.60
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.52	0.71	0.27	0.20
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	2.6	3.2	1.1	1.5
Pyrene	mg/kg	0.05	MCERTS	< 0.05	2.4	2.9	1.1	1.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.1	0.98	0.39	1.1
Chrysene	mg/kg	0.05	MCERTS	< 0.05	1.1	1.1	0.49	0.74
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.1	1.0	0.42	1.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.53	0.38	0.21	0.41
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.0	0.77	0.37	0.82
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.43	0.37	< 0.05	0.49
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.52	0.42	< 0.05	0.57

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	12.9	17.9	5.17	8.94

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Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1833170	1833171	1833172	1833173	1833174
Sample Reference				TTD	SA01	TT04	TT01	TTB
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.80	1.20	1.50	1.00
Date Sampled				22/03/2021	22/03/2021	22/03/2021	23/03/2021	23/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.0	10	7.0	7.4	6.6
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.3	0.3	0.2	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2	0.3	0.3
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	6.1	23	12	19	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	8.8	44	21	33	29
Lead (aqua regia extractable)	mg/kg	1	MCERTS	11	82	29	58	56
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	3.6	27	12	27	17
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	14	130	33	110	79
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	10	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	46	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	56	< 10	< 10	< 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	2.2	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	5.2	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	21	< 10	15	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	47	23	20	24
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	68	40	34	33

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1833175	1833176	1833177	1833178	1833179
Sample Reference				CP10	TTC	CP10	TT04	TTG
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.60	2.00	2.00	1.50
Date Sampled				23/03/2021	23/03/2021	23/03/2021	23/03/2021	24/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.5	9.0	9.0	36	10
Total mass of sample received	kg	0.001	NONE	2.0	2.0	1.8	1.7	1.5
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	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	11.2	8.0	9.8	4.2	7.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	590	240	320	3800	170
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.30	0.12	0.16	1.9	0.084
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	296	120	160	1920	83.6
Organic Matter	%	0.1	MCERTS	1.5	2.6	2.9	7.3	2.9
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.45	0.76	0.80	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.45	0.54	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.62	1.3	3.8	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.63	1.3	3.5	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.23	0.50	1.2	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.31	0.58	1.4	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.22	0.44	1.1	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.19	0.37	0.73	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.26	0.43	1.2	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.52	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.69	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	2.91	6.18	15.4	< 0.80	< 0.80

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Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1833175	1833176	1833177	1833178	1833179
Sample Reference				CP10	TTC	CP10	TT04	TTG
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.60	2.00	2.00	1.50
Date Sampled				23/03/2021	23/03/2021	23/03/2021	23/03/2021	24/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.1	6.0	8.4	4.2	15
Boron (water soluble)	mg/kg	0.2	MCERTS	1.4	0.4	0.2	1.6	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.3	< 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	17	13	14	6.7	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	25	28	17	92
Lead (aqua regia extractable)	mg/kg	1	MCERTS	67	36	82	17	230
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	15	15	16	7.4	32
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	93	53	81	17	55
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	9.9	9.1	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	59	69	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	69	78	< 10	< 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	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	12	17	38	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	26	98	130	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	38	110	170	< 10	< 10

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

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Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1833180	1833181	1833182	1833183	1833184
Sample Reference				TTG	TT06	TTF	TTF	TTG
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.70	1.70	1.20	2.60
Date Sampled				24/03/2021	24/03/2021	24/03/2021	24/03/2021	24/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.2	17	4.2	6.9	14
Total mass of sample received	kg	0.001	NONE	2.0	1.7	2.0	2.0	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	7.5	8.2	8.2	8.6	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	42	74	61	47	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.021	0.037	0.030	0.024	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	21.0	37.0	30.3	23.5	-
Organic Matter	%	0.1	MCERTS	0.6	3.9	0.7	1.5	2.8
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.36	< 0.05	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.21	< 0.05	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.7	< 0.05	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.32	< 0.05	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.6	< 0.05	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	1.4	< 0.05	< 0.05	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.70	< 0.05	< 0.05	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.72	< 0.05	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.46	< 0.05	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.36	< 0.05	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.44	< 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	8.26	< 0.80	< 0.80	-

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Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1833180	1833181	1833182	1833183	1833184
Sample Reference				TTG	TT06	TTF	TTF	TTG
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.70	1.70	1.20	2.60
Date Sampled				24/03/2021	24/03/2021	24/03/2021	24/03/2021	24/03/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.0	14	4.9	6.0	-
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.5	< 0.2	< 0.2	-
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	7.6	25	11	14	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	6.2	56	13	23	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	11	31	14	59	-
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	5.8	41	17	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	23	34	44	39	-
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	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	-
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	11	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	17	< 10	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	24	< 10	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	52	< 10	< 10	-

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

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Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1833948
Sample Reference				TTF
Sample Number				24/3
Depth (m)				0.10
Date Sampled				24/03/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	1.1
Total mass of sample received	kg	0.001	NONE	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-
Asbestos in Soil	Type	N/A	ISO 17025	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	12.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	29
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.015
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	14.5
Organic Matter	%	0.1	MCERTS	1.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	3.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05

Total PAH

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

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Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1833948
Sample Reference				TTF
Sample Number				24/3
Depth (m)				0.10
Date Sampled				24/03/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.0
Boron (water soluble)	mg/kg	0.2	MCERTS	2.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.3
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.0
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	25
Monoaromatics & Oxygenates				
Benzene	µg/kg	1	MCERTS	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0
Petroleum Hydrocarbons				
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10

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

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Analytical Report Number: 21-67964
Project / Site name: Rochdale, Neighbourhood
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-PL 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
1833174	TTB	1.00	145	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 21-67964
Project / Site name: Rochdale, Neighbourhood

* 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 *
1833170	TTD	None Supplied	0.8	Brown loam with gravel.
1833171	SA01	None Supplied	0.8	Brown loam and clay with gravel.
1833172	TT04	None Supplied	1.2	Brown sandy loam with gravel.
1833173	TT01	None Supplied	1.5	Brown loam and gravel.
1833174	TTB	None Supplied	1	Brown loam with gravel.
1833175	CP10	None Supplied	0.5	Brown loam and clay with gravel.
1833176	TTC	None Supplied	0.6	Brown loam and clay with gravel.
1833177	CP10	None Supplied	2	Brown loam and clay with gravel and vegetation.
1833178	TT04	None Supplied	2	Brown loam and clay with gravel.
1833179	TTG	None Supplied	1.5	Brown loam and clay with gravel.
1833180	TTG	None Supplied	0.4	Brown clay and sand with gravel.
1833181	TT06	None Supplied	0.7	Brown gravelly loam.
1833182	TTF	None Supplied	1.7	Brown sandy loam with gravel.
1833183	TTF	None Supplied	1.2	Brown sandy loam with gravel.
1833184	TTG	None Supplied	2.6	Brown clay and loam with gravel.
1833948	TTF	24/3	0.1	Light grey concrete.**

**Non MCERTS Matrix

Analytical Report Number : 21-67964
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
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
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

Analytical Report Number : 21-67964
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-67964
Project / Site name: Rochdale, Neighbourhood

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
CP10	None Supplied	S	1833175	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
CP10	None Supplied	S	1833175	c	Total cyanide in soil	L080-PL	c
CP10	None Supplied	S	1833177	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
CP10	None Supplied	S	1833177	c	Total cyanide in soil	L080-PL	c
SA01	None Supplied	S	1833171	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
SA01	None Supplied	S	1833171	c	Monohydric phenols in soil	L080-PL	c
SA01	None Supplied	S	1833171	c	Speciated EPA-16 PAHs in soil	L064-PL	c
SA01	None Supplied	S	1833171	c	TPHCWG (Soil)	L088/76-PL	c
SA01	None Supplied	S	1833171	c	Total cyanide in soil	L080-PL	c
TT01	None Supplied	S	1833173	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TT01	None Supplied	S	1833173	c	Total cyanide in soil	L080-PL	c
TT04	None Supplied	S	1833172	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TT04	None Supplied	S	1833172	c	Monohydric phenols in soil	L080-PL	c
TT04	None Supplied	S	1833172	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TT04	None Supplied	S	1833172	c	TPHCWG (Soil)	L088/76-PL	c
TT04	None Supplied	S	1833172	c	Total cyanide in soil	L080-PL	c
TT04	None Supplied	S	1833178	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TT04	None Supplied	S	1833178	c	Total cyanide in soil	L080-PL	c
TT06	None Supplied	S	1833181	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TT06	None Supplied	S	1833181	c	Total cyanide in soil	L080-PL	c
TTB	None Supplied	S	1833174	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TTB	None Supplied	S	1833174	c	Total cyanide in soil	L080-PL	c
TTC	None Supplied	S	1833176	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TTC	None Supplied	S	1833176	c	Total cyanide in soil	L080-PL	c
TTD	None Supplied	S	1833170	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TTD	None Supplied	S	1833170	c	Monohydric phenols in soil	L080-PL	c
TTD	None Supplied	S	1833170	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TTD	None Supplied	S	1833170	c	TPHCWG (Soil)	L088/76-PL	c
TTD	None Supplied	S	1833170	c	Total cyanide in soil	L080-PL	c
TTF	None Supplied	S	1833182	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TTF	None Supplied	S	1833182	c	Total cyanide in soil	L080-PL	c
TTF	None Supplied	S	1833183	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TTF	None Supplied	S	1833183	c	Total cyanide in soil	L080-PL	c
TTF	24/3	S	1833948	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TTF	24/3	S	1833948	c	Total cyanide in soil	L080-PL	c
TTG	None Supplied	S	1833179	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TTG	None Supplied	S	1833179	c	Total cyanide in soil	L080-PL	c
TTG	None Supplied	S	1833180	c	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	c
TTG	None Supplied	S	1833180	c	Total cyanide in soil	L080-PL	c

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Analytical Report Number : 21-68612

Project / Site name:	Rochdale, Neighbourhood	**Samples received on:**	12/04/2021
Your job number:	B175882	**Samples instructed on/ Analysis started on:**	12/04/2021
Your order number:	EBMA2846	**Analysis completed by:**	21/04/2021
Report Issue Number:	1	**Report issued on:**	21/04/2021
Samples Analysed:	2 soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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

Analytical Report Number: 21-68612
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1836597	1836598
Sample Reference				TTD	TTC
Sample Number				(Concrete)	(Concrete)
Depth (m)				0.05	0.10
Date Sampled				22/03/2021	23/03/2021
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	%	0.01	NONE	2.0	1.8
Total mass of sample received	kg	0.001	NONE	2.0	2.0

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

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.9	12.0
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	18	16
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0091	0.0078
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9.1	7.8
Organic Matter	%	0.1	MCERTS	0.6	0.1

Total Phenols

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

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	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
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

Total PAH

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

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.8	2.4
Boron (water soluble)	mg/kg	0.2	MCERTS	2.2	1.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	5.4	5.0
Lead (aqua regia extractable)	mg/kg	1	MCERTS	11	5.3
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	9.4	7.0
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	37	33

Monoaromatics & Oxygenates

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 21-68612
Project / Site name: Rochdale, Neighbourhood

Lab Sample Number				1836597	1836598
Sample Reference				TTD	TTC
Sample Number				(Concrete)	(Concrete)
Depth (m)				0.05	0.10
Date Sampled				22/03/2021	23/03/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
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	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10

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	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 21-68612
Project / Site name: Rochdale, Neighbourhood

* 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 *
1836597	TTD	(Concrete)	0.05	White sand.
1836598	TTC	(Concrete)	0.1	White sand.

Analytical Report Number : 21-68612
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Analytical Report Number : 21-68612
Project / Site name: Rochdale, Neighbourhood

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-68612
Project / Site name: Rochdale, Neighbourhood

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TTC	(Concrete)	S	1836598	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
TTC	(Concrete)	S	1836598	bc	Monohydric phenols in soil	L080-PL	bc
TTC	(Concrete)	S	1836598	bc	Speciated EPA-16 PAHs in soil	L064-PL	bc
TTC	(Concrete)	S	1836598	bc	TPHCWG (Soil)	L088/76-PL	bc
TTC	(Concrete)	S	1836598	bc	Total cyanide in soil	L080-PL	c
TTD	(Concrete)	S	1836597	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
TTD	(Concrete)	S	1836597	bc	Monohydric phenols in soil	L080-PL	bc
TTD	(Concrete)	S	1836597	bc	Speciated EPA-16 PAHs in soil	L064-PL	bc
TTD	(Concrete)	S	1836597	bc	TPHCWG (Soil)	L088/76-PL	bc
TTD	(Concrete)	S	1836597	bc	Total cyanide in soil	L080-PL	c