AP GEOTECHNICS
a ground investigation and consultancy service

51-53 Guildford Street
Chertsey
Surrey
KT16 9BA

t 01932 848460
e mail@apgeotechnics.co.uk
www.apgeotechnics.co.uk

LAND EAST OF MOUSDELL CLOSE ASHINGTON

Contamination Assessment

Client
Rocco Homes

Report No. 5993 v2

11th August 2025

CONTENTS

LAND EAST OF MOUSDELL CLOSE ASHINGTON

Contamination Assessment

Synopsis

An investigation has been carried out at on land east of Mousdell Close, Ashington on the instructions of Rocco Homes.

The purpose of the investigation was to determine the ground conditions and to provide recommendations in respect of foundation design and other geoenvironmental matters for the proposed new residential dwellings.

Three boreholes and 12 continuous open drive (windowless) samplers were carried out, supported by a programme of in situ and laboratory testing.

Chemical analysis of samples recovered during the field work revealed no contamination above the relevant triggers.

1

Site description

The area under investigation lies to the east of Mousdell Close, Ashington and comprises a field which extends to some 2.19 hectares.

The current general layout is given at Figure 1 of Appendix A.

2

Development proposals

It is intended to construct 74 dwellings with associated landscaping, open space, parking and creation of new vehicular access from Rectory Lane.

The proposed development is shown on Figure 2 at Appendix A.

3

Geology

Published records of the British Geological Survey (BGS) indicate the site to lie on the Weald Clay Formation with superficial Head deposits mapped on the southern part of the site.

4

Field work

The extent of the field work was agreed with Rocco Homes and comprised three boreholes advanced by light percussive techniques to a maximum depth of 16.5 m. In addition, 12 continuous open drive (windowless) samplers were advanced to a maximum depth of 4.0 m.

The approximate location of all exploratory points is shown on Figure 1 at Appendix A.

A continuous column of soil was recovered from the windowless samplers (WS) whilst representative soil samples were recovered from the trial pits for subsequent laboratory examination and testing. Standard Penetration Tests (SPT) were carried out as appropriate. Details of the strata encountered are provided on the Exploratory Hole Records at Appendix B; together with particulars of the samples recovered, groundwater observations and SPT results.

Soakaway testing, generally in accordance with BRE Digest 365[1] was carried out in five locations.

Standpipes were installed in WS1, 6 & 9 to allow monitoring of groundwater levels and soil gas concentrations.

5
Laboratory testing

The following laboratory tests were conducted on soil samples recovered during the field work:-

- Contamination: chemical analyses to detect the presence of a broad range of contaminants, viz:-

Metals & metalloids: Total arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc.
Water soluble boron.

[1] *BRE Digest 365. Soakaway design, Building Research Establishment, September 1991*

Organic:	Speciated petroleum hydrocarbons (TPH) with aliphatic/aromatic split, BTEX & MTBE, speciated polyaromatic hydrocarbons and phenols.
Others:	Asbestos screen and waste acceptance criteria (WAC).

Results of these tests are presented at Appendix B and the original chemical laboratory test sheets are presented at Appendix C.

6
Discussion

6.1
Contaminant analysis

6.1.1
Solid phase

Contaminant testing was undertaken on selected soil samples and the results have been compared with the limited number of CLEA[2] Soil Guideline Values (SGVs) for residential land use with plant uptake that have been published to date. Where not available from that source, reference has also been made to the LQM/CIEH S4ULs for Human Health Risk Assessment[3]. Appropriate trigger levels are given with the results at Appendix B whilst the original analytical laboratory result sheets are presented at Appendix CE.

Analysis for metals/metalloids revealed all determinands to be below the triggers for residential land use with plant uptake.

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[2] *The Contaminated Land Exposure Assessment Model, Department for Environment, Food and Rural Affairs, The Environment Agency, R & D Publications SGV 1 et al., March 2002*

[3] *The LQM/CIEH S4ULs for Human Health Risk Assessment. Land Quality Press, 2015*

No SGV exists for lead (the old SGV of 450 mg/kg having been withdrawn) and LQM have not calculated one. However, provisional Category 4 Screening Levels (C4SLs) have been published by Defra which suggest a maximum concentration of 210 mg/kg lead for residential land use with plant uptake (a number of different concentrations have been published, dependant on differing exposure scenarios). No samples recorded lead in excess of this value.

No phenols were recorded above the limit of detection for the test of 1 mg/kg.

No TPH was recorded above the limits of detection for the tests.

No BTEX or MTBE was recorded above the limits of detection for the tests.

Analysis for speciated PAH recorded the vast majority of individual PAHs below the limit of detection for the test of 0.05 mg/kg. Of the seven samples analysed, only two recorded any individual PAHs above the limit of detection for the test, but at very low concentrations.

No asbestos fibres were detected in the seven samples tested.

6.1.2
Gas phase

The standpipes installed in WS1, 6 & 9 are being monitored for gas flow rate and concentrations of oxygen, methane, carbon dioxide, carbon monoxide and hydrogen sulphide. A note is also being made of the weather conditions at the time of reading. The results will be reported once a full set of data is available. However, ground gas is not expected to be an issue at the site.

6.1.3
Waste Acceptance Criteria (WAC)

Three samples were subject to the WAC full solid waste suite and the WAC single stage leachate suite. The results have been compared to the criteria contained in the Landfill Regulations 2002 as amended and are presented at Appendix B.

Within the solid waste suite, all results were within the Inert Waste Landfill criteria limits. Similarly, parameters determined on the compliance leaching test were also within the Inert Waste Landfill criteria limits.

The contamination test results and the WAC results should be forwarded to the contractor appointed to remove arisings from site. Transfer notes and chain of custody sheets should be retained for all spoil removed from site. The presence of asbestos (sometimes visible) in samples will also need to be taken into consideration for disposal.

6.2
Conclusion

No contaminants have been recorded above the relevant triggers and the site can therefore be considered suitable for use as residential land with plant uptake and no remediation is expected to be required.

R G Chapman
AP GEOTECHNICS LTD.
11th August 2025

PROCEDURAL NOTES for GROUND INVESTIGATIONS

General

This report has been prepared generally in accordance with CLR 11: Model Procedures for the Management of Land Contamination (Defra & Environment Agency 2004).

This report is based upon data obtained from field descriptions of the strata and examination of the samples by an engineer, together with the results of in situ and laboratory tests as appropriate. Responsibility cannot be accepted for variations in ground conditions between and around any of the exploratory points that is not revealed by the data. Whilst the report may offer an opinion on the ground conditions between exploratory points and below the depth of investigation, this is for guidance only and no liability is accepted for its accuracy. Unless specifically included in the report, it should be assumed that no testing has been carried out in respect of asbestos or Japanese Knotweed and no liability will is inferred or accepted.

Drilling procedure

Boring by light cable percussion drilling allows the ground conditions to be reasonably well established. However, a certain amount of disturbance is inevitable and some mixing of soils can occur.

Sampling procedure

"Undisturbed" samples of predominantly cohesive soils are taken with a 100mm diameter open tube sampler, generally in accordance with BS 5930: 1999.

Where appropriate, or where an undisturbed sample is unsuccessful, disturbed samples are recovered and sealed into polythene bags.

Groundwater samples are taken when water is encountered in sufficient quantity.

Standard penetration tests

The test is conducted generally in accordance with BS 1377: Part 9: 1990. The sampler tube is subject to a seating drive of 150mm into the soil at the base of the borehole. Results are given on the Borehole Records as the number of blows required to drive the sampler tube a further 300mm and this is known as the "N" value. Where the driving resistance is such that full penetration is not achieved, the test is generally terminated after 50 blows and the actual distance penetrated is recorded.

Groundwater

Groundwater observations necessarily reflect the conditions encountered at the time of the exploratory work. Long term monitoring of standpipes is usually required to establish an equilibrium water level since the normal rate of boring is too fast to permit steady state conditions to be achieved.

Groundwater levels are subject to variations caused by changes in drainage conditions and seasonal climatic changes.

Water may necessarily be added to advance the bore whilst casing may be required to maintain an open hole. These can both mask subsequent groundwater observations and are therefore noted on the individual Borehole Record.

APPENDICES

A Figures

Figure 1: Site Plan with approximate Exploratory Hole Locations
Figure 2: Proposed Site Plan

B Laboratory Test Results

Contaminants in Soil
Waste Acceptance Criteria (WAC)

C Original Testing House Certificates

Analytical Reports

APPENDIX A

FIGURES

Land East of Mousdell Close,
Ashington, West Sussex,
RH20 3AR

Site Plan with approximate Exploratory Hole Locations

Scale: unknown

RECTORY LANE

El Sub Sta

MOUSDELL CLOSE

PENN GARDENS

Penn Gardens

BH1
WS1
WS2
WS3
SA1
SA2
WS4
WS5
BH2
SA3
WS6
WS7
WS8
WS9
WS10
SA5
BH3
WS11
SA4
WS12

Winders
Cleftstones
Karoja
Kestrals

Chanctonbury House

Pond

Neighbouring Ongoing Development

Figure 1

Land East of Mousdell Close,
Ashington, West Sussex,
RH20 3AR

Proposed Site Plan

Scale: unknown

Accommodation Schedule

Affordable Dwellings		**(26no. - 35.1%)**		
4no.	1-Bedroom Flats	Up to 2.5 Storeys	Blocks A and B	540sqft
4no.	1-Bedroom Flats - M4(3)	Up to 2.5 Storeys	Blocks A and B	660sqft
1no.	1-Bedroom Flats	2 Storeys	Block C	540sqft
1no.	1-Bedroom Flats	2 Storeys	Block C	592sqft
8no.	2-Bedroom Flats	Up to 2.5 Storeys	Blocks A and B	660sqft
2no.	2-Bedroom Houses	2 Storeys	Semi-Detached	855sqft
2no.	3-Bedroom Houses	2 Storeys	Semi-Detached	1003sqft
3no.	3-Bedroom Townhouses	2.5 Storeys	Semi / Terraced	1145sqft
1no.	3-Bedroom Townhouses	2.5 Storeys	Semi / Terraced	1271sqft
Open Market Dwellings		**(48no. - 64.9%)**		
2no.	1-Bedroom Flats	2 Storeys	Block D/E	540sqft
2no.	1-Bedroom Flats	2 Storeys	Block D/E	592sqft
8no.	2-Bedroom Houses	2 Storeys	Semi-Detached	855sqft
13no.	3-Bedroom Houses	2 Storeys	Semi- Detached	1003sqft
8no.	3-Bedroom Houses	2.5 Storeys	Semi-Detached	1145sqft
5no.	4-Bedroom Houses	2 Storeys	Detached	1240sqft
1no.	4-Bedroom Houses	2 Storeys	Detached	1261sqft
2no.	3-Bedroom Houses	2.5 Storeys	Semi-Detached	1271sqft
1no.	4-Bedroom Houses	2 Storeys	Detached	1285sqft
2no.	4-Bedroom Houses	2.5 Storeys	Semi-Detached	1340sqft
2no.	4-Bedroom Houses	2 Storeys	Detached	1425sqft
2no.	4-Bedroom Houses	2 Storeys	Detached	1933sqft
Total;	**74 Dwellings [2.19 Ha approx. to Overall Ownership Line - 33.78 Dw/Ha]**			
Car Parking Generally;	1 space per 1-Bedroom Flat 1.5 spaces per 2-Bedroom Flat 2-3 spaces per 2 and 3-Bedroom House (incl. open car barns) 3 spaces per 4-Bedroom House (incl. garages) 23 visitor spaces (1 per 3.26 dwellings)			

Figure 2

APPENDIX B

LABORATORY TEST RESULTS

CONTAMINANTS IN SOIL

Project: LAND EAST OF MOUSDELL CLOSE, ASHINGTON, RH20 3AR
Client: Rocco Homes

Project No: 5993-2
Sheet No: 1/1

Location	Sample	Depth	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	Boron	Chromium	Phenols	Sulphate	TPH by GCMS							pH
		m			trivalent			inorganic				water sol.	hexavalent	tot. monohydric	water sol.	C8 - C10	C10 - C12	C12 - C16	C16 - C21	C21 - C35	C35 - C40		
WS1	C1	0.20	12	<0.2	18	9.1	19	<0.3	6.6	1.7	44	1		<1.0									
WS2	C1	0.40	14	<0.2	20	8.1	18	<0.3	6.6	1.4	43	0.9		<1.0									
WS4	C1	0.30	30	<0.2	18	14	14	<0.3	9.5	3.5	68	0.4		<1.0									
WS5	C1	0.50	12	<0.2	20	8.8	12	<0.3	5.2	1.2	33	0.6		<1.0									
WS8	C1	0.30	7.5	<0.2	22	11	15	<0.3	5.9	<1.0	22	0.6		<1.0									
WS9	C1	0.10	11	<0.2	16	9.1	21	<0.3	5.2	<1.0	37	0.6		<1.0									
WS11	C1	0.40	13	<0.2	19	9.8	26	<0.3	6.3	1.4	47	0.7		<1.0									
S4UL[1]	residential[3]		37	11	910	2400		40	180	250	3700	290	6	380									
	residential[3a]		40	85	910	7100		56	180	430	40000	11000	6	1200									
	commercial		640	190	8600	68000		1100	980	12000	730000	240000	33	1300									
	POS resi*		79	120	1500	12000		120	230	1100	81000	21000	7.7										
CLEA[2]	residential		32					170	130	350													
	commercial		640					3600	1800	13000													

Notes

1. S4UL given at 6% soil organic matter
2. CLEA SGVs given at 6% soil organic matter
3. Residential with plant uptake

3a. Residential without plant uptake

All units are mg/kg dry weight of soil unless otherwise stated, except for pH which is dimensionless

Exceptions denoted thus: Residential XX
Commercial XX

CONTAMINANTS IN SOIL

Project: LAND EAST OF MOUSDELL CLOSE, ASHINGTON, RH20 3AR
Client: Rocco Homes

Project No: 5993-2
Sheet No: 1/1

Speciated Total Petroleum Hydrocarbons (Aromatic / Aliphatic Split with BTEX)											
Location	WS1	WS2	WS4	WS5	WS8	WS9	WS11		LQM/CIEH S4UL		
Sample	C1	C1	C1	C1	C1	C1	C1				
Depth, m	0.20	0.40	0.30	0.50	0.30	0.10	0.40		residential	allotments	commercial
Determinand	Concentration, mg/kg										
Aromatic Hydrocarbons											
C5 - C7	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		300	57	86000
>C7 - C8	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		660	120	180000
>C8 - C10	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020		190	51	17000
>C10 - C12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		380	74	34000
>C12 - C16	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		660	130	38000
>C16 - C21	<10	<10	<10	<10	<10	<10	<10		930	260	28000
>C21 - C35	<10	<10	<10	<10	<10	<10	<10		1700	1600	28000
Total Aromatic Hydrocarbons	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**				
Aliphatic Hydrocarbons											
C5 - C6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		160	3900	12000
>C6 - C8	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		530	13000	40000
>C8 - C10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		150	1700	11000
>C10 - C12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		760	7300	47000
>C12 - C16	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		4300	13000	90000
>C16 - C21	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0				
>C21 - C35	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0				
Total Aliphatic Hydrocarbons	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**				
Total Petroleum Hydrocarbons	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**				
BTEX	Concentration, µg/kg										
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		370	75	90000
Toluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		660000	120000	180000000
Ethyl Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		260000	91000	27000000
p & m-xylene	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0				
o-xylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		310000	160000	30000000
MTBE (Methyl Tertiary Butyl Ether)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0				

Notes
Total = Sum of compounds above detection limit.
S4UL given at 6% soil organic matter
*Results given as total of (ortho), (meta) and (para) xylene. SGV given is the lowest permissible value for any xylene compound

Exceptions denoted thus: Residential XX
Commercial XX

CONTAMINANTS IN SOIL

Project: LAND EAST OF MOUSDELL CLOSE, ASHINGTON, RH20 3AR
Client: Rocco Homes

Project No: 5993-2
Sheet No: 1/1

Speciated Polyaromatic Hydrocarbons by GCMS

Location	WS1	WS2	WS4	WS5	WS8	WS9	WS11					LQM/CIEH S4UL[3]		
Sample	C1	C1	C1	C1	C1	C1	C1							
Depth, m	0.20	0.40	0.30	0.50	0.30	0.10	0.40					residential4	residential5	allotments	commercial
Determinand	Concentration, mg/kg														
PAH															
Naphthalene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					13	13	24	1100
Acenaphthylene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					920	6000	160	100000
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					1100	6000	200	100000
Fluorene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					860	4500	160	71000
Phenanthrene	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					440	1500	90	23000
Anthracene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					11000	37000	2200	540000
Fluoranthene	0.14	0.13	<0.05	<0.05	<0.05	<0.05	<0.05					890	1600	290	23000
Pyrene	0.12	0.11	<0.05	<0.05	<0.05	<0.05	<0.05					2000	3800	620	54000
Benzo(a)anthracene	0.06	0.05	<0.05	<0.05	<0.05	<0.05	<0.05					13	15	13	180
Chrysene	0.08	0.06	<0.05	<0.05	<0.05	<0.05	<0.05					27	32	19	350
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					3.7	4.0	3.9	45
Benzo(k)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					100	110	130	1200
Benzo(a)pyrene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					3	3.2	3.5	36
Indeno(123-cd)pyrene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					41	46	39	510
Dibenzo(ah)anthracene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					0.3	0.32	0.43	3.6
Benzo(ghi)perylene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					350	360	640	4000
Total PAH (16)	**<0.80**	**<0.80**	**<0.80**	**<0.80**	**<0.80**	**<0.80**	**<0.80**								

Notes

1. Total PAH = Sum of EPA16 identified components
2. The results are expressed as mg/kg dry weight soil after correction for moisture content
3. S4UL given at 6% soil organic matter
4. Residential with plant uptake
5. Residential without plant uptake

Exceptions denoted thus: Residential XX
Commercial XX

CONTAMINANTS IN SOIL

Project: LAND EAST OF MOUSDELL CLOSE, ASHINGTON, RH20 3AR Project No: 5993-2
Client: Rocco Homes Sheet No: 1/1

Location	Sample	Depth	Asbestos identification		
		m	Description of matrix	Overall percentage of asbestos identified (approx.)	Type of asbestos identified
WS1	C1	0.20	Brown loam		none detected
WS2	C1	0.40	Brown loam with vegetation		none detected
WS4	C1	0.30	Brown loam and clay with gravel		none detected
ES5	C1	0.50	Brown clay and loam with vegetation		none detected
WS8	C1	0.30	Brown clay and loam with vegetation		none detected
WS9	C1	0.10	Brown loam with vegetation		none detected
WS11	C1	0.40	Brown loam with vegetation		none detected

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

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**25-035959**						
					Client:	**AP Geotechnics Ltd**	
Location	**Ashington**						
Lab Reference (Sample Number)	607053				**Landfill Waste Acceptance Criteria**		
					Limits		
Sampling Date	sampdatenull				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS3 C1						
Depth (m)	0.50-1.00						
Solid Waste Analysis							
TOC (%)**	0.2				3%	5%	6%
Loss on Ignition (%) **	2.4				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	7.7				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	1.2				--	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 *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00121			0.0121	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.00097			0.0097	0.5	10	70
Copper *	0.0047			0.047	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000663			0.00663	0.5	10	30
Nickel *	< 0.00030			< 0.0030	0.4	10	40
Lead *	< 0.0010			< 0.010	0.5	10	50
Antimony *	0.002			0.02	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0028			0.028	4	50	200
Chloride *	1.2			12	800	15000	25000
Fluoride*	0.17			1.7	10	150	500
Sulphate *	2.5			25	1000	20000	50000
TDS*	17			170	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	6.11			61.1	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	86						
Moisture (%)	14						

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.

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

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**25-035959**						
					Client:	**AP Geotechnics Ltd**	
Location	**Ashington**						
Lab Reference (Sample Number)	607054				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	sampdatenull				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS7 C1						
Depth (m)	1.00-1.50						
Solid Waste Analysis							
TOC (%)**	< 0.1				3%	5%	6%
Loss on Ignition (%) **	2.5				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	5.7				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	-12				--	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 *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00621			0.0621	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.0017			0.017	0.5	10	70
Copper *	0.0099			0.099	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000526			0.00526	0.5	10	30
Nickel *	< 0.00030			< 0.0030	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 *	0.0077			0.077	4	50	200
Chloride *	1.4			14	800	15000	25000
Fluoride*	0.3			3	10	150	500
Sulphate *	2			20	1000	20000	50000
TDS*	11			110	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	2.74			27.4	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	87						
Moisture (%)	13						

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.

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

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**25-035959**						
					Client:	**AP Geotechnics Ltd**	
Location	**Ashington**						
Lab Reference (Sample Number)	607055				**Landfill Waste Acceptance Criteria**		
					Limits		
Sampling Date	sampdatenull				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS12 C1						
Depth (m)	0.50-1.00						
Solid Waste Analysis							
TOC (%)**	0.2				3%	5%	6%
Loss on Ignition (%) **	3.3				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	7.5				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	0.53				--	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 *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00682			0.0682	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.0025			0.025	0.5	10	70
Copper *	0.013			0.13	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000609			0.00609	0.5	10	30
Nickel *	< 0.00030			< 0.0030	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 *	0.016			0.16	4	50	200
Chloride *	1			10	800	15000	25000
Fluoride*	0.15			1.5	10	150	500
Sulphate *	0.97			9.7	1000	20000	50000
TDS*	16			160	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	5.03			50.3	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	84						
Moisture (%)	16						

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.

APPENDIX C

ORIGINAL TESTING HOUSE CERTIFICATES

AP Geotechnics Ltd
51-53 Guildford Street
Chertsey
KT16 9BA

t: 01932 848460

e: richard.chapman@apgeotechnics.co.uk

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

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

Analytical Report Number : 25-035957

Project / Site name:	Ashington	**Samples received on:**	08/07/2025
Your job number:	5993	**Samples instructed on/ Analysis started on:**	08/07/2025
Your order number:		**Analysis completed by:**	17/07/2025
Report Issue Number:	1	**Report issued on:**	17/07/2025
Samples Analysed:	7 soil samples		

Signed:

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

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

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

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

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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

Analytical Report Number: 25-035957
Project / Site name: Ashington

Lab Sample Number				607030	607031	607032	607033	607034
Sample Reference				WS1	WS2	WS4	WS5	WS8
Sample Number				C1	C1	C1	C1	C1
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.20	0.40	0.30	0.50	0.30
Date Sampled				07/07/2025	07/07/2025	07/07/2025	07/07/2025	07/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	8.5	9.2	13	11
Total mass of sample received	kg	0.1	NONE	0.9	0.9	0.9	0.9	0.9
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PKU	PKU	PKU	PKU	PKU
Analysis completed	N/A	N/A	N/A	15/07/2025	15/07/2025	15/07/2025	15/07/2025	15/07/2025
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.14	0.13	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.12	0.11	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.06	0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.08	0.06	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	14	30	12	7.5
Boron (water soluble)	mg/kg	0.2	MCERTS	1	0.9	0.4	0.6	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	20	18	20	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.1	8.1	14	8.8	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	19	18	14	12	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	6.6	6.6	9.5	5.2	5.9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.7	1.4	3.5	1.2	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	44	43	68	33	22

Analytical Report Number: 25-035957
Project / Site name: Ashington

Lab Sample Number				607030	607031	607032	607033	607034
Sample Reference				WS1	WS2	WS4	WS5	WS8
Sample Number				C1	C1	C1	C1	C1
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.20	0.40	0.30	0.50	0.30
Date Sampled				07/07/2025	07/07/2025	07/07/2025	07/07/2025	07/07/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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

Analytical Report Number: 25-035957
Project / Site name: Ashington

Lab Sample Number				607035	607036
Sample Reference				WS9	WS11
Sample Number				C1	C1
Water Matrix				N/A	N/A
Depth (m)				0.10	0.40
Date Sampled				07/07/2025	07/07/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	13
Total mass of sample received	kg	0.1	NONE	0.9	0.9
Asbestos					
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PKU	PKU
Analysis completed	N/A	N/A	N/A	15/07/2025	15/07/2025
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	ISO 17025	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 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	ISO 17025	< 0.80	< 0.80
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	13
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.1	9.8
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	26
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	5.2	6.3
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.4
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	37	47

Analytical Report Number: 25-035957
Project / Site name: Ashington

Lab Sample Number				607035	607036
Sample Reference				WS9	WS11
Sample Number				C1	C1
Water Matrix				N/A	N/A
Depth (m)				0.10	0.40
Date Sampled				07/07/2025	07/07/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	< 10	< 10
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	< 10
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	< 10	< 10
VOCs					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

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

Analytical Report Number : 25-035957
Project / Site name: Ashington

* 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 *
607030	WS1	C1	0.2	Brown loam
607031	WS2	C1	0.4	Brown loam with vegetation
607032	WS4	C1	0.3	Brown loam and clay with gravel
607033	WS5	C1	0.5	Brown clay and loam with vegetation
607034	WS8	C1	0.3	Brown clay and loam with vegetation
607035	WS9	C1	0.1	Brown loam with vegetation
607036	WS11	C1	0.4	Brown loam with vegetation

Analytical Report Number : 25-035957
Project / Site name: Ashington

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

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

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

AP Geotechnics Ltd
51-53 Guildford Street
Chertsey
KT16 9BA

t: 01932 848460

e: richard.chapman@apgeotechnics.co.uk

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

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

Analytical Report Number : 25-035959

Project / Site name:	Ashington	**Samples received on:**	08/07/2025
Your job number:	5993	**Samples instructed on/ Analysis started on:**	08/07/2025
Your order number:		**Analysis completed by:**	16/07/2025
Report Issue Number:	1	**Report issued on:**	16/07/2025
Samples Analysed:	3 10:1 WAC samples		

Signed:

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

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

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

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

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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

Analytical Report Number: 25-035959
Project / Site name: Ashington

Lab Sample Number				607053	607054	607055
Sample Reference				WS3	WS7	WS12
Sample Number				C1	C1	C1
Water Matrix				N/A	N/A	N/A
Depth (m)				0.50-1.00	1.00-1.50	0.50-1.00
Date Sampled				Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	13	16
Total mass of sample received	kg	0.1	NONE	1.2	1.2	1.2
General Inorganics						
pH (L005B)	pH Units	N/A	MCERTS	7.7	5.7	7.5
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.2	< 0.1	0.2
Loss on Ignition @ 450°C	%	0.2	MCERTS	2.4	2.5	3.3
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	1.2	-12	0.53
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	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 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	ISO 17025	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 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
Coronene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05
Total PAH						
Total WAC-17 PAHs	mg/kg	0.85	NONE	< 0.85	< 0.85	< 0.85
Petroleum Hydrocarbons						
Mineral Oil (EC10 - EC40) EH_CU_1D_AL	mg/kg	10	NONE	< 10	< 10	< 10
VOCs						
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Total BTEX	µg/kg	10	MCERTS	< 10	< 10	< 10

Analytical Report Number: 25-035959
Project / Site name: Ashington

Lab Sample Number				607053	607054	607055
Sample Reference				WS3	WS7	WS12
Sample Number				C1	C1	C1
Water Matrix				N/A	N/A	N/A
Depth (m)				0.50-1.00	1.00-1.50	0.50-1.00
Date Sampled				Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**			
PCBs by GC-MS						
PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
Total PCBs	mg/kg	0.007	MCERTS	< 0.007	< 0.007	< 0.007

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

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

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**25-035959**						
					Client:	**AP Geotechnics Ltd**	
Location	**Ashington**						
Lab Reference (Sample Number)	607053				**Landfill Waste Acceptance Criteria**		
					Limits		
Sampling Date	sampdatenull				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS3 C1						
Depth (m)	0.50-1.00						
Solid Waste Analysis							
TOC (%)**	0.2				3%	5%	6%
Loss on Ignition (%) **	2.4				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	7.7				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	1.2				--	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 *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00121			0.0121	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.00097			0.0097	0.5	10	70
Copper *	0.0047			0.047	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000663			0.00663	0.5	10	30
Nickel *	< 0.00030			< 0.0030	0.4	10	40
Lead *	< 0.0010			< 0.010	0.5	10	50
Antimony *	0.002			0.02	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0028			0.028	4	50	200
Chloride *	1.2			12	800	15000	25000
Fluoride*	0.17			1.7	10	150	500
Sulphate *	2.5			25	1000	20000	50000
TDS*	17			170	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	6.11			61.1	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	86						
Moisture (%)	14						

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.

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

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**25-035959**						
					Client:	**AP Geotechnics Ltd**	
Location	**Ashington**						
Lab Reference (Sample Number)	607054				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	sampdatenull				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS7 C1						
Depth (m)	1.00-1.50						
Solid Waste Analysis							
TOC (%)**	< 0.1				3%	5%	6%
Loss on Ignition (%) **	2.5				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	5.7				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	-12				--	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 *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00621			0.0621	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.0017			0.017	0.5	10	70
Copper *	0.0099			0.099	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000526			0.00526	0.5	10	30
Nickel *	< 0.00030			< 0.0030	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 *	0.0077			0.077	4	50	200
Chloride *	1.4			14	800	15000	25000
Fluoride*	0.3			3	10	150	500
Sulphate *	2			20	1000	20000	50000
TDS*	11			110	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	2.74			27.4	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	87						
Moisture (%)	13						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

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

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**25-035959**						
					Client:	**AP Geotechnics Ltd**	
Location	**Ashington**						
Lab Reference (Sample Number)	607055				**Landfill Waste Acceptance Criteria**		
					Limits		
Sampling Date	sampdatenull				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS12 C1						
Depth (m)	0.50-1.00						
Solid Waste Analysis							
TOC (%)**	0.2				3%	5%	6%
Loss on Ignition (%) **	3.3				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	7.5				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	0.53				--	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 *	< 0.00100			< 0.0100	0.5	2	25
Barium *	0.00682			0.0682	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.0025			0.025	0.5	10	70
Copper *	0.013			0.13	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000609			0.00609	0.5	10	30
Nickel *	< 0.00030			< 0.0030	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 *	0.016			0.16	4	50	200
Chloride *	1			10	800	15000	25000
Fluoride*	0.15			1.5	10	150	500
Sulphate *	0.97			9.7	1000	20000	50000
TDS*	16			160	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	5.03			50.3	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	84						
Moisture (%)	16						

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.

Analytical Report Number : 25-035959
Project / Site name: Ashington

* 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 *
607053	WS3	C1	0.50-1.00	Brown clay and loam with gravel and vegetation
607054	WS7	C1	1.00-1.50	Brown clay and loam
607055	WS12	C1	0.50-1.00	Brown clay and loam

Analytical Report Number : 25-035959
Project / Site name: Ashington

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH at 20°C in soil	Determination of pH in soil by addition of water followed by electrometric measurement	In-house method	L005B	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
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	L031B	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	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR Analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	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	L039B	W	ISO 17025
One stage WAC 10:1 leachate preparation	One stage batch test at a liquid to solid ratio of 10 L/kg	BS EN 12457-2-2002	L043B	W	ISO 17025
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	L046B	W	NONE
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047-PL	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088-PL	D/W	NONE
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

Analytical Report Number : 25-035959
Project / Site name: Ashington

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

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

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

Analytical Report Number : 25-035959
Project / Site name: Ashington

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS12	C1	L	607055	ab	Chloride 10:1 WAC	L082B	a
WS12	C1	L	607055	ab	Dissolved organic carbon 10:1 WAC	L037B	a
WS12	C1	L	607055	ab	Fluoride 10:1 WAC	L033B	a
WS12	C1	L	607055	ab	Metals in leachate by ICP-OES	L039B	a
WS12	C1	L	607055	ab	Monohydric phenols 10:1 WAC	L080-PL	a
WS12	C1	L	607055	ab	One stage WAC 10:1 leachate preparation	L043B	ab
WS12	C1	L	607055	ab	Total dissolved solids 10:1 WAC	L031B	a
WS12	C1	L	607055	ab	WAC Leachate 10:1	L043B	a
WS12	C1	S	607055	ab	Acid neutralisation capacity of soil	L046B	a
WS12	C1	S	607055	ab	BTEX and/or Volatile organic compounds in soil	L073B	a
WS12	C1	S	607055	ab	Loss on ignition of soil @ 450°C	L047-PL	a
WS12	C1	S	607055	ab	Moisture Content	L019B	a
WS12	C1	S	607055	ab	PCB's By GC-MS in soil	L027B	a
WS12	C1	S	607055	ab	Sample preparation	L019B	a
WS12	C1	S	607055	ab	Soil Descriptions	L019B	a
WS12	C1	S	607055	ab	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	a
WS12	C1	S	607055	ab	Stones content of soil	L019B	a
WS12	C1	S	607055	ab	Total organic carbon (Automated) in soil	L009B	a
WS12	C1	S	607055	ab	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088-PL	a
WS12	C1	S	607055	ab	pH at 20°C in soil	L005B	a
WS3	C1	L	607053	ab	Chloride 10:1 WAC	L082B	a
WS3	C1	L	607053	ab	Dissolved organic carbon 10:1 WAC	L037B	a
WS3	C1	L	607053	ab	Fluoride 10:1 WAC	L033B	a
WS3	C1	L	607053	ab	Metals in leachate by ICP-OES	L039B	a
WS3	C1	L	607053	ab	Monohydric phenols 10:1 WAC	L080-PL	a
WS3	C1	L	607053	ab	One stage WAC 10:1 leachate preparation	L043B	ab
WS3	C1	L	607053	ab	Total dissolved solids 10:1 WAC	L031B	a
WS3	C1	L	607053	ab	WAC Leachate 10:1	L043B	a
WS3	C1	S	607053	ab	Acid neutralisation capacity of soil	L046B	a
WS3	C1	S	607053	ab	BTEX and/or Volatile organic compounds in soil	L073B	a
WS3	C1	S	607053	ab	Loss on ignition of soil @ 450°C	L047-PL	a
WS3	C1	S	607053	ab	Moisture Content	L019B	a
WS3	C1	S	607053	ab	PCB's By GC-MS in soil	L027B	a
WS3	C1	S	607053	ab	Sample preparation	L019B	a
WS3	C1	S	607053	ab	Soil Descriptions	L019B	a
WS3	C1	S	607053	ab	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	a
WS3	C1	S	607053	ab	Stones content of soil	L019B	a
WS3	C1	S	607053	ab	Total organic carbon (Automated) in soil	L009B	a
WS3	C1	S	607053	ab	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088-PL	a
WS3	C1	S	607053	ab	pH at 20°C in soil	L005B	a
WS7	C1	L	607054	ab	Chloride 10:1 WAC	L082B	a
WS7	C1	L	607054	ab	Dissolved organic carbon 10:1 WAC	L037B	a
WS7	C1	L	607054	ab	Fluoride 10:1 WAC	L033B	a
WS7	C1	L	607054	ab	Metals in leachate by ICP-OES	L039B	a
WS7	C1	L	607054	ab	Monohydric phenols 10:1 WAC	L080-PL	a
WS7	C1	L	607054	ab	One stage WAC 10:1 leachate preparation	L043B	ab
WS7	C1	L	607054	ab	Total dissolved solids 10:1 WAC	L031B	a
WS7	C1	L	607054	ab	WAC Leachate 10:1	L043B	a
WS7	C1	S	607054	ab	Acid neutralisation capacity of soil	L046B	a
WS7	C1	S	607054	ab	BTEX and/or Volatile organic compounds in soil	L073B	a
WS7	C1	S	607054	ab	Loss on ignition of soil @ 450°C	L047-PL	a
WS7	C1	S	607054	ab	Moisture Content	L019B	a
WS7	C1	S	607054	ab	PCB's By GC-MS in soil	L027B	a
WS7	C1	S	607054	ab	Sample preparation	L019B	a
WS7	C1	S	607054	ab	Soil Descriptions	L019B	a
WS7	C1	S	607054	ab	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	a

Sample Deviation Report

Analytical Report Number : 25-035959
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Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS7	C1	S	607054	ab	Stones content of soil	L019B	a
WS7	C1	S	607054	ab	Total organic carbon (Automated) in soil	L009B	a
WS7	C1	S	607054	ab	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088-PL	a
WS7	C1	S	607054	ab	pH at 20°C in soil	L005B	a