

COVER SYSTEM VALIDATION LETTER ANCOATS GREEN, MANCHESTER

Project Name:	Ancoats Green, Manchester
Project Number:	15-798
Client:	Civic Engineers / Atkins Realis
Validation Date:	6 th August 2025
Project Manager & Qualifications:	N Dawson
E3P Engineer & Qualifications:	Sam Juhasz – Qualified Engineer
Validation Area:	POS Landscaping (multiple locations)

OVERVIEW

An E3P engineer attended the above site to validate the thickness of the cover system placed within the landscaping installed as part of the redevelopment of the site at Ancoats Green, Manchester; herein referred to as the site.

As part of the cover system validation for the POS area, several Tree Root Protection Zones (TRPZs) were confirmed on site where mature trees were to be retained. These zones restricted the ability to excavate and replace existing soils without risking damage to the trees. To assess the suitability of the in-situ soils within these areas, hand excavations were undertaken. Laboratory testing confirmed that the existing soils were suitable for retention across all TRPZs with the exception of POS8, where asbestos was detected at a concentration of less than 0.001 percent. Following consultation with the Environmental Health Officer, it was agreed that a minimum of 100 mm of clean topsoil within TRPZs would be sufficient to mitigate the potential asbestos inhalation pathway. Areas outside TRPZs required a minimum of 300 mm of clean cover, with greater depths applied where dictated by landscaping requirements, for example 1.00 m in tree pits.

The Soft Landscape Proposal Plan (including agreed depths of cover) is included within Figure 1 and attached to this letter.

Twelve excavated trial pits were advanced, with the resulting strata detailed at the rear of this letter.

All trial pits were completed to highlight the required cover system as below:

- ✿ Minimum 300mm (150mm topsoil and 150mm subsoil).
- ✿ 100mm topsoil within tree root protection zones.

E3P can confirm that our independent validation demonstrates that all landscaped areas have been installed in line with the remedial requirements for the site.



TOPSOIL

E3P attended the site on the 12th February. Three samples of imported topsoil were obtained, based upon the appropriate soil sampling frequencies outlined in E3P report: 15-798-R4-3 – Contaminated Land Remediation Strategy, dated January 2025 to confirm the suitability of material for retention.

Chemical testing of topsoil was carried out with all samples tested and compared against POS park general acceptance criteria, confirming suitability for use within the clean cover system.

Topsoil was supplied by Tarmac sourced from Crown Farm Quarry and was tested on-site and confirmed to be suitable prior to placement. Chemical analysis results are included as an attachment along with testing results provided by the supplier prior to importation.

Imported materials were obtained from a certified manufacturer and supplied as a commercially available product. Topsoil was tested at 1 per 200m³ as per the Remediation Strategy with a total of 3 samples (800m³).

Analysis for topsoil undertaken by Eurofins ChemTest using UKAS accredited methods where applicable. The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos.

Chemical analysis confirmed that the topsoil deposits were chemically suitable for use within the proposed soft landscaping.

SUBSOIL

E3P attended the site on the 12th February Three samples of imported subsoil were obtained, based upon the appropriate soil sampling frequencies outlined in E3P report: 15-798-R4-3 – Contaminated Land Remediation Strategy, dated January 2025 to confirm the suitability of material for retention.

Chemical testing of subsoil was carried out with all samples tested and compared against POS park general acceptance criteria, confirming suitability for use within the clean cover system.

Subsoil was supplied by Tarmac sourced from Crown Farm Quarry and was tested on-site and confirmed to be suitable prior to placement. Chemical analysis results are included as an attachment along with testing results provided by the supplier prior to importation.

Imported materials were obtained from a certified manufacturer and supplied as a commercially available product. Subsoil was tested at 1 per 200m³ as per the Remediation Strategy with a total of 3 samples (800m³).

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Chemical analysis confirmed that the subsoil deposits were chemically suitable for use within the proposed soft landscaping.



CHEMICAL ANALYSIS

TOPSOIL/ SUBSOIL	DATE	SOURCE	LAB REFERENCE	SAMPLE REFERENCE	PASS/FAIL
Topsoil	June 2024	Site Won	24-19169-1	HPTS101 - HPTS105	Pass
	July 2024	Site Won	24-24349-1	POS1TS-POS8TS	Pass (Except POS8)
	Feb 2025	Imported	25-05089-1	TS101 – TS103	Pass
Subsoil	July 2024	Site Won	24-24349-1	POS1SS – POS8SS	Pass (Except POS8)
	Feb 2025	Imported	02-05089-1	SS101 – SS103	Pass

Laboratory analysis certificates are attached to this validation certificate.

SAMPLE LOCATIONS

E3P have included a sample location plan including the initial hand pit locations for sampling in-situ material (POS1-8 and HP101-105) and subsequent depth validation hand pits to confirm the suitable depth of installed clean cover (HP201-212).

The location plan is included in Figure 1 below and appended to this letter.

Figure 1 Sampling Location Plan





POS (public open space) Cover System Validation

Complete

Score	72 / 72 (100%)	Flagged items	0	Actions	0
Site Name	Jersey street, Ancoats				
Location	208 Oldham Road Manchester England M4 6BQ United Kingdom (53.48762719793641, - 2.224382692018648)				
Project Number	15798				
Developer	Civic Engineers Limited				
Project Manager	Nicola Dawson				
Conducted By	Sam Juhasz				
Date of visit	6 Aug 2025 10:21 AM BST				

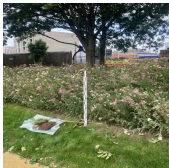


Plot Validation 1		6 / 6 (100%)
What Three Words location		HP207 - ///feed.moment.club
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100mm
 Photo 1		
Depth of Topsoil (mm)		100mm
Depth of Subsoil (mm)		0
Depth of Cover System at Ground Level (Photo)		☒
 Photo 2		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 3		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 2		6 / 6 (100%)
What Three Words location		HP206 - ///again.snake.silver
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100
 Photo 4		
Depth of Topsoil (mm)		100
Depth of Subsoil (mm)		0
Depth of Cover System at Ground Level (Photo)		☒
 Photo 5		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 6		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 3		6 / 6 (100%)
What Three Words location		HP205 - ///soft.tend.glad
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100
 Photo 7		
Depth of Topsoil (mm)		100
Depth of Subsoil (mm)		0
Depth of Cover System at Ground Level (Photo)		☒
 Photo 8		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 9		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 4		6 / 6 (100%)
What Three Words location		HP204 - ///clash.fault.nobody
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100
 Photo 10		
Depth of Topsoil (mm)		100
Depth of Subsoil (mm)		0
Depth of Cover System at Ground Level (Photo)		☒
 Photo 11		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 12		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 5		6 / 6 (100%)
What Three Words location		HP203 - ///square.exist.weedy
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100
 Photo 13		
Depth of Topsoil (mm)		100
Depth of Subsoil (mm)		0
Depth of Cover System at Ground Level (Photo)		☒
 Photo 14		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 15		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 6		6 / 6 (100%)
What Three Words location		HP202 - ///double.films.grow
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100
 Photo 16		
Depth of Topsoil (mm)		100
Depth of Subsoil (mm)		0
Depth of Cover System at Ground Level (Photo)		☒
 Photo 17		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 18		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 7		6 / 6 (100%)
What Three Words location		HP201 - ///guard.prefer.decks
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100
 Photo 19		
Depth of Topsoil (mm)		50
Depth of Subsoil (mm)		50
Depth of Cover System at Ground Level (Photo)		☒
 Photo 20		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 21		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 8		6 / 6 (100%)
What Three Words location		HP212 - ///rounds.dull.panels
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100
 Photo 22		
Depth of Topsoil (mm)		100
Depth of Subsoil (mm)		0
Depth of Cover System at Ground Level (Photo)		☒
 Photo 23		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 24		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A

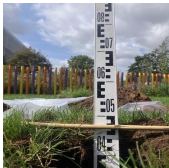


Plot Validation 9		6 / 6 (100%)
What Three Words location		HP211 - ///extend.crass.either
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		100
 Photo 25		
Depth of Topsoil (mm)		100
Depth of Subsoil (mm)		0
Depth of Cover System at Ground Level (Photo)		☒
 Photo 26		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 27		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 10		6 / 6 (100%)
What Three Words location		HP210 - ///firmly.paused.kinds
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		450
 Photo 28		
Depth of Topsoil (mm)		300
Depth of Subsoil (mm)		150
Depth of Cover System at Ground Level (Photo)		☒
 Photo 29		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 30		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A



Plot Validation 11		6 / 6 (100%)
What Three Words location		HP209 - ///formal.spun.less
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		450
 Photo 31		
Depth of Topsoil (mm)		150
Depth of Subsoil (mm)		300
Depth of Cover System at Ground Level (Photo)		☒
 Photo 32		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 33		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present	N/A	



Plot Validation 12		6 / 6 (100%)
What Three Words location		HP208 - ///bottom.exile.listed
Is Location Ready	Yes	
Installation Standard	Pass	
Depth of Cover System Materials (record the depth and support with Photo down the hole)		450
 Photo 34		
Depth of Topsoil (mm)		200
Depth of Subsoil (mm)		250
Depth of Cover System at Ground Level (Photo)		☒
 Photo 35		
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)		☒
 Photo 36		
Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM and take photos.		Yes
Geotextile membrane present		N/A

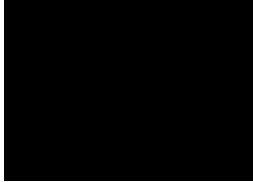


Site Manager or Representative

Name

Sam Juhasz

Signature



6 Aug 2025 11:45 AM BST



Media Summary



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20



Photo 21



Photo 22



Photo 23



Photo 24



Photo 25



Photo 26



Photo 27



Photo 28



Photo 29



Photo 30



Photo 31



Photo 32



Photo 33



Photo 34



Photo 35



Photo 36



Cover Systems		Location Symbols	
	Hardstanding		Approximate Handpit Location
	450mm Cover System		Approximate Hand Dug Pit Location (E3P June 2024)
	(Reduced Level) Minimum of 100mm Topsoil		Approximate Hand Dug Pit Location (E3P August 2025)
	(Reduced Level) Minimum of 100mm Topsoil		

Notes:

Client:

Job No:

Date:

Civic Engineers

15-798

12.08.2025

Drawing No:

Scale:

031

NTS



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E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

P1	REVA	12.08.2025	TG	ND	ND
Phase	Issue	Date	Drawn	Checked	PM

Job Title:

Jersey Street,
Ancoats

Drawing Title:

Sampling Location Plan

The client must not amend any drawing, design or other intellectual property produced by E3P Ltd without permission in writing from E3P Ltd in advance of any amendments being made. In the event that such written permission is not obtained in advance of the amendments being made, E3P Ltd shall not be liable for any damage and/or losses occurring as a result of the amended drawing, design or intellectual property.



Final Report

Report No.: 24-19169-1

Initial Date of Issue: 26-Jun-2024

Re-Issue Details:

Client E3P

Client Address: Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contact(s): ndawson@e3p.co.uk

Project Ancoats Green

Quotation No.: **Date Received:** 17-Jun-2024

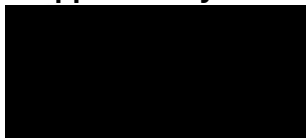
Order No.: 008535 **Date Instructed:** 17-Jun-2024

No. of Samples: 13

Turnaround (Wkdays): 4 **Results Due:** 20-Jun-2024

Date Approved: 26-Jun-2024

Approved By:



Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Ancoats Green

Client: E3P		Chemtest Job No.: 24-19169 24-19169 24-19169 24-19169 24-19169 24-19169 24-19169 24-19169 24-19169												
Quotation No.:		Chemtest Sample ID.: 1822276 1822277 1822278 1822279 1822280 1822281 1822282 1822283												
		Client Sample ID.: HPTS101 HPTS102 HPTS103 HPTS104 HPTS105 HPSS101 HPSS102 HPSS103												
		Sample Type: SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL												
		Date Sampled: 14-Jun-2024 14-Jun-2024 14-Jun-2024 14-Jun-2024 14-Jun-2024 14-Jun-2024 14-Jun-2024 14-Jun-2024 14-Jun-2024												
		Time Sampled: 12:00 12:00 12:00 12:00 12:00 12:00 12:00 12:00 12:00												
		Asbestos Lab: NEW-ASB NEW-ASB NEW-ASB NEW-ASB NEW-ASB NEW-ASB NEW-ASB NEW-ASB NEW-ASB												
Determinand	HWOL Code	Accred.	SOP	Units	LOD									
ACM Type		U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	31	27	33	31	16	14	15	19	
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A	Clay	Loam	Clay	Clay	Loam	Loam	Loam	Loam	Loam
pH at 20C		M	2010		4.0	7.4	8.0	7.1	7.1	7.4	7.8	8.0	7.5	
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.039	< 0.010	< 0.010	< 0.010	
Total Sulphur		U	2175	%	0.010	0.081	0.051	0.058	0.047	0.046	0.14	0.060	0.035	
Cyanide (Total)		M	2300	mg/kg	0.50	1.9	1.5	1.6	1.7	1.3	1.2	1.0	0.50	
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	0.72	5.4	3.2	3.4	4.9	2.9	3.1	5.3	
Sulphate (Total)		U	2430	%	0.010	0.19	0.16	0.18	0.13	0.12	0.15	0.14	0.052	
Arsenic		M	2455	mg/kg	0.5	19	20	26	11	14	27	32	15	
Cadmium		M	2455	mg/kg	0.10	0.60	0.37	0.52	0.24	0.68	1.2	0.65	0.23	
Chromium		M	2455	mg/kg	0.5	35	20	38	42	19	41	28	29	
Copper		M	2455	mg/kg	0.50	88	46	76	35	63	140	96	44	
Mercury		M	2455	mg/kg	0.05	0.37	0.30	0.34	0.15	0.33	0.47	0.53	0.15	
Nickel		M	2455	mg/kg	0.50	25	17	29	15	20	34	29	27	
Lead		M	2455	mg/kg	0.50	280	140	240	120	150	380	460	80	
Selenium		M	2455	mg/kg	0.25	0.83	0.64	1.1	0.62	0.74	1.2	0.94	1.0	
Zinc		M	2455	mg/kg	0.50	220	130	190	96	190	400	230	110	
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
Organic Matter		M	2625	%	0.40	11	9.8	10	8.0	7.6	8.4	7.2	2.9	
Total Organic Carbon		M	2625	%	0.20	6.5	5.7	5.9	4.6	4.4	4.9	4.2	1.7	
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	7.6	< 1.0	< 1.0	< 1.0	
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	66	22	16	< 1.0	
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	26	23	17	11	250	93	45	16	
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	19	15	11	9.3	160	100	75	17	
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	56	150	44	36	260	150	120	38	
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	5.5	11	< 1.0	4.2	29	19	19	< 1.0	
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	110	200	72	60	780	380	270	71	
Naphthalene		M	2800	mg/kg	0.10	0.77	0.21	0.10	0.24	< 0.10	0.38	0.33	0.11	
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	0.13	< 0.10	0.10	< 0.10	0.22	< 0.10	< 0.10	
Acenaphthene		M	2800	mg/kg	0.10	1.1	0.42	< 0.10	0.26	< 0.10	0.68	< 0.10	< 0.10	
Fluorene		M	2800	mg/kg	0.10	0.79	0.30	< 0.10	0.13	< 0.10	0.42	< 0.10	< 0.10	

Results - Soil

Project: Ancoats Green

Client: E3P		Chemtest Job No.:				24-19169	24-19169	24-19169	24-19169	24-19169	24-19169	24-19169	24-19169
Quotation No.:		Chemtest Sample ID.:				1822276	1822277	1822278	1822279	1822280	1822281	1822282	1822283
		Client Sample ID.:				HPTS101	HPTS102	HPTS103	HPTS104	HPTS105	HPSS101	HPSS102	HPSS103
		Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Date Sampled:				14-Jun-2024	14-Jun-2024	14-Jun-2024	14-Jun-2024	14-Jun-2024	14-Jun-2024	14-Jun-2024	14-Jun-2024
		Time Sampled:				12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
		Asbestos Lab:				NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	HWOL Code	Accred.	SOP	Units	LOD								
Phenanthrene		M	2800	mg/kg	0.10	5.7	8.2	0.82	2.0	1.0	5.8	1.5	0.89
Anthracene		M	2800	mg/kg	0.10	1.6	1.2	0.15	0.37	0.21	1.4	0.36	0.21
Fluoranthene		M	2800	mg/kg	0.10	7.5	11	1.5	3.6	1.7	11	2.8	1.2
Pyrene		M	2800	mg/kg	0.10	6.7	10	1.5	3.2	1.5	10	2.5	0.99
Benzo[a]anthracene		M	2800	mg/kg	0.10	2.6	4.1	0.63	1.4	0.70	4.4	1.2	0.33
Chrysene		M	2800	mg/kg	0.10	3.1	5.0	0.62	1.4	0.67	5.1	1.2	0.34
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	3.2	5.3	0.97	2.2	0.95	6.2	1.7	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	1.2	1.9	0.35	0.72	0.35	2.1	0.56	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	2.4	4.0	0.67	1.6	0.74	4.8	1.3	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	1.4	2.5	0.51	1.1	0.51	3.3	0.88	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.31	0.54	< 0.10	0.30	< 0.10	0.66	0.21	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	1.5	2.6	0.54	1.3	0.51	3.6	0.95	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	40	57	8.4	20	8.8	60	16	4.1
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.33	< 0.10

Results - Soil

Project: Ancoats Green

Client: E3P		Chemtest Job No.: 24-19169 24-19169 24-19169 24-19169 24-19169								
Quotation No.:		Chemtest Sample ID.: 1822284 1822285 1822286 1822287 1822288								
		Client Sample ID.: HPSS104 HPSS105 TS106 TS107 TS108								
		Sample Type: SOIL SOIL SOIL SOIL SOIL								
		Date Sampled: 14-Jun-2024 14-Jun-2024 14-Jun-2024 14-Jun-2024 14-Jun-2024								
		Time Sampled: 12:00 12:00 12:00 12:00 12:00								
		Asbestos Lab: NEW-ASB NEW-ASB NEW-ASB NEW-ASB NEW-ASB								
Determinand	HWOL Code	Accred.	SOP	Units	LOD					
ACM Type		U	2192		N/A	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	19	12	31	19	24
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones, Roots and Glass	Stones and Roots
Soil Texture		N	2040		N/A	Clay	Clay	Clay	Clay	Clay
pH at 20C		M	2010		4.0	7.2	8.7	7.2	7.5	7.7
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010	0.047	0.038	0.15	0.043
Total Sulphur		U	2175	%	0.010	0.041	0.039	0.068	0.099	0.061
Cyanide (Total)		M	2300	mg/kg	0.50	0.60	< 0.50	1.4	1.4	0.90
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	3.2	19	3.5	5.6	3.4
Sulphate (Total)		U	2430	%	0.010	0.12	< 0.010	0.16	0.17	0.14
Arsenic		M	2455	mg/kg	0.5	20	74	22	18	13
Cadmium		M	2455	mg/kg	0.10	0.32	1.6	0.38	0.62	0.41
Chromium		M	2455	mg/kg	0.5	43	59	21	27	23
Copper		M	2455	mg/kg	0.50	53	270	70	83	59
Mercury		M	2455	mg/kg	0.05	0.21	1.2	0.37	0.64	0.36
Nickel		M	2455	mg/kg	0.50	25	68	22	23	18
Lead		M	2455	mg/kg	0.50	150	730	170	240	160
Selenium		M	2455	mg/kg	0.25	1.0	2.2	0.73	0.75	0.43
Zinc		M	2455	mg/kg	0.50	130	450	130	210	160
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	4.2	5.2	6.1	11	7.1
Total Organic Carbon		M	2625	%	0.20	2.4	3.0	3.5	6.4	4.1
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	5.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	31	3.2	7.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	6.7	130	56	48	22
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	5.6	120	38	27	18
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	19	170	66	95	77
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	36	< 1.0	11	14
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	31	500	160	190	130
Naphthalene		M	2800	mg/kg	0.10	< 0.10	0.21	0.12	0.79	0.19
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	0.15	0.48	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	0.44	0.16	1.4	0.18
Fluorene		M	2800	mg/kg	0.10	< 0.10	0.41	0.17	1.1	0.11

Results - Soil

Project: Ancoats Green

Client: E3P		Chemtest Job No.:		24-19169	24-19169	24-19169	24-19169	24-19169	24-19169
Quotation No.:		Chemtest Sample ID.:		1822284	1822285	1822286	1822287	1822288	
		Client Sample ID.:		HPSS104	HPSS105	TS106	TS107	TS108	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	
		Date Sampled:		14-Jun-2024	14-Jun-2024	14-Jun-2024	14-Jun-2024	14-Jun-2024	
		Time Sampled:		12:00	12:00	12:00	12:00	12:00	
		Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	
Determinand	HWOL Code	Accred.	SOP	Units	LOD				
Phenanthrene		M	2800	mg/kg	0.10	0.59	3.3	1.4	13
Anthracene		M	2800	mg/kg	0.10	0.15	0.84	0.29	2.4
Fluoranthene		M	2800	mg/kg	0.10	1.5	3.8	2.0	17
Pyrene		M	2800	mg/kg	0.10	1.4	3.6	1.8	15
Benzo[a]anthracene		M	2800	mg/kg	0.10	0.61	1.3	0.73	6.2
Chrysene		M	2800	mg/kg	0.10	0.61	1.4	0.99	7.3
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	0.85	1.6	0.98	7.9
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.27	0.61	0.40	2.9
Benzo[a]pyrene		M	2800	mg/kg	0.10	0.55	1.2	0.71	6.3
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	0.33	0.75	0.64	3.8
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	0.15	0.41	0.86
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	0.39	0.89	0.67	4.0
Total Of 16 PAH's		N	2800	mg/kg	2.0	7.3	21	12	90
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.61

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com



Final Report

Report No.: 24-24349-1

Initial Date of Issue: 12-Aug-2024

Re-Issue Details:

Client E3P

Client Address: Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contact(s): ndawson@e3p.co.uk

Project Ancoats Green - POS Handpits

Quotation No.: **Date Received:** 31-Jul-2024

Order No.: 009001 **Date Instructed:** 31-Jul-2024

No. of Samples: 22

Turnaround (Wkdays): 5 **Results Due:** 06-Aug-2024

Date Approved: 12-Aug-2024

Approved By:

Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Ancoats Green - POS Handpits

Client: E3P		Chemtest Job No.:						24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349
Quotation No.:		Chemtest Sample ID.:						1843626	1843627	1843628	1843629	1843630	1843631	1843632
		Client Sample ID.:						POS1-TS	POS1-SS	POS2-TS	POS2-SS	POS3-TS	POS3-SS	POS4-TS
		Sample Type:						SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):						0.1	0.4	0.1	0.4	0.1	0.4	0.1
		Date Sampled:						29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024
		Time Sampled:						12:00	12:00	12:00	12:00	12:00	12:00	12:00
		Asbestos Lab:						DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	HWOL Code	Accred.	SOP	Units	LOD									
ACM Type		U	2192		N/A	-	-	-	-	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Asbestos by Gravimetry		U	2192	%	0.001									
Total Asbestos		U	2192	%	0.001									
Moisture		N	2030	%	0.020	12	11	12	68	11	6.8	13	9.6	
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	None	Stones and Roots	5% Stones	Stones	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
pH at 20C		M	2010		4.0	7.7	7.7	7.5	7.2	7.4	7.9	7.4	8.1	
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.011	< 0.010	0.017	0.038	
Total Sulphur		U	2175	%	0.010	0.075	0.051	0.045	0.050	0.057	0.089	0.064	0.030	
Cyanide (Total)		M	2300	mg/kg	0.50	1.3	< 0.50	1.3	1.4	1.5	< 0.50	1.4	< 0.50	
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	3.3	4.0	2.5	8.4	3.1	7.6	2.8	4.1	
Sulphate (Total)		U	2430	%	0.010	0.082	0.13	0.094	0.11	0.11	0.12	0.15	0.11	
Arsenic		M	2455	mg/kg	0.5	11	13	13	14	17	35	12	16	
Cadmium		M	2455	mg/kg	0.10	0.15	0.19	0.15	0.18	0.19	0.46	0.26	0.19	
Chromium		M	2455	mg/kg	0.5	12	19	15	17	15	16	17	23	
Copper		M	2455	mg/kg	0.50	33	41	48	54	77	110	75	210	
Mercury		M	2455	mg/kg	0.05	0.11	0.20	0.19	0.47	0.15	0.27	0.20	0.18	
Nickel		M	2455	mg/kg	0.50	13	21	15	20	16	24	18	30	
Lead		M	2455	mg/kg	0.50	110	150	150	220	130	230	130	130	
Selenium		M	2455	mg/kg	0.25	0.34	0.36	0.29	0.35	0.33	0.42	0.36	0.51	
Zinc		M	2455	mg/kg	0.50	68	90	100	130	210	200	130	150	
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
Organic Matter		M	2625	%	0.40	7.2	4.6	5.3	4.8	8.7	6.0	6.2	6.9	
Total Organic Carbon		M	2625	%	0.20	4.2	2.7	3.1	2.8	5.1	3.5	3.6	4.0	
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.1	< 1.0	7.4	
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	27	< 1.0	23	11	29	
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	11	8.9	18	69	< 1.0	59	20	120	
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	12	15	14	43	< 1.0	100	16	120	
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	51	34	42	140	< 1.0	110	59	110	
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	2.5	4.0	5.1	20	< 1.0	15	7.0	19	
Total TPH >C6-C40	EH_1D_Total	N	2670	mg/kg	10	76	62	79	300	< 10	320	110	420	
Naphthalene		M	2800	mg/kg	0.10	1.6	0.34	0.71	0.51	0.20	0.47	< 0.10	0.32	

Results - Soil

Project: Ancoats Green - POS Handpits

Client: E3P		Chemtest Job No.:	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349
Quotation No.:		Chemtest Sample ID.:	1843626	1843627	1843628	1843629	1843630	1843631	1843632	1843633			
		Client Sample ID.:	POS1-TS	POS1-SS	POS2-TS	POS2-SS	POS3-TS	POS3-SS	POS4-TS	POS4-SS			
		Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
		Top Depth (m):	0.1	0.4	0.1	0.4	0.1	0.4	0.1	0.4			
		Date Sampled:	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024			
		Time Sampled:	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00			
		Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM			
Determinand	HWOL Code	Accred.	SOP	Units	LOD								
Acenaphthylene		N	2800	mg/kg	0.10	0.43	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	0.49	0.84	1.2	0.77	0.20	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	0.65	0.54	0.86	0.55	0.12	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	5.3	4.9	5.4	3.9	1.2	5.2	0.74	5.6
Anthracene		M	2800	mg/kg	0.10	1.3	1.3	1.3	1.0	0.27	1.4	0.18	1.3
Fluoranthene		M	2800	mg/kg	0.10	7.3	7.8	6.0	4.9	1.9	9.4	1.5	8.4
Pyrene		M	2800	mg/kg	0.10	6.9	6.6	5.2	4.4	1.8	7.9	1.3	7.0
Benzo[a]anthracene		M	2800	mg/kg	0.10	3.0	3.5	2.6	2.2	0.99	4.3	0.74	3.2
Chrysene		M	2800	mg/kg	0.10	3.1	3.1	2.0	2.1	0.99	4.8	0.84	3.5
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	3.9	4.7	3.5	2.9	1.5	5.9	1.2	4.2
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	1.4	1.5	1.0	0.94	0.44	2.1	0.38	1.5
Benzo[a]pyrene		M	2800	mg/kg	0.10	3.3	3.8	2.9	2.4	1.1	4.3	0.85	3.4
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	2.7	2.9	2.0	1.8	0.83	2.5	0.66	2.1
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.37	0.46	0.43	0.28	< 0.10	0.63	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	2.6	2.2	1.6	1.4	0.70	2.2	0.55	2.0
Total Of 16 PAH's		N	2800	mg/kg	2.0	44	45	37	30	12	51	8.9	43
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	13	< 0.10	< 0.10	6.5	< 0.10

Results - Soil

Project: Ancoats Green - POS Handpits

Client: E3P		Chemtest Job No.: 24-24349										
Quotation No.:		Chemtest Sample ID.: 1843634										
		Client Sample ID.: POS5-TS										
		Sample Type: SOIL										
		Top Depth (m): 0.1										
		Date Sampled: 29-Jul-2024										
		Time Sampled: 12:00										
		Asbestos Lab: DURHAM										
Determinand	HWOL Code	Accred.	SOP	Units	LOD							
ACM Type		U	2192		N/A	-	-	-	-	-	-	Fibres/Clumps
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	Amosite
Asbestos by Gravimetry		U	2192	%	0.001							<0.001
Total Asbestos		U	2192	%	0.001							<0.001
Moisture		N	2030	%	0.020	13	12	11	7.3	11	6.8	18
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	None	Stones and Roots	Stones and Roots	Stones and Roots	Roots and Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand
pH at 20C		M	2010		4.0	7.3	7.8	7.4	7.9	7.5	8.0	7.6
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010	0.038	0.13	< 0.010	0.010	< 0.010	0.040
Total Sulphur		U	2175	%	0.010	0.053	0.050	0.041	0.049	0.058	0.089	0.14
Cyanide (Total)		M	2300	mg/kg	0.50	1.7	0.80	1.1	1.4	3.3	0.70	5.0
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	7.6	3.9	3.1	14	2.8	3.2	6.2
Sulphate (Total)		U	2430	%	0.010	0.13	0.12	0.073	0.087	0.10	0.067	0.091
Arsenic		M	2455	mg/kg	0.5	11	13	6.4	8.1	9.3	9.0	20
Cadmium		M	2455	mg/kg	0.10	0.35	0.47	< 0.10	0.12	0.40	0.22	0.22
Chromium		M	2455	mg/kg	0.5	18	26	6.2	10	15	15	9.8
Copper		M	2455	mg/kg	0.50	45	56	32	32	43	36	47
Mercury		M	2455	mg/kg	0.05	0.32	0.44	0.27	0.80	0.24	0.17	0.16
Nickel		M	2455	mg/kg	0.50	14	19	7.4	12	11	18	13
Lead		M	2455	mg/kg	0.50	130	160	58	110	540	110	160
Selenium		M	2455	mg/kg	0.25	< 0.25	0.39	< 0.25	< 0.25	< 0.25	0.32	0.43
Zinc		M	2455	mg/kg	0.50	110	140	53	77	110	86	90
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	8.4	7.1	5.2	7.4	8.8	6.2	16
Total Organic Carbon		M	2625	%	0.20	4.9	4.1	3.0	4.3	5.1	3.6	9.4
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	5.0	4.6	< 1.0	13	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	25	19	25	84	16
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	24	18	130	94	49	320	38
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	12	21	160	120	36	200	29
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	89	70	200	140	98	290	75
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	13	7.3	31	27	17	60	9.7
Total TPH >C6-C40	EH_1D_Total	N	2670	mg/kg	10	140	120	550	400	230	970	170
Naphthalene		M	2800	mg/kg	0.10	0.61	0.30	0.36	0.39	0.58	0.63	0.81

Results - Soil

Project: Ancoats Green - POS Handpits

Client: E3P		Chemtest Job No.:				24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349
Quotation No.:		Chemtest Sample ID.:				1843634	1843635	1843636	1843637	1843638	1843639	1843640
		Client Sample ID.:				POS5-TS	POS5-SS	POS6-TS	POS6-SS	POS7-TS	POS7-SS	POS8-TS
		Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):				0.1	0.4	0.1	0.4	0.1	0.4	0.1
		Date Sampled:				29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024
		Time Sampled:				12:00	12:00	12:00	12:00	12:00	12:00	12:00
		Asbestos Lab:				DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	HWOL Code	Accred.	SOP	Units	LOD							
Acenaphthylene		N	2800	mg/kg	0.10	0.16	< 0.10	0.14	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	0.69	< 0.10	0.82	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	0.58	< 0.10	0.57	0.65	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	5.1	1.8	6.3	9.1	6.8	8.5	3.4
Anthracene		M	2800	mg/kg	0.10	1.1	0.40	1.5	2.0	1.5	1.9	0.72
Fluoranthene		M	2800	mg/kg	0.10	6.8	3.1	11	16	8.9	11	5.0
Pyrene		M	2800	mg/kg	0.10	6.2	2.9	10	14	7.6	9.1	4.4
Benzo[a]anthracene		M	2800	mg/kg	0.10	3.0	1.3	4.9	6.5	3.4	3.9	2.1
Chrysene		M	2800	mg/kg	0.10	3.0	1.6	4.6	7.5	4.1	4.7	2.5
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	4.0	2.1	6.4	8.6	4.5	5.6	3.0
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	1.3	0.63	2.1	3.3	1.5	1.9	1.1
Benzo[a]pyrene		M	2800	mg/kg	0.10	3.3	1.7	5.5	7.3	3.3	4.7	2.4
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	2.2	1.1	3.8	4.5	2.1	3.1	1.5
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.51	< 0.10	0.71	0.87	< 0.10	0.53	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	1.9	1.1	3.2	4.2	2.3	2.9	1.5
Total Of 16 PAH's		N	2800	mg/kg	2.0	41	18	62	85	47	59	28
Total Phenols		M	2920	mg/kg	0.10	< 0.10	0.19	< 0.10	< 0.10	0.56	< 0.10	0.17

Results - Soil

Project: Ancoats Green - POS Handpits

Client: E3P		Chemtest Job No.:						24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349
Quotation No.:		Chemtest Sample ID.:						1843641	1843642	1843643	1843644	1843645	1843646	1843647
		Client Sample ID.:						POS8-SS	SP101	SP102	SP103	SP104	SP105	SP106
		Sample Type:						SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):						0.4						
		Date Sampled:						29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024
		Time Sampled:						12:00	12:00	12:00	12:00	12:00	12:00	12:00
		Asbestos Lab:						DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	HWOL Code	Accred.	SOP	Units	LOD									
ACM Type		U	2192		N/A	Fibres/Clumps	-	-	-	-	-	-	-	-
Asbestos Identification		U	2192		N/A	Chrysotile	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Asbestos by Gravimetry		U	2192	%	0.001	<0.001								
Total Asbestos		U	2192	%	0.001	<0.001								
Moisture		N	2030	%	0.020	14	15	20	17	12	16	22		
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Roots and Stones	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
pH at 20C		M	2010		4.0	7.4	7.9	8.0	7.9	7.9	8.0	7.9		
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.022	0.041	0.078	0.045	0.089	0.041	0.016		
Total Sulphur		U	2175	%	0.010	0.21	0.27	0.24	0.066	0.068	0.070	0.073		
Cyanide (Total)		M	2300	mg/kg	0.50	5.0	0.90	0.50	0.70	1.2	< 0.50	1.3		
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	11	6.1	5.8	9.9	2.6	1.6	8.2		
Sulphate (Total)		U	2430	%	0.010	0.19	0.079	0.19	0.10	0.14	0.099	0.11		
Arsenic		M	2455	mg/kg	0.5	86	13	52	9.2	18	12	15		
Cadmium		M	2455	mg/kg	0.10	1.4	0.29	0.76	0.31	0.99	0.34	0.26		
Chromium		M	2455	mg/kg	0.5	29	12	24	11	19	12	16		
Copper		M	2455	mg/kg	0.50	220	43	120	52	63	41	51		
Mercury		M	2455	mg/kg	0.05	0.57	0.23	1.0	0.26	0.56	0.21	0.21		
Nickel		M	2455	mg/kg	0.50	44	10	30	13	17	11	13		
Lead		M	2455	mg/kg	0.50	640	210	390	140	180	120	140		
Selenium		M	2455	mg/kg	0.25	2.6	< 0.25	1.5	< 0.25	1.6	0.56	0.31		
Zinc		M	2455	mg/kg	0.50	440	95	290	130	130	89	110		
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		
Organic Matter		M	2625	%	0.40	22	14	10	6.6	9.1	7.2	7.1		
Total Organic Carbon		M	2625	%	0.20	13	7.9	5.8	3.8	5.3	4.2	4.1		
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	130	< 1.0	< 1.0	< 1.0		
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	7.9	< 1.0	< 1.0	180	6.1	5.1	6.2		
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	26	18	< 1.0	450	57	25	21		
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	64	29	< 1.0	130	620	61	90		
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	43	18	< 1.0	380	570	34	130		
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	81	39	< 1.0	230	970	78	140		
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	15	5.8	< 1.0	57	210	10	23		
Total TPH >C6-C40	EH_1D_Total	N	2670	mg/kg	10	240	110	< 10	1600	2400	210	410		
Naphthalene		M	2800	mg/kg	0.10	1.3	0.68	0.23	0.29	0.50	0.36	0.34		

Results - Soil

Project: Ancoats Green - POS Handpits

Client: E3P		Chemtest Job No.:		24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349	24-24349
Quotation No.:		Chemtest Sample ID.:		1843641	1843642	1843643	1843644	1843645	1843646	1843647	
		Client Sample ID.:		POS8-SS	SP101	SP102	SP103	SP104	SP105	SP106	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Top Depth (m):		0.4							
		Date Sampled:		29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	29-Jul-2024	
		Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00	12:00	
		Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	
Determinand	HWOL Code	Accred.	SOP	Units	LOD						
Acenaphthylene		N	2800	mg/kg	0.10	0.52	0.18	0.11	< 0.10	0.12	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	0.83	< 0.10	0.26	< 0.10	< 0.10	0.43
Fluorene		M	2800	mg/kg	0.10	0.66	< 0.10	0.26	< 0.10	< 0.10	0.37
Phenanthrene		M	2800	mg/kg	0.10	6.8	5.8	2.3	6.1	6.0	2.7
Anthracene		M	2800	mg/kg	0.10	1.7	1.2	0.66	1.4	1.4	0.59
Fluoranthene		M	2800	mg/kg	0.10	11	7.2	5.2	9.4	9.7	4.3
Pyrene		M	2800	mg/kg	0.10	10	6.3	4.7	8.1	8.9	4.1
Benzo[a]anthracene		M	2800	mg/kg	0.10	5.2	2.8	2.6	3.5	4.3	1.9
Chrysene		M	2800	mg/kg	0.10	5.6	3.1	2.4	4.1	4.8	2.3
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	7.1	3.5	3.7	4.7	6.0	2.6
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	2.4	1.1	1.2	1.7	2.1	0.91
Benzo[a]pyrene		M	2800	mg/kg	0.10	5.7	2.5	3.1	3.9	5.1	2.2
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	4.4	1.6	2.3	2.5	2.9	1.4
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.82	< 0.10	0.42	0.50	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	3.7	1.6	1.9	2.5	2.8	1.3
Total Of 16 PAH's		N	2800	mg/kg	2.0	68	38	31	49	55	25
Total Phenols		M	2920	mg/kg	0.10	< 0.10	0.14	0.73	0.39	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com



Final Report

Report No.: 25-05089-1

Initial Date of Issue: 03-Mar-2025

Re-Issue Details:

Client E3P

Client Address: Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contact(s): ndawson@e3p.co.uk

Project Ancoats Green Import SS and TS

Quotation No.: Q23-31421

Date Received: 13-Feb-2025

Order No.: 010676

Date Instructed: 13-Feb-2025

No. of Samples: 6

Turnaround (Wkdays): 13

Results Due: 03-Mar-2025

Date Approved: 21-Feb-2025

Approved By:



Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Ancoats Green Import SS and TS

Client: E3P		Chemtest Job No.:		25-05089	25-05089	25-05089	25-05089	25-05089	25-05089	25-05089
Quotation No.: Q23-31421		Chemtest Sample ID.:		1932392	1932393	1932394	1932395	1932396	1932397	
		Client Sample ID.:		TS101	TS102	TS103	SS101	SS102	SS103	
		Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		Date Sampled:		12-Feb-2025	12-Feb-2025	12-Feb-2025	12-Feb-2025	12-Feb-2025	12-Feb-2025	
		Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00	
		Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	
Determinand	HWOL Code	Accred.	SOP	Units	LOD					
ACM Type		N	2192		N/A	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	16	17	15	9.5	9.9
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Roots	Stones and Roots	Stones and Roots	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand	Sand
pH at 20C		M	2010		4.0	8.0	8.3	8.4	8.5	8.3
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.014	0.018	< 0.010	< 0.010	< 0.010
Total Sulphur		U	2175	%	0.010	0.030	0.040	0.020	0.010	< 0.010
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	0.60	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	2.3	2.5	2.9	3.2	3.7
Sulphate (Total)		U	2430	%	0.010	0.080	0.053	0.049	0.012	< 0.010
Arsenic		M	2455	mg/kg	0.5	2.0	1.7	1.7	6.4	2.2
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	5.6	4.8	4.6	14	8.9
Copper		M	2455	mg/kg	0.50	7.6	6.3	5.7	9.0	4.7
Mercury		M	2455	mg/kg	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel		M	2455	mg/kg	0.50	5.1	4.7	4.2	12	8.9
Lead		M	2455	mg/kg	0.50	8.8	6.6	6.6	4.6	1.9
Selenium		M	2455	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Zinc		M	2455	mg/kg	0.50	24	20	18	19	10
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	4.1	2.8	2.4	< 0.40	< 0.40
Total Organic Carbon		M	2625	%	0.20	2.4	1.6	1.4	< 0.20	< 0.20
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	8.3	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	5.8	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	4.9	3.2	3.0	11	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	26	13	20	11	< 1.0
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	40	38	42	31	< 1.0
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	160	100	130	24	< 1.0
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	19	12	12	2.8	< 1.0
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	250	170	200	93	< 10
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Ancoats Green Import SS and TS

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		Time Sampled:						12:00	12:00	12:00	12:00	12:00	12:00
		Asbestos Lab:						NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	HWOL Code	Accred.	SOP	Units	LOD								
Phenanthrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene		M	2800	mg/kg	0.10	0.11	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

NEW_ASB	Eurofins Chemtest Limited, 11 Depot Road, Newmarket, CB8 0AL
DURHAM	Eurofins Chemtest Limited, Unit A North Wing, Prospect Business Park, Crookhall Lane, Consett, Co Durham, DH8 7PW

Sample Deviation Codes

As a result of any of the below deviations applying, the test results may be unreliable

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - The required amount of sample for analysis was not received

H - Appropriate cooling measures were not taken for sample transportation

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Report Information

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

Asbestos Tests LOD = LOQ

Limit of Detection = Limit of Quantification for asbestos results only

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com