Date: 12th June 2025
Reference: 15-974 V19

# GARDEN VALIDATION – BENNETT STREET

| | |
|---|---|
| **Project Name:** | Bennett Street |
| **Project Number:** | 15-974 |
| **Client:** | Kellen Homes Ltd |
| **Date:** | 02-06-2025 |
| **Project Manager:** | Matt Dee |
| **E3P Engineer:** | J. Newall |
| **Plots:** | 72-79 |

## OVERVIEW

An E3P engineer attended the above site to validate the thickness of the cover system placed within the rear garden of plots 72-79 at Bennett Street, Manchester.

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

Trial pits in rear gardens were completed to highlight the required cover system of 600mm (150mm topsoil and 450mm subsoil) and the presence of a geotechnical break layer at the base of cover system.

E3P can confirm that our independent validation demonstrates that the rear garden has been installed with 150mm of certified topsoil and at least 450mm subsoil in line with the requirements of the build phase mitigation plan for this site. A geotechnical break layer was noted within all trial pits at the base of the cover system.

A list of plots requiring validation and their associated validation letters is presented in Table 1 for reference.

## TOPSOIL

E3P have obtained imported topsoil deposits from Donor Site 'Roman Way, Preston', 'Halewood Consortium' and 'Viking Way, Congleton' which were analysed in line with the E3P Remediation Strategy.

To date, a total of 16no. topsoil samples have been submitted for analysis from Roman Way, at a brownfield frequency of 1 per 50 m3. Five topsoil samples from Halewood Consortium, five topsoil samples from Viking Way, Congleton, three topsoil samples from Giantswood Way, Congleton and five samples from Delph Lane, Daresbury have been submitted for analysis at a greenfield frequency of 1 per 200m3 in line with the E3P remediation strategy. Total samples obtained cover 4,400 m3 of imported topsoil.

Analysis for subsoil undertaken by I2 Analytical Laboratories and Eurofins Laboratories 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. The sampling frequency follows the agreed Remediation Strategy. Laboratory analysis certificates are attached to this validation certificate.

Chemical analysis confirmed that these topsoil deposits were chemically suitable for use within the proposed garden areas.

Chemical analysis results are included within lab reports 24-12322-1, 24-77927-1, 24-13816-1, 24-29418-1, 24-36526, 25-09340 and 25-15777 (relevant sampling attached to this letter).

## SUBSOIL

E3P attended the site to obtain samples of the imported subsoil deposits from "The Mere Golf Club" and "Roman Way", which were tested in line with the E3P Remediation Strategy.

To date, a total of eight subsoil samples have been submitted for analysis, at a brownfield frequency of 1 per 50 m3 in line with the E3P remediation strategy, covering 400 m3 of imported subsoil.

Additionally, E3P have obtained samples of site won natural clay subsoils, won from civil excavations and cut/fill works across the development site. A total of 18no. site won subsoil samples have been obtained, two minor exceedances of generic screening values were identified (SW-CLAY-001 and SW-CLAY-011), unsuitable soils were segregated and used as bulk fill elsewhere on site with the remaining soils tested and confirming suitability for use in private gardens. To date, a total of 16no. suitable subsoil samples have been submitted for analysis, at a site won subsoil frequency of 1 per 250 m3 in line with the E3P remediation strategy, covering 4,000 m3 of site won subsoil.

Analysis for subsoil undertaken by I2 Analytical Laboratories and Eurofins Laboratories 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. The sampling frequency follows the agreed Remediation Strategy. Laboratory analysis certificates are attached to this validation certificate.

Chemical analysis confirmed that these subsoil deposits were chemically suitable for use within the proposed garden areas. Chemical analysis results are included within lab reports 24-008736-1, 24-010773-1, 24-77927-1, 24-25212-1, 24-25843-1, 24-27346-1 and 24-29407-1 (attached to this letter).

## CHEMICAL ANALYSIS

| TOPSOIL/SUBSOIL | SOURCE | LAB REFERENCE | SAMPLE REFERENCE | PASS/FAIL |
|---|---|---|---|---|
| Topsoil | Roman Way | 24-77927-1 | TS001 – TS003 | Pass |
| | | 24-12322-1 | TS101 – TS103 | Pass |
| | | 24-13816-1 | TS104 – TS113 | Pass |
| | Halewood | 24-29418-1 | IMP-TS-101 - 105 | Pass |
| | Viking Way | 24-36526-1 | Cong TS 001-005 | Pass |
| | Giantswood Way | 25-09340-1 | GW-TS01-TS03 | Pass |
| | Daresbury | 25-15777-1 | DBTS-01 – 05 | Pass |
| Subsoil | The Mere Golf Club | 24-008736-1 | IMP-SS-101-104 | Pass |
| | | 24-010773-1 | IMP-SS-105 | Pass |
| | Roman Way | 24-77927-1 | SS-001 – SS-003 | Pass |
| | Site won | 24-25212-1 | SW-CLAY-001-005 | Pass – Following segregation of SW-CLAY-001 |
| | | 24-25843-1 | SW-CLAY-006-010 | Pass |
| | | 24-27346-1 | SW-CLAY-011-015 | Pass – Following segregation of SW-CLAY-011 |
| | | 24-29407-1 | SW-CLAY-016-018 | Pass |

The cover system validation photographs are enclosed within this letter. For information, Table 1 includes references and validation dates of previously validated plots.

**Table 1 – Validation Letter Reference**

| PLOT NUMBER | DATE | REPORT REFERENCE |
|---|---|---|
| 9-12 & 14-17 | 17th April 2024 | V1 |
| 13 | 29th April 2024 | V2 |
| 17-19 | 12th August 2024 | V3 |
| 136, 137, 141-146 | 21st October 2024 | V4 |
| 138-140, 147, FG 18, 139, 145 | 14th November 2024 | V5 |
| 123-124 | 4th December 2024 | V6 |
| 125-127, 20-22 | 11th December 2024 | V7 |
| 132 | 7th January 2025 | V8 |
| 133 and 135 | 21st January 2025 | V9 |
| 112-113 and 117-121 | 2nd February 2025 | V10 |
| 114 and 134 | 20th February 2025 | V11 |
| 105-111, 122 | 4th March 2025 | V12 |
| 115-116 | 14th March 2025 | V13 |
| 128-131 | 25th March 2025 | V14 |
| 80-86, 91-95, 97, 98 | 3rd April 2025 | V15 |
| 99-102, 104 | 22nd April 2025 | V16 |
| 87-90 | 9th May 2025 | V17 |
| 96 and 103 | 19th May 2025 | V18 |
| 72-79 | 2nd June 2025 | V19 |

# Garden Cover System Validation

| | Complete |
|---|---|
| **Score** | 59 / 70 (84.29%) |
| **Site Name** | Bennet street |
| **Location** | 7 Galloway Dr<br>Manchester<br>England<br>M12<br>United Kingdom<br>(53.46969036829697, -2.2093570779502936) |
| **Project Number** | 15974 |
| **Developer** | Kellen homes |
| **Project Manager** | MD |
| **Conducted By** | Joe Newall |
| **Date of visit** | 2 Jun 2025 2:03 PM BST |

| Subsoil/Topsoil Material Source (If the site manager can't supply you with detail of where the soil is sourced STOP THE INSPECTION and call the PM) | |
|---|---|
| **Where has the Subsoil been sourced** | Site Won |
| **Where has the Topsoil been sourced** | Daresbury |

| Plot Validation 7 | 5 / 5 (100%) |
|---|---|
| **Plot Number** | 72 |
| **Garden position** | Rear |
| **Is Plot Ready** | Yes |
| **Installation Standard** | Pass |
| **Depth of Cover System Materials (record the depth and support with Photos down the hole )** | 600 |

Photo 63

Photo 64

Photo 65

| | |
|---|---|
| **Depth of Topsoil (mm)** | 150 |
| **Depth of Subsoil (mm)** | 450 |

**Depth of Cover System at Ground Level (Photo)**

Photo 66

Photo 67

**Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)**

Photo 68

Photo 69

| | |
|---|---|
| **Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.** | Yes |
| **If soil is unsuitable please add a FULL description and support with photos.** | - |
| **Geotextile membrane present** | Yes |

Photo 70

Photo 71

Photo 72

Photo 73

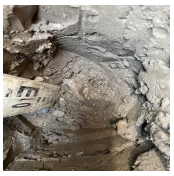
Photo 74

Photo 75

Photo 76

| Plot Validation 8 | 5 / 5 (100%) |
|---|---|
| **Plot Number** | 73 |
| **Garden position** | Rear |
| **Is Plot Ready** | Yes |
| **Installation Standard** | Pass |
| **Depth of Cover System Materials (record the depth and support with Photos down the hole )** | 600 |

Photo 77

Photo 78

| | |
|---|---|
| **Depth of Topsoil (mm)** | 150 |
| **Depth of Subsoil (mm)** | 450 |

**Depth of Cover System at Ground Level (Photo)**

Photo 79

Photo 80

Photo 81

Photo 82

**Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)**

Photo 83

Photo 84

| | |
|---|---|
| **Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.** | Yes |
| **If soil is unsuitable please add a FULL description and support with photos.** | - |
| **Geotextile membrane present** | Yes |

Photo 85

Photo 86

| Plot Validation 9 | 5 / 5 (100%) |
|---|---|
| **Plot Number** | 74 |
| **Garden position** | Rear |
| **Is Plot Ready** | Yes |
| **Installation Standard** | Pass |
| **Depth of Cover System Materials (record the depth and support with Photos down the hole )** | 600 |

Photo 87

Photo 88

| | |
|---|---|
| **Depth of Topsoil (mm)** | 150 |
| **Depth of Subsoil (mm)** | 450 |

**Depth of Cover System at Ground Level (Photo)**

Photo 89

Photo 90

**Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)**

Photo 91

Photo 92

| | |
|---|---|
| **Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.** | Yes |
| **If soil is unsuitable please add a FULL description and support with photos.** | - |
| **Geotextile membrane present** | Yes |

Photo 93

Photo 94

| | |
|---|---|
| Plot Validation 10 | 5 / 5 (100%) |
| **Plot Number** | 75 |
| **Garden position** | Rear |
| **Is Plot Ready** | Yes |
| **Installation Standard** | Pass |
| **Depth of Cover System Materials (record the depth and support with Photos down the hole )** | 600 |

Photo 95

Photo 96

| | |
|---|---|
| **Depth of Topsoil (mm)** | 150 |
| **Depth of Subsoil (mm)** | 450 |
| **Depth of Cover System at Ground Level (Photo)** | |

Photo 97

Photo 98

**Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)**

Photo 99

Photo 100

| | |
|---|---|
| **Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.** | Yes |
| **If soil is unsuitable please add a FULL description and support with photos.** | - |
| **Geotextile membrane present** | Yes |

Photo 101

Photo 102

Photo 103

| Plot Validation 11 | 5 / 5 (100%) |
|---|---|
| **Plot Number** | 76 |
| **Garden position** | Rear |
| **Is Plot Ready** | Yes |
| **Installation Standard** | Pass |
| **Depth of Cover System Materials (record the depth and support with Photos down the hole )** | 700 |

Photo 104

Photo 105

Photo 106

| | |
|---|---|
| **Depth of Topsoil (mm)** | 200 |

| | |
|---|---|
| **Depth of Subsoil (mm)** | 500 |

**Depth of Cover System at Ground Level (Photo)**

Photo 107

Photo 108

**Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)**

Photo 109

Photo 110

| | |
|---|---|
| **Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.** | Yes |
| **If soil is unsuitable please add a FULL description and support with photos.** | - |
| **Geotextile membrane present** | Yes |

Photo 111

Photo 112

Photo 113

| | |
|---|---|
| Plot Validation 12 | 5 / 5 (100%) |
| **Plot Number** | 77 |
| **Garden position** | Rear |
| **Is Plot Ready** | Yes |
| **Installation Standard** | Pass |
| **Depth of Cover System Materials (record the depth and support with Photos down the hole )** | 800 |

Photo 114

Photo 115

| | |
|---|---|
| **Depth of Topsoil (mm)** | 200 |
| **Depth of Subsoil (mm)** | 600 |

**Depth of Cover System at Ground Level (Photo)**

Photo 116

Photo 117

**Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)**

Photo 118

Photo 119

| | |
|---|---|
| **Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.** | Yes |
| **If soil is unsuitable please add a FULL description and support with photos.** | - |
| **Geotextile membrane present** | Yes |

Photo 120

Photo 121

| | |
|---|---|
| Plot Validation 13 | 5 / 5 (100%) |
| **Plot Number** | 78 |
| **Garden position** | Rear |
| **Is Plot Ready** | Yes |
| **Installation Standard** | Pass |

| | |
|---|---|
| **Depth of Cover System Materials (record the depth and support with Photos down the hole )** | 700 |

Photo 122

Photo 123

| | |
|---|---|
| **Depth of Topsoil (mm)** | 200 |
| **Depth of Subsoil (mm)** | 500 |

**Depth of Cover System at Ground Level (Photo)**

Photo 124

Photo 125

**Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)**

Photo 126

Photo 127

| | |
|---|---|
| **Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.** | Yes |
| **If soil is unsuitable please add a FULL description and support with photos.** | - |
| **Geotextile membrane present** | Yes |

Photo 128

Photo 129

Photo 130

Photo 131

| | |
|---|---|
| Plot Validation 14 | 5 / 5 (100%) |
| **Plot Number** | 79 |
| **Garden position** | Rear |

| | |
|---|---|
| **Is Plot Ready** | Yes |
| **Installation Standard** | Pass |
| **Depth of Cover System Materials (record the depth and support with Photos down the hole )** | 650 |

Photo 132

Photo 133

Photo 134

| | |
|---|---|
| **Depth of Topsoil (mm)** | 200 |
| **Depth of Subsoil (mm)** | 450 |

**Depth of Cover System at Ground Level (Photo)**

Photo 135

Photo 136

**Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)**

Photo 137

Photo 138

| | |
|---|---|
| **Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.** | Yes |
| **If soil is unsuitable please add a FULL description and support with photos.** | - |
| **Geotextile membrane present** | Yes |

Photo 139

Photo 140

Photo 141

Site Manager or Representative

| | |
|---|---|
| **Name** | Rob |
| **Signature** | |
| [redacted] | 2 Jun 2025 4:22 PM BST |

## Media summary

Photo 63

Photo 64

Photo 65

Photo 66

Photo 67

Photo 68

Photo 69

Photo 70

Photo 71

Photo 72

Photo 73

Photo 74

Photo 75

Photo 76

Photo 77

Photo 78

Photo 79

Photo 80

Photo 81

Photo 82

Photo 83

Photo 84

Photo 85

Photo 86

Photo 87

Photo 88

Photo 89

Photo 90

Photo 91

Photo 92

Photo 93

Photo 94

Photo 95

Photo 96

Photo 97

Photo 98

Photo 99

Photo 100

Photo 101

Photo 102

Photo 103

Photo 104

Photo 105

Photo 106

Photo 107

Photo 108

Photo 109

Photo 110

Photo 111

Photo 112

Photo 113

Photo 114

Photo 115

Photo 116

Photo 117

Photo 118

Photo 119

Photo 120

Photo 121

Photo 122

Photo 123

Photo 124

Photo 125

Photo 126

Photo 127

Photo 128

Photo 129

Photo 130

Photo 131

Photo 132

Photo 133

Photo 134

Photo 135

Photo 136

Photo 137

Photo 138

Photo 139

Photo 140

Photo 141

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

# Final Report

| | | | |
|---|---|---|---|
| **Report No.:** | 24-25212-1 | | |
| **Initial Date of Issue:** | 14-Aug-2024 | | |
| **Re-Issue Details:** | | | |
| **Client** | E3P | | |
| **Client Address:** | Taylor Road<br>Trafford Park<br>Urmston<br>Manchester<br>M41 7JQ | | |
| **Contact(s):** | [redacted] | | |
| **Project** | Bennett Street (15-974) | | |
| **Quotation No.:** | | **Date Received:** | 07-Aug-2024 |
| **Order No.:** | 9019 | **Date Instructed:** | 07-Aug-2024 |
| **No. of Samples:** | 5 | | |
| **Turnaround (Wkdays):** | 5 | **Results Due:** | 13-Aug-2024 |
| **Date Approved:** | 14-Aug-2024 | | |
| **Approved By:** | [redacted] | | |
| **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: Bennett Street (15-974)**

| **Client: E3P** | | | | | | **Chemtest Job No.:** | 24-25212 | 24-25212 | 24-25212 | 24-25212 |
|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | | | **Chemtest Sample ID.:** | 1847257 | 1847258 | 1847259 | 1847260 | 1847261 |
| | | | | | | Client Sample ID.: | 001 | 002 | 003 | 004 | 005 |
| | | | | | | Sample Location: | SW-CLAY | SW-CLAY | SW-CLAY | SW-CLAY | SW-CLAY |
| | | | | | | Sample Type: | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | | | Date Sampled: | 02-Aug-2024 | 02-Aug-2024 | 02-Aug-2024 | 02-Aug-2024 | 02-Aug-2024 |
| | | | | | | Time Sampled: | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| | | | | | | Asbestos Lab: | 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 |
| Moisture | | N | 2030 | % | 0.020 | 10 | 13 | 11 | 12 | 9.6 |
| Soil Colour | | N | 2040 | | N/A | Brown | Brown | Brown | Brown | Brown |
| Other Material | | N | 2040 | | N/A | Stones | Stones | Stones | Stones | Stones |
| Soil Texture | | N | 2040 | | N/A | Gravel | Sand | Clay | Clay | Clay |
| pH at 20C | | M | 2010 | | 4.0 | 8.7 | 8.7 | 8.7 | 8.6 | 8.5 |
| Sulphate (2:1 Water Soluble) as SO4 | | M | 2120 | g/l | 0.010 | 0.24 | 0.16 | < 0.010 | 0.023 | 0.052 |
| Total Sulphur | | U | 2175 | % | 0.010 | 0.080 | 0.080 | 0.020 | 0.060 | 0.12 |
| Cyanide (Total) | | M | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Sulphide (Easily Liberatable) | | N | 2325 | mg/kg | 0.50 | 11 | 4.0 | 3.4 | 8.1 | 4.9 |
| Sulphate (Total) | | U | 2430 | % | 0.010 | 0.31 | 0.42 | 0.067 | 0.30 | 1.7 |
| Arsenic | | M | 2455 | mg/kg | 0.5 | 12 | 5.4 | 5.9 | 5.0 | 7.0 |
| Cadmium | | M | 2455 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Chromium | | M | 2455 | mg/kg | 0.5 | 22 | 20 | 14 | 18 | 19 |
| Copper | | M | 2455 | mg/kg | 0.50 | 32 | 23 | 15 | 20 | 22 |
| Mercury | | M | 2455 | mg/kg | 0.05 | 0.09 | < 0.05 | 0.06 | < 0.05 | < 0.05 |
| Nickel | | M | 2455 | mg/kg | 0.50 | 15 | 30 | 16 | 27 | 29 |
| Lead | | M | 2455 | mg/kg | 0.50 | 65 | 17 | 26 | 11 | 15 |
| Selenium | | M | 2455 | mg/kg | 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| Zinc | | M | 2455 | mg/kg | 0.50 | 200 | 68 | 53 | 51 | 56 |
| Chromium (Hexavalent) | | N | 2490 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | | M | 2625 | % | 0.40 | 5.2 | 29 | 1.2 | 2.9 | 1.3 |
| Total Organic Carbon | | M | 2625 | % | 0.20 | 3.0 | 17 | 0.69 | 1.7 | 0.76 |
| 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 | < 1.0 | < 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 | < 1.0 |
| TPH >C16-C21 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 13 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C21-C25 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 5.1 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C25-C35 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 15 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C35-C40 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 1.1 | < 1.0 | < 1.0 | < 1.0 |
| Total TPH >C6-C40 | EH_1D_Total | M | 2670 | mg/kg | 10 | < 10 | 33 | < 10 | < 10 | < 10 |
| Naphthalene | | M | 2800 | mg/kg | 0.10 | 0.13 | 0.20 | < 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 | 0.36 | < 0.10 | < 0.10 | < 0.10 |
| Fluorene | | M | 2800 | mg/kg | 0.10 | < 0.10 | 0.28 | < 0.10 | < 0.10 | < 0.10 |

# Results - Soil

**Project: Bennett Street (15-974)**

| **Client: E3P** | | | | **Chemtest Job No.:** | | 24-25212 | 24-25212 | 24-25212 | 24-25212 | 24-25212 |
|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | **Chemtest Sample ID.:** | | 1847257 | 1847258 | 1847259 | 1847260 | 1847261 |
| | | | | Client Sample ID.: | | 001 | 002 | 003 | 004 | 005 |
| | | | | Sample Location: | | SW-CLAY | SW-CLAY | SW-CLAY | SW-CLAY | SW-CLAY |
| | | | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | Date Sampled: | | 02-Aug-2024 | 02-Aug-2024 | 02-Aug-2024 | 02-Aug-2024 | 02-Aug-2024 |
| | | | | Time Sampled: | | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| | | | | Asbestos Lab: | | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM |
| **Determinand** | **HWOL Code** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | |
| Phenanthrene | | M | 2800 | mg/kg | 0.10 | 4.1 | 1.7 | 0.19 | 0.34 | 0.50 |
| Anthracene | | M | 2800 | mg/kg | 0.10 | 1.0 | 0.44 | < 0.10 | < 0.10 | < 0.10 |
| Fluoranthene | | M | 2800 | mg/kg | 0.10 | 8.1 | 2.7 | 0.38 | 0.36 | 0.45 |
| Pyrene | | M | 2800 | mg/kg | 0.10 | 6.2 | 2.3 | 0.36 | 0.33 | 0.41 |
| Benzo[a]anthracene | | M | 2800 | mg/kg | 0.10 | 3.7 | 1.1 | < 0.10 | < 0.10 | < 0.10 |
| Chrysene | | M | 2800 | mg/kg | 0.10 | 3.8 | 1.2 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[b]fluoranthene | | M | 2800 | mg/kg | 0.10 | 4.9 | 1.4 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[k]fluoranthene | | M | 2800 | mg/kg | 0.10 | 1.7 | 0.45 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[a]pyrene | | M | 2800 | mg/kg | 0.10 | 3.7 | 1.0 | < 0.10 | < 0.10 | < 0.10 |
| Indeno(1,2,3-c,d)Pyrene | | M | 2800 | mg/kg | 0.10 | 2.3 | 0.60 | < 0.10 | < 0.10 | < 0.10 |
| Dibenz(a,h)Anthracene | | N | 2800 | mg/kg | 0.10 | 0.49 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[g,h,i]perylene | | M | 2800 | mg/kg | 0.10 | 2.2 | 0.67 | < 0.10 | < 0.10 | < 0.10 |
| Total Of 16 PAH's | | N | 2800 | mg/kg | 2.0 | 42 | 14 | < 2.0 | < 2.0 | < 2.0 |
| Total Phenols | | M | 2920 | mg/kg | 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 | Allkaline 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-diphenylcarbazide. | |
| 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 ≤ 30°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

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

# Final Report

| | | | |
|---|---|---|---|
| **Report No.:** | 24-25843-1 | | |
| **Initial Date of Issue:** | 19-Aug-2024 | | |
| **Re-Issue Details:** | | | |
| **Client** | E3P | | |
| **Client Address:** | Taylor Road<br>Trafford Park<br>Urmston<br>Manchester<br>M41 7JQ | | |
| **Contact(s):** | [redacted] | | |
| **Project** | Bennett Street | | |
| **Quotation No.:** | | **Date Received:** | 13-Aug-2024 |
| **Order No.:** | 9075 | **Date Instructed:** | 13-Aug-2024 |
| **No. of Samples:** | 5 | | |
| **Turnaround (Wkdays):** | 5 | **Results Due:** | 19-Aug-2024 |
| **Date Approved:** | 19-Aug-2024 | | |

**Approved By:**

[redacted]

**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: Bennett Street**

| **Client: E3P** | | | | | **Chemtest Job No.:** | 24-25843 | 24-25843 | 24-25843 | 24-25843 | 24-25843 |
|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | | **Chemtest Sample ID.:** | 1850124 | 1850125 | 1850126 | 1850127 | 1850128 |
| | | | | | Client Sample ID.: | SW-CLAY-006 | SW-CLAY-007 | SW-CLAY-008 | SW-CLAY-009 | SW-CLAY-010 |
| | | | | | Sample Type: | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | | Date Sampled: | 09-Aug-2024 | 09-Aug-2024 | 09-Aug-2024 | 09-Aug-2024 | 09-Aug-2024 |
| | | | | | Time Sampled: | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| | | | | | 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 | 8.4 | 0.91 | 9.2 | 1.4 | 9.8 |
| Soil Colour | | N | 2040 | | N/A | Brown | Brown | Brown | Brown | Brown |
| Other Material | | N | 2040 | | N/A | Stones | Stones | Stones and Roots | Stones | Stones and Roots |
| Soil Texture | | N | 2040 | | N/A | Clay | Loam | Clay | Loam | Loam |
| pH at 20C | | M | 2010 | | 4.0 | 7.7 | 7.6 | 8.4 | 7.2 | 7.3 |
| Sulphate (2:1 Water Soluble) as SO4 | | M | 2120 | g/l | 0.010 | < 0.010 | 0.033 | 0.036 | 0.054 | < 0.010 |
| Total Sulphur | | U | 2175 | % | 0.010 | 0.040 | 0.020 | 0.050 | 0.040 | 0.050 |
| Cyanide (Total) | | M | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Sulphide (Easily Liberatable) | | N | 2325 | mg/kg | 0.50 | 2.3 | 2.7 | 2.6 | 8.9 | 8.8 |
| Sulphate (Total) | | U | 2430 | % | 0.010 | 0.076 | 0.060 | 0.070 | 0.030 | 0.064 |
| Arsenic | | M | 2455 | mg/kg | 0.5 | 5.9 | 11 | 8.4 | 5.8 | 7.4 |
| Cadmium | | M | 2455 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Chromium | | M | 2455 | mg/kg | 0.5 | 19 | 44 | 33 | 18 | 23 |
| Copper | | M | 2455 | mg/kg | 0.50 | 21 | 37 | 30 | 19 | 25 |
| Mercury | | M | 2455 | mg/kg | 0.05 | < 0.05 | < 0.05 | 0.24 | 0.05 | 0.05 |
| Nickel | | M | 2455 | mg/kg | 0.50 | 25 | 56 | 40 | 24 | 32 |
| Lead | | M | 2455 | mg/kg | 0.50 | 27 | 22 | 32 | 15 | 18 |
| Selenium | | M | 2455 | mg/kg | 0.25 | 0.38 | 0.99 | 0.74 | 0.34 | 0.58 |
| Zinc | | M | 2455 | mg/kg | 0.50 | 52 | 94 | 72 | 49 | 62 |
| Chromium (Hexavalent) | | N | 2490 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | | M | 2625 | % | 0.40 | 2.8 | 2.8 | 4.1 | 4.8 | 2.9 |
| Total Organic Carbon | | M | 2625 | % | 0.20 | 1.6 | 1.6 | 2.4 | 2.8 | 1.7 |
| 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 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C12-C16 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 6.6 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C16-C21 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 19 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C21-C25 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 12 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C25-C35 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 25 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C35-C40 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | 3.2 | < 1.0 | < 1.0 | < 1.0 |
| Total TPH >C6-C40 | EH_1D_Total | M | 2670 | mg/kg | 10 | < 10 | 65 | < 10 | < 10 | < 10 |
| Naphthalene | | M | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | 0.17 | < 0.10 | 0.20 |
| 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 | 0.20 |

# Results - Soil

**Project: Bennett Street**

| **Client: E3P** | | | | **Chemtest Job No.:** | | 24-25843 | 24-25843 | 24-25843 | 24-25843 | 24-25843 |
|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: | | | | **Chemtest Sample ID.:** | | 1850124 | 1850125 | 1850126 | 1850127 | 1850128 |
| | | | | Client Sample ID.: | | SW-CLAY-006 | SW-CLAY-007 | SW-CLAY-008 | SW-CLAY-009 | SW-CLAY-010 |
| | | | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | Date Sampled: | | 09-Aug-2024 | 09-Aug-2024 | 09-Aug-2024 | 09-Aug-2024 | 09-Aug-2024 |
| | | | | Time Sampled: | | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| | | | | Asbestos Lab: | | NEW-ASB | NEW-ASB | NEW-ASB | NEW-ASB | NEW-ASB |
| **Determinand** | **HWOL Code** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | |
| Fluorene | | M | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.23 |
| Phenanthrene | | M | 2800 | mg/kg | 0.10 | 0.72 | < 0.10 | 0.76 | 0.26 | 1.1 |
| Anthracene | | M | 2800 | mg/kg | 0.10 | 0.19 | < 0.10 | 0.21 | < 0.10 | 0.27 |
| Fluoranthene | | M | 2800 | mg/kg | 0.10 | 0.61 | < 0.10 | 0.66 | 0.37 | 0.95 |
| Pyrene | | M | 2800 | mg/kg | 0.10 | 0.65 | < 0.10 | 0.71 | 0.32 | 0.94 |
| Benzo[a]anthracene | | M | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.35 |
| Chrysene | | M | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.39 |
| Benzo[b]fluoranthene | | M | 2800 | mg/kg | 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 |
| Benzo[a]pyrene | | M | 2800 | mg/kg | 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 |
| Dibenz(a,h)Anthracene | | N | 2800 | mg/kg | 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 |
| Total Of 16 PAH's | | N | 2800 | mg/kg | 2.0 | 2.2 | < 2.0 | 2.5 | < 2.0 | 4.6 |
| Total Phenols | | M | 2920 | mg/kg | 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 | Allkaline 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-diphenylcarbazide. | |
| 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 | |
|---|---|
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| 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 |

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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 ≤ 30°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

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

# Final Report

| | |
|---|---|
| **Report No.:** | 24-27346-1 |
| **Initial Date of Issue:** | 02-Sep-2024 |
| **Re-Issue Details:** | |
| **Client** | E3P |
| **Client Address:** | Taylor Road<br>Trafford Park<br>Urmston<br>Manchester<br>M41 7JQ |
| **Contact(s):** | [redacted] |
| **Project** | Bennett Street CLAY |

| | | | |
|---|---|---|---|
| **Quotation No.:** | Q23-31421 | **Date Received:** | 27-Aug-2024 |
| **Order No.:** | 009230 | **Date Instructed:** | 27-Aug-2024 |
| **No. of Samples:** | 5 | | |
| **Turnaround (Wkdays):** | 5 | **Results Due:** | 02-Sep-2024 |
| **Date Approved:** | 02-Sep-2024 | | |

**Approved By:**

[redacted]

**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: Bennett Street CLAY**

| **Client: E3P** | | | | **Chemtest Job No.:** | | 24-27346 | 24-27346 | 24-27346 | 24-27346 | 24-27346 |
|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: Q23-31421 | | | | **Chemtest Sample ID.:** | | 1856420 | 1856421 | 1856422 | 1856423 | 1856424 |
| | | | | Client Sample ID.: | | SW-CLAY 011 | SW-CLAY 012 | SW-CLAY 013 | SW-CLAY 014 | SW-CLAY 015 |
| | | | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | Date Sampled: | | 22-Aug-2024 | 22-Aug-2024 | 22-Aug-2024 | 22-Aug-2024 | 22-Aug-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 | 6.3 | 5.3 | 5.0 | 8.2 | 15 |
| Soil Colour | | N | 2040 | | N/A | Brown | Grey | Grey | Brown | Brown |
| Other Material | | N | 2040 | | N/A | Stones | Stones | Stones | Stones | Roots and Stones |
| Soil Texture | | N | 2040 | | N/A | Loam | Loam | Loam | Loam | Loam |
| pH at 20C | | M | 2010 | | 4.0 | 8.8 | 8.7 | 8.6 | 8.5 | 8.4 |
| Sulphate (2:1 Water Soluble) as SO4 | | M | 2120 | g/l | 0.010 | < 0.010 | 0.027 | 0.023 | 0.029 | < 0.010 |
| Total Sulphur | | U | 2175 | % | 0.010 | 0.040 | 0.030 | 0.040 | 0.040 | 0.050 |
| Cyanide (Total) | | M | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Sulphide (Easily Liberatable) | | N | 2325 | mg/kg | 0.50 | 2.9 | 3.9 | 4.6 | 4.9 | 2.5 |
| Sulphate (Total) | | U | 2430 | % | 0.010 | 0.12 | 0.031 | 0.055 | 0.058 | 0.065 |
| Arsenic | | M | 2455 | mg/kg | 0.5 | 6.0 | 8.7 | 8.7 | 7.4 | 6.7 |
| Cadmium | | M | 2455 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Chromium | | M | 2455 | mg/kg | 0.5 | 25 | 25 | 31 | 31 | 30 |
| Copper | | M | 2455 | mg/kg | 0.50 | 20 | 24 | 32 | 28 | 43 |
| Mercury | | M | 2455 | mg/kg | 0.05 | 0.05 | < 0.05 | < 0.05 | < 0.05 | 0.05 |
| Nickel | | M | 2455 | mg/kg | 0.50 | 29 | 34 | 40 | 38 | 39 |
| Lead | | M | 2455 | mg/kg | 0.50 | 11 | 13 | 23 | 14 | 21 |
| Selenium | | M | 2455 | mg/kg | 0.25 | < 0.25 | 0.39 | 0.50 | 0.40 | 1.0 |
| Zinc | | M | 2455 | mg/kg | 0.50 | 47 | 62 | 70 | 63 | 68 |
| Chromium (Hexavalent) | | N | 2490 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | | M | 2625 | % | 0.40 | 1.7 | 1.5 | 6.4 | 1.7 | 4.0 |
| Total Organic Carbon | | M | 2625 | % | 0.20 | 1.0 | 0.89 | 3.7 | 1.0 | 2.3 |
| 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 | < 1.0 | < 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 | < 1.0 |
| TPH >C16-C21 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C21-C25 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C25-C35 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C35-C40 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Total TPH >C6-C40 | EH_1D_Total | U | 2670 | mg/kg | 10 | < 10 | < 10 | < 10 | < 10 | < 10 |
| Naphthalene | | M | 2800 | mg/kg | 0.10 | 18 | < 0.10 | < 0.10 | < 0.10 | 0.27 |
| Acenaphthylene | | N | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Acenaphthene | | M | 2800 | mg/kg | 0.10 | 15 | < 0.10 | < 0.10 | < 0.10 | 0.20 |

# Results - Soil

**Project: Bennett Street CLAY**

| **Client: E3P** | | | | **Chemtest Job No.:** | | 24-27346 | 24-27346 | 24-27346 | 24-27346 | 24-27346 |
|---|---|---|---|---|---|---|---|---|---|---|
| Quotation No.: Q23-31421 | | | | **Chemtest Sample ID.:** | | 1856420 | 1856421 | 1856422 | 1856423 | 1856424 |
| | | | | Client Sample ID.: | | SW-CLAY 011 | SW-CLAY 012 | SW-CLAY 013 | SW-CLAY 014 | SW-CLAY 015 |
| | | | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | | | Date Sampled: | | 22-Aug-2024 | 22-Aug-2024 | 22-Aug-2024 | 22-Aug-2024 | 22-Aug-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** | | | | | |
| Fluorene | | M | 2800 | mg/kg | 0.10 | 13 | < 0.10 | < 0.10 | < 0.10 | 0.20 |
| Phenanthrene | | M | 2800 | mg/kg | 0.10 | 64 | 0.36 | 0.28 | 0.32 | 0.73 |
| Anthracene | | M | 2800 | mg/kg | 0.10 | 14 | < 0.10 | < 0.10 | < 0.10 | 0.19 |
| Fluoranthene | | M | 2800 | mg/kg | 0.10 | 42 | 0.13 | 0.23 | 0.21 | 0.62 |
| Pyrene | | M | 2800 | mg/kg | 0.10 | 33 | 0.15 | 0.20 | 0.20 | 0.59 |
| Benzo[a]anthracene | | M | 2800 | mg/kg | 0.10 | 14 | < 0.10 | < 0.10 | < 0.10 | 0.29 |
| Chrysene | | M | 2800 | mg/kg | 0.10 | 15 | < 0.10 | < 0.10 | < 0.10 | 0.32 |
| Benzo[b]fluoranthene | | M | 2800 | mg/kg | 0.10 | 14 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[k]fluoranthene | | M | 2800 | mg/kg | 0.10 | 5.2 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[a]pyrene | | M | 2800 | mg/kg | 0.10 | 11 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Indeno(1,2,3-c,d)Pyrene | | M | 2800 | mg/kg | 0.10 | 5.6 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Dibenz(a,h)Anthracene | | N | 2800 | mg/kg | 0.10 | 1.4 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[g,h,i]perylene | | M | 2800 | mg/kg | 0.10 | 6.1 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Total Of 16 PAH's | | N | 2800 | mg/kg | 2.0 | 270 | < 2.0 | < 2.0 | < 2.0 | 3.4 |
| Total Phenols | | M | 2920 | mg/kg | 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 | Allkaline 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-diphenylcarbazide. | |
| 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 ≤ 30°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

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

# Final Report

| | | | |
|---|---|---|---|
| **Report No.:** | 24-29407-1 | | |
| **Initial Date of Issue:** | 23-Sep-2024 | | |
| **Re-Issue Details:** | | | |
| **Client** | E3P | | |
| **Client Address:** | Taylor Road<br>Trafford Park<br>Urmston<br>Manchester<br>M41 7JQ | | |
| **Contact(s):** | [redacted] | | |
| **Project** | Bennett Street | | |
| **Quotation No.:** | Q23-31421 | **Date Received:** | 13-Sep-2024 |
| **Order No.:** | 009435 | **Date Instructed:** | 13-Sep-2024 |
| **No. of Samples:** | 3 | | |
| **Turnaround (Wkdays):** | 5 | **Results Due:** | 19-Sep-2024 |
| **Date Approved:** | 23-Sep-2024 | | |

[redacted]

**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: Bennett Street**

| **Client: E3P** | | | | | **Chemtest Job No.:** | 24-29407 | 24-29407 | 24-29407 |
|---|---|---|---|---|---|---|---|---|
| Quotation No.: Q23-31421 | | | | | **Chemtest Sample ID.:** | 1865568 | 1865569 | 1865570 |
| | | | | | Client Sample ID.: | SW-CLAY-016 | SW-CLAY-017 | SW-CLAY-018 |
| | | | | | Sample Type: | SOIL | SOIL | SOIL |
| | | | | | Date Sampled: | 11-Sep-2024 | 11-Sep-2024 | 11-Sep-2024 |
| | | | | | Time Sampled: | 12:00 | 12:00 | 12:00 |
| | | | | | Asbestos Lab: | 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 |
| Moisture | | N | 2030 | % | 0.020 | 6.9 | 15 | 9.3 |
| Soil Colour | | N | 2040 | | N/A | Brown | Brown | Brown |
| Other Material | | N | 2040 | | N/A | Stones | Stones | Stones |
| Soil Texture | | N | 2040 | | N/A | Sand | Clay | Clay |
| pH at 20C | | M | 2010 | | 4.0 | 8.2 | 8.3 | 8.4 |
| Sulphate (2:1 Water Soluble) as SO4 | | M | 2120 | g/l | 0.010 | 0.062 | 0.36 | 0.098 |
| Total Sulphur | | U | 2175 | % | 0.010 | 0.060 | 0.21 | 0.10 |
| Cyanide (Total) | | M | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Sulphide (Easily Liberatable) | | N | 2325 | mg/kg | 0.50 | 8.5 | 8.8 | 9.1 |
| Sulphate (Total) | | U | 2430 | % | 0.010 | 0.099 | 0.46 | 0.15 |
| Arsenic | | M | 2455 | mg/kg | 0.5 | 12 | 17 | 10 |
| Cadmium | | M | 2455 | mg/kg | 0.10 | 0.27 | 0.15 | < 0.10 |
| Chromium | | M | 2455 | mg/kg | 0.5 | 30 | 35 | 22 |
| Copper | | M | 2455 | mg/kg | 0.50 | 43 | 62 | 32 |
| Mercury | | M | 2455 | mg/kg | 0.05 | 0.26 | 0.24 | 0.13 |
| Nickel | | M | 2455 | mg/kg | 0.50 | 39 | 42 | 29 |
| Lead | | M | 2455 | mg/kg | 0.50 | 44 | 62 | 31 |
| Selenium | | M | 2455 | mg/kg | 0.25 | 0.94 | 1.4 | 0.73 |
| Zinc | | M | 2455 | mg/kg | 0.50 | 81 | 100 | 58 |
| Chromium (Hexavalent) | | N | 2490 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | | M | 2625 | % | 0.40 | 2.6 | 4.3 | 2.6 |
| Total Organic Carbon | | M | 2625 | % | 0.20 | 1.5 | 2.5 | 1.5 |
| TPH >C6-C8 | EH_1D_Total | N | 2670 | mg/kg | 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 |
| TPH >C10-C12 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C12-C16 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C16-C21 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | 8.6 | 22 | 10 |
| TPH >C21-C25 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | 7.5 | 17 | 9.5 |
| TPH >C25-C35 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | 13 | 35 | 26 |
| TPH >C35-C40 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Total TPH >C6-C40 | EH_1D_Total | U | 2670 | mg/kg | 10 | 29 | 74 | 45 |
| Naphthalene | | M | 2800 | mg/kg | 0.10 | 0.22 | 0.27 | < 0.10 |
| Acenaphthylene | | N | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Acenaphthene | | M | 2800 | mg/kg | 0.10 | 0.29 | 0.40 | < 0.10 |
| Fluorene | | M | 2800 | mg/kg | 0.10 | 0.28 | 0.42 | < 0.10 |

# Results - Soil

**Project: Bennett Street**

| **Client: E3P** | | | | **Chemtest Job No.:** | | 24-29407 | 24-29407 | 24-29407 |
|---|---|---|---|---|---|---|---|---|
| Quotation No.: Q23-31421 | | | | **Chemtest Sample ID.:** | | 1865568 | 1865569 | 1865570 |
| | | | | Client Sample ID.: | | SW-CLAY-016 | SW-CLAY-017 | SW-CLAY-018 |
| | | | | Sample Type: | | SOIL | SOIL | SOIL |
| | | | | Date Sampled: | | 11-Sep-2024 | 11-Sep-2024 | 11-Sep-2024 |
| | | | | Time Sampled: | | 12:00 | 12:00 | 12:00 |
| | | | | Asbestos Lab: | | NEW-ASB | NEW-ASB | NEW-ASB |
| **Determinand** | **HWOL Code** | **Accred.** | **SOP** | **Units** | **LOD** | | | |
| Phenanthrene | | M | 2800 | mg/kg | 0.10 | 1.7 | 2.3 | 0.38 |
| Anthracene | | M | 2800 | mg/kg | 0.10 | 0.47 | 0.51 | < 0.10 |
| Fluoranthene | | M | 2800 | mg/kg | 0.10 | 2.0 | 2.7 | 0.42 |
| Pyrene | | M | 2800 | mg/kg | 0.10 | 2.0 | 2.7 | 0.50 |
| Benzo[a]anthracene | | M | 2800 | mg/kg | 0.10 | 0.86 | 1.0 | < 0.10 |
| Chrysene | | M | 2800 | mg/kg | 0.10 | 0.95 | 1.2 | < 0.10 |
| Benzo[b]fluoranthene | | M | 2800 | mg/kg | 0.10 | 0.85 | 1.1 | < 0.10 |
| Benzo[k]fluoranthene | | M | 2800 | mg/kg | 0.10 | 0.32 | 0.39 | < 0.10 |
| Benzo[a]pyrene | | M | 2800 | mg/kg | 0.10 | 0.77 | 0.82 | < 0.10 |
| Indeno(1,2,3-c,d)Pyrene | | M | 2800 | mg/kg | 0.10 | 0.42 | 0.49 | < 0.10 |
| Dibenz(a,h)Anthracene | | N | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[g,h,i]perylene | | M | 2800 | mg/kg | 0.10 | 0.40 | 0.55 | < 0.10 |
| Total Of 16 PAH's | | N | 2800 | mg/kg | 2.0 | 12 | 15 | < 2.0 |
| Total Phenols | | M | 2920 | mg/kg | 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 | Allkaline 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-diphenylcarbazide. | |
| 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 |

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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 ≤ 30°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

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

# Final Report

| | | | |
|---|---|---|---|
| **Report No.:** | 25-15777-1 | | |
| **Initial Date of Issue:** | 20-May-2025 | | |
| **Re-Issue Details:** | | | |
| ***Client*** | *E3P* | | |
| ***Client Address:*** | *Taylor Road*<br>*Trafford Park*<br>*Urmston*<br>*Manchester*<br>*M41 7JQ* | | |
| ***Contact(s):*** | [redacted] | | |
| ***Project*** | *Bennett Street - Topsoil Import* | | |
| ***Quotation No.:*** | | **Date Received:** | 13-May-2025 |
| **Order No.:** | 011144 | **Date Instructed:** | 13-May-2025 |
| ***No. of Samples:*** | *5* | | |
| **Turnaround (Wkdays):** | 5 | **Results Due:** | 19-May-2025 |
| **Date Approved:** | 20-May-2025 | | |
| **Approved By:** | [redacted] | | |
| **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: Bennett Street - Topsoil Import***

| **Client: E3P** | | | | | | **Chemtest Job No.:** | 25-15777 | 25-15777 | 25-15777 | 25-15777 |
|---|---|---|---|---|---|---|---|---|---|---|
| *Quotation No.:* | | | | | | **Chemtest Sample ID.:** | 1971933 | 1971934 | 1971935 | 1971936 | 1971937 |
| | | | | | | *Client Sample ID.:* | *DB-TS-01* | *DB-TS-02* | *DB-TS-03* | *DB-TS-04* | *DB-TS-05* |
| | | | | | | *Client Reference:* | *Import TS* | *Import TS* | *Import TS* | *Import TS* | *Import TS* |
| | | | | | | *Sample Type:* | *SOIL* | *SOIL* | *SOIL* | *SOIL* | *SOIL* |
| | | | | | | *Date Sampled:* | *09-May-2025* | *09-May-2025* | *09-May-2025* | *09-May-2025* | *09-May-2025* |
| | | | | | | *Time Sampled:* | *12:00* | *12:00* | *12:00* | *12:00* | *12:00* |
| | | | | | | Asbestos Lab: | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM |
| **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 | 14 | 14 | 15 | 13 | 15 |
| 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 and Roots | Stones and Roots |
| Soil Texture | | N | 2040 | | N/A | Loam | Loam | Loam | Loam | Loam |
| pH at 20C | | M | 2010 | | 4.0 | 7.0 | 7.0 | 6.9 | 7.3 | 7.1 |
| Sulphate (2:1 Water Soluble) as SO4 | | M | 2120 | g/l | 0.010 | 0.028 | 0.23 | 0.046 | 0.038 | 0.12 |
| Total Sulphur | | U | 2175 | % | 0.010 | 0.020 | 0.040 | 0.040 | 0.030 | 0.040 |
| Cyanide (Total) | | M | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Sulphide (Easily Liberatable) | | N | 2325 | mg/kg | 0.50 | 2.9 | 8.6 | 5.5 | 2.7 | 8.2 |
| Sulphate (Total) | | U | 2430 | % | 0.010 | 0.078 | 0.12 | 0.12 | 0.067 | 0.10 |
| Arsenic | | M | 2455 | mg/kg | 0.5 | 34 | 15 | 23 | 20 | 36 |
| Cadmium | | M | 2455 | mg/kg | 0.10 | 0.29 | 0.21 | 0.33 | 0.25 | 0.35 |
| Chromium | | M | 2455 | mg/kg | 0.5 | 17 | 13 | 22 | 15 | 22 |
| Copper | | M | 2455 | mg/kg | 0.50 | 38 | 30 | 70 | 32 | 51 |
| Mercury | | M | 2455 | mg/kg | 0.05 | 0.12 | 0.09 | 0.12 | 0.10 | 0.13 |
| Nickel | | M | 2455 | mg/kg | 0.50 | 15 | 12 | 17 | 13 | 20 |
| Lead | | M | 2455 | mg/kg | 0.50 | 52 | 41 | 63 | 44 | 67 |
| Selenium | | M | 2455 | mg/kg | 0.25 | 0.44 | 0.31 | 0.49 | 0.37 | 0.56 |
| Zinc | | M | 2455 | mg/kg | 0.50 | 73 | 58 | 100 | 66 | 86 |
| Chromium (Hexavalent) | | N | 2490 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | | M | 2625 | % | 0.40 | 1.7 | 2.6 | 5.5 | 2.9 | 3.1 |
| Total Organic Carbon | | M | 2625 | % | 0.20 | 1.0 | 1.5 | 3.2 | 1.7 | 1.8 |
| 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 | < 1.0 | < 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 | < 1.0 |
| TPH >C16-C21 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C21-C25 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C25-C35 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| TPH >C35-C40 | EH_1D_Total | N | 2670 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Total TPH >C6-C40 | EH_1D_Total | U | 2670 | mg/kg | 10 | < 10 | < 10 | < 10 | < 10 | < 10 |
| Naphthalene | | M | 2800 | mg/kg | 0.10 | < 0.10 | 0.25 | < 0.10 | < 0.10 | < 0.10 |
| Acenaphthylene | | N | 2800 | mg/kg | 0.10 | < 0.10 | 0.41 | < 0.10 | < 0.10 | 0.20 |
| Acenaphthene | | M | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |

# Results - Soil

***Project: Bennett Street - Topsoil Import***

| **Client: E3P** | | | | **Chemtest Job No.:** | | 25-15777 | 25-15777 | 25-15777 | 25-15777 | 25-15777 |
|---|---|---|---|---|---|---|---|---|---|---|
| *Quotation No.:* | | | | **Chemtest Sample ID.:** | | 1971933 | 1971934 | 1971935 | 1971936 | 1971937 |
| | | | | *Client Sample ID.:* | | *DB-TS-01* | *DB-TS-02* | *DB-TS-03* | *DB-TS-04* | *DB-TS-05* |
| | | | | *Client Reference:* | | *Import TS* | *Import TS* | *Import TS* | *Import TS* | *Import TS* |
| | | | | *Sample Type:* | | *SOIL* | *SOIL* | *SOIL* | *SOIL* | *SOIL* |
| | | | | *Date Sampled:* | | *09-May-2025* | *09-May-2025* | *09-May-2025* | *09-May-2025* | *09-May-2025* |
| | | | | *Time Sampled:* | | *12:00* | *12:00* | *12:00* | *12:00* | *12:00* |
| | | | | Asbestos Lab: | | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM |
| **Determinand** | **HWOL Code** | **Accred.** | **SOP** | **Units** | **LOD** | | | | | |
| Fluorene | | M | 2800 | mg/kg | 0.10 | < 0.10 | 0.20 | < 0.10 | < 0.10 | 0.15 |
| Phenanthrene | | M | 2800 | mg/kg | 0.10 | 0.11 | 0.68 | 0.39 | 0.11 | 0.97 |
| Anthracene | | M | 2800 | mg/kg | 0.10 | < 0.10 | 0.37 | 0.16 | < 0.10 | 0.39 |
| Fluoranthene | | M | 2800 | mg/kg | 0.10 | 0.19 | 0.95 | 0.81 | 0.21 | 1.4 |
| Pyrene | | M | 2800 | mg/kg | 0.10 | 0.16 | 0.82 | 0.71 | 0.22 | 1.3 |
| Benzo[a]anthracene | | M | 2800 | mg/kg | 0.10 | < 0.10 | 0.64 | 0.40 | < 0.10 | 1.0 |
| Chrysene | | M | 2800 | mg/kg | 0.10 | < 0.10 | 0.49 | 0.39 | < 0.10 | 0.71 |
| Benzo[b]fluoranthene | | M | 2800 | mg/kg | 0.10 | 0.14 | 0.85 | 0.65 | < 0.10 | 1.3 |
| Benzo[k]fluoranthene | | M | 2800 | mg/kg | 0.10 | < 0.10 | 0.49 | 0.30 | < 0.10 | 0.89 |
| Benzo[a]pyrene | | M | 2800 | mg/kg | 0.10 | 0.13 | 0.76 | 0.51 | < 0.10 | 1.2 |
| Indeno(1,2,3-c,d)Pyrene | | M | 2800 | mg/kg | 0.10 | 0.16 | 0.67 | 0.44 | < 0.10 | 1.2 |
| Dibenz(a,h)Anthracene | | N | 2800 | mg/kg | 0.10 | 0.11 | 0.21 | 0.16 | < 0.10 | 0.28 |
| Benzo[g,h,i]perylene | | M | 2800 | mg/kg | 0.10 | 0.15 | 0.53 | 0.46 | < 0.10 | 1.1 |
| Total Of 16 PAH's | | N | 2800 | mg/kg | 2.0 | < 2.0 | 8.5 | 5.4 | < 2.0 | 13 |
| Total Phenols | | M | 2920 | mg/kg | 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 | Allkaline 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-diphenylcarbazide. | |
| 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 |

*Text example* All items indicated in italic font represent customer-supplied information that may not be independently verified by the laboratory

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 ≤ 30°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.

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Charges may apply to extended sample storage.

# Report Information

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CU - Clean-up – e.g. by Florisil, silica gel
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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