

TPH Chromatogram on Soil Sample: 1398344

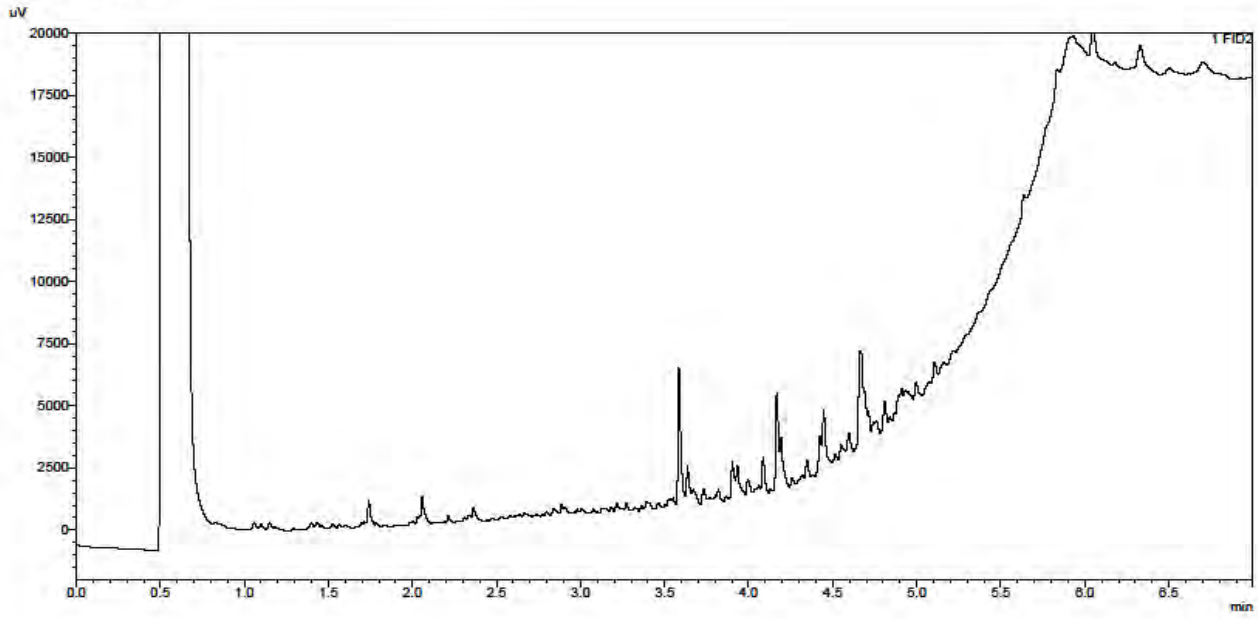
<Sample Information>

Sample Name : 1398344 22-11245
Data Filename : 2022-03-28_28032022_1398344 22-11245_042.gcd
Method Filename : TPH 12m Fast OSv2.gcm
Sample # : 96
Date Acquired : 28/03/2022 20:53:16
Date Processed : 28/03/2022



Chemtest

<Chromatogram>



TPH Interpretation

| Job | Sample | Matrix | Location | Sample Ref | Sample ID | Sample Depth (m) | Gasoline / Diesel Present | TPH Interpretation |
|----------|---------|--------|----------|------------|-----------|------------------|---------------------------|--------------------|
| 22-11245 | 1398342 | S | | | TS101 | | No | N/A |
| 22-11245 | 1398343 | S | | | TS102 | | No | N/A |
| 22-11245 | 1398344 | S | | | TS103 | | No | N/A |

Test Methods

| SOP | Title | Parameters included | Method summary |
|------|--|---|--|
| 2010 | pH Value of Soils | pH | 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 <37°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 |
| 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. |
| 2450 | 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 |
| 2680 | TPH A/A Split | Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44 | Dichloromethane extraction / GCxGC FID detection |
| 2760 | Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS | Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule | Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds. |
| 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 |

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

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 TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°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

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com



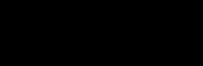
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Derwentside Environmental Testing Services Ltd
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DETS Report No: 23-11413

Site Reference: Fairfield Road, Droylsden
Project / Job Ref: LKC 20 1761
Order No: LKC201761-EM
Sample Receipt Date: 11/09/2023
Sample Scheduled Date: 11/09/2023
Report Issue Number: 1
Reporting Date: 18/09/2023

Authorised by:



Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Soil Analysis Certificate

| | | | | | | |
|---|-----------------|---------------|---------------|---------------|--|--|
| DETS Report No: 23-11413 | Date Sampled | 08/09/23 | 08/09/23 | 08/09/23 | | |
| LK Consult Limited | Time Sampled | None Supplied | None Supplied | None Supplied | | |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | TS201 | TS202 | TS203 | | |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | None Supplied | None Supplied | | |
| Order No: LKC201761-EM | Depth (m) | None Supplied | None Supplied | None Supplied | | |
| Reporting Date: 18/09/2023 | DETS Sample No | 674066 | 674067 | 674068 | | |

| Determinand | Unit | RL | Accreditation | | | |
|---------------------------------------|----------|--------|---------------|--------------|--------------|--------------|
| Asbestos Screen ^(S) | N/a | N/a | ISO17025 | Not Detected | Not Detected | Not Detected |
| pH | pH Units | N/a | MCERTS | 8.5 | 8.5 | 8.5 |
| Total Cyanide | mg/kg | < 1 | NONE | 2 | 2 | < 1 |
| Free Cyanide | mg/kg | < 1 | NONE | < 1 | < 1 | < 1 |
| W/S Sulphate as SO ₄ (2:1) | mg/l | < 10 | MCERTS | 112 | 99 | 103 |
| W/S Sulphate as SO ₄ (2:1) | g/l | < 0.01 | MCERTS | 0.11 | 0.10 | 0.10 |
| Organic Matter (SOM) | % | < 0.1 | MCERTS | 6.2 | 5.9 | 7.2 |
| Arsenic (As) | mg/kg | < 2 | MCERTS | 3 | 2 | 2 |
| W/S Boron | mg/kg | < 1 | NONE | 1.1 | 1.3 | < 1 |
| Cadmium (Cd) | mg/kg | < 0.2 | MCERTS | < 0.2 | < 0.2 | < 0.2 |
| Chromium (Cr) | mg/kg | < 2 | MCERTS | 9 | 7 | 7 |
| Chromium (hexavalent) | mg/kg | < 2 | NONE | < 2 | < 2 | < 2 |
| Copper (Cu) | mg/kg | < 4 | MCERTS | 16 | 15 | 15 |
| Lead (Pb) | mg/kg | < 3 | MCERTS | 26 | 20 | 21 |
| Mercury (Hg) | mg/kg | < 1 | MCERTS | < 1 | < 1 | < 1 |
| Nickel (Ni) | mg/kg | < 3 | MCERTS | 6 | 5 | 5 |
| Selenium (Se) | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 |
| Vanadium (V) | mg/kg | < 1 | MCERTS | 7 | 6 | 6 |
| Zinc (Zn) | mg/kg | < 3 | MCERTS | 49 | 40 | 44 |
| Total Phenols (monohydric) | mg/kg | < 2 | NONE | 2.8 | 2 | 5 |

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)



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| Soil Analysis Certificate - Speciated PAHs | | | | | | |
|--|-----------------|---------------|---------------|---------------|--|--|
| DETS Report No: 23-11413 | Date Sampled | 08/09/23 | 08/09/23 | 08/09/23 | | |
| LK Consult Limited | Time Sampled | None Supplied | None Supplied | None Supplied | | |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | TS201 | TS202 | TS203 | | |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | None Supplied | None Supplied | | |
| Order No: LKC201761-EM | Depth (m) | None Supplied | None Supplied | None Supplied | | |
| Reporting Date: 18/09/2023 | DETS Sample No | 674066 | 674067 | 674068 | | |

| Determinand | Unit | RL | Accreditation | | | | |
|------------------------|-------|-------|---------------|-------|-------|-------|--|
| Naphthalene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | |
| Acenaphthylene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | |
| Acenaphthene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | |
| Fluorene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | |
| Phenanthrene | mg/kg | < 0.1 | MCERTS | 0.32 | 0.31 | 0.37 | |
| Anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | |
| Fluoranthene | mg/kg | < 0.1 | MCERTS | 0.67 | 0.57 | 0.74 | |
| Pyrene | mg/kg | < 0.1 | MCERTS | 0.57 | 0.46 | 0.64 | |
| Benzo(a)anthracene | mg/kg | < 0.1 | MCERTS | 0.34 | 0.27 | 0.34 | |
| Chrysene | mg/kg | < 0.1 | MCERTS | 0.32 | 0.25 | 0.34 | |
| Benzo(b)fluoranthene | mg/kg | < 0.1 | MCERTS | 0.35 | 0.28 | 0.38 | |
| Benzo(k)fluoranthene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | |
| Benzo(a)pyrene | mg/kg | < 0.1 | MCERTS | 0.35 | 0.25 | 0.33 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | < 0.1 | MCERTS | 0.14 | < 0.1 | 0.14 | |
| Dibenz(a,h)anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | |
| Benzo(ghi)perylene | mg/kg | < 0.1 | MCERTS | 0.15 | < 0.1 | < 0.1 | |
| Total EPA-16 PAHs | mg/kg | < 1.6 | MCERTS | 3.2 | 2.4 | 3.3 | |



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| Soil Analysis Certificate - TPH CWG Banded | | | | | | |
|--|-----------------|---------------|---------------|---------------|--|--|
| DETS Report No: 23-11413 | Date Sampled | 08/09/23 | 08/09/23 | 08/09/23 | | |
| LK Consult Limited | Time Sampled | None Supplied | None Supplied | None Supplied | | |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | TS201 | TS202 | TS203 | | |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | None Supplied | None Supplied | | |
| Order No: LKC201761-EM | Depth (m) | None Supplied | None Supplied | None Supplied | | |
| Reporting Date: 18/09/2023 | DETS Sample No | 674066 | 674067 | 674068 | | |

| Determinand | Unit | RL | Accreditation | | | | |
|--|-------|--------|---------------|--------|--------|--------|--|
| Aliphatic >C5 - C6 : HS_1D_MS_AL | mg/kg | < 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | |
| Aliphatic >C6 - C8 : HS_1D_MS_AL | mg/kg | < 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | |
| Aliphatic >C8 - C10 : EH_CU_1D_AL | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | |
| Aliphatic >C10 - C12 : EH_CU_1D_AL | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | |
| Aliphatic >C12 - C16 : EH_CU_1D_AL | mg/kg | < 3 | MCERTS | < 3 | < 3 | < 3 | |
| Aliphatic >C16 - C21 : EH_CU_1D_AL | mg/kg | < 3 | MCERTS | < 3 | < 3 | < 3 | |
| Aliphatic >C21 - C34 : EH_CU_1D_AL | mg/kg | < 10 | MCERTS | < 10 | < 10 | < 10 | |
| Aliphatic >C34 - C44 | mg/kg | < 10 | NONE | < 10 | < 10 | < 10 | |
| Aliphatic (C5 - C44) : HS_1D_MS+EH_CU_1D_AL | mg/kg | < 21 | NONE | < 21 | < 21 | < 21 | |
| Aromatic >C5 - C7 : HS_1D_MS_AR | mg/kg | < 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | |
| Aromatic >C7 - C8 : HS_1D_MS_AR | mg/kg | < 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | |
| Aromatic >C8 - C10 : EH_CU_1D_AR | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | |
| Aromatic >C10 - C12 : EH_CU_1D_AR | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | |
| Aromatic >C12 - C16 : EH_CU_1D_AR | mg/kg | < 2 | MCERTS | 5 | < 2 | < 2 | |
| Aromatic >C16 - C21 : EH_CU_1D_AR | mg/kg | < 3 | MCERTS | 12 | < 3 | < 3 | |
| Aromatic >C21 - C35 : EH_CU_1D_AR | mg/kg | < 10 | MCERTS | 17 | < 10 | < 10 | |
| Aromatic >C35 - C44 | mg/kg | < 10 | NONE | < 10 | < 10 | < 10 | |
| Aromatic (C5 - C44) : HS_1D_MS+EH_CU_1D_AR | mg/kg | < 21 | NONE | 34 | < 21 | < 21 | |
| Total >C5 - C44 : HS_1D_MS+EH_CU_1D_Tot al | mg/kg | < 42 | NONE | < 42 | < 42 | < 42 | |



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| Soil Analysis Certificate - BTEX / MTBE | | | | | | |
|---|-----------------|---------------|---------------|---------------|--|--|
| DETS Report No: 23-11413 | Date Sampled | 08/09/23 | 08/09/23 | 08/09/23 | | |
| LK Consult Limited | Time Sampled | None Supplied | None Supplied | None Supplied | | |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | TS201 | TS202 | TS203 | | |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | None Supplied | None Supplied | | |
| Order No: LKC201761-EM | Depth (m) | None Supplied | None Supplied | None Supplied | | |
| Reporting Date: 18/09/2023 | DETS Sample No | 674066 | 674067 | 674068 | | |

| Determinand | Unit | RL | Accreditation | | | | |
|-------------------------|-------|-----|---------------|-----|-----|-----|-----|
| Benzene : HS 1D MS | ug/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 |
| Toluene : HS 1D MS | ug/kg | < 5 | MCERTS | < 5 | < 5 | < 5 | < 5 |
| Ethylbenzene : HS 1D MS | ug/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 |
| p & m-xylene : HS 1D MS | ug/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 |
| o-xylene : HS 1D MS | ug/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 |
| MTBE : HS 1D MS | ug/kg | < 5 | MCERTS | < 5 | < 5 | < 5 | < 5 |



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Soil Analysis Certificate - Sample Descriptions

| | |
|---|--|
| DETS Report No: 23-11413 | |
| LK Consult Limited | |
| Site Reference: Fairfield Road, Droylsden | |
| Project / Job Ref: LKC 20 1761 | |
| Order No: LKC201761-EM | |
| Reporting Date: 18/09/2023 | |

| DETS Sample No | TP / BH No | Additional Refs | Depth (m) | Moisture Content (%) | Sample Matrix Description |
|----------------|------------|-----------------|---------------|----------------------|----------------------------------|
| 674066 | TS201 | None Supplied | None Supplied | 28.4 | Black loamy sand with vegetation |
| 674067 | TS202 | None Supplied | None Supplied | 28.6 | Black loamy sand with vegetation |
| 674068 | TS203 | None Supplied | None Supplied | 29.4 | Black loamy sand with vegetation |

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample ^{U/S}

Unsuitable Sample ^{U/S}

Soil Analysis Certificate - Methodology & Miscellaneous Information

| |
|---|
| DETS Report No: 23-11413 |
| LK Consult Limited |
| Site Reference: Fairfield Road, Droylsden |
| Project / Job Ref: LKC 20 1761 |
| Order No: LKC201761-EM |
| Reporting Date: 18/09/2023 |

| Matrix | Analysed On | Determinand | Brief Method Description | Method No |
|--------|-------------|---|---|-----------|
| Soil | D | Boron - Water Soluble | Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES | E012 |
| Soil | AR | BTEX | Determination of BTEX by headspace GC-MS | E001 |
| Soil | D | Cations | Determination of cations in soil by aqua-regia digestion followed by ICP-OES | E002 |
| Soil | D | Chloride - Water Soluble (2:1) | Determination of chloride by extraction with water & analysed by ion chromatography | E009 |
| Soil | AR | Chromium - Hexavalent | Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphencylcarbazine followed by colorimetry | E016 |
| Soil | AR | Cyanide - Complex | Determination of complex cyanide by distillation followed by colorimetry | E015 |
| Soil | AR | Cyanide - Free | Determination of free cyanide by distillation followed by colorimetry | E015 |
| Soil | AR | Cyanide - Total | Determination of total cyanide by distillation followed by colorimetry | E015 |
| Soil | D | Cyclohexane Extractable Matter (CEM) | Gravimetrically determined through extraction with cyclohexane | E011 |
| Soil | AR | Diesel Range Organics (C10 - C24) | Determination of hexane/acetone extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | Electrical Conductivity | Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement | E022 |
| Soil | AR | Electrical Conductivity | Determination of electrical conductivity by addition of water followed by electrometric measurement | E023 |
| Soil | D | Elemental Sulphur | Determination of elemental sulphur by solvent extraction followed by GC-MS | E020 |
| Soil | AR | EPH (C10 – C40) | Determination of acetone/hexane extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | EPH Product ID | Determination of acetone/hexane extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) | Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS | E004 |
| Soil | D | Fluoride - Water Soluble | Determination of Fluoride by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Fraction Organic Carbon (FOC) | Determination of TOC by combustion analyser. | E027 |
| Soil | D | Organic Matter (SOM) | Determination of TOC by combustion analyser. | E027 |
| Soil | D | TOC (Total Organic Carbon) | Determination of TOC by combustion analyser. | E027 |
| Soil | AR | Exchangeable Ammonium | Determination of ammonium by discrete analyser. | E029 |
| Soil | D | FOC (Fraction Organic Carbon) | Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | D | Loss on Ignition @ 450oC | Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace | E019 |
| Soil | D | Magnesium - Water Soluble | Determination of water soluble magnesium by extraction with water followed by ICP-OES | E025 |
| Soil | D | Metals | Determination of metals by aqua-regia digestion followed by ICP-OES | E002 |
| Soil | AR | Mineral Oil (C10 - C40) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge | E004 |
| Soil | AR | Moisture Content | Moisture content: determined gravimetrically | E003 |
| Soil | D | Nitrate - Water Soluble (2:1) | Determination of nitrate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Organic Matter | Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | AR | PAH - Speciated (EPA 16) | Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards | E005 |
| Soil | AR | PCB - 7 Congeners | Determination of PCB by extraction with acetone and hexane followed by GC-MS | E008 |
| Soil | D | Petroleum Ether Extract (PEE) | Gravimetrically determined through extraction with petroleum ether | E011 |
| Soil | AR | pH | Determination of pH by addition of water followed by electrometric measurement | E007 |
| Soil | AR | Phenols - Total (monohydric) | Determination of phenols by distillation followed by colorimetry | E021 |
| Soil | D | Phosphate - Water Soluble (2:1) | Determination of phosphate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Sulphate (as SO4) - Total | Determination of total sulphate by extraction with 10% HCl followed by ICP-OES | E013 |
| Soil | D | Sulphate (as SO4) - Water Soluble (2:1) | Determination of sulphate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Sulphate (as SO4) - Water Soluble (2:1) | Determination of water soluble sulphate by extraction with water followed by ICP-OES | E014 |
| Soil | AR | Sulphide | Determination of sulphide by distillation followed by colorimetry | E018 |
| Soil | D | Sulphur - Total | Determination of total sulphur by extraction with aqua-regia followed by ICP-OES | E024 |
| Soil | AR | SVOC | Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS | E006 |
| Soil | AR | Thiocyanate (as SCN) | Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry | E017 |
| Soil | D | Toluene Extractable Matter (TEM) | Gravimetrically determined through extraction with toluene | E011 |
| Soil | D | Total Organic Carbon (TOC) | Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | AR | TPH CWG (all: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS | E004 |
| Soil | AR | TPH LQM (all: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS | E004 |
| Soil | AR | VOCS | Determination of volatile organic compounds by headspace GC-MS | E001 |
| Soil | AR | VPH (C6-C8 & C8-C10) | Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID | E001 |

D Dried
AR As Received

| List of HWOL Acronyms and Operators |
|---|
| DETS Report No: 23-11413 |
| LK Consult Limited |
| Site Reference: Fairfield Road, Droyslden |
| Project / Job Ref: LKC 20 1761 |
| Order No: LKC201761-EM |
| Reporting Date: 18/09/2023 |

| Acronym | Description |
|---------|---|
| 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 |
| 2D | GC-GC - Double coil gas chromatography |
| Total | Aliphatics & Aromatics |
| AL | Aliphatics only |
| AR | Aromatics only |
| #1 | EH_2D_Total but with humics mathematically subtracted |
| #2 | EH_2D_Total but with fatty acids mathematically subtracted |
| = | Operator - underscore to separate acronyms (exception for +) |
| + | Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total |

| Det - Acronym |
|--|
| Benzene - HS_1D_MS |
| Ethylbenzene - HS_1D_MS |
| MTBE - HS_1D_MS |
| TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL |
| TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL |
| TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL |
| TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL |
| TPH CWG - Aliphatic >C5 - C44 - HS_1D_MS+EH_CU_1D_AL |
| TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL |
| TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL |
| TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL |
| TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR |
| TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR |
| TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR |
| TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR |
| TPH CWG - Aromatic >C5 - C44 - HS_1D_MS+EH_CU_1D_AR |
| TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR |
| TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR |
| TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR |
| TPH CWG - Total >C5 - C44 - HS_1D_MS+EH_CU_1D_Total |
| Toluene - HS_1D_MS |
| m & p-xylene - HS_1D_MS |
| o-Xylene - HS_1D_MS |



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Derwentside Environmental Testing Services Ltd
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Rose Lane
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Kent
ME17 2JN
t: 01622 850410

DETS Report No: 23-09647

Site Reference: Fairfield Road, Droylsden

Project / Job Ref: LKC 20 1761

Order No: LKC201761-D1

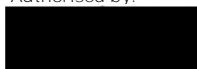
Sample Receipt Date: 25/07/2023

Sample Scheduled Date: 25/07/2023

Report Issue Number: 2

Reporting Date: 09/08/2023

Authorised by:



Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.
This report supersedes 23-09647, issue no.1.

Reason for Re-Issue:
Sample Id' amended

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.



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| Soil Analysis Certificate | | | | |
|---|-----------------|------------------|------------------|------------------|
| DETS Report No: 23-09647 | Date Sampled | 21/07/23 | 21/07/23 | 21/07/23 |
| LK Consult Limited | Time Sampled | None Supplied | None Supplied | None Supplied |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | Plot 55 Front TS | Plot 56 Front TS | Plot 59 Front TS |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | None Supplied | None Supplied |
| Order No: LKC201761-D1 | Depth (m) | None Supplied | None Supplied | None Supplied |
| Reporting Date: 09/08/2023 | DETS Sample No | 665896 | 665897 | 665898 |

| Determinand | Unit | RL | Accreditation | | | | |
|---------------------------------------|----------|--------|---------------|--------------|--------------|--------------|--------------|
| Asbestos Screen ^(S) | N/a | N/a | ISO17025 | Not Detected | Not Detected | Not Detected | Not Detected |
| pH | pH Units | N/a | MCERTS | 8.4 | 8.3 | 8.2 | 8.1 |
| W/S Sulphate as SO ₄ (2:1) | mg/l | < 10 | MCERTS | 34 | 35 | 18 | 44 |
| W/S Sulphate as SO ₄ (2:1) | g/l | < 0.01 | MCERTS | 0.03 | 0.04 | 0.02 | 0.04 |
| Organic Matter (SOM) | % | < 0.1 | MCERTS | 4.1 | 3.9 | 4.7 | 4.4 |
| Arsenic (As) | mg/kg | < 2 | MCERTS | 8 | 9 | 9 | 7 |
| Cadmium (Cd) | mg/kg | < 0.2 | MCERTS | < 0.2 | < 0.2 | 0.2 | < 0.2 |
| Chromium (Cr) | mg/kg | < 2 | MCERTS | 19 | 19 | 21 | 23 |
| Chromium (hexavalent) | mg/kg | < 2 | NONE | < 2 | < 2 | < 2 | < 2 |
| Copper (Cu) | mg/kg | < 4 | MCERTS | 53 | 23 | 26 | 18 |
| Lead (Pb) | mg/kg | < 3 | MCERTS | 109 | 84 | 69 | 45 |
| Mercury (Hg) | mg/kg | < 1 | MCERTS | < 1 | < 1 | < 1 | < 1 |
| Nickel (Ni) | mg/kg | < 3 | MCERTS | 14 | 12 | 15 | 18 |
| Selenium (Se) | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 |
| Vanadium (V) | mg/kg | < 1 | MCERTS | 24 | 27 | 27 | 27 |
| Zinc (Zn) | mg/kg | < 3 | MCERTS | 75 | 63 | 88 | 66 |

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
 Subcontracted analysis (S)



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| Soil Analysis Certificate - Speciated PAHs | | | | | |
|--|-----------------|------------------|------------------|------------------|------------------|
| DETS Report No: 23-09647 | Date Sampled | 21/07/23 | 21/07/23 | 21/07/23 | 21/07/23 |
| LK Consult Limited | Time Sampled | None Supplied | None Supplied | None Supplied | None Supplied |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | Plot 55 Front TS | Plot 56 Front TS | Plot 57 Front TS | Plot 59 Front TS |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | None Supplied | None Supplied | None Supplied |
| Order No: LKC201761-D1 | Depth (m) | None Supplied | None Supplied | None Supplied | None Supplied |
| Reporting Date: 09/08/2023 | DETS Sample No | 665896 | 665897 | 665898 | 665899 |

| Determinand | Unit | RL | Accreditation | | | | |
|------------------------|-------|-------|---------------|-------|-------|-------|-------|
| Naphthalene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Acenaphthylene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Acenaphthene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Fluorene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Phenanthrene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | 0.24 |
| Anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Fluoranthene | mg/kg | < 0.1 | MCERTS | 0.26 | 0.27 | 0.26 | 0.24 |
| Pyrene | mg/kg | < 0.1 | MCERTS | 0.22 | 0.25 | 0.25 | 0.20 |
| Benzo(a)anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Chrysene | mg/kg | < 0.1 | MCERTS | 0.14 | 0.15 | 0.15 | < 0.1 |
| Benzo(b)fluoranthene | mg/kg | < 0.1 | MCERTS | 0.14 | 0.14 | 0.14 | < 0.1 |
| Benzo(k)fluoranthene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Benzo(a)pyrene | mg/kg | < 0.1 | MCERTS | < 0.1 | 0.12 | < 0.1 | < 0.1 |
| Indeno(1,2,3-cd)pyrene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Dibenz(a,h)anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Benzo(ghi)perylene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Total EPA-16 PAHs | mg/kg | < 1.6 | MCERTS | < 1.6 | < 1.6 | < 1.6 | < 1.6 |



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 Kent ME17 2JN
 Tel : 01622 850410



| Soil Analysis Certificate - Sample Descriptions | |
|---|--|
| DETS Report No: 23-09647 | |
| LK Consult Limited | |
| Site Reference: Fairfield Road, Droylsden | |
| Project / Job Ref: LKC 20 1761 | |
| Order No: LKC201761-D1 | |
| Reporting Date: 09/08/2023 | |

| DETS Sample No | TP / BH No | Additional Refs | Depth (m) | Moisture Content (%) | Sample Matrix Description |
|----------------|------------------|-----------------|---------------|----------------------|---|
| 665896 | Plot 55 Front TS | None Supplied | None Supplied | 14.9 | Brown sandy clay with stones and vegetation |
| 665897 | Plot 56 Front TS | None Supplied | None Supplied | 15.4 | Brown sandy clay with stones and vegetation |
| 665898 | Plot 57 Front TS | None Supplied | None Supplied | 19.6 | Brown sandy clay with stones and vegetation |
| 665899 | Plot 59 Front TS | None Supplied | None Supplied | 20.8 | Brown sandy clay with stones and vegetation |

Moisture content is part of procedure E003 & is not an accredited test
 Insufficient Sample ^{1/5}
 Unsuitable Sample ^{1/5}

Soil Analysis Certificate - Methodology & Miscellaneous Information

| |
|---|
| DETS Report No: 23-09647 |
| LK Consult Limited |
| Site Reference: Fairfield Road, Droylsden |
| Project / Job Ref: LKC 20 1761 |
| Order No: LKC201761-D1 |
| Reporting Date: 09/08/2023 |

| Matrix | Analysed On | Determinand | Brief Method Description | Method No |
|--------|-------------|---|---|-----------|
| Soil | D | Boron - Water Soluble | Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES | E012 |
| Soil | AR | BTEX | Determination of BTEX by headspace GC-MS | E001 |
| Soil | D | Cations | Determination of cations in soil by aqua-regia digestion followed by ICP-OES | E002 |
| Soil | D | Chloride - Water Soluble (2:1) | Determination of chloride by extraction with water & analysed by ion chromatography | E009 |
| Soil | AR | Chromium - Hexavalent | Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphencylcarbazine followed by colorimetry | E016 |
| Soil | AR | Cyanide - Complex | Determination of complex cyanide by distillation followed by colorimetry | E015 |
| Soil | AR | Cyanide - Free | Determination of free cyanide by distillation followed by colorimetry | E015 |
| Soil | AR | Cyanide - Total | Determination of total cyanide by distillation followed by colorimetry | E015 |
| Soil | D | Cyclohexane Extractable Matter (CEM) | Gravimetrically determined through extraction with cyclohexane | E011 |
| Soil | AR | Diesel Range Organics (C10 - C24) | Determination of hexane/acetone extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | Electrical Conductivity | Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement | E022 |
| Soil | AR | Electrical Conductivity | Determination of electrical conductivity by addition of water followed by electrometric measurement | E023 |
| Soil | D | Elemental Sulphur | Determination of elemental sulphur by solvent extraction followed by GC-MS | E020 |
| Soil | AR | EPH (C10 – C40) | Determination of acetone/hexane extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | EPH Product ID | Determination of acetone/hexane extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) | Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS | E004 |
| Soil | D | Fluoride - Water Soluble | Determination of Fluoride by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Fraction Organic Carbon (FOC) | Determination of TOC by combustion analyser. | E027 |
| Soil | D | Organic Matter (SOM) | Determination of TOC by combustion analyser. | E027 |
| Soil | D | TOC (Total Organic Carbon) | Determination of TOC by combustion analyser. | E027 |
| Soil | AR | Exchangeable Ammonium | Determination of ammonium by discrete analyser. | E029 |
| Soil | D | FOC (Fraction Organic Carbon) | Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | D | Loss on Ignition @ 450oC | Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace | E019 |
| Soil | D | Magnesium - Water Soluble | Determination of water soluble magnesium by extraction with water followed by ICP-OES | E025 |
| Soil | D | Metals | Determination of metals by aqua-regia digestion followed by ICP-OES | E002 |
| Soil | AR | Mineral Oil (C10 - C40) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge | E004 |
| Soil | AR | Moisture Content | Moisture content: determined gravimetrically | E003 |
| Soil | D | Nitrate - Water Soluble (2:1) | Determination of nitrate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Organic Matter | Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | AR | PAH - Speciated (EPA 16) | Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards | E005 |
| Soil | AR | PCB - 7 Congeners | Determination of PCB by extraction with acetone and hexane followed by GC-MS | E008 |
| Soil | D | Petroleum Ether Extract (PEE) | Gravimetrically determined through extraction with petroleum ether | E011 |
| Soil | AR | pH | Determination of pH by addition of water followed by electrometric measurement | E007 |
| Soil | AR | Phenols - Total (monohydric) | Determination of phenols by distillation followed by colorimetry | E021 |
| Soil | D | Phosphate - Water Soluble (2:1) | Determination of phosphate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Sulphate (as SO4) - Total | Determination of total sulphate by extraction with 10% HCl followed by ICP-OES | E013 |
| Soil | D | Sulphate (as SO4) - Water Soluble (2:1) | Determination of sulphate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Sulphate (as SO4) - Water Soluble (2:1) | Determination of water soluble sulphate by extraction with water followed by ICP-OES | E014 |
| Soil | AR | Sulphide | Determination of sulphide by distillation followed by colorimetry | E018 |
| Soil | D | Sulphur - Total | Determination of total sulphur by extraction with aqua-regia followed by ICP-OES | E024 |
| Soil | AR | SVOC | Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS | E006 |
| Soil | AR | Thiocyanate (as SCN) | Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry | E017 |
| Soil | D | Toluene Extractable Matter (TEM) | Gravimetrically determined through extraction with toluene | E011 |
| Soil | D | Total Organic Carbon (TOC) | Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | AR | TPH CWG (all: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS | E004 |
| Soil | AR | TPH LQM (all: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS | E004 |
| Soil | AR | VOCS | Determination of volatile organic compounds by headspace GC-MS | E001 |
| Soil | AR | VPH (C6-C8 & C8-C10) | Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID | E001 |

D Dried
AR As Received



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| |
|---|
| List of HWOL Acronyms and Operators |
| DETS Report No: 23-09647 |
| LK Consult Limited |
| Site Reference: Fairfield Road, Droyslden |
| Project / Job Ref: LKC 20 1761 |
| Order No: LKC201761-D1 |
| Reporting Date: 09/08/2023 |

| Acronym | Description |
|---------|---|
| 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 |
| 2D | GC-GC - Double coil gas chromatography |
| Total | Aliphatics & Aromatics |
| AL | Aliphatics only |
| AR | Aromatics only |
| #1 | EH_2D_Total but with humics mathematically subtracted |
| #2 | EH_2D_Total but with fatty acids mathematically subtracted |
| _ | Operator - underscore to separate acronyms (exception for +) |
| + | Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total |

| |
|---------------|
| Det - Acronym |
| |
| |

Topsoil Source : Plots 61-62
Fairfield Rd, Droyden



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

| | |
|-------------|--------------------------------|
| Client: | MB Soils & Groundworks Ltd |
| Project: | Yew Tree Farm Phase Five |
| Job: | Topsoil Analysis - BS3882:2015 |
| Date: | 29/07/2022 |
| Job Ref No: | TOHA/22/7593/SS |

| Sample Reference | | Accreditation | |
|-----------------------------------|------|---------------|--|
| Clay (<0.002mm) | % | UKAS | |
| Silt (0.002-0.063mm) | % | UKAS | |
| Sand (0.063-2.0mm) | % | UKAS | |
| Texture Class (UK Classification) | — | UKAS | |
| Stones (2-20mm) | % DW | GLP | |
| Stones (20-50mm) | % DW | GLP | |
| Stones (>50mm) | % DW | GLP | |

| Burscough Topsoil | |
|-------------------|-----|
| | 21 |
| | 11 |
| | 68 |
| | SCL |
| | 3 |
| | 0 |
| | 0 |

| | | | |
|---|-------|------|--|
| pH Value (1:2.5 water extract) | units | UKAS | |
| Electrical Conductivity (1:2.5 water extract) | uS/cm | UKAS | |
| Electrical Conductivity (1:2 CaSO ₄ extract) | uS/cm | UKAS | |
| Exchangeable Sodium Percentage | % | UKAS | |
| Organic Matter (LOI) | % | UKAS | |
| Total Nitrogen (Dumas) | % | UKAS | |
| C : N Ratio | ratio | UKAS | |
| Extractable Phosphorus | mg/l | UKAS | |
| Extractable Potassium | mg/l | UKAS | |
| Extractable Magnesium | mg/l | UKAS | |

| | |
|--|------|
| | 7.5 |
| | 668 |
| | 2306 |
| | 0.7 |
| | 5.1 |
| | 0.19 |
| | 15 |
| | 12 |
| | 60 |
| | 164 |

| | | | |
|-----------------------------|-------|--------|--|
| Total Arsenic (As) | mg/kg | MCERTS | |
| Total Cadmium (Cd) | mg/kg | MCERTS | |
| Total Chromium (Cr) | mg/kg | MCERTS | |
| Hexavalent Chromium (Cr VI) | mg/kg | MCERTS | |
| Total Copper (Cu) | mg/kg | MCERTS | |
| Total Lead (Pb) | mg/kg | MCERTS | |
| Total Mercury (Hg) | mg/kg | MCERTS | |
| Total Nickel (Ni) | mg/kg | MCERTS | |
| Total Selenium (Se) | mg/kg | MCERTS | |
| Total Zinc (Zn) | mg/kg | MCERTS | |
| Water Soluble Boron (B) | mg/kg | MCERTS | |
| Total Cyanide (CN) | mg/kg | MCERTS | |
| Total (mono) Phenols | mg/kg | MCERTS | |

| | |
|--|-------|
| | 7 |
| | < 0.2 |
| | 17 |
| | < 1.8 |
| | 19 |
| | 24 |
| | < 0.3 |
| | 15 |
| | < 1.0 |
| | 35 |
| | 0.7 |
| | < 1.0 |
| | < 1.0 |

| | | | |
|--------------------------|-------|--------|--|
| Naphthalene | mg/kg | MCERTS | |
| Acenaphthylene | mg/kg | MCERTS | |
| Acenaphthene | mg/kg | MCERTS | |
| Fluorene | mg/kg | MCERTS | |
| Phenanthrene | mg/kg | MCERTS | |
| Anthracene | mg/kg | MCERTS | |
| Fluoranthene | mg/kg | MCERTS | |
| Pyrene | mg/kg | MCERTS | |
| Benz(a)anthracene | mg/kg | MCERTS | |
| Chrysene | mg/kg | MCERTS | |
| Benzo(b)fluoranthene | mg/kg | MCERTS | |
| Benzo(k)fluoranthene | mg/kg | MCERTS | |
| Benzo(a)pyrene | mg/kg | MCERTS | |
| Indeno(1,2,3-cd)pyrene | mg/kg | MCERTS | |
| Dibenzo(a,h)anthracene | mg/kg | MCERTS | |
| Benzo(g,h,i)perylene | mg/kg | MCERTS | |
| Total PAHs (sum USEPA16) | mg/kg | MCERTS | |

| | |
|--|--------|
| | < 0.05 |
| | < 0.05 |
| | < 0.05 |
| | < 0.05 |
| | 0.56 |
| | < 0.05 |
| | 0.50 |
| | 0.47 |
| | 0.23 |
| | 0.29 |
| | 0.23 |
| | 0.11 |
| | < 0.05 |
| | < 0.05 |
| | < 0.05 |
| | < 0.05 |
| | 2.4 |

| | | | |
|--------------------------|-------|--------|--|
| Aliphatic TPH >C5 - C8 | mg/kg | MCERTS | |
| Aliphatic TPH >C8 - C8 | mg/kg | MCERTS | |
| Aliphatic TPH >C8 - C10 | mg/kg | MCERTS | |
| Aliphatic TPH >C10 - C12 | mg/kg | MCERTS | |
| Aliphatic TPH >C12 - C16 | mg/kg | MCERTS | |
| Aliphatic TPH >C16 - C21 | mg/kg | MCERTS | |
| Aliphatic TPH >C21 - C35 | mg/kg | MCERTS | |
| Aliphatic TPH (C5 - C35) | mg/kg | MCERTS | |
| Aromatic TPH >C5 - C7 | mg/kg | MCERTS | |
| Aromatic TPH >C7 - C8 | mg/kg | MCERTS | |
| Aromatic TPH >C8 - C10 | mg/kg | MCERTS | |
| Aromatic TPH >C10 - C12 | mg/kg | MCERTS | |
| Aromatic TPH >C12 - C16 | mg/kg | MCERTS | |
| Aromatic TPH >C16 - C21 | mg/kg | MCERTS | |
| Aromatic TPH >C21 - C35 | mg/kg | MCERTS | |
| Aromatic TPH (C5 - C35) | mg/kg | MCERTS | |

| | |
|--|---------|
| | < 0.001 |
| | < 0.001 |
| | < 0.001 |
| | < 1.0 |
| | < 2.0 |
| | < 8.0 |
| | < 8.0 |
| | < 10 |
| | < 0.001 |
| | < 0.001 |
| | < 0.001 |
| | < 1.0 |
| | < 2.0 |
| | < 10 |
| | < 10 |
| | < 10 |

| | | | |
|------------------------------------|-------|--------|--|
| Benzene | mg/kg | MCERTS | |
| Toluene | mg/kg | MCERTS | |
| Ethylbenzene | mg/kg | MCERTS | |
| p & m-xylene | mg/kg | MCERTS | |
| o-xylene | mg/kg | MCERTS | |
| MTBE (Methyl Tertiary Butyl Ether) | mg/kg | MCERTS | |

| | |
|--|---------|
| | < 0.001 |
| | < 0.001 |
| | < 0.001 |
| | < 0.001 |
| | < 0.001 |
| | < 0.001 |

| | | |
|-----------------|------|-----------|
| Asbestos Screen | ND/D | ISO 17025 |
|-----------------|------|-----------|

| |
|--------------|
| Not-detected |
|--------------|

SCL = SANDY CLAY LOAM

Visual Examination

The sample was described as a very dark grey (Munsell Colour 10YR 3/1), slightly moist, friable, very slightly calcareous SANDY CLAY LOAM with a well developed, fine to medium and occasionally coarse granular and sub-angular blocky structure. The sample was slightly stony. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

Harriet MacRae
BSc MSc
Graduate Soil Scientist

Results of analysis should be read in conjunction with the report they were issued with

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4041



CIRAPPENHALL SOURCE



Environmental Science

Analytical Report Number: 20-34336
Project / Site name: Astor Drive
Your Order No: 12.613.HM.A

| Lab Sample Number | 1643369 | 1643370 | | | |
|--------------------------------------|---------------|--------------------|----------------------|-------|-------|
| Sample Reference | TS101 | TS102 | | | |
| Sample Number | None Supplied | None Supplied | | | |
| Depth (m) | None Supplied | None Supplied | | | |
| Date Sampled | 07/10/2020 | 07/10/2020 | | | |
| Time Taken | None Supplied | None Supplied | | | |
| Analytical Parameter (Soil Analysis) | Units | Limit of detection | Accreditation Status | | |
| Stone Content | % | 0.1 | NONE | < 0.1 | < 0.1 |
| Molsture Content | % | N/A | NONE | 23 | 25 |
| Total mass of sample received | kg | 0.001 | NONE | 0.6 | 2 |

| Asbestos In Soil | Type | N/A | ISO 17025 | Not-detected | Not-detected |
|------------------|------|-----|-----------|--------------|--------------|
| | | | | | |

General Inorganics

| | pH Units | N/A | MCERTS | 7 | 7 |
|---|----------|---------|--------|-------|-------|
| pH - Automated | | | | | |
| Total Cyanide | mg/kg | 1 | MCERTS | < 1 | < 1 |
| Total Sulphate as SO4 | mg/kg | 50 | MCERTS | 600 | 680 |
| Water Soluble Sulphate as SO4 16hr extraction (2:1) | mg/kg | 2.5 | MCERTS | 52 | 120 |
| Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent) | g/l | 0.00125 | MCERTS | 0.026 | 0.058 |
| Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent) | mg/l | 1.25 | MCERTS | 25.9 | 58.2 |
| Sulphide | mg/kg | 1 | MCERTS | 24 | 28 |
| Total Sulphur | mg/kg | 50 | MCERTS | 280 | 310 |

Total Phenols

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

Speciated PAHs

| | mg/kg | 0.05 | MCERTS | < 0.05 | < 0.05 |
|------------------------|-------|------|--------|--------|--------|
| Naphthalene | | | | | |
| Acenaphthylene | mg/kg | 0.05 | MCERTS | < 0.05 | < 0.05 |
| Acenaphthene | mg/kg | 0.05 | MCERTS | < 0.05 | < 0.05 |
| Fluorene | mg/kg | 0.05 | MCERTS | < 0.05 | < 0.05 |
| Phenanthrene | mg/kg | 0.05 | MCERTS | < 0.05 | 0.48 |
| Anthracene | mg/kg | 0.05 | MCERTS | < 0.05 | < 0.05 |
| Fluoranthene | mg/kg | 0.05 | MCERTS | < 0.05 | 0.81 |
| Pyrene | mg/kg | 0.05 | MCERTS | < 0.05 | 0.75 |
| Benzo(a)anthracene | mg/kg | 0.05 | MCERTS | < 0.05 | 0.38 |
| Chrysene | mg/kg | 0.05 | MCERTS | < 0.05 | 0.47 |
| Benzo(b)fluoranthene | mg/kg | 0.05 | MCERTS | < 0.05 | 0.45 |
| Benzo(k)fluoranthene | mg/kg | 0.05 | MCERTS | < 0.05 | 0.27 |
| Benzo(a)pyrene | mg/kg | 0.05 | MCERTS | < 0.05 | 0.42 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.05 | MCERTS | < 0.05 | < 0.05 |
| Dibenz(a,h)anthracene | mg/kg | 0.05 | MCERTS | < 0.05 | < 0.05 |
| Benzo(ghi)perylene | mg/kg | 0.05 | MCERTS | < 0.05 | < 0.05 |

Total PAH

| Speciated Total EPA-16 PAHs | mg/kg | 0.8 | MCERTS | < 0.80 | 4.03 |
|-----------------------------|-------|-----|--------|--------|------|
| | | | | | |

Heavy Metals / Metalloids

| | mg/kg | 1 | MCERTS | 16 | 18 |
|-----------------------------------|-------|-----|--------|-------|-------|
| Arsenic (aqua regia extractable) | | | | | |
| Cadmium (aqua regia extractable) | mg/kg | 0.2 | MCERTS | < 0.2 | < 0.2 |
| Chromium (hexavalent) | mg/kg | 4 | MCERTS | < 4.0 | < 4.0 |
| Chromium (aqua regia extractable) | mg/kg | 1 | MCERTS | 25 | 23 |
| Copper (aqua regia extractable) | mg/kg | 1 | MCERTS | 60 | 62 |
| Lead (aqua regia extractable) | mg/kg | 1 | MCERTS | 67 | 78 |
| Mercury (aqua regia extractable) | mg/kg | 0.3 | MCERTS | < 0.3 | < 0.3 |
| Nickel (aqua regia extractable) | mg/kg | 1 | MCERTS | 20 | 20 |
| Selenium (aqua regia extractable) | mg/kg | 1 | MCERTS | < 1.0 | 1.2 |
| Zinc (aqua regia extractable) | mg/kg | 1 | MCERTS | 75 | 84 |



4041



Environmental Science

Analytical Report Number: 20-34336
 Project / Site name: Astor Drive
 Your Order No: 12.613.HM.A

| | | | | | |
|---|---------------|--------------------|----------------------|--|--|
| Lab Sample Number | 1643369 | 1643370 | | | |
| Sample Reference | TS101 | TS102 | | | |
| Sample Number | None Supplied | None Supplied | | | |
| Depth (m) | None Supplied | None Supplied | | | |
| Date Sampled | 07/10/2020 | 07/10/2020 | | | |
| Time Taken | None Supplied | None Supplied | | | |
| Analytical Parameter (Soil Analysis) | Units | Limit of detection | Accreditation Status | | |

Petroleum Hydrocarbons

| | | | | | |
|--------------------|-------|-----|--------|-------|-------|
| TPH (C5 - C6) | mg/kg | 1 | NONE | < 1.0 | < 1.0 |
| TPH (C6 - C8) | mg/kg | 0.1 | MCERTS | < 0.1 | < 0.1 |
| TPH (C8 - C10) | mg/kg | 0.1 | MCERTS | < 0.1 | < 0.1 |
| TPH (C10 - C12) | mg/kg | 2 | MCERTS | < 2.0 | < 2.0 |
| TPH (C12 - C16) | mg/kg | 4 | MCERTS | < 4.0 | < 4.0 |
| TPH (C16 - C21) | mg/kg | 1 | MCERTS | < 1.0 | < 1.0 |
| TPH (C21 - C35) | mg/kg | 1 | MCERTS | < 1.0 | < 1.0 |
| TPH (C35 - C40) | mg/kg | 10 | MCERTS | < 10 | < 10 |
| TPH Total C5 - C40 | mg/kg | 10 | MCERTS | < 10 | < 10 |

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



| | |
|-------------|--------------------------------|
| Client: | MB Soils & Groundworks Ltd |
| Project: | Wrexham Road, Chester |
| Job: | Topsoll Analysis - BS3682:2016 |
| Date: | 16/02/2022 |
| Job Ref No: | TOHA/22/7331/SS |

| Sample Reference | | |
|-----------------------------------|------|---------------|
| | | Accreditation |
| Clay (<0.002mm) | % | UKAS |
| Silt (0.002-0.063mm) | % | UKAS |
| Sand (0.063-2.0mm) | % | UKAS |
| Texture Class (UK Classification) | - | UKAS |
| Stones (2-20mm) | % DW | GLP |
| Stones (20-50mm) | % DW | GLP |
| Stones (>50mm) | % DW | GLP |

**Wrexham Road
Chester Topsoil**

| |
|----|
| 10 |
| 9 |
| 81 |
| LS |
| 2 |
| 1 |
| 0 |

| | | |
|---|-------|------|
| pH Value (1:2.5 water extract) | units | UKAS |
| Electrical Conductivity (1:2.5 water extract) | uS/cm | UKAS |
| Electrical Conductivity (1:2 CaSO ₄ extract) | uS/cm | UKAS |
| Exchangeable Sodium Percentage | % | UKAS |
| Organic Matter (LOI) | % | UKAS |
| Total Nitrogen (Dumas) | % | UKAS |
| C : N Ratio | ratio | UKAS |
| Extractable Phosphorus | mg/l | UKAS |
| Extractable Potassium | mg/l | UKAS |
| Extractable Magnesium | mg/l | UKAS |

| |
|------|
| 6.4 |
| 73 |
| 2069 |
| 1.0 |
| 5.7 |
| 0.30 |
| 11 |
| 29 |
| 82 |
| 84 |

| | | |
|-----------------------------|-------|--------|
| Total Arsenic (As) | mg/kg | MCERTS |
| Total Cadmium (Cd) | mg/kg | MCERTS |
| Total Chromium (Cr) | mg/kg | MCERTS |
| Hexavalent Chromium (Cr VI) | mg/kg | MCERTS |
| Total Copper (Cu) | mg/kg | MCERTS |
| Total Lead (Pb) | mg/kg | MCERTS |
| Total Mercury (Hg) | mg/kg | MCERTS |
| Total Nickel (Ni) | mg/kg | MCERTS |
| Total Selenium (Se) | mg/kg | MCERTS |
| Total Zinc (Zn) | mg/kg | MCERTS |
| Water Soluble Boron (B) | mg/kg | MCERTS |
| Total Cyanide (CN) | mg/kg | MCERTS |
| Total (mono) Phenols | mg/kg | MCERTS |

| |
|-------|
| 8 |
| < 0.2 |
| 14 |
| < 4.0 |
| 30 |
| 59 |
| < 0.3 |
| 13 |
| < 1.0 |
| 48 |
| 0.3 |
| < 1.0 |
| < 1.0 |

| | | |
|--------------------------|-------|--------|
| Naphthalene | mg/kg | MCERTS |
| Acenaphthylene | mg/kg | MCERTS |
| Acenaphthene | mg/kg | MCERTS |
| Fluorene | mg/kg | MCERTS |
| Phenanthrene | mg/kg | MCERTS |
| Anthracene | mg/kg | MCERTS |
| Fluoranthene | mg/kg | MCERTS |
| Pyrene | mg/kg | MCERTS |
| Benz(a)anthracene | mg/kg | MCERTS |
| Chrysene | mg/kg | MCERTS |
| Benzo(b)fluoranthene | mg/kg | MCERTS |
| Benzo(k)fluoranthene | mg/kg | MCERTS |
| Benzo(a)pyrene | mg/kg | MCERTS |
| Indeno(1,2,3-cd)pyrene | mg/kg | MCERTS |
| Dibenzo(a,h)anthracene | mg/kg | MCERTS |
| Benzo(g,h,i)perylene | mg/kg | MCERTS |
| Total PAHs (sum USEPA16) | mg/kg | MCERTS |

| |
|--------|
| < 0.05 |
| < 0.05 |
| 0.26 |
| 0.22 |
| 1.00 |
| < 0.05 |
| 0.85 |
| 0.88 |
| 0.57 |
| 0.53 |
| 0.37 |
| 0.27 |
| 0.33 |
| < 0.05 |
| < 0.05 |
| < 0.05 |
| 5.3 |

| | | |
|--------------------------|-------|--------|
| Aliphatic TPH >C5 - C6 | mg/kg | MCERTS |
| Aliphatic TPH >C6 - C8 | mg/kg | MCERTS |
| Aliphatic TPH >C8 - C10 | mg/kg | MCERTS |
| Aliphatic TPH >C10 - C12 | mg/kg | MCERTS |
| Aliphatic TPH >C12 - C16 | mg/kg | MCERTS |
| Aliphatic TPH >C16 - C21 | mg/kg | MCERTS |
| Aliphatic TPH >C21 - C35 | mg/kg | MCERTS |
| Aliphatic TPH (C5 - C35) | mg/kg | MCERTS |
| Aromatic TPH >C5 - C7 | mg/kg | MCERTS |
| Aromatic TPH >C7 - C8 | mg/kg | MCERTS |
| Aromatic TPH >C8 - C10 | mg/kg | MCERTS |
| Aromatic TPH >C10 - C12 | mg/kg | MCERTS |
| Aromatic TPH >C12 - C16 | mg/kg | MCERTS |
| Aromatic TPH >C16 - C21 | mg/kg | MCERTS |
| Aromatic TPH >C21 - C35 | mg/kg | MCERTS |
| Aromatic TPH (C5 - C35) | mg/kg | MCERTS |

| |
|---------|
| < 0.001 |
| < 0.001 |
| < 0.001 |
| < 1.0 |
| < 2.0 |
| < 8.0 |
| 25 |
| 26 |
| < 0.001 |
| < 0.001 |
| < 0.001 |
| < 1.0 |
| < 2.0 |
| < 10 |
| < 10 |
| < 10 |

| | | |
|------------------------------------|-------|--------|
| Benzene | mg/kg | MCERTS |
| Toluene | mg/kg | MCERTS |
| Ethylbenzene | mg/kg | MCERTS |
| p & m-xylene | mg/kg | MCERTS |
| o-xylene | mg/kg | MCERTS |
| MTBE (Methyl Tertiary Butyl Ether) | mg/kg | MCERTS |

| |
|---------|
| < 0.001 |
| < 0.001 |
| < 0.001 |
| < 0.001 |
| < 0.001 |
| < 0.001 |

| | | |
|-----------------|------|-----------|
| Asbestos Screen | ND/D | ISO 17025 |
|-----------------|------|-----------|

| |
|--------------|
| Not-detected |
|--------------|

LS = LOAMY SAND

Visual Examination

The sample was described as a very dark greyish brown (Munsell Colour 10YR 3/2), dry, friable, non-calcareous LOAMY SAND with a weakly developed, fine to medium granular structure. The sample was virtually stone-free and no unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

Results of analysis should be read in conjunction with the report they were issued with

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Tilly Kimble-Wilde
BSc MSc
Graduate Soil Scientist



Catherine Baranek
LK Consult Limited
Unit 29 Eton Business Park
Eton Hill Road
Manchester
M26 2ZS

Derwentside Environmental Testing Services Ltd
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 22-10945

Site Reference: Fairfield Road, Droylsden

Project / Job Ref: LKC 20 1761

Order No: LKC 20 1761-CB

Sample Receipt Date: 20/12/2022

Sample Scheduled Date: 21/12/2022

Report Issue Number: 1

Reporting Date: 04/01/2023

Authorised by:



Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.



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 Rose Lane
 Lenham Heath
 Maidstone
 Kent ME17 2JN
 Tel : 01622 850410



| Soil Analysis Certificate | | | | | | |
|---|-----------------|------------------------------|--|--|--|--|
| DETS Report No: 22-10945 | Date Sampled | 19/12/22 | | | | |
| LK Consult Limited | Time Sampled | None Supplied | | | | |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | Plot 43 & 44 Topsoil (TS) | | | | |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | | | | |
| Order No: LKC 20 1761-CB | Depth (m) | None Supplied | | | | |
| Reporting Date: 04/01/2023 | DETS Sample No | 625904 | | | | |

| Determinand | Unit | RL | Accreditation | | | | |
|---------------------------------------|----------|--------|---------------|--------------|--|--|--|
| Asbestos Screen ^(S) | N/a | N/a | ISO17025 | Not Detected | | | |
| pH | pH Units | N/a | MCERTS | 7.2 | | | |
| Total Cyanide | mg/kg | < 1 | NONE | < 1 | | | |
| Free Cyanide | mg/kg | < 1 | NONE | < 1 | | | |
| W/S Sulphate as SO ₄ (2:1) | mg/l | < 10 | MCERTS | 17 | | | |
| W/S Sulphate as SO ₄ (2:1) | g/l | < 0.01 | MCERTS | 0.02 | | | |
| Organic Matter (SOM) | % | < 0.1 | MCERTS | 3.3 | | | |
| Arsenic (As) | mg/kg | < 2 | MCERTS | 9 | | | |
| W/S Boron | mg/kg | < 1 | NONE | < 1 | | | |
| Cadmium (Cd) | mg/kg | < 0.2 | MCERTS | < 0.2 | | | |
| Chromium (Cr) | mg/kg | < 2 | MCERTS | 19 | | | |
| Chromium (hexavalent) | mg/kg | < 2 | NONE | < 2 | | | |
| Copper (Cu) | mg/kg | < 4 | MCERTS | 31 | | | |
| Lead (Pb) | mg/kg | < 3 | MCERTS | 49 | | | |
| Mercury (Hg) | mg/kg | < 1 | MCERTS | < 1 | | | |
| Nickel (Ni) | mg/kg | < 3 | MCERTS | 14 | | | |
| Selenium (Se) | mg/kg | < 2 | MCERTS | < 3 | | | |
| Vanadium (V) | mg/kg | < 1 | MCERTS | 23 | | | |
| Zinc (Zn) | mg/kg | < 3 | MCERTS | 54 | | | |
| Total Phenols (monohydric) | mg/kg | < 1 | NONE | < 2 | | | |

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
 Subcontracted analysis (S)



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| Soil Analysis Certificate - Speciated PAHs | | | | | | |
|--|-----------------|------------------------------|--|--|--|--|
| DETS Report No: 22-10945 | Date Sampled | 19/12/22 | | | | |
| LK Consult Limited | Time Sampled | None Supplied | | | | |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | Plot 43 & 44 Topsoil (TS) | | | | |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | | | | |
| Order No: LKC 20 1761-CB | Depth (m) | None Supplied | | | | |
| Reporting Date: 04/01/2023 | DETS Sample No | 625904 | | | | |

| Determinand | Unit | RL | Accreditation | | | | |
|------------------------|-------|-------|---------------|-------|--|--|--|
| Naphthalene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Acenaphthylene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Acenaphthene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Fluorene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Phenanthrene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Fluoranthene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Pyrene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Benzo(a)anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Chrysene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Benzo(b)fluoranthene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Benzo(k)fluoranthene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Benzo(a)pyrene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Indeno(1,2,3-cd)pyrene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Dibenz(a,h)anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Benzo(ghi)perylene | mg/kg | < 0.1 | MCERTS | < 0.1 | | | |
| Total EPA-16 PAHs | mg/kg | < 1.6 | MCERTS | < 1.6 | | | |



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 Maidstone
 Kent ME17 2JN
 Tel : 01622 850410



| Soil Analysis Certificate - TPH LOM Banded | | | | | |
|--|-----------------|------------------------------|--|--|--|
| DETS Report No: 22-10945 | Date Sampled | 19/12/22 | | | |
| LK Consult Limited | Time Sampled | None Supplied | | | |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | Plot 43 & 44 Topsoil (TS) | | | |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | | | |
| Order No: LKC 20 1761-CB | Depth (m) | None Supplied | | | |
| Reporting Date: 04/01/2023 | DETS Sample No | 625904 | | | |

| Determinand | Unit | RL | Accreditation | | | | |
|----------------------|-------|--------|---------------|--------|--|--|--|
| Aliphatic >C5 - C6 | mg/kg | < 0.01 | NONE | < 0.01 | | | |
| Aliphatic >C6 - C8 | mg/kg | < 0.05 | NONE | < 0.05 | | | |
| Aliphatic >C8 - C10 | mg/kg | < 2 | MCERTS | < 2 | | | |
| Aliphatic >C10 - C12 | mg/kg | < 2 | MCERTS | < 2 | | | |
| Aliphatic >C12 - C16 | mg/kg | < 3 | MCERTS | < 3 | | | |
| Aliphatic >C16 - C35 | mg/kg | < 10 | MCERTS | < 10 | | | |
| Aliphatic >C35 - C44 | mg/kg | < 10 | NONE | < 10 | | | |
| Aliphatic (C5 - C44) | mg/kg | < 30 | NONE | < 30 | | | |
| Aromatic >C5 - C7 | mg/kg | < 0.01 | NONE | < 0.01 | | | |
| Aromatic >C7 - C8 | mg/kg | < 0.05 | NONE | < 0.05 | | | |
| Aromatic >C8 - C10 | mg/kg | < 2 | MCERTS | < 2 | | | |
| Aromatic >C10 - C12 | mg/kg | < 2 | MCERTS | < 2 | | | |
| Aromatic >C12 - C16 | mg/kg | < 2 | MCERTS | < 2 | | | |
| Aromatic >C16 - C21 | mg/kg | < 3 | MCERTS | < 3 | | | |
| Aromatic >C21 - C35 | mg/kg | < 10 | MCERTS | < 10 | | | |
| Aromatic >C35 - C44 | mg/kg | < 10 | NONE | < 10 | | | |
| Aromatic (>C5 - C44) | mg/kg | < 30 | NONE | < 30 | | | |
| Total >C5 - C44 | mg/kg | < 60 | NONE | < 60 | | | |



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 Tel : 01622 850410



| Soil Analysis Certificate - BTEX / MTBE | | | | | | |
|---|-----------------|------------------------------|--|--|--|--|
| DETS Report No: 22-10945 | Date Sampled | 19/12/22 | | | | |
| LK Consult Limited | Time Sampled | None Supplied | | | | |
| Site Reference: Fairfield Road, Droylsden | TP / BH No | Plot 43 & 44 Topsoil (TS) | | | | |
| Project / Job Ref: LKC 20 1761 | Additional Refs | None Supplied | | | | |
| Order No: LKC 20 1761-CB | Depth (m) | None Supplied | | | | |
| Reporting Date: 04/01/2023 | DETS Sample No | 625904 | | | | |

| Determinand | Unit | RL | Accreditation | | | | |
|--------------|-------|-----|---------------|-----|--|--|--|
| Benzene | ug/kg | < 2 | MCERTS | < 2 | | | |
| Toluene | ug/kg | < 5 | MCERTS | < 5 | | | |
| Ethylbenzene | ug/kg | < 2 | MCERTS | < 2 | | | |
| p & m-xylene | ug/kg | < 2 | MCERTS | < 2 | | | |
| o-xylene | ug/kg | < 2 | MCERTS | < 2 | | | |
| MTBE | ug/kg | < 5 | MCERTS | < 5 | | | |



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Tel : 01622 850410



| Soil Analysis Certificate - Sample Descriptions | |
|---|--|
| DETS Report No: 22-10945 | |
| LK Consult Limited | |
| Site Reference: Fairfield Road, Droylsden | |
| Project / Job Ref: LKC 20 1761 | |
| Order No: LKC 20 1761-CB | |
| Reporting Date: 04/01/2023 | |

| DETS Sample No | TP / BH No | Additional Refs | Depth (m) | Moisture Content (%) | Sample Matrix Description |
|----------------|---------------------------|-----------------|---------------|----------------------|------------------------------|
| 625904 | Plot 43 & 44 Topsoil (TS) | None Supplied | None Supplied | 14.1 | Brown sandy clay with stones |

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample ^{1/S}

Unsuitable Sample ^{U/S}

| Soil Analysis Certificate - Methodology & Miscellaneous Information | |
|---|--|
| DETS Report No: 22-10945 | |
| LK Consult Limited | |
| Site Reference: Fairfield Road, Droylsden | |
| Project / Job Ref: LKC 20 1761 | |
| Order No: LKC 20 1761-CB | |
| Reporting Date: 04/01/2023 | |

| Matrix | Analysed On | Determinand | Brief Method Description | Method No |
|--------|-------------|---|--|-----------|
| Soil | D | Boron - Water Soluble | Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES | E012 |
| Soil | AR | BTEX | Determination of BTEX by headspace GC-MS | E001 |
| Soil | D | Cations | Determination of cations in soil by aqua-regia digestion followed by ICP-OES | E002 |
| Soil | D | Chloride - Water Soluble (2:1) | Determination of chloride by extraction with water & analysed by ion chromatography | E009 |
| Soil | AR | Chromium - Hexavalent | Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry | E016 |
| Soil | AR | Cyanide - Complex | Determination of complex cyanide by distillation followed by colorimetry | E015 |
| Soil | AR | Cyanide - Free | Determination of free cyanide by distillation followed by colorimetry | E015 |
| Soil | AR | Cyanide - Total | Determination of total cyanide by distillation followed by colorimetry | E015 |
| Soil | D | Cyclohexane Extractable Matter (CEM) | Gravimetrically determined through extraction with cyclohexane | E011 |
| Soil | AR | Diesel Range Organics (C10 - C24) | Determination of hexane/acetone extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | Electrical Conductivity | Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement | E022 |
| Soil | AR | Electrical Conductivity | Determination of electrical conductivity by addition of water followed by electrometric measurement | E023 |
| Soil | D | Elemental Sulphur | Determination of elemental sulphur by solvent extraction followed by GC-MS | E020 |
| Soil | AR | EPH (C10 - C40) | Determination of acetone/hexane extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | EPH Product ID | Determination of acetone/hexane extractable hydrocarbons by GC-FID | E004 |
| Soil | AR | EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) | Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS | E004 |
| Soil | D | Fluoride - Water Soluble | Determination of Fluoride by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Fraction Organic Carbon (FOC) | Determination of TOC by combustion analyser. | E027 |
| Soil | D | Organic Matter (SOM) | Determination of TOC by combustion analyser. | E027 |
| Soil | D | TOC (Total Organic Carbon) | Determination of TOC by combustion analyser. | E027 |
| Soil | AR | Exchangeable Ammonium | Determination of ammonium by discrete analyser. | E029 |
| Soil | D | FOC (Fraction Organic Carbon) | Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | D | Loss on Ignition @ 450oC | Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace | E019 |
| Soil | D | Magnesium - Water Soluble | Determination of water soluble magnesium by extraction with water followed by ICP-OES | E025 |
| Soil | D | Metals | Determination of metals by aqua-regia digestion followed by ICP-OES | E002 |
| Soil | AR | Mineral Oil (C10 - C40) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge | E004 |
| Soil | AR | Moisture Content | Moisture content: determined gravimetrically | E003 |
| Soil | D | Nitrate - Water Soluble (2:1) | Determination of nitrate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Organic Matter | Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | AR | PAH - Speciated (EPA 16) | Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards | E005 |
| Soil | AR | PCB - 7 Congeners | Determination of PCB by extraction with acetone and hexane followed by GC-MS | E008 |
| Soil | D | Petroleum Ether Extract (PEE) | Gravimetrically determined through extraction with petroleum ether | E011 |
| Soil | AR | pH | Determination of pH by addition of water followed by electrometric measurement | E007 |
| Soil | AR | Phenols - Total (monohydric) | Determination of phenols by distillation followed by colorimetry | E021 |
| Soil | D | Phosphate - Water Soluble (2:1) | Determination of phosphate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Sulphate (as SO4) - Total | Determination of total sulphate by extraction with 10% HCl followed by ICP-OES | E013 |
| Soil | D | Sulphate (as SO4) - Water Soluble (2:1) | Determination of sulphate by extraction with water & analysed by ion chromatography | E009 |
| Soil | D | Sulphate (as SO4) - Water Soluble (2:1) | Determination of water soluble sulphate by extraction with water followed by ICP-OES | E014 |
| Soil | AR | Sulphide | Determination of sulphide by distillation followed by colorimetry | E018 |
| Soil | D | Sulphur - Total | Determination of total sulphur by extraction with aqua-regia followed by ICP-OES | E024 |
| Soil | AR | SVOC | Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS | E006 |
| Soil | AR | Thiocyanate (as SCN) | Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry | E017 |
| Soil | D | Toluene Extractable Matter (TEM) | Gravimetrically determined through extraction with toluene | E011 |
| Soil | D | Total Organic Carbon (TOC) | Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate | E010 |
| Soil | AR | TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS | E004 |
| Soil | AR | TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44) | Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS | E004 |
| Soil | AR | VOCS | Determination of volatile organic compounds by headspace GC-MS | E001 |
| Soil | AR | VPH (C6-C8 & C8-C10) | Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID | E001 |

D Dried
AR As Received

APPENDIX D

IMPORTED CLEAN INERT FILL TESTING DATA

Final Report

| | | | |
|-------------------------------|--|-------------------------|-------------|
| Report No.: | 22-41883-1 | | |
| Initial Date of Issue: | 12-Nov-2022 | | |
| Client | LK Consult | | |
| Client Address: | Unit 29 Eton Business Park Eton Hill Road Radcliffe Manchester Lancashire M26 2ZS | | |
| Contact(s): | Catherine Baranek Contaminated Land | | |
| Project | LKC 20 1761 Fairfield Road | | |
| Quotation No.: | | Date Received: | 02-Nov-2022 |
| Order No.: | 740690 | Date Instructed: | 04-Nov-2022 |
| No. of Samples: | 7 | | |
| Turnaround (Wkdays): | 5 | Results Due: | 10-Nov-2022 |
| Date Approved: | 12-Nov-2022 | | |
| Approved By: |  | | |
| Details: | Stuart Henderson, Technical Manager | | |

Results - Soil

Project: LKC 20 1761 Fairfield Road

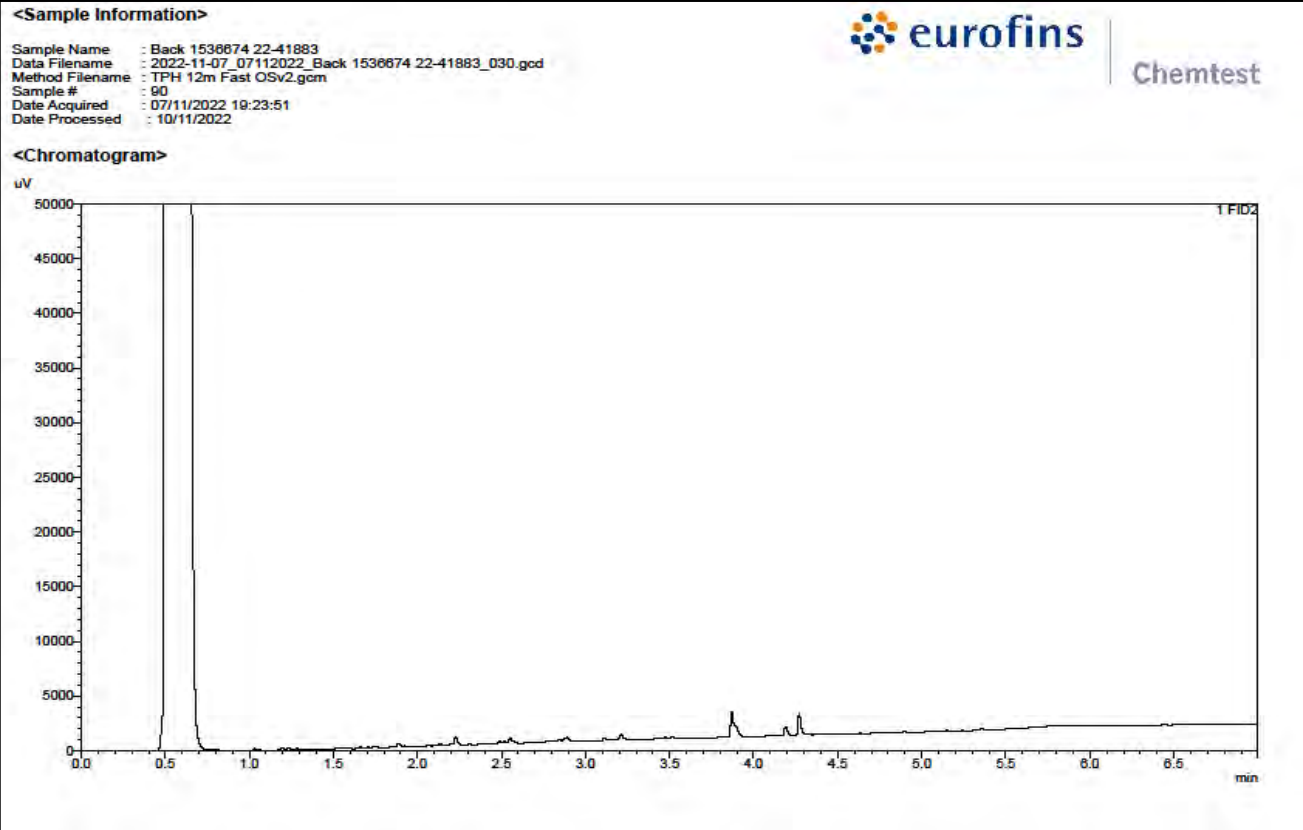
| Client: LK Consult | | Chemtest Job No.: | | 22-41883 | 22-41883 | 22-41883 | 22-41883 | 22-41883 | 22-41883 | 22-41883 | 22-41883 |
|-------------------------------------|---------|----------------------|-------|--------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Quotation No.: | | Chemtest Sample ID.: | | 1536674 | 1536677 | 1536679 | 1536680 | 1536681 | 1536682 | 1536683 | 1536683 |
| Order No.: 740690 | | Client Sample Ref.: | | Plot 61 Rear | Plot 62 Rear | Apartment | Plot 38 Rear | Plot 38 Rear | Plot 37 Rear | Plot 37 Rear | Plot 37 Rear |
| | | Client Sample ID.: | | TS | TS | TS | Sub | TS | Sub | TS | TS |
| | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | Date Sampled: | | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 |
| | | Asbestos Lab: | | COVENTRY | COVENTRY | COVENTRY | COVENTRY | COVENTRY | COVENTRY | COVENTRY | COVENTRY |
| Determinand | 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 |
| Moisture | N | 2030 | % | 0.020 | 19 | 20 | 15 | 21 | 22 | 21 | 28 |
| Soil Colour | N | 2040 | | N/A | Brown | Brown | Brown | Brown | Brown | Brown | Brown |
| Other Material | N | 2040 | | N/A | Stones and Roots | Stones | Stones | Stones and Roots | Stones | Stones | Stones |
| Soil Texture | N | 2040 | | N/A | Loam | Sand | Sand | Sand | Sand | Sand | Sand |
| Chromatogram (TPH) | N | | | N/A | See Attached | See Attached | See Attached | | See Attached | | See Attached |
| pH | U | 2010 | | 4.0 | 8.2 | 8.4 | 6.7 | 7.0 | 7.0 | 7.1 | 6.9 |
| Boron (Hot Water Soluble) | U | 2120 | mg/kg | 0.40 | 0.58 | 0.47 | < 0.40 | | 0.48 | | < 0.40 |
| Sulphate (2:1 Water Soluble) as SO4 | U | 2120 | g/l | 0.010 | < 0.010 | < 0.010 | 0.043 | < 0.010 | 0.039 | 0.012 | < 0.010 |
| Cyanide (Free) | U | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | | < 0.50 | | < 0.50 |
| Cyanide (Total) | U | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | | < 0.50 | | < 0.50 |
| Arsenic | U | 2455 | mg/kg | 0.5 | 2.6 | 4.0 | 3.1 | 7.5 | 6.5 | 5.5 | 5.6 |
| Cadmium | U | 2455 | mg/kg | 0.10 | < 0.10 | 0.20 | 0.22 | 0.19 | 0.13 | 0.11 | 0.16 |
| Chromium | U | 2455 | mg/kg | 0.5 | 3.4 | 5.3 | 5.6 | 15 | 15 | 12 | 11 |
| Copper | U | 2455 | mg/kg | 0.50 | 11 | 21 | 8.9 | 78 | 19 | 17 | 20 |
| Mercury | U | 2455 | mg/kg | 0.05 | 0.06 | 0.12 | 0.05 | 0.07 | 0.06 | 0.05 | 0.10 |
| Nickel | U | 2455 | mg/kg | 0.50 | 4.5 | 6.2 | 5.2 | 9.6 | 9.9 | 7.5 | 11 |
| Lead | U | 2455 | mg/kg | 0.50 | 23 | 48 | 21 | 42 | 28 | 25 | 39 |
| Selenium | U | 2455 | mg/kg | 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.37 | 0.49 | 0.27 | 0.47 |
| Vanadium | U | 2455 | mg/kg | 0.5 | 3.8 | 6.6 | 6.7 | 16 | 16 | 14 | 12 |
| Zinc | U | 2455 | mg/kg | 0.50 | 19 | 71 | 26 | 49 | 37 | 29 | 43 |
| Chromium (Hexavalent) | N | 2490 | mg/kg | 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Organic Matter | U | 2625 | % | 0.40 | 4.5 | 7.8 | 2.2 | 4.5 | 11 | 2.8 | 6.9 |
| Diesel Present | N | 2670 | | N/A | False | False | False | | False | | False |
| Aliphatic TPH >C5-C6 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aliphatic TPH >C6-C8 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aliphatic TPH >C8-C10 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aliphatic TPH >C10-C12 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aliphatic TPH >C12-C16 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aliphatic TPH >C16-C21 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aliphatic TPH >C21-C35 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aliphatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Total Aliphatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | < 5.0 | < 5.0 | < 5.0 | | < 5.0 | | < 5.0 |
| Aromatic TPH >C5-C7 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aromatic TPH >C7-C8 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |
| Aromatic TPH >C8-C10 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | | < 1.0 |

Results - Soil

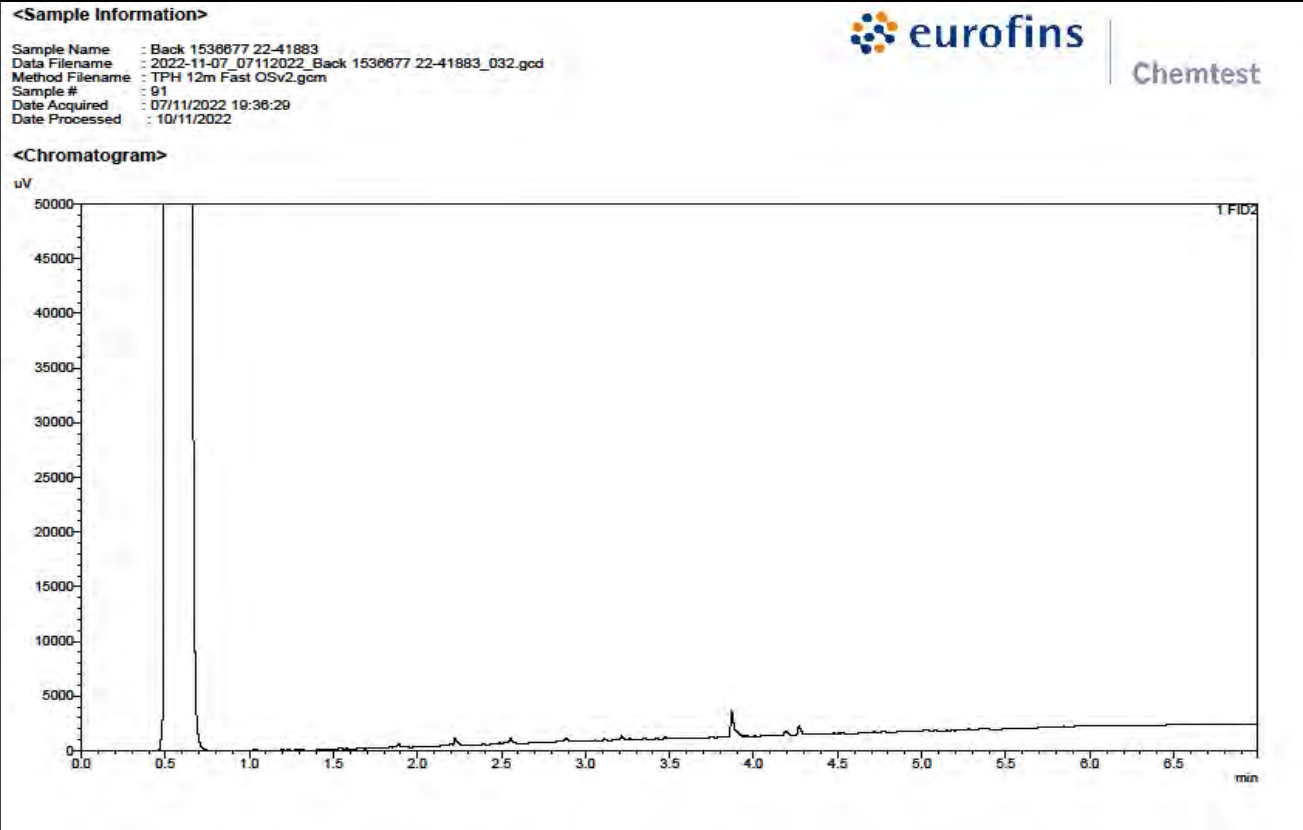
Project: LKC 20 1761 Fairfield Road

| Client: LK Consult | | Chemtest Job No.: | | 22-41883 | 22-41883 | 22-41883 | 22-41883 | 22-41883 | 22-41883 | 22-41883 |
|------------------------------|---------|----------------------|-------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|
| Quotation No.: | | Chemtest Sample ID.: | | 1536674 | 1536677 | 1536679 | 1536680 | 1536681 | 1536682 | 1536683 |
| Order No.: 740690 | | Client Sample Ref.: | | Plot 61 Rear | Plot 62 Rear | Apartment | Plot 38 Rear | Plot 38 Rear | Plot 37 Rear | Plot 37 Rear |
| | | Client Sample ID.: | | TS | TS | TS | Sub | TS | Sub | TS |
| | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | Date Sampled: | | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 | 01-Nov-2022 |
| | | Asbestos Lab: | | COVENTRY | COVENTRY | COVENTRY | COVENTRY | COVENTRY | COVENTRY | COVENTRY |
| Determinand | Accred. | SOP | Units | LOD | | | | | | |
| Aromatic TPH >C10-C12 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Aromatic TPH >C12-C16 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Aromatic TPH >C16-C21 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Aromatic TPH >C21-C35 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Aromatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Total Aromatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | < 5.0 | < 5.0 | < 5.0 | | < 5.0 | < 5.0 |
| Total Petroleum Hydrocarbons | N | 2680 | mg/kg | 10.0 | < 10 | < 10 | < 10 | | < 10 | < 10 |
| Benzene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Toluene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Ethylbenzene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| m & p-Xylene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| o-Xylene | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Methyl Tert-Butyl Ether | U | 2760 | µg/kg | 1.0 | < 1.0 | < 1.0 | < 1.0 | | < 1.0 | < 1.0 |
| Naphthalene | U | 2800 | mg/kg | 0.10 | 0.59 | 0.64 | 0.39 | 0.79 | 1.4 | 0.77 |
| Acenaphthylene | N | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Acenaphthene | U | 2800 | mg/kg | 0.10 | 0.13 | < 0.10 | < 0.10 | < 0.10 | 0.12 | < 0.10 |
| Fluorene | U | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.15 | 0.18 | < 0.10 |
| Phenanthrene | U | 2800 | mg/kg | 0.10 | 0.58 | 0.57 | 0.16 | 0.61 | 0.28 | 0.20 |
| Anthracene | U | 2800 | mg/kg | 0.10 | 0.14 | 0.11 | < 0.10 | 0.16 | < 0.10 | < 0.10 |
| Fluoranthene | U | 2800 | mg/kg | 0.10 | 0.94 | 0.85 | 0.17 | 0.87 | 0.22 | 0.23 |
| Pyrene | U | 2800 | mg/kg | 0.10 | 0.90 | 0.78 | 0.21 | 0.84 | 0.20 | 0.24 |
| Benzo[a]anthracene | U | 2800 | mg/kg | 0.10 | 0.49 | 0.38 | < 0.10 | 0.49 | < 0.10 | < 0.10 |
| Chrysene | U | 2800 | mg/kg | 0.10 | 0.41 | 0.35 | < 0.10 | 0.39 | < 0.10 | < 0.10 |
| Benzo[b]fluoranthene | U | 2800 | mg/kg | 0.10 | 0.43 | 0.49 | < 0.10 | 0.40 | < 0.10 | < 0.10 |
| Benzo[k]fluoranthene | U | 2800 | mg/kg | 0.10 | 0.12 | 0.11 | < 0.10 | 0.16 | < 0.10 | < 0.10 |
| Benzo[a]pyrene | U | 2800 | mg/kg | 0.10 | 0.51 | 0.40 | < 0.10 | 0.39 | < 0.10 | < 0.10 |
| Indeno(1,2,3-c,d)Pyrene | U | 2800 | mg/kg | 0.10 | 0.22 | 0.24 | < 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 |
| Benzo[g,h,i]perylene | U | 2800 | mg/kg | 0.10 | 0.39 | 0.29 | < 0.10 | 0.24 | < 0.10 | < 0.10 |
| Total Of 16 PAH's | N | 2800 | mg/kg | 2.0 | 5.9 | 5.2 | < 2.0 | 5.5 | 2.4 | < 2.0 |
| Total Phenols | U | 2920 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | | < 0.10 | < 0.10 |

TPH Chromatogram on Soil Sample: 1536674



TPH Chromatogram on Soil Sample: 1536677



TPH Chromatogram on Soil Sample: 1536679

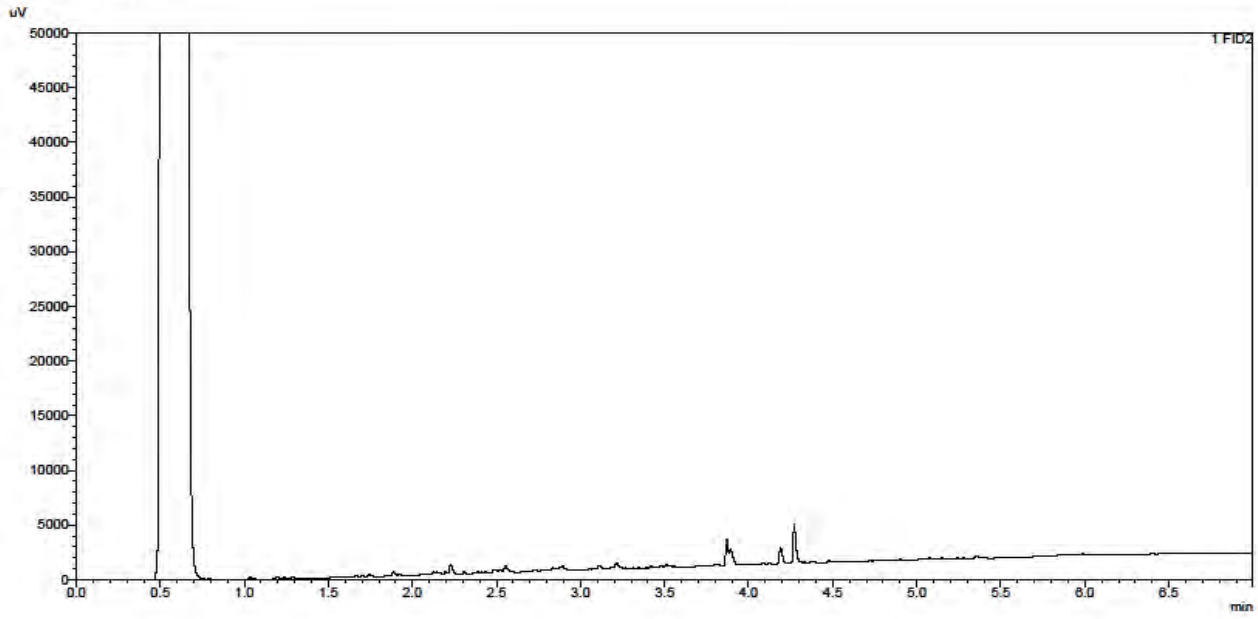
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Date Processed : 10/11/2022



Chemtest

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TPH Chromatogram on Soil Sample: 1536681

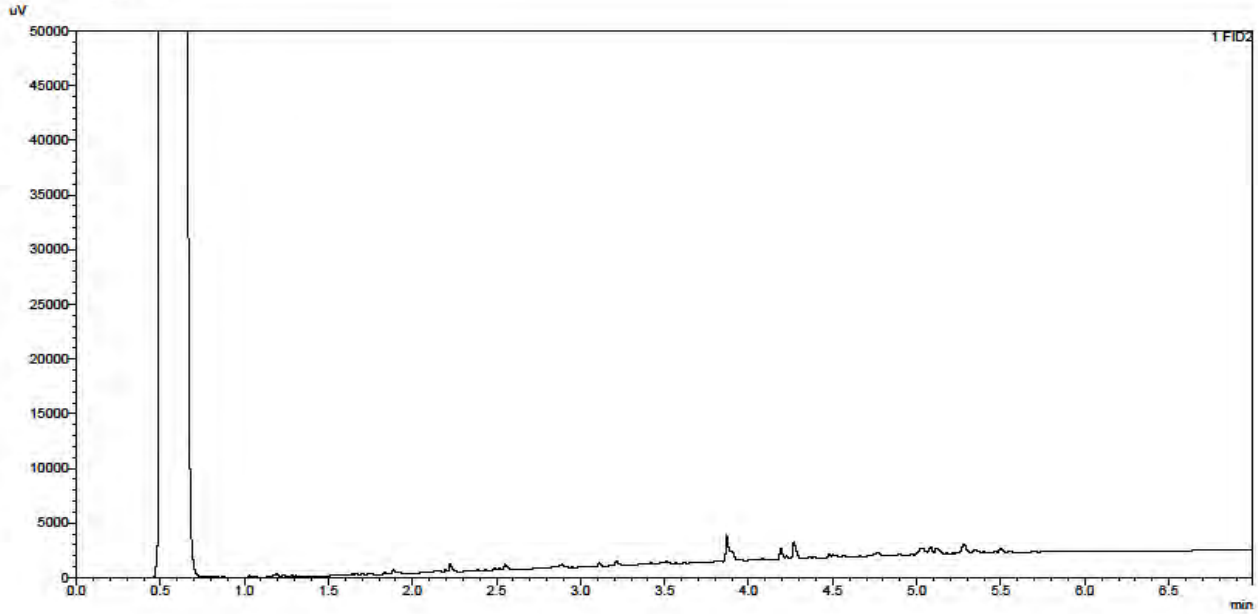
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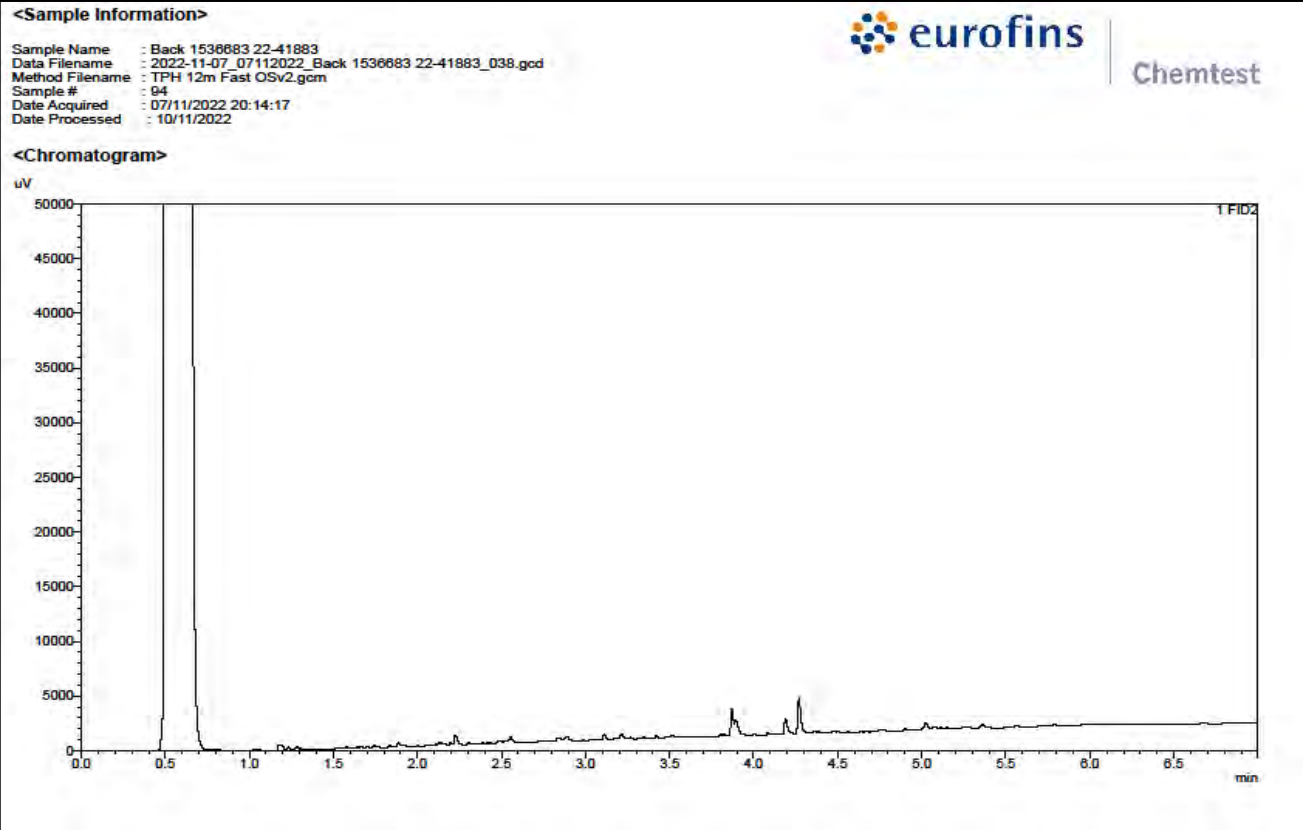


Chemtest

<Chromatogram>



TPH Chromatogram on Soil Sample: 1536683



TPH Interpretation

| Job | Sample | Matrix | Location | Sample Ref | Sample ID | Sample Depth (m) | Gasoline / Diesel Present | TPH Interpretation |
|----------|---------|--------|----------|--------------|-----------|------------------|---------------------------|--------------------|
| 22-41883 | 1536674 | S | | Plot 61 Rear | TS | | No | N/A |
| 22-41883 | 1536677 | S | | Plot 62 Rear | TS | | No | N/A |
| 22-41883 | 1536679 | S | | Apartment | TS | | No | N/A |
| 22-41883 | 1536681 | S | | Plot 38 Rear | TS | | No | N/A |
| 22-41883 | 1536683 | S | | Plot 37 Rear | TS | | No | N/A |

Test Methods

| SOP | Title | Parameters included | Method summary |
|------|--|---|--|
| 2010 | pH Value of Soils | pH | 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 <37°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 |
| 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. |
| 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 |
| 2680 | TPH A/A Split | Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44 | Dichloromethane extraction / GCxGC FID detection |
| 2760 | Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS | Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule | Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds. |
| 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 |

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

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 TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°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

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com



Final Report

Report No.: 22-20258-1

Initial Date of Issue: 08-Jun-2022

Client: LK Consult

Client Address: Unit 29 Eton Business Park
Eton Hill Road
Radcliffe
Manchester
Lancashire
M26 2ZS

Contact(s): Contaminated Land
Ella Mcleod

Project: LKC 20 1761 Fairfield Road, Droylsden

| | | | |
|-----------------------------|-------------|-------------------------|-------------|
| Quotation No.: | | Date Received: | 31-May-2022 |
| Order No.: | 740322 | Date Instructed: | 31-May-2022 |
| No. of Samples: | 18 | | |
| Turnaround (Wkdays): | 5 | Results Due: | 08-Jun-2022 |
| Date Approved: | 08-Jun-2022 | | |

Approved By:


Details: Stuart Henderson, Technical Manager

Results - Soil

Project: LKC 20 1761 Fairfield Road, Droylsden

| Client: LK Consult | | Chemtest Job No.: | | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 |
|-------------------------------------|---------|----------------------|-------|-------------|----------------------|----------------------|----------------------|----------------------|---------------|---------------|----------------------|----------------------|
| Quotation No.: | | Chemtest Sample ID.: | | 1439016 | 1439017 | 1439018 | 1439019 | 1439020 | 1439021 | 1439022 | 1439023 | |
| | | Client Sample ID.: | | Plot 37 MG1 | Plot 37 MG2 | Plot 38 MG1 | Plot 38 MG2 | Plot 39 MG1 | Plot 39 MG2 | Plot 40 MG1 | Plot 40 MG2 | |
| | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | |
| | | Date Sampled: | | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | |
| | | Asbestos Lab: | | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | |
| Determinand | Accred. | SOP | Units | LOD | | | | | | | | |
| ACM Type | U | 2192 | | N/A | - | - | - | - | Fibres/Clumps | Fibres/Clumps | - | - |
| Asbestos Identification | U | 2192 | | N/A | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | No Asbestos Detected | Chrysotile | Chrysotile | No Asbestos Detected | No Asbestos Detected |
| Asbestos by Gravimetry | U | 2192 | % | 0.001 | | | | | 0.001 | 0.017 | | |
| Total Asbestos | U | 2192 | % | 0.001 | | | | | 0.001 | 0.017 | | |
| Moisture | N | 2030 | % | 0.020 | 23 | 24 | 13 | 13 | 19 | 21 | 14 | 13 |
| Soil Colour | N | 2040 | | N/A | Brown | Brown | Brown | Brown | Brown | Brown | Brown | Brown |
| Other Material | N | 2040 | | N/A | Stones | Stones and Roots | Stones and Roots | Stones and Roots | Stones | Stones | Stones and Roots | Stones |
| Soil Texture | N | 2040 | | N/A | Sand | Sand | Sand | Sand | Clay | Clay | Clay | Clay |
| Chromatogram (TPH) | N | | | N/A | | | | | | | | |
| pH | M | 2010 | | 4.0 | 8.3 | 7.8 | 8.2 | 8.4 | 9.3 | 9.6 | 8.8 | 9.0 |
| Boron (Hot Water Soluble) | M | 2120 | mg/kg | 0.40 | | | | | | | | |
| Sulphate (2:1 Water Soluble) as SO4 | M | 2120 | g/l | 0.010 | 0.056 | 0.084 | 0.13 | 0.15 | 1.4 | 1.9 | 0.71 | 0.61 |
| Cyanide (Free) | M | 2300 | mg/kg | 0.50 | | | | | | | | |
| Cyanide (Total) | M | 2300 | mg/kg | 0.50 | | | | | | | | |
| Arsenic | M | 2455 | mg/kg | 0.5 | 24 | 13 | 35 | 43 | 33 | 22 | 22 | 22 |
| Cadmium | M | 2455 | mg/kg | 0.10 | 1.2 | 0.98 | 1.9 | 6.4 | 2.7 | 2.4 | 3.0 | 3.2 |
| Chromium | M | 2455 | mg/kg | 0.5 | 20 | 14 | 27 | 32 | 24 | 14 | 18 | 19 |
| Copper | M | 2455 | mg/kg | 0.50 | 390 | 210 | 550 | 900 | 910 | 370 | 830 | 1400 |
| Mercury | M | 2455 | mg/kg | 0.05 | 0.14 | 0.11 | 0.16 | 0.15 | 0.21 | 0.19 | 0.17 | 0.17 |
| Nickel | M | 2455 | mg/kg | 0.50 | 12 | 10 | 18 | 20 | 220 | 14 | 22 | 21 |
| Lead | M | 2455 | mg/kg | 0.50 | 710 | 560 | 1000 | 1000 | 1500 | 910 | 1400 | 1400 |
| Selenium | M | 2455 | mg/kg | 0.25 | 0.94 | 0.83 | 1.4 | 1.6 | 2.0 | 1.3 | 0.97 | 0.99 |
| Vanadium | U | 2455 | mg/kg | 0.5 | 15 | 13 | 19 | 23 | 14 | 10 | 13 | 13 |
| Zinc | M | 2455 | mg/kg | 0.50 | 500 | 450 | 960 | 1200 | 890 | 660 | 1200 | 1000 |
| 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 | 21 | 13 | 9.5 | 10 | 4.1 | 5.1 | 6.3 | 3.6 |
| Diesel Present | N | 2670 | | N/A | | | | | | | | |
| Aliphatic TPH >C5-C6 | N | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aliphatic TPH >C6-C8 | N | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aliphatic TPH >C8-C10 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aliphatic TPH >C10-C12 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aliphatic TPH >C12-C16 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aliphatic TPH >C16-C21 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aliphatic TPH >C21-C35 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aliphatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | | | | | | | | |
| Total Aliphatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | | | | | | | | |
| Aromatic TPH >C5-C7 | N | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aromatic TPH >C7-C8 | N | 2680 | mg/kg | 1.0 | | | | | | | | |

Results - Soil

Project: LKC 20 1761 Fairfield Road, Droylsden

| Client: LK Consult | | Chemtest Job No.: | | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | |
|------------------------------|---------|----------------------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|
| Quotation No.: | | Chemtest Sample ID.: | | 1439016 | 1439017 | 1439018 | 1439019 | 1439020 | 1439021 | 1439022 | 1439023 | |
| | | Client Sample ID.: | | Plot 37 MG1 | Plot 37 MG2 | Plot 38 MG1 | Plot 38 MG2 | Plot 39 MG1 | Plot 39 MG2 | Plot 40 MG1 | Plot 40 MG2 | |
| | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | |
| | | Date Sampled: | | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | |
| | | Asbestos Lab: | | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | |
| Determinand | Accred. | SOP | Units | LOD | | | | | | | | |
| Aromatic TPH >C8-C10 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aromatic TPH >C10-C12 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aromatic TPH >C12-C16 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aromatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aromatic TPH >C21-C35 | M | 2680 | mg/kg | 1.0 | | | | | | | | |
| Aromatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | | | | | | | | |
| Total Aromatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | | | | | | | | |
| Total Petroleum Hydrocarbons | N | 2680 | mg/kg | 10.0 | | | | | | | | |
| Benzene | M | 2760 | µg/kg | 1.0 | | | | | | | | |
| Toluene | M | 2760 | µg/kg | 1.0 | | | | | | | | |
| Ethylbenzene | M | 2760 | µg/kg | 1.0 | | | | | | | | |
| m & p-Xylene | M | 2760 | µg/kg | 1.0 | | | | | | | | |
| o-Xylene | M | 2760 | µg/kg | 1.0 | | | | | | | | |
| Methyl Tert-Butyl Ether | M | 2760 | µg/kg | 1.0 | | | | | | | | |
| Naphthalene | M | 2800 | mg/kg | 0.10 | 1.8 | < 0.10 | < 0.10 | 2.7 | 0.55 | 0.64 | 0.45 | < 0.10 |
| Acenaphthylene | N | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 0.10 | 0.13 | 0.16 | 0.11 | < 0.10 | < 0.10 |
| Acenaphthene | M | 2800 | mg/kg | 0.10 | 4.1 | < 0.10 | < 0.10 | 6.0 | 0.63 | 1.1 | 0.61 | < 0.10 |
| Fluorene | M | 2800 | mg/kg | 0.10 | 2.8 | < 0.10 | < 0.10 | 4.1 | 0.51 | 0.81 | 0.45 | < 0.10 |
| Phenanthrene | M | 2800 | mg/kg | 0.10 | 28 | 1.4 | 13 | 34 | 4.1 | 8.8 | 3.9 | 3.9 |
| Anthracene | M | 2800 | mg/kg | 0.10 | 6.6 | 0.26 | 3.0 | 8.5 | 1.2 | 2.2 | 0.93 | 1.0 |
| Fluoranthene | M | 2800 | mg/kg | 0.10 | 29 | 2.3 | 13 | 31 | 5.9 | 14 | 6.8 | 5.0 |
| Pyrene | M | 2800 | mg/kg | 0.10 | 29 | 2.4 | 14 | 31 | 6.3 | 15 | 7.3 | 5.0 |
| Benzo[a]anthracene | M | 2800 | mg/kg | 0.10 | 14 | 1.3 | 6.8 | 15 | 3.3 | 7.1 | 4.5 | 2.5 |
| Chrysene | M | 2800 | mg/kg | 0.10 | 15 | 1.2 | 6.8 | 15 | 3.7 | 7.6 | 4.9 | 2.5 |
| Benzo[b]fluoranthene | M | 2800 | mg/kg | 0.10 | 15 | 1.9 | 7.3 | 15 | 4.4 | 9.5 | 7.3 | 3.2 |
| Benzo[k]fluoranthene | M | 2800 | mg/kg | 0.10 | 5.9 | 0.72 | 2.7 | 5.8 | 1.7 | 3.5 | 2.6 | 1.1 |
| Benzo[a]pyrene | M | 2800 | mg/kg | 0.10 | 14 | 1.6 | 6.9 | 14 | 4.0 | 8.6 | 6.3 | 2.9 |
| Indeno(1,2,3-c,d)Pyrene | M | 2800 | mg/kg | 0.10 | 6.8 | 1.1 | 3.4 | 7.0 | 2.5 | 4.7 | 3.9 | 1.5 |
| Dibenz(a,h)Anthracene | N | 2800 | mg/kg | 0.10 | 1.7 | 0.20 | 0.63 | 1.4 | 0.48 | 0.74 | 0.63 | 0.32 |
| Benzo[g,h,i]perylene | M | 2800 | mg/kg | 0.10 | 7.3 | 1.2 | 3.3 | 6.7 | 2.6 | 5.0 | 3.7 | 1.6 |
| Total Of 16 PAH's | N | 2800 | mg/kg | 2.0 | 180 | 16 | 81 | 200 | 42 | 89 | 54 | 31 |
| Total Phenols | M | 2920 | mg/kg | 0.10 | | | | | | | | |

Results - Soil

Project: LKC 20 1761 Fairfield Road, Droylsden

| Client: LK Consult | Chemtest Job No.: | | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 |
|-------------------------------------|----------------------|------|-------------|-------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Quotation No.: | Chemtest Sample ID.: | | 1439024 | 1439025 | 1439026 | 1439027 | 1439028 | 1439029 | 1439030 | 1439031 | | |
| | Client Sample ID.: | | Plot 41 MG1 | Plot 41 MG2 | Plot 42 MG1 | Plot 42 MG2 | Plot 43 SS105 | Plot 44 SS106 | Plot 45 SS101 | Plot 46 SS102 | | |
| | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | | |
| | Date Sampled: | | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | | |
| | Asbestos Lab: | | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | | |
| Determinand | 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 |
| Asbestos by Gravimetry | U | 2192 | % | 0.001 | | | | | | | | |
| Total Asbestos | U | 2192 | % | 0.001 | | | | | | | | |
| Moisture | N | 2030 | % | 0.020 | 14 | 10 | 15 | 12 | 6.2 | 6.1 | 12 | 15 |
| Soil Colour | N | 2040 | | N/A | Brown | Brown | Brown | Brown | Brown | Brown | Brown | Brown |
| Other Material | N | 2040 | | N/A | Stones | Stones | Stones and Roots | Stones | Stones | Stones | Stones and Roots | Stones and Roots |
| Soil Texture | N | 2040 | | N/A | Clay | Clay | Clay | Clay | Sand | Sand | Sand | Clay |
| Chromatogram (TPH) | N | | | N/A | | | | | See Attached | See Attached | See Attached | See Attached |
| pH | M | 2010 | | 4.0 | 9.0 | 10.2 | 9.2 | 8.8 | 9.3 | 9.1 | 8.6 | 8.6 |
| Boron (Hot Water Soluble) | M | 2120 | mg/kg | 0.40 | | | | | 1.6 | 0.45 | 1.2 | 0.67 |
| Sulphate (2:1 Water Soluble) as SO4 | M | 2120 | g/l | 0.010 | 0.85 | 1.0 | 0.96 | 0.82 | 0.28 | 0.087 | 0.48 | 0.69 |
| Cyanide (Free) | M | 2300 | mg/kg | 0.50 | | | | | < 0.50 | < 0.50 | < 0.50 | < 0.50 |
| Cyanide (Total) | M | 2300 | mg/kg | 0.50 | | | | | < 0.50 | < 0.50 | 0.50 | < 0.50 |
| Arsenic | M | 2455 | mg/kg | 0.5 | 29 | 25 | 30 | 19 | 2.7 | 1.9 | 4.8 | 7.3 |
| Cadmium | M | 2455 | mg/kg | 0.10 | 4.3 | 26 | 4.3 | 2.1 | 0.18 | 0.14 | 0.53 | 0.68 |
| Chromium | M | 2455 | mg/kg | 0.5 | 22 | 21 | 21 | 14 | 11 | 9.3 | 10 | 8.9 |
| Copper | M | 2455 | mg/kg | 0.50 | 1500 | 920 | 1100 | 460 | 11 | 9.4 | 90 | 160 |
| Mercury | M | 2455 | mg/kg | 0.05 | 0.20 | 0.18 | 0.31 | 0.16 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Nickel | M | 2455 | mg/kg | 0.50 | 24 | 25 | 21 | 13 | 16 | 14 | 10 | 8.3 |
| Lead | M | 2455 | mg/kg | 0.50 | 2300 | 1900 | 1700 | 900 | 16 | 14 | 160 | 330 |
| Selenium | M | 2455 | mg/kg | 0.25 | 1.1 | 1.2 | 1.1 | 0.65 | 0.40 | 0.26 | 0.25 | 0.32 |
| Vanadium | U | 2455 | mg/kg | 0.5 | 14 | 15 | 15 | 9.8 | 10 | 7.8 | 7.7 | 6.9 |
| Zinc | M | 2455 | mg/kg | 0.50 | 1400 | 1300 | 1800 | 730 | 50 | 40 | 140 | 210 |
| 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 | 3.4 | 5.1 | 4.7 | 4.5 | 0.67 | < 0.40 | 3.4 | 2.3 |
| Diesel Present | N | 2670 | | N/A | | | | | False | False | False | False |
| Aliphatic TPH >C5-C6 | N | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C6-C8 | N | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C8-C10 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C10-C12 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C12-C16 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C16-C21 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C21-C35 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Total Aliphatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | | | | | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Aromatic TPH >C5-C7 | N | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C7-C8 | N | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |

Results - Soil

Project: LKC 20 1761 Fairfield Road, Droylsden

| Client: LK Consult | | Chemtest Job No.: | | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 | 22-20258 |
|------------------------------|---------|----------------------|-------|-------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|
| Quotation No.: | | Chemtest Sample ID.: | | 1439024 | 1439025 | 1439026 | 1439027 | 1439028 | 1439029 | 1439030 | 1439031 | 1439031 |
| | | Client Sample ID.: | | Plot 41 MG1 | Plot 41 MG2 | Plot 42 MG1 | Plot 42 MG2 | Plot 43 SS105 | Plot 44 SS106 | Plot 45 SS101 | Plot 46 SS102 | Plot 46 SS102 |
| | | Sample Type: | | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL | SOIL |
| | | Date Sampled: | | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 | 27-May-2022 |
| | | Asbestos Lab: | | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM | DURHAM |
| Determinand | Accred. | SOP | Units | LOD | | | | | | | | |
| Aromatic TPH >C8-C10 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C10-C12 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C12-C16 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C21-C35 | M | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Total Aromatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | | | | | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Total Petroleum Hydrocarbons | N | 2680 | mg/kg | 10.0 | | | | | < 10 | < 10 | < 10 | < 10 |
| Benzene | M | 2760 | µg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene | M | 2760 | µg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethylbenzene | M | 2760 | µg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| m & p-Xylene | M | 2760 | µg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| o-Xylene | M | 2760 | µg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Methyl Tert-Butyl Ether | M | 2760 | µg/kg | 1.0 | | | | | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Naphthalene | M | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 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 | < 0.10 | < 0.10 | < 0.10 |
| Acenaphthene | M | 2800 | mg/kg | 0.10 | < 0.10 | < 0.10 | < 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 | < 0.10 | < 0.10 | < 0.10 |
| Phenanthrene | M | 2800 | mg/kg | 0.10 | 5.6 | 2.3 | 3.9 | 2.3 | < 0.10 | < 0.10 | 2.5 | 0.83 |
| Anthracene | M | 2800 | mg/kg | 0.10 | 1.7 | 0.61 | 1.0 | 0.67 | < 0.10 | < 0.10 | 0.76 | 0.35 |
| Fluoranthene | M | 2800 | mg/kg | 0.10 | 8.1 | 4.6 | 6.1 | 4.9 | 0.58 | < 0.10 | 3.4 | 1.6 |
| Pyrene | M | 2800 | mg/kg | 0.10 | 8.0 | 5.0 | 6.2 | 5.7 | 0.50 | < 0.10 | 3.5 | 1.7 |
| Benzo[a]anthracene | M | 2800 | mg/kg | 0.10 | 4.2 | 3.1 | 3.2 | 2.7 | < 0.10 | < 0.10 | 1.4 | 0.80 |
| Chrysene | M | 2800 | mg/kg | 0.10 | 4.3 | 3.3 | 3.4 | 2.9 | < 0.10 | < 0.10 | 1.5 | 0.85 |
| Benzo[b]fluoranthene | M | 2800 | mg/kg | 0.10 | 5.4 | 4.6 | 4.3 | 4.2 | < 0.10 | < 0.10 | 2.0 | 1.2 |
| Benzo[k]fluoranthene | M | 2800 | mg/kg | 0.10 | 2.0 | 1.6 | 1.6 | 1.5 | < 0.10 | < 0.10 | 0.68 | 0.24 |
| Benzo[a]pyrene | M | 2800 | mg/kg | 0.10 | 4.9 | 4.0 | 4.0 | 4.3 | < 0.10 | < 0.10 | 1.7 | 0.90 |
| Indeno(1,2,3-c,d)Pyrene | M | 2800 | mg/kg | 0.10 | 2.6 | 2.2 | 2.1 | 2.5 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Dibenz(a,h)Anthracene | N | 2800 | mg/kg | 0.10 | 0.50 | 0.37 | 0.36 | 0.68 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Benzo[g,h,i]perylene | M | 2800 | mg/kg | 0.10 | 2.7 | 2.3 | 2.1 | 2.6 | < 0.10 | < 0.10 | < 0.10 | < 0.10 |
| Total Of 16 PAH's | N | 2800 | mg/kg | 2.0 | 50 | 34 | 38 | 35 | < 2.0 | < 2.0 | 17 | 8.5 |
| Total Phenols | M | 2920 | mg/kg | 0.10 | | | | | < 0.10 | < 0.10 | < 0.10 | < 0.10 |

Results - Soil

Project: LKC 20 1761 Fairfield Road, Droylsden

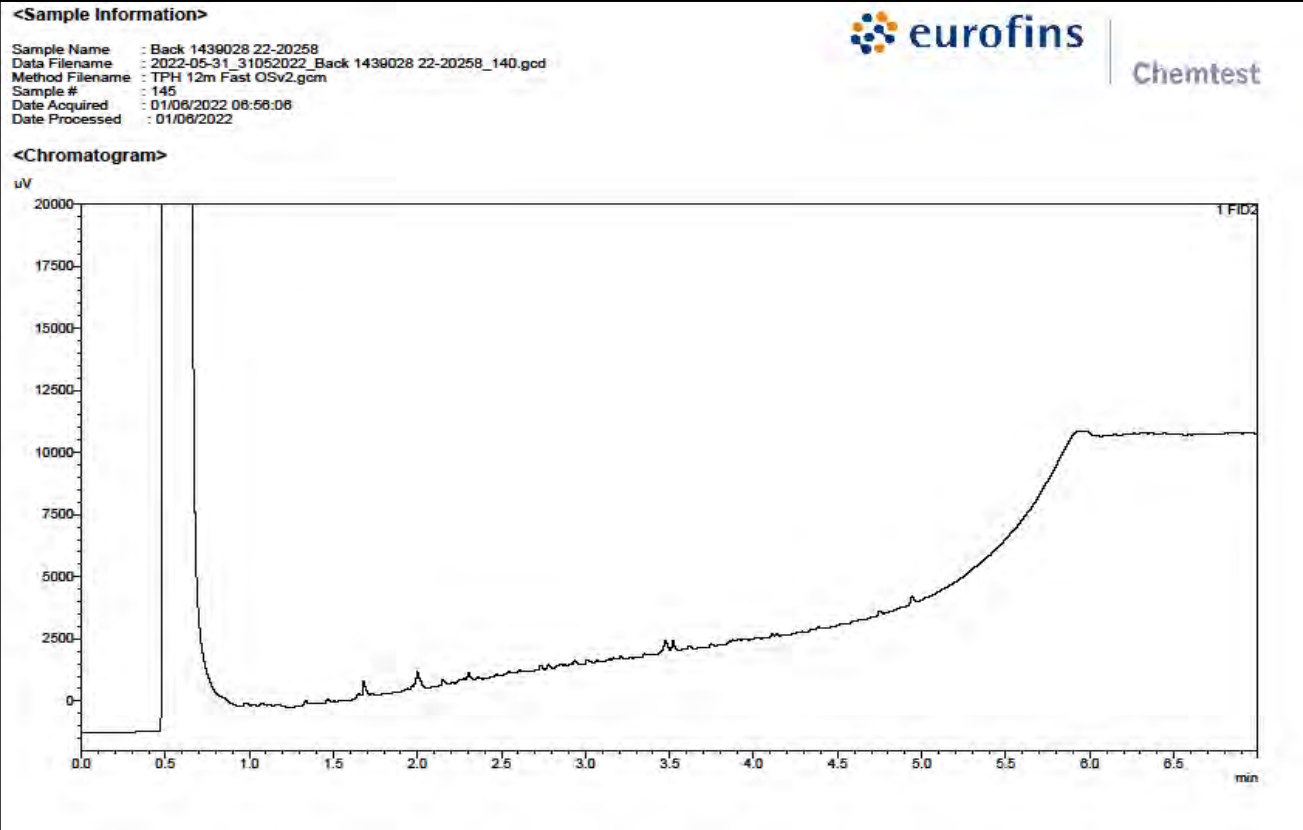
| Client: LK Consult | | Chemtest Job No.: | | 22-20258 | 22-20258 | |
|-------------------------------------|---------|----------------------|-------|---------------|----------------------|----------------------|
| Quotation No.: | | Chemtest Sample ID.: | | 1439032 | 1439033 | |
| | | Client Sample ID.: | | Plot 47 SS103 | Plot 48 SS104 | |
| | | Sample Type: | | SOIL | SOIL | |
| | | Date Sampled: | | 27-May-2022 | 27-May-2022 | |
| | | Asbestos Lab: | | DURHAM | DURHAM | |
| Determinand | Accred. | SOP | Units | LOD | | |
| ACM Type | U | 2192 | | N/A | - | - |
| Asbestos Identification | U | 2192 | | N/A | No Asbestos Detected | No Asbestos Detected |
| Asbestos by Gravimetry | U | 2192 | % | 0.001 | | |
| Total Asbestos | U | 2192 | % | 0.001 | | |
| Moisture | N | 2030 | % | 0.020 | 22 | 19 |
| Soil Colour | N | 2040 | | N/A | Brown | Brown |
| Other Material | N | 2040 | | N/A | Stones and Roots | Stones and Roots |
| Soil Texture | N | 2040 | | N/A | Clay | Clay |
| Chromatogram (TPH) | N | | | N/A | See Attached | See Attached |
| pH | M | 2010 | | 4.0 | 8.6 | 8.8 |
| Boron (Hot Water Soluble) | M | 2120 | mg/kg | 0.40 | 0.43 | 0.74 |
| Sulphate (2:1 Water Soluble) as SO4 | M | 2120 | g/l | 0.010 | 0.21 | 0.49 |
| Cyanide (Free) | M | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 |
| Cyanide (Total) | M | 2300 | mg/kg | 0.50 | < 0.50 | < 0.50 |
| Arsenic | M | 2455 | mg/kg | 0.5 | 2.3 | 8.3 |
| Cadmium | M | 2455 | mg/kg | 0.10 | 0.19 | 0.80 |
| Chromium | M | 2455 | mg/kg | 0.5 | 5.3 | 9.7 |
| Copper | M | 2455 | mg/kg | 0.50 | 29 | 110 |
| Mercury | M | 2455 | mg/kg | 0.05 | < 0.05 | < 0.05 |
| Nickel | M | 2455 | mg/kg | 0.50 | 4.7 | 9.6 |
| Lead | M | 2455 | mg/kg | 0.50 | 66 | 290 |
| Selenium | M | 2455 | mg/kg | 0.25 | < 0.25 | 0.32 |
| Vanadium | U | 2455 | mg/kg | 0.5 | 5.2 | 9.0 |
| Zinc | M | 2455 | mg/kg | 0.50 | 46 | 240 |
| Chromium (Hexavalent) | N | 2490 | mg/kg | 0.50 | < 0.50 | < 0.50 |
| Organic Matter | M | 2625 | % | 0.40 | 4.1 | 2.1 |
| Diesel Present | N | 2670 | | N/A | False | False |
| Aliphatic TPH >C5-C6 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C6-C8 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C8-C10 | M | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C10-C12 | M | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C12-C16 | M | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C16-C21 | M | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C21-C35 | M | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Aliphatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Total Aliphatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | < 5.0 | < 5.0 |
| Aromatic TPH >C5-C7 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |
| Aromatic TPH >C7-C8 | N | 2680 | mg/kg | 1.0 | < 1.0 | < 1.0 |

Results - Soil

Project: LKC 20 1761 Fairfield Road, Droylsden

| Client: LK Consult | | Chemtest Job No.: | | 22-20258 | 22-20258 |
|------------------------------|---------|----------------------|-------|---------------|---------------|
| Quotation No.: | | Chemtest Sample ID.: | | 1439032 | 1439033 |
| | | Client Sample ID.: | | Plot 47 SS103 | Plot 48 SS104 |
| | | Sample Type: | | SOIL | SOIL |
| | | Date Sampled: | | 27-May-2022 | 27-May-2022 |
| | | Asbestos Lab: | | DURHAM | DURHAM |
| Determinand | Accred. | SOP | Units | LOD | |
| Aromatic TPH >C8-C10 | M | 2680 | mg/kg | 1.0 | < 1.0 |
| Aromatic TPH >C10-C12 | M | 2680 | mg/kg | 1.0 | < 1.0 |
| Aromatic TPH >C12-C16 | M | 2680 | mg/kg | 1.0 | < 1.0 |
| Aromatic TPH >C16-C21 | U | 2680 | mg/kg | 1.0 | < 1.0 |
| Aromatic TPH >C21-C35 | M | 2680 | mg/kg | 1.0 | < 1.0 |
| Aromatic TPH >C35-C44 | N | 2680 | mg/kg | 1.0 | < 1.0 |
| Total Aromatic Hydrocarbons | N | 2680 | mg/kg | 5.0 | < 5.0 |
| Total Petroleum Hydrocarbons | N | 2680 | mg/kg | 10.0 | < 10 |
| Benzene | M | 2760 | µg/kg | 1.0 | < 1.0 |
| Toluene | M | 2760 | µg/kg | 1.0 | < 1.0 |
| Ethylbenzene | M | 2760 | µg/kg | 1.0 | < 1.0 |
| m & p-Xylene | M | 2760 | µg/kg | 1.0 | < 1.0 |
| o-Xylene | M | 2760 | µg/kg | 1.0 | < 1.0 |
| Methyl Tert-Butyl Ether | M | 2760 | µg/kg | 1.0 | < 1.0 |
| Naphthalene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Acenaphthylene | N | 2800 | mg/kg | 0.10 | < 0.10 |
| Acenaphthene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Fluorene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Phenanthrene | M | 2800 | mg/kg | 0.10 | 0.43 |
| Anthracene | M | 2800 | mg/kg | 0.10 | 0.14 |
| Fluoranthene | M | 2800 | mg/kg | 0.10 | 0.79 |
| Pyrene | M | 2800 | mg/kg | 0.10 | 0.76 |
| Benzo[a]anthracene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Chrysene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Benzo[b]fluoranthene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Benzo[k]fluoranthene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Benzo[a]pyrene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Indeno(1,2,3-c,d)Pyrene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Dibenz(a,h)Anthracene | N | 2800 | mg/kg | 0.10 | < 0.10 |
| Benzo[g,h,i]perylene | M | 2800 | mg/kg | 0.10 | < 0.10 |
| Total Of 16 PAH's | N | 2800 | mg/kg | 2.0 | 2.1 |
| Total Phenols | M | 2920 | mg/kg | 0.10 | < 0.10 |

TPH Chromatogram on Soil Sample: 1439028



TPH Chromatogram on Soil Sample: 1439029

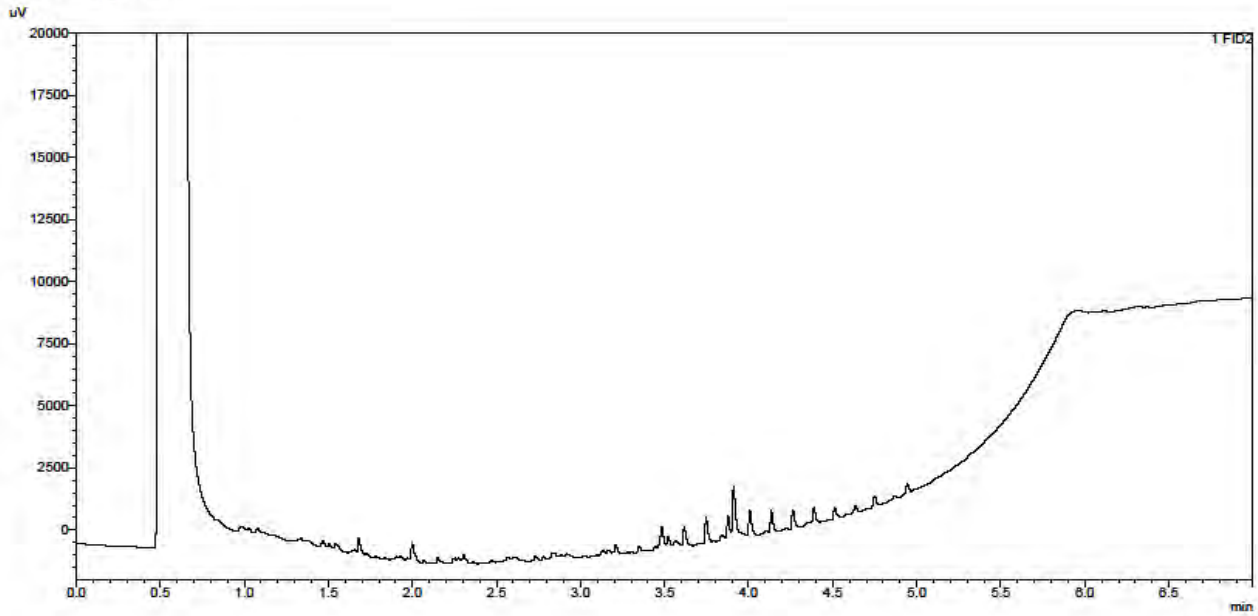
<Sample Information>

Sample Name : Back 1439029
Data Filename : 2022-05-31_31052022_Back 1439029_142.gcd
Method Filename : TPH 12m Fast OSv2.gcm
Sample # : 148
Date Acquired : 01/08/2022 07:08:54
Date Processed : 01/08/2022

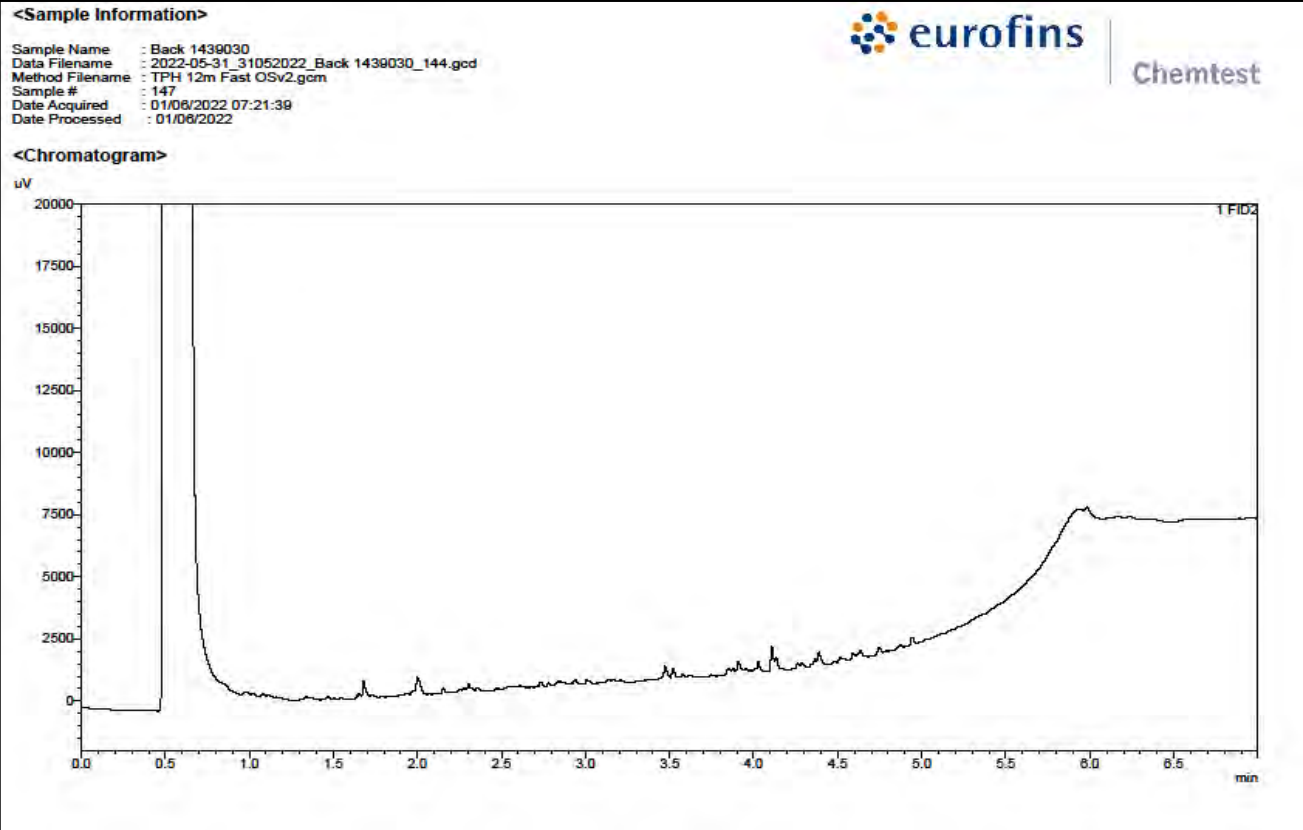


Chemtest

<Chromatogram>



TPH Chromatogram on Soil Sample: 1439030



TPH Chromatogram on Soil Sample: 1439031

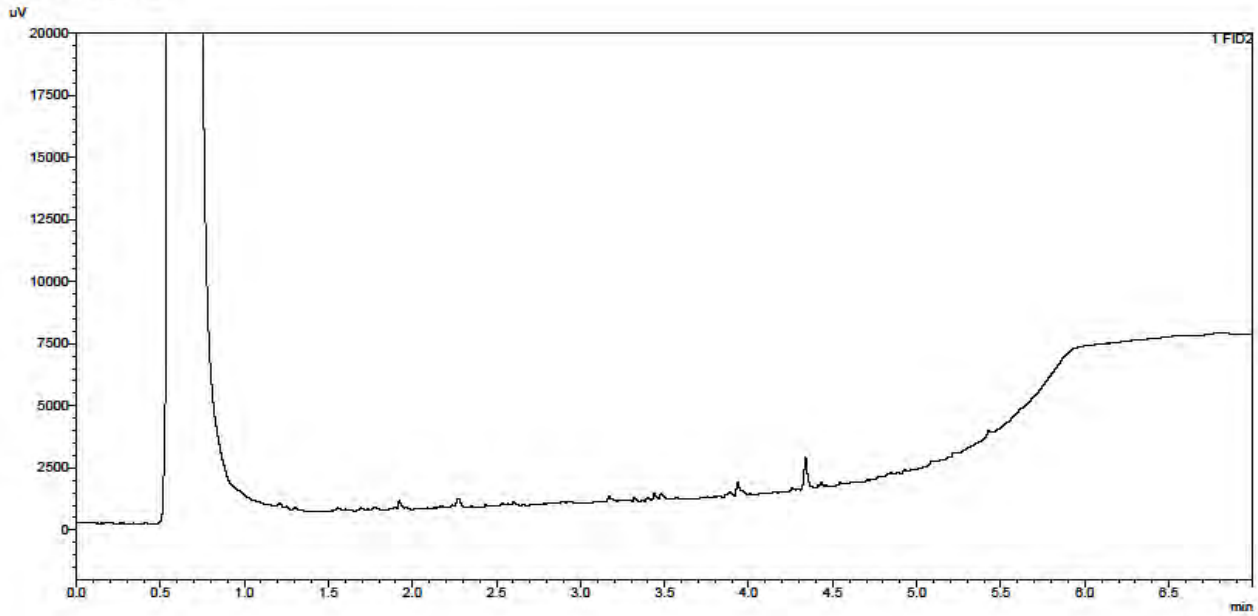
<Sample Information>

Sample Name : Back 1439031 22-20258
Data Filename : 2022-05-31_31052022_Back 1439031 22-20258_072.gcd
Method Filename : TPH 12m Fast OSv2.gcm
Sample # : 111
Date Acquired : 01/08/2022 00:09:51
Date Processed : 01/08/2022

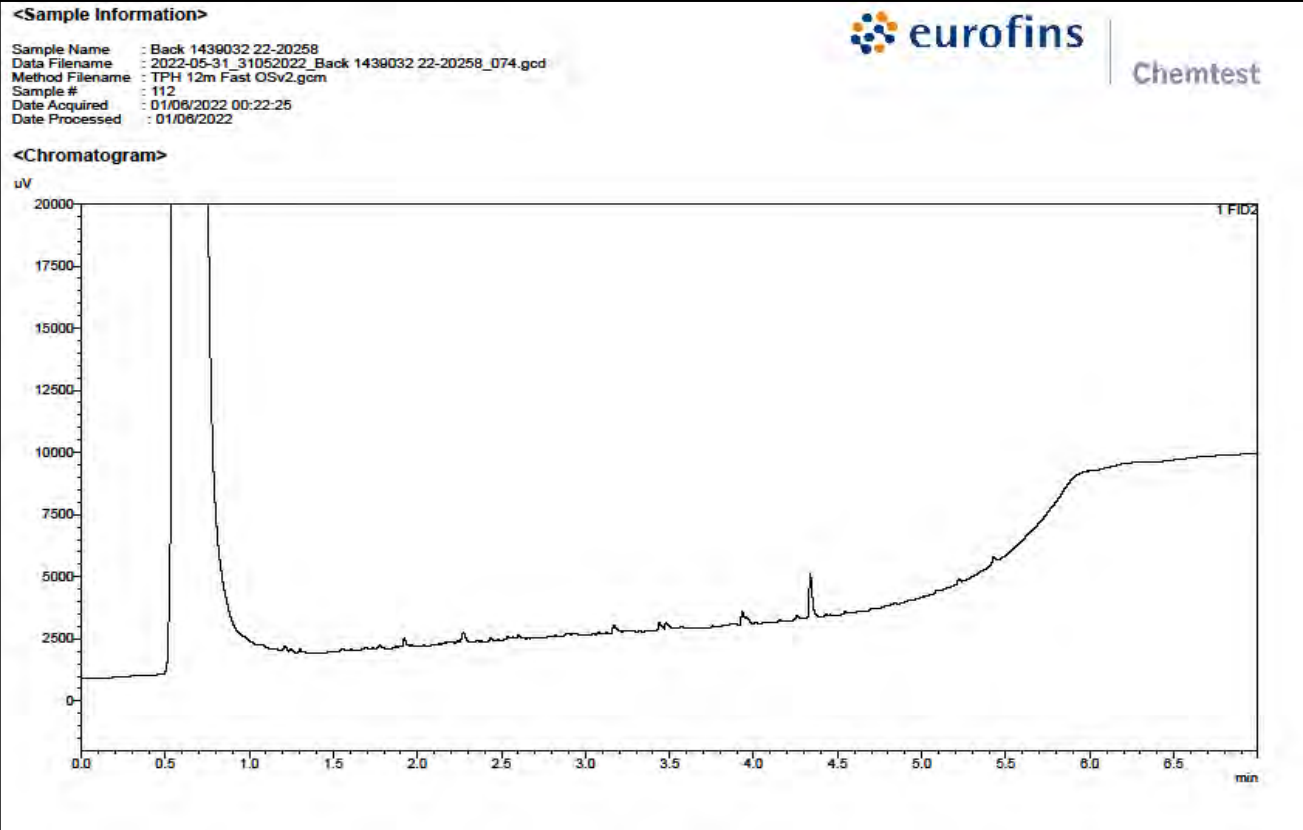


Chemtest

<Chromatogram>



TPH Chromatogram on Soil Sample: 1439032



TPH Chromatogram on Soil Sample: 1439033

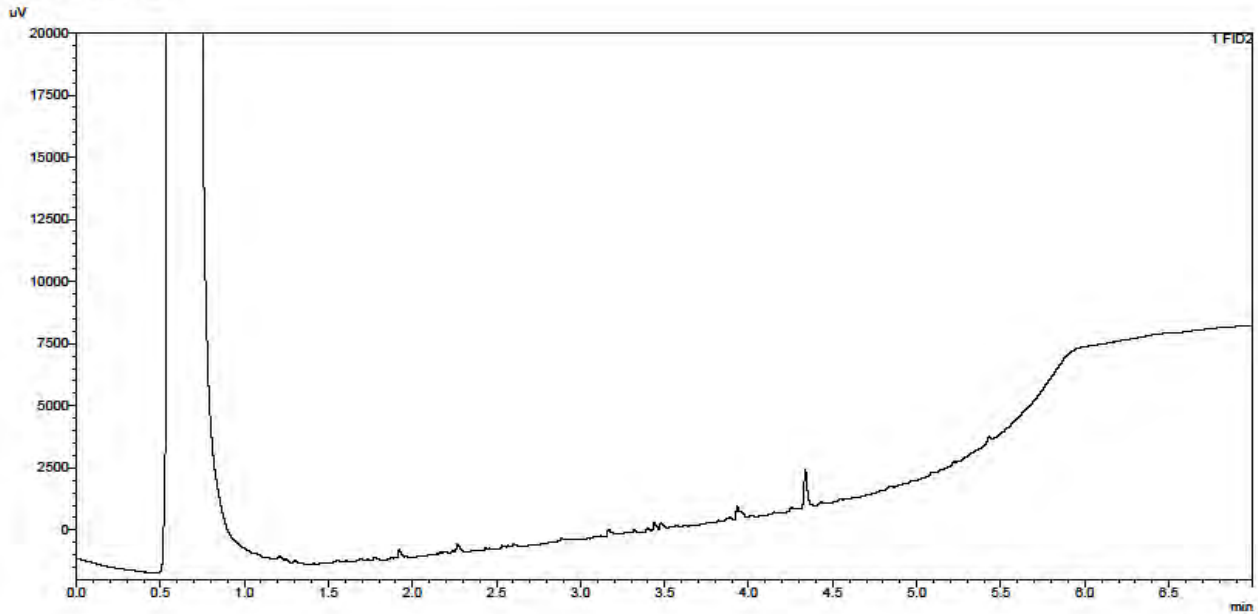
<Sample Information>

Sample Name : Back 1439033 22-20258
Data Filename : 2022-05-31_31052022_Back 1439033 22-20258_078.gcd
Method Filename : TPH 12m Fast OSv2.gcm
Sample # : 113
Date Acquired : 01/08/2022 00:35:04
Date Processed : 01/08/2022



Chemtest

<Chromatogram>



TPH Interpretation

| Job | Sample | Matrix | Location | Sample Ref | Sample ID | Sample Depth (m) | Gasoline / Diesel Present | TPH Interpretation |
|----------|---------|--------|----------|------------|---------------|------------------|---------------------------|--------------------|
| 22-20258 | 1439028 | S | | | Plot 43 SS105 | | No | N/A |
| 22-20258 | 1439029 | S | | | Plot 44 SS106 | | No | N/A |
| 22-20258 | 1439030 | S | | | Plot 45 SS101 | | No | N/A |
| 22-20258 | 1439031 | S | | | Plot 46 SS102 | | No | N/A |
| 22-20258 | 1439032 | S | | | Plot 47 SS103 | | No | N/A |
| 22-20258 | 1439033 | S | | | Plot 48 SS104 | | No | N/A |

Test Methods

| SOP | Title | Parameters included | Method summary |
|------|--|---|--|
| 2010 | pH Value of Soils | pH | 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 <37°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 |
| 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. |
| 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 |
| 2680 | TPH A/A Split | Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44 | Dichloromethane extraction / GCxGC FID detection |
| 2760 | Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS | Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule | Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds. |
| 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 |

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

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 TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°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

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com

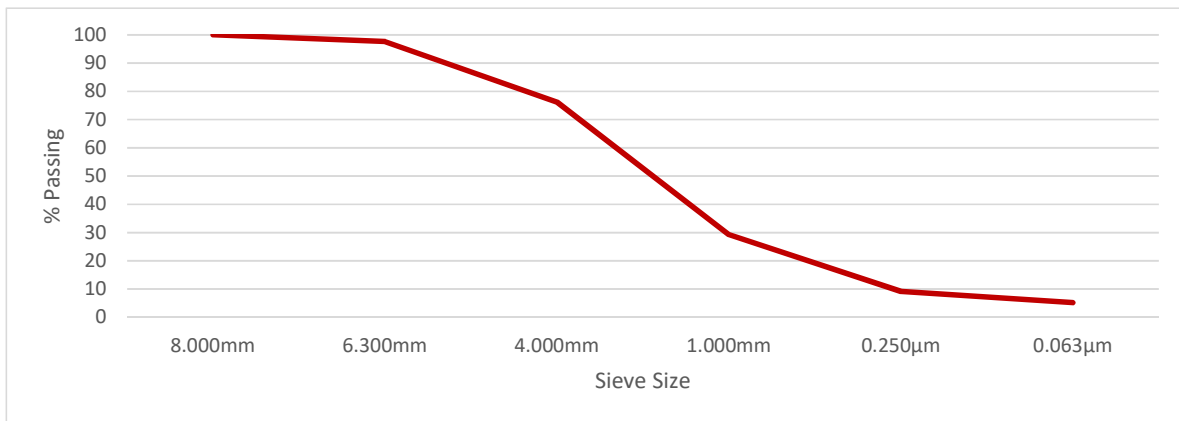
Marshalls Plc
 Central Laboratory
 Brookfoot Works
 Halifax
 West Yorkshire
 HX3 9SX



Laboratory Test Report:

Sample Details:

| | |
|---------------------------|-------------------------------|
| Site | Scoutmoor |
| Product | Grit Sand |
| Tested in accordance with | Marshalls Specification |
| Technician | C Wilson |
| Sample date | 03 July 2023 |
| Test date | 07 July 2023 |
| Moisture content (%) | 2.49 |
| Status | Fail |
| Technical Manger | B Paul |
| Authorised by | C Wilson - Laboratory Manager |
| Report Date | 07 July 2023 |



| Sieve Size | LCL | UCL |
|------------|-----|-----|
| 8.000mm | 100 | 100 |
| 6.300mm | 99 | 100 |
| 4.000mm | 85 | 92 |
| 1.000mm | 38 | 80 |
| 0.250µm | 24 | 76 |
| 0.063µm | 5 | 13 |
| Pan | | |
| Total | | |

| % Passing | Retained (g) |
|-----------|--------------|
| 100.0 | 0 |
| 97.6 | 119 |
| 76.2 | 1085 |
| 29.3 | 2368 |
| 9.2 | 1017 |
| 5.2 | 200.96 |
| | 262.04 |
| | 5052 |



To be used for internal use only. If this information is to be passed on to third parties then seek authorisation from a Technical Manager or similar.

B132 - Crown Farm

Sand (Silica)

| Typical Aggregate properties | | | | Typical Chemical Analysis | | |
|---|-----------------------|----------|-----------|----------------------------------|----------------|-----------|
| Particle Density | Oven Dried | 2.59 | EN 1097-6 | Iron | % as Fe_2O_3 | 0.79 |
| | Saturated Surface Dry | 2.62 | | Calcium | % as CaO | 0.26 |
| | Apparent | 2.66 | | Silicon | % as SiO_2 | 93.16 |
| Water Absorption | | 0.5 % | EN 1097-6 | Magnesium | % as MgO | 0.07 |
| Aggregate Abrasion Value (AAV) | | N/A | EN1097-8 | Aluminum | % as Al_2O_3 | 3.47 |
| Polished Stone Value (PSV) | | N/A | EN1097-8 | Phosphorus | % as P_2O_5 | <0.01 |
| Los Angeles Coefficient (LA) | | N/A | EN1097-2 | Titanium | % as TiO_2 | 0.08 |
| Micro-Deval Coefficient (M_{DE}) | | N/A | EN1097-1 | Potassium | % as K_2O | 1.48 |
| Magnesium Sulfate Soundness | | N/A % | EN1267-2 | Sodium | % as Na_2O | <0.01 |
| Water Soluble Chloride | | <0.001 % | EN1744-1 | | | |
| Water Soluble Sulphate | | <0.01 % | EN1744-1 | | | |
| Acid Soluble Sulphate | | <0.01 % | EN1744-1 | Loss on Ignition | @ 1000C | 0.57 |
| Total Sulfur | | 0.01 % | EN1744-1 | Additional Information : | | |
| Carbon Dioxide Content | | 2.03 % | EN196-21 | Ten percent Fines Value | | N/A |
| Drying Shrinkage | | 0.018 % | EN1367-4 | Modified ten percent Fines Value | | N/A |
| Resistance to Breakage | | NPD Mpa | EN1926 | | Uncompacted | Compacted |
| Proportion of Crushed/Broken Surfaces | | NPD % | EN13383-1 | Bulk Density 10mm | | |
| Resistance to Freeze Thaw | | NPD % | EN13383-2 | Bulk Density 20mm | | |
| Water Absorption | | NPD % | EN13383-2 | Bulk Density 4/20mm | | |
| Sonnenbrand | | None | EN13383-2 | Bulk Density Fine Agg | 1.51 | 1.63 |
| Resistance to Fragmentation (Track Ballast) | | NPD | EN1097-2 | Carbonate Content (%) | 4.61 | |
| Resistance to Wear (Track Ballast) | | NPD | EN1097-2 | | | |

Issued By :


 Christopher Abbott
 Technical Systems Manager

Date of Issue :

16 September 2021



Marshalls Marshalls

Laboratory Grading Analysis

Source : Scout Moor Quarry

Source : Scout Moor Quarry

Material: Fill Sand

Material: Fill Sand

Test Method : Dry Sieve

Sample Area: Stock Pile

Sampled by: Central Lab

Tested by: Central Lab

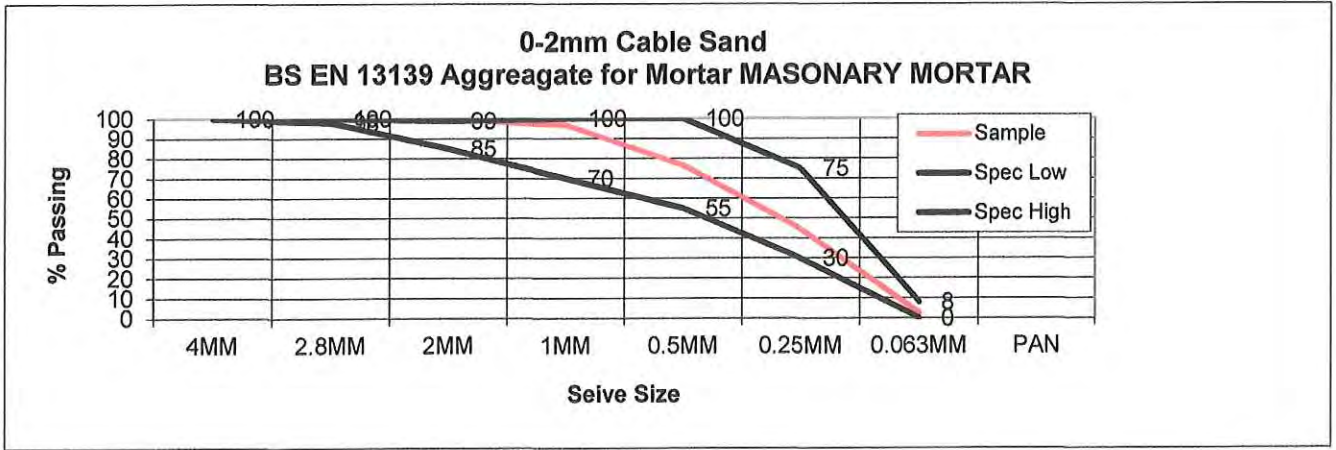
Date Sampled : 02/10/2018

Date Tested : 24/10/2019

| BS EN Sieve | Weight (g.) | % Retained | % Passing 100 | Overall grading range | | |
|-------------|-------------|------------|------------------|--------------------------|-----|-------------|
| 6.3MM | 0 | 0 | 100 | 100 | 100 | |
| 4MM | 0 | 0 | 100 | 100 | 100 | |
| 2.8MM | 0 | 0 | 100 | 98 | 100 | |
| 2MM | 0.4 | 0.09 | 100 | 85 | 99 | (+5) |
| 1MM | 13.4 | 3.11 | 97 | 70 | 100 | (+-20) |
| 0.5MM | 86.8 | 20.13 | 77 | 55 | 100 | FP |
| 0.25MM | 137.3 | 31.84 | 44.83 | 30 | 75 | (+-25) |
| 0.063MM | 182.5 | 42.32 | 2.50 | 0 | 8 | Cat 3 (+-5) |
| PAN | 1.7 | 2.50 | | | | |

| | |
|-----------------------------|-------|
| Original Sampled Weight (g) | 504.3 |
| Oven Dry Weight (g) | 431.2 |
| Loss in weight (g) | 73.1 |
| Moisture Content % | 14.5% |
| Washed Dry Weight (g) | 422.1 |
| Lost Mass when Grading | 9.1 |

STATUS Pass





Marshalls

Aggregate Property Summary Sheet Scoutmoor Quarry, Edenfield Road, Ramsbottom

Summary of Findings:

| Aggregate Type | Crushed Gritstone | | |
|----------------|-------------------|-------|-------|
| Constituents | Major | Minor | Trace |
| | Gritstone | - | - |

Simplified Petrographic Description of Aggregate - BS EN 932-3:1997

| Discrete Constituent | Particle Shape | Surface Texture | Coatings / Encrustations |
|----------------------|----------------|-----------------|--------------------------|
| Gritstone | Angular | Rough | - |

| | Test Result | Test Standard | Lab Ref. No. |
|---|----------------------|--------------------------------|-------------------------|
| Aggregate Crushing Value | 20 | BS 812: Part 112: | SA4177/05 |
| Aggregate Abrasion Value (MEAN) | 8.3 | BS EN 1097-8: | SA4177/05 |
| Aggregate Impact Value (DRY) | 19% | BS 812: Part 112: | SA4177/05 |
| Polished Stone Value | | BS EN 1097-8: | SA4177/05 |
| | <i>Test Specimen</i> | 66.8 | SA4177/05 |
| | <i>Control Stone</i> | 50.3 | SA4177/05 |
| | <i>Corrected PSV</i> | 69 | S+52.5 - C SA4177/05 |
| 10% Fines Value (Dry) | 180kN | BS 812: Part 111: | SA4177/05 |
| 10% Fines Value (Soaked) | 140kN | BS 812: Part 111: | SA4177/05 |
| Carbon Dioxide (Co2) | 0.07% | BS EN 196 Part 21 | SA4177/05 |
| Calcium Carbonate Equivalent (CaCO3) | 0.15% | BS EN 196 Part 21 | SA4177/05 |
| Calcareous Content | 0.00% | | SA4177/05 |
| Particle Density :- | | BS EN 1097-6: | SA4177/05 |
| Particle density on an oven dried basis | 2.55Mg/m3 | | |
| Particle density on a saturated and surface dried basis | 2.60Mg/m3 | | |
| Apparent Maximum Particle Density | 2.67Mg/m3 | | |
| Water absorption (% of dry mass) | 1.70% | | |
| pH Values of Soils | 10.3 | BS EN:Part 3: | SA4177/05 |
| Magnesium Sulfate Value | 5 | BS EN 1367-2 : | SA4177/05 |
| Water Soluble Sulfate of Aggregates Sample as SO3 | <0.01% | BS EN 1744-1 : | SA4177/05 |
| Stake Durability Index | 98.90% | ISRM Guidelines | SA4177/05 |
| Los Angeles Coefficient (LA) | 22 | BS EN 1097 - 2 | SA4177/05 |
| Plastic Limits | Non Plastic | BS 1377 pt 2 | SA4177/05 |
| Particle Size Distribution | 0 | BS EN 966-1 : | SA4177/05 |
| Were any unrepresentable lumps present ? | No | | |
| Flakiness Index of Aggregate | 24 | BS EN 966-3 : BS EN 13043 : | SA4177/05 |
| Resistance to Wear of Aggregate - Micro Deval Test | 44 | BS EN 1097-1: | SA4177/05 |
| Frost Heave of Aggregate | | BS 812:Part 124: | SA4239 |
| | Mean Specimen | 12.3 | 1 |
| | Mean Frost Heave | 8.8 | |

| | | | | |
|------------------------------------|-------------------|----------------------------------|--------------------------|-----------|
| Compaction Fraction | 20-5mm Sample | Non Frost Susceptible 0.12 | ISSN - 1353 - 2510 | SA4177/05 |
| (Shear Box Test) Angle of Friction | MOT Type 1 sample | 35 Deg | SHW Volume 1, Series 600 | SA4177/05 |

For all queries relating to the above test results please contact :-

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| Oxide Analysis | STR 151910 |
|--------------------------------|------------|
| SiO ₂ | 61.10% |
| TiO ₂ | 1.10% |
| Al ₂ O ₃ | 17.10% |
| Fe ₂ O ₃ | 6.90% |
| MnO | 0.20% |
| MgO | 1.80% |
| CaO | 0.50% |
| Na ₂ O | 1.20% |
| K ₂ O | 3.00% |
| P ₂ O ₅ | 0.10% |
| Loss On Ignition | 7.00% |

Notes:

1. The above data is provided in good faith as a guide to typical values and does not constitute a specification.
2. Marshalls Mono Ltd reserve the right to alter data at any given time.
3. PSD for Individua materials and test results are uponl test results are available upon request. PSD for specific materials

APPENDIX E

GENERIC ASSESSMENT CRITERIA VALUES

CATEGORY 4 SCREENING LEVELS

| Substance | Residential (with home- grown produce) | Residential (without home- grown produce) | Allotments | Commercial | Public Open Space 1 | Public Open Space 2 |
|----------------|--|---|------------|------------|---------------------------|---------------------------|
| Arsenic | 37 mg/kg | 40 mg/kg | 49 mg/kg | 640 mg/kg | 79 mg/kg | 170 mg/kg |
| Benzene | 0.87 mg/kg | 3.3 mg/kg | 0.18 mg/kg | 98 mg/kg | 140 mg/kg | 230 mg/kg |
| Benzo(a)pyrene | 5.0 mg/kg | 5.3 mg/kg | 5.7 mg/kg | 77 mg/kg | 10 mg/kg | 21 mg/kg |
| Cadmium | 22 mg/kg | 150 mg/kg | 3.9 mg/kg | 410 mg/kg | 220 mg/kg | 880 mg/kg |
| Chromium VI | 21 mg/kg | 21 mg/kg | 170 mg/kg | 49 mg/kg | 21 mg/kg | 250 mg/kg |
| Lead | 200 mg/kg | 310 mg/kg | 80 mg/kg | 2300 mg/kg | 630 mg/kg | 1300 mg/kg |

| | | | | | | |
|--------------------------------------|-----------------|-----------------|-----------------|---------------|----------------|----------------|
| Tetrachlorethene (PCE) – 1% SOM | 0.31 mg/kg | 0.32 mg/kg | 2.0 mg/kg | 24 mg/kg | 3,200 mg/kg | 1,400 mg/kg |
| Tetrachlorethene (PCE) – 2.5% SOM | 0.70 mg/kg | 0.71 mg/kg | 4.8 mg/kg | 55 mg/kg | 3,300 mg/kg | 1,900 mg/kg |
| Tetrachlorethene (PCE) – 6% SOM | 1.6 mg/kg | 1.6 mg/kg | 11 mg/kg | 130 mg/kg | 3,400 mg/kg | 2,500 mg/kg |
| Trichlorethene (TCE) – 1% SOM | 0.0093 mg/kg | 0.0097 mg/kg | 0.032 mg/kg | 0.73 mg/kg | 76 mg/kg | 41 mg/kg |
| Trichlorethene (TCE) – 2.5% SOM | 0.020 mg/kg | 0.020 mg/kg | 0.072 mg/kg | 1.5 mg/kg | 78 mg/kg | 54 mg/kg |
| Trichlorethene (TCE) – 6% SOM | 0.043 mg/kg | 0.045 mg/kg | 0.16 mg/kg | 3.4 mg/kg | 79 mg/kg | 69 mg/kg |
| Vinyl Chloride (VC) – 1% SOM | 0.0064 mg/kg | 0.015 mg/kg | 0.0017 mg/kg | 1.1 mg/kg | 7.8 mg/kg | 18 mg/kg |
| Vinyl Chloride (VC) – 2.5% SOM | 0.010 mg/kg | 0.019 mg/kg | 0.0031 mg/kg | 1.4 mg/kg | 7.8 mg/kg | 19 mg/kg |
| Vinyl Chloride (VC) – 6% SOM | 0.017 mg/kg | 0.029 mg/kg | 0.0058 mg/kg | 2.2 mg/kg | 7.8 mg/kg | 19 mg/kg |

**Summary Table for the Generic Assessment Criteria for Human Health Risk
Assessment Land Quality Management (LQM) 2nd Edition.**

| | | Generic Assessment Criteria (mg/kg) Dry weight soil | | | |
|---|-----------------------|---|-------------|------------|----------------------------|
| | | SOM | Residential | Allotments | Commercial |
| Contaminant | | | | | |
| Metals | Beryllium | 6% | 51 | 55 | 420 |
| | Boron | 6% | 291 | 45 | 192000 |
| | Chromium (III) | 6% | 3000 | 34600 | 30400 |
| | Chromium (VI) | 6% | 4.3 | 2.1 | 35 |
| | Copper | 6% | 2330 | 524 | 71700 |
| | Vanadium | 6% | 75 | 18 | 3160 |
| | Zinc | 6% | 3750 | 618 | 665000 |
| Polycyclic Aromatic Hydrocarbons (PAHs) | Acenaphthene | 1% | 210 | 34 | 85000(57) ^{soil} |
| | | 2.5% | 480 | 85 | 98000(141) ^{soil} |
| | | 6% | 1000 | 200 | 100000 |
| | Acenaphthylene | 1% | 170 | 28 | 84000(86) ^{soil} |
| | | 2.5% | 400 | 69 | 97000(212) ^{soil} |
| | | 6% | 850 | 160 | 100000 |
| | Anthracene | 1% | 2300 | 380 | 530000 |
| | | 2.5% | 4900 | 950 | 540000 |
| | | 6% | 9200 | 2200 | 540000 |
| | Benz(a)anthracene | 1% | 3.1 | 2.5 | 90 |
| | | 2.5% | 4.7 | 5.5 | 95 |
| | | 6% | 5.9 | 10 | 97 |
| | Benzo(a)pyrene | 1% | 0.83 | 0.60 | 14 |
| | | 2.5% | 0.94 | 1.2 | 14 |
| | | 6% | 1.0 | 2.1 | 14 |
| | Benzo(b)fluoranthene | 1% | 5.6 | 3.5 | 100 |
| | | 2.5% | 6.5 | 7.4 | 100 |
| | | 6% | 7.0 | 13 | 100 |
| | Benzo(ghi)perylene | 1% | 44 | 70 | 650 |
| | | 2.5% | 46 | 120 | 660 |
| | | 6% | 47 | 160 | 660 |
| | Benzo(k)fluoranthene | 1% | 8.5 | 6.8 | 140 |
| | | 2.5% | 9.6 | 14 | 140 |
| | | 6% | 10 | 23 | 140 |
| | Chrysene | 1% | 6.0 | 2.6 | 140 |
| | | 2.5% | 8.0 | 5.8 | 140 |
| | | 6% | 9.3 | 12 | 140 |
| | Dibenzo(ah)anthracene | 1% | 0.76 | 0.76 | 13 |
| | | 2.5% | 0.86 | 1.5 | 13 |
| | | 6% | 0.90 | 2.3 | 13 |
| | Fluoranthene | 1% | 260 | 52 | 2300 |
| | | 2.5% | 460 | 130 | 2300 |
| | | 6% | 670 | 290 | 2300 |
| | Fluorene | 1% | 160 | 27 | 64000(31) ^{soil} |
| | | 2.5% | 380 | 67 | 69000 |
| | | 6% | 780 | 160 | 71000 |
| | Indeno(123-cd)pyrene | 1% | 3.2 | 1.8 | 60 |
| | | 2.5% | 3.9 | 3.8 | 61 |
| | | 6% | 4.2 | 7.1 | 62 |
| | Naphthalene | 1% | 1.5 | 4.1 | 200(76) ^{soil} |
| | | 2.5% | 3.7 | 9.9 | 480(183) ^{soil} |
| | | 6% | 8.7 | 23 | 1100(432) ^{soil} |
| | Phenanthrene | 1% | 92 | 16 | 22000 |
| | | 2.5% | 200 | 38 | 22000 |
| | | 6% | 380 | 90 | 23000 |
| | Pyrene | 1% | 560 | 110 | 54000 |
| | | 2.5% | 1000 | 270 | 54000 |
| | | 6% | 1600 | 620 | 54000 |

| | | Generic Assessment Criteria (mg/kg) Dry weight soil | | | |
|---------------------------------|---------------------------------|---|----------------------------|-----------------------------|----------------------------|
| Contaminant | | SOM | Residential | Allotments | Commercial |
| Petroleum Hydrocarbons | Aliphatic | | | | |
| | EC 5-6 | 1% | 30 | 740 | 3400(304) ^{sol} |
| | EC>6-8 | 1% | 73 | 2300 | 8300(144) ^{sol} |
| | EC>8-10 | 1% | 19 | 320 | 2100(78) ^{sol} |
| | EC>10-12 | 1% | 93(48) ^{sol} | 2200 | 10000(48) ^{sol} |
| | EC>12-16 | 1% | 740(24) ^{sol} | 11000 | 61000(24) ^{sol} |
| | EC>16-21 | 1% | 45000(8.48) ^{sol} | 260000 | 1600000 |
| | EC>21-35 | 1% | 45000(8.48) ^{sol} | 260000 | 1600000 |
| | EC>35-44 | 1% | 45000(8.48) ^{sol} | 260000 | 1600000 |
| | Aliphatic | | | | |
| | EC 5-6 | 2.5% | 55 | 1700 | 6200(558) ^{sol} |
| | EC>6-8 | 2.5% | 160 | 5600 | 18000(322) ^{sol} |
| | EC>8-10 | 2.5% | 46 | 770 | 5100(190) ^{sol} |
| | EC>10-12 | 2.5% | 230(118) ^{sol} | 4400 | 24000(118) ^{sol} |
| | EC>12-16 | 2.5% | 1700(59) ^{sol} | 13000 | 83000(59) ^{sol} |
| | EC>16-21 | 2.5% | 64000(21) ^{sol} | 270000 | 1800000 |
| | EC>21-35 | 2.5% | 64000(21) ^{sol} | 270000 | 1800000 |
| | EC>35-44 | 2.5% | 64000(21) ^{sol} | 270000 | 1800000 |
| | Aliphatic | | | | |
| | EC 5-6 | 6% | 110 | 3900 | 13000(1150) ^{sol} |
| | EC>6-8 | 6% | 370 | 1300 | 42000(736) ^{sol} |
| | EC>8-10 | 6% | 110 | 1700 | 12000(451) ^{sol} |
| | EC>10-12 | 6% | 540(283) ^{sol} | 7300 | 49000(283) ^{sol} |
| | EC>12-16 | 6% | 3000(142) ^{sol} | 13000 | 91000(142) ^{sol} |
| | EC>16-21 | 6% | 76000 | 270000 | 1800000 |
| | EC>21-35 | 6% | 76000 | 270000 | 1800000 |
| | EC>35-44 | 6% | 76000 | 270000 | 1800000 |
| | Aromatic | | | | |
| | EC5-7(benzene as non-threshold) | 1% | 65 | 13 | 28000(1220) ^{sol} |
| | EC>7-8(toluene) | 1% | 120 | 22 | 59000(869) ^{sol} |
| | EC>8-10 | 1% | 27 | 8.6 | 3700(613) ^{sol} |
| | EC>10-12 | 1% | 69 | 13 | 17000(364) ^{sol} |
| | EC>12-16 | 1% | 140 | 23 | 36000(169) ^{sol} |
| EC>16-21 | 1% | 250 | 46 | 28000 | |
| EC>21-35 | 1% | 890 | 370 | 28000 | |
| EC>35-44 | 1% | 890 | 370 | 28000 | |
| Aliphatic | | | | | |
| EC5-7(benzene as non-threshold) | 2.5% | 130 | 27 | 49000(2260) ^{sol} | |
| EC>7-8(toluene) | 2.5% | 270 | 51 | 110000(1920) ^{sol} | |
| EC>8-10 | 2.5% | 65 | 21 | 8600(1500) ^{sol} | |
| EC>10-12 | 2.5% | 160 | 31 | 29000(899) ^{sol} | |
| EC>12-16 | 2.5% | 310 | 57 | 37000 | |
| EC>16-21 | 2.5% | 480 | 110 | 28000 | |
| EC>21-35 | 2.5% | 1100 | 820 | 28000 | |
| EC>35-44 | 2.5% | 1100 | 820 | 28000 | |
| Aliphatic | | | | | |
| EC5-7(benzene as non-threshold) | 6% | 280 | 57 | 90000(4710) ^{sol} | |
| EC>7-8(toluene) | 6% | 611 | 120 | 190000(4360) ^{sol} | |
| EC>8-10 | 6% | 151 | 51 | 18000(3580) ^{sol} | |
| EC>10-12 | 6% | 346 | 74 | 34500(2150) ^{sol} | |
| EC>12-16 | 6% | 593 | 130 | 37800 | |
| EC>16-21 | 6% | 770 | 260 | 28000 | |
| EC>21-35 | 6% | 1230 | 1600 | 28000 | |
| EC>35-44 | 6% | 1230 | 1600 | 28000 | |
| Aliphatic +Aromatic | 1% | 1200 | 1200 | 28000 | |
| >EC44 | 2.5% | 1300 | 2100 | 28000 | |
| | 6% | 1300 | 3000 | 28000 | |

N.B all GAC are based on Sandy loam soils with a pH 7.
^{Sol} = solubility limit (potentially use if free product identified, although highly conservative)

| Contaminant | | Generic Assessment Criteria (mg/kg) Dry weight soil | | | |
|--|---|---|-------------|------------|---------------------------|
| | | SOM | Residential | Allotments | Commercial |
| Chloalkanes and Alkenes & Explosives | 1,2 Dichloroethane | 1% | 0.0054 | 0.0046 | 0.71 |
| | | 2.5% | 0.0080 | 0.0083 | 1.0 |
| | | 6% | 0.014 | 0.016 | 1.8 |
| | 1,1,1 Trichloroethane | 1% | 6.2 | 48 | 700 |
| | | 2.5% | 13 | 110 | 1400 |
| | | 6% | 28 | 240 | 3100 |
| | 1,1,1,2-Tetrachloroethanes | 1% | 1.4 | 0.41 | 290 |
| | | 2.5% | 2.9 | 0.89 | 580 |
| | | 6% | 6.3 | 2.0 | 1200 |
| | 1,1,1,2-Tetrachloroethanes | 1% | 0.90 | 0.79 | 120 |
| | | 2.5% | 2.1 | 1.9 | 4.4 |
| | | 6% | 4.8 | 4.4 | 590 |
| | Tetrachloroethene (TCE) | 1% | 0.94 | 1.6 | 130 |
| | | 2.5% | 2.1 | 3.7 | 290 |
| | | 6% | 4.8 | 8.7 | 660 |
| | Tetrachloromethane (carbon tetrachloride) | 1% | 0.018 | 0.16 | 3.0 |
| | | 2.5% | 0.039 | 0.37 | 6.6 |
| | | 6% | 0.089 | 0.85 | 15 |
| | Trichloroethene | 1% | 0.11 | 0.43 | 12 |
| | | 2.5% | 0.22 | 0.95 | 25 |
| 6% | | 0.49 | 2.2 | 55 | |
| Trichloromethane (chloroform) | 1% | 0.75 | 0.36 | 110 | |
| | 2.5% | 1.3 | 0.70 | 190 | |
| | 6% | 2.7 | 1.5 | 370 | |
| Chloroethene (vinyl chloride) | 1% | 0.00047 | 0.00055 | 0.063 | |
| | 2.5% | 0.00064 | 0.0010 | 0.081 | |
| | 6% | 0.00099 | 0.0018 | 0.12 | |
| 2,4,6-Trinitrotoluene (TNT) | 1% | 1.6 | 0.24 | 1000 | |
| | 2.5% | 3.7 | 0.58 | 1000 | |
| | 6% | 8.0 | 1.4 | 1100 | |
| RDX and HMX | 1% | 3.5 | 0.52 | 6400 | |
| | 2.5% | 7.4 | 1.1 | 6400 | |
| | 6% | 16 | 2.5 | 6400 | |
| Pesticides | Aldrin and Dieldrin | 1% | 0.69 | 0.13 | 90 |
| | | 2.5% | 1.4 | 0.32 | 91 |
| | | 6% | 2.2 | 0.73 | 92 |
| | Atrazine | 1% | 0.24 | 0.037 | 870 |
| | | 2.5% | 0.56 | 0.085 | 880 |
| | | 6% | 1.3 | 0.20 | 880 |
| | Dichlorvos | 1% | 0.29 | 0.044 | 842 |
| | | 2.5% | 0.6 | 0.091 | 872 |
| | | 6% | 1.3 | 0.2 | 893 |
| | Endosulfans (2 isomers) | 1% | 2.8 | 0.44 | 2580(7E-5) ^{Sol} |
| | | 2.5% | 6.6 | 1.1 | 3160(2E-4) ^{Sol} |
| | | 6% | 15 | 2.6 | 3480 |
| Hexachlorocyclohexane (3 isomers), inc Lindane | 1% | 1.7 | 0.26 | 1120 | |
| | 2.5% | 3.9 | 0.64 | 1130 | |
| | 6% | 8.5 | 1.5 | 1130 | |

N.B all GAC are based on Sandy loam soils with a pH 7.

^{Sol} = solubility limit (potentially use if free product identified, although highly conservative)

| | | Generic Assessment Criteria (mg/kg) Dry weight soil | | | |
|----------------|---------------------------------|---|--------------------------|------------|----------------------------|
| Contaminant | | SOM | Residential | Allotments | Commercial |
| Chlorobenzenes | Chlorobenzene | 1% | 0.33 | 5.9 | 59 |
| | | 2.5% | 0.73 | 14 | 130 |
| | | 6% | 1.7 | 32 | 310 |
| | Dichlorobenzenes (3 isomers) | 1% | 16 | 94 | 2100(571) ^{sol} |
| | | 2.5% | 39 | 230 | 5100(1370) ^{sol} |
| | | 6% | 91 | 540 | 12000(3240) ^{sol} |
| | Trichlorobenzenes (3 isomers) | 1% | 1.0 | 2.6 | 6.1 |
| | | 2.5% | 4.7 | 12 | 28 |
| | | 6% | 6.1 | 28 | 620 |
| | Tetrachlorobenzenes (3 isomers) | 1% | 12 | 4.4 | 1800(122) ^{sol} |
| | | 2.5% | 29 | 11 | 3200(304) ^{sol} |
| | | 6% | 62 | 26 | 4500(728) ^{sol} |
| | Pentachlorobenzene | 1% | 5.2 | 1.2 | 650(43) ^{sol} |
| | | 2.5% | 10 | 3.1 | 770(107) ^{sol} |
| | | 6% | 17 | 7.1 | 830 |
| | Hexachlorobenzene | 1% | 0.59(0.2) ^{sol} | 0.18 | 48(0.20) ^{sol} |
| | | 2.5% | 1.0(0.50) ^{sol} | 0.42 | 53 |
| | | 6% | 1.4 | 0.92 | 55 |
| Chlorophenol | Chlorophenols (4 congeners) | 1% | 0.87 | 0.13 | 3500 |
| | | 2.5% | 2.0 | 0.3 | 4000 |
| | | 6% | 4.4 | 0.70 | 4200 |
| | Pentachlorophenol | 1% | 0.55 | 0.084 | 1200 |
| | | 2.5% | 1.3 | 0.21 | 1300 |
| | | 6% | 2.96 | 0.49 | 1400 |
| Others | Carbon Disulphide | 1% | 0.10 | 4.8 | 12 |
| | | 2.5% | 0.20 | 10 | 23 |
| | | 6% | 0.44 | 23 | 50 |
| | Hexachlorobutadiene | 1% | 0.21 | 0.25 | 32 |
| | | 2.5% | 0.51 | 0.61 | 69 |
| | | 6% | 1.2 | 1.4 | 120 |

N.B all GAC are based on Sandy loam soils with a pH 7.

^{Sol} = solubility limit (potentially use if free product identified, although highly conservative)

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