



Joleen Harris
Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business Centre
Houldsworth Street
Reddish
Stockport
Cheshire
SK5 6DA

QTS Environmental Ltd
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410
russell.jarvis@qtsenvironmental.com

QTS Environmental Report No: 17-55706

Site Reference: Busker Lane, Scissett

Project / Job Ref: A1819

Order No: A1819

Sample Receipt Date: 28/02/2017

Sample Scheduled Date: 28/02/2017

Report Issue Number: 1

Reporting Date: 06/03/2017

Authorised by:

Kevin Old
Associate Director of Laboratory

Authorised by:

Russell Jarvis
Associate Director of Client Services

QTSE is the trading name of DETS Ltd, company registration number 03705645



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



| Soil Analysis Certificate | | | | | | |
|---|------------------------|---------------|---------------|---------------|---------------|---------------|
| QTS Environmental Report No: 17-55706 | Date Sampled | 24/02/17 | 24/02/17 | 24/02/17 | 24/02/17 | 24/02/17 |
| Earth Environmental & Geotechnical Ltd | Time Sampled | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Site Reference: Busker Lane, Scissett | TP / BH No | WS101 | WS101 | WS102 | WS103 | WS104 |
| Project / Job Ref: A1819 | Additional Refs | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Order No: A1819 | Depth (m) | 0.40 | 1.20 | 1.00 | 0.20 | 0.50 |
| Reporting Date: 06/03/2017 | QTSE Sample No | 255359 | 255360 | 255361 | 255362 | 255363 |

| Determinand | Unit | RL | Accreditation | | | | | |
|---------------------------------------|----------|--------|---------------|--------------|--------------|--------------|--------------|--------------|
| Asbestos Screen | N/a | N/a | ISO17025 | Not Detected | Not Detected | Not Detected | Not Detected | Not Detected |
| pH | pH Units | N/a | MCERTS | 8.1 | 8.0 | 9.0 | 5.9 | 5.7 |
| Total Cyanide | mg/kg | < 2 | NONE | < 2 | < 2 | < 2 | < 2 | < 2 |
| Complex Cyanide | mg/kg | < 2 | NONE | < 2 | < 2 | < 2 | < 2 | < 2 |
| Free Cyanide | mg/kg | < 2 | NONE | < 2 | < 2 | < 2 | < 2 | < 2 |
| Total Sulphate as SO ₄ | mg/kg | < 200 | NONE | 2248 | 1393 | 44530 | 1592 | 537 |
| Total Sulphate as SO ₄ | % | < 0.02 | NONE | 0.22 | 0.14 | 4.45 | 0.16 | 0.05 |
| W/S Sulphate as SO ₄ (2:1) | mg/l | < 10 | MCERTS | 374 | 165 | 1710 | 637 | 208 |
| W/S Sulphate as SO ₄ (2:1) | g/l | < 0.01 | MCERTS | 0.37 | 0.16 | 1.71 | 0.64 | 0.21 |
| Sulphide | mg/kg | < 5 | NONE | < 5 | < 5 | < 5 | < 5 | < 5 |
| Organic Matter | % | < 0.1 | MCERTS | 3.1 | 2.6 | 1.4 | 2.7 | 1.7 |
| Arsenic (As) | mg/kg | < 2 | MCERTS | 19 | 20 | 8 | 17 | 13 |
| Barium (Ba) | mg/kg | < 5 | NONE | 243 | 143 | 117 | 84 | 81 |
| Beryllium (Be) | mg/kg | < 0.5 | NONE | 0.9 | 1.1 | 0.8 | 1 | 1.3 |
| W/S Boron | mg/kg | < 1 | NONE | 1.2 | < 1 | 1.1 | < 1 | < 1 |
| Cadmium (Cd) | mg/kg | < 0.2 | MCERTS | 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| Chromium (Cr) | mg/kg | < 2 | MCERTS | 20 | 25 | 26 | 21 | 25 |
| Chromium (hexavalent) | mg/kg | < 2 | NONE | < 2 | < 2 | < 2 | < 2 | < 2 |
| Copper (Cu) | mg/kg | < 4 | MCERTS | 67 | 76 | 27 | 27 | 33 |
| Lead (Pb) | mg/kg | < 3 | MCERTS | 92 | 142 | 237 | 44 | 24 |
| Mercury (Hg) | mg/kg | < 1 | NONE | < 1 | < 1 | < 1 | < 1 | < 1 |
| Nickel (Ni) | mg/kg | < 3 | MCERTS | 19 | 29 | 17 | 21 | 27 |
| Selenium (Se) | mg/kg | < 3 | NONE | < 3 | < 3 | < 3 | < 3 | < 3 |
| Vanadium (V) | mg/kg | < 2 | NONE | 29 | 32 | 29 | 30 | 29 |
| Zinc (Zn) | mg/kg | < 3 | MCERTS | 166 | 115 | 84 | 91 | 90 |
| Total Phenols (monohydric) | mg/kg | < 2 | NONE | < 2 | < 2 | < 2 | < 2 | < 2 |
| EPH (C10 - C40) | mg/kg | < 6 | MCERTS | 761 | 53 | 479 | < 6 | < 6 |

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

Analysis carried out on the dried sample is corrected for the stone content

The samples have been examined to identify the presence of asbestiform minerals by polarising light microscopy and dispersion staining technique to In-House Procedures QTSE600 Determination of Asbestos in Bulk Materials; Asbestos in Soils/Sediments (fibre screening and identification)

This report refers to samples as received, and QTS Environmental Ltd, takes no responsibility for the accuracy or competence of sampling by others.

The material description shall be regarded as tentative and is not included in our scope of UKAS Accreditation.

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

Asbestos Analyst: Graham Revell

RL: Reporting Limit

Pinch Test: Where pinch test is positive it is reported "Loose Fibres - PT" with type(s).

Subcontracted analysis ⁽⁵⁾



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



| Soil Analysis Certificate | | | | | |
|---|------------------------|---------------|---------------|--|--|
| QTS Environmental Report No: 17-55706 | Date Sampled | 24/02/17 | 24/02/17 | | |
| Earth Environmental & Geotechnical Ltd | Time Sampled | None Supplied | None Supplied | | |
| Site Reference: Busker Lane, Scissett | TP / BH No | WS105 | WS106 | | |
| Project / Job Ref: A1819 | Additional Refs | None Supplied | None Supplied | | |
| Order No: A1819 | Depth (m) | 0.40 | 0.40 | | |
| Reporting Date: 06/03/2017 | QTSE Sample No | 255364 | 255365 | | |

| Determinand | Unit | RL | Accreditation | | | | |
|---------------------------------------|----------|--------|---------------|--------------|--------------|--|--|
| Asbestos Screen | N/a | N/a | ISO17025 | Not Detected | Not Detected | | |
| pH | pH Units | N/a | MCERTS | 6.3 | 5.5 | | |
| Total Cyanide | mg/kg | < 2 | NONE | < 2 | < 2 | | |
| Complex Cyanide | mg/kg | < 2 | NONE | < 2 | < 2 | | |
| Free Cyanide | mg/kg | < 2 | NONE | < 2 | < 2 | | |
| Total Sulphate as SO ₄ | mg/kg | < 200 | NONE | 994 | 488 | | |
| Total Sulphate as SO ₄ | % | < 0.02 | NONE | 0.10 | 0.05 | | |
| W/S Sulphate as SO ₄ (2:1) | mg/l | < 10 | MCERTS | 350 | 146 | | |
| W/S Sulphate as SO ₄ (2:1) | g/l | < 0.01 | MCERTS | 0.35 | 0.15 | | |
| Sulphide | mg/kg | < 5 | NONE | < 5 | < 5 | | |
| Organic Matter | % | < 0.1 | MCERTS | 1.1 | 0.5 | | |
| Arsenic (As) | mg/kg | < 2 | MCERTS | 11 | 4 | | |
| Barium (Ba) | mg/kg | < 5 | NONE | 81 | 62 | | |
| Beryllium (Be) | mg/kg | < 0.5 | NONE | 1.1 | 1.5 | | |
| W/S Boron | mg/kg | < 1 | NONE | < 1 | < 1 | | |
| Cadmium (Cd) | mg/kg | < 0.2 | MCERTS | < 0.2 | < 0.2 | | |
| Chromium (Cr) | mg/kg | < 2 | MCERTS | 21 | 26 | | |
| Chromium (hexavalent) | mg/kg | < 2 | NONE | < 2 | < 2 | | |
| Copper (Cu) | mg/kg | < 4 | MCERTS | 24 | 34 | | |
| Lead (Pb) | mg/kg | < 3 | MCERTS | 23 | 27 | | |
| Mercury (Hg) | mg/kg | < 1 | NONE | < 1 | < 1 | | |
| Nickel (Ni) | mg/kg | < 3 | MCERTS | 24 | 42 | | |
| Selenium (Se) | mg/kg | < 3 | NONE | < 3 | < 3 | | |
| Vanadium (V) | mg/kg | < 2 | NONE | 26 | 26 | | |
| Zinc (Zn) | mg/kg | < 3 | MCERTS | 72 | 98 | | |
| Total Phenols (monohydric) | mg/kg | < 2 | NONE | < 2 | < 2 | | |
| EPH (C10 - C40) | mg/kg | < 6 | MCERTS | < 6 | 7 | | |

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

Analysis carried out on the dried sample is corrected for the stone content

The samples have been examined to identify the presence of asbestiform minerals by polarising light microscopy and dispersion staining technique to In-House Procedures QTSE600 Determination of Asbestos in Bulk Materials; Asbestos in Soils/Sediments (fibre screening and identification)

This report refers to samples as received, and QTS Environmental Ltd, takes no responsibility for the accuracy or competence of sampling by others.

The material description shall be regarded as tentative and is not included in our scope of UKAS Accreditation.

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

Asbestos Analyst: Graham Revell

RL: Reporting Limit

Pinch Test: Where pinch test is positive it is reported "Loose Fibres - PT" with type(s).

Subcontracted analysis ⁽⁵⁾



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



| Soil Analysis Certificate - Speciated PAHs | | | | | | |
|---|------------------------|---------------|---------------|---------------|---------------|---------------|
| QTS Environmental Report No: 17-55706 | Date Sampled | 24/02/17 | 24/02/17 | 24/02/17 | 24/02/17 | 24/02/17 |
| Earth Environmental & Geotechnical Ltd | Time Sampled | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Site Reference: Busker Lane, Scissett | TP / BH No | WS101 | WS101 | WS102 | WS103 | WS104 |
| Project / Job Ref: A1819 | Additional Refs | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Order No: A1819 | Depth (m) | 0.40 | 1.20 | 1.00 | 0.20 | 0.50 |
| Reporting Date: 06/03/2017 | QTSE Sample No | 255359 | 255360 | 255361 | 255362 | 255363 |

| Determinand | Unit | RL | Accreditation | | | | | |
|------------------------|-------|-------|---------------|-------|-------|-------|-------|-------|
| Naphthalene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Acenaphthylene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Acenaphthene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Fluorene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Phenanthrene | mg/kg | < 0.1 | MCERTS | 0.32 | < 0.1 | 0.14 | < 0.1 | < 0.1 |
| Anthracene | mg/kg | < 0.1 | MCERTS | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Fluoranthene | mg/kg | < 0.1 | MCERTS | 0.98 | 0.17 | 0.49 | < 0.1 | < 0.1 |
| Pyrene | mg/kg | < 0.1 | MCERTS | 1.05 | 0.19 | 0.45 | < 0.1 | < 0.1 |
| Benzo(a)anthracene | mg/kg | < 0.1 | MCERTS | 0.65 | < 0.1 | 0.17 | < 0.1 | < 0.1 |
| Chrysene | mg/kg | < 0.1 | MCERTS | 0.68 | < 0.1 | 0.21 | < 0.1 | < 0.1 |
| Benzo(b)fluoranthene | mg/kg | < 0.1 | MCERTS | 1.09 | < 0.1 | 0.14 | < 0.1 | < 0.1 |
| Benzo(k)fluoranthene | mg/kg | < 0.1 | MCERTS | 0.36 | < 0.1 | 0.13 | < 0.1 | < 0.1 |
| Benzo(a)pyrene | mg/kg | < 0.1 | MCERTS | 0.83 | < 0.1 | 0.12 | < 0.1 | < 0.1 |
| Indeno(1,2,3-cd)pyrene | mg/kg | < 0.1 | MCERTS | 0.45 | < 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 | < 0.1 |
| Benzo(ghi)perylene | mg/kg | < 0.1 | MCERTS | 0.35 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Total EPA-16 PAHs | mg/kg | < 1.6 | MCERTS | 6.8 | < 1.6 | 1.9 | < 1.6 | < 1.6 |

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



| Soil Analysis Certificate - Speciated PAHs | | | | | |
|---|------------------------|---------------|---------------|--|--|
| QTS Environmental Report No: 17-55706 | Date Sampled | 24/02/17 | 24/02/17 | | |
| Earth Environmental & Geotechnical Ltd | Time Sampled | None Supplied | None Supplied | | |
| Site Reference: Busker Lane, Scissett | TP / BH No | WS105 | WS106 | | |
| Project / Job Ref: A1819 | Additional Refs | None Supplied | None Supplied | | |
| Order No: A1819 | Depth (m) | 0.40 | 0.40 | | |
| Reporting Date: 06/03/2017 | QTSE Sample No | 255364 | 255365 | | |

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

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



| Soil Analysis Certificate - TPH CWG Banded | | | | | | |
|---|------------------------|---------------|---------------|---------------|---------------|---------------|
| QTS Environmental Report No: 17-55706 | Date Sampled | 24/02/17 | 24/02/17 | 24/02/17 | 24/02/17 | 24/02/17 |
| Earth Environmental & Geotechnical Ltd | Time Sampled | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Site Reference: Busker Lane, Scissett | TP / BH No | WS101 | WS101 | WS102 | WS103 | WS104 |
| Project / Job Ref: A1819 | Additional Refs | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Order No: A1819 | Depth (m) | 0.40 | 1.20 | 1.00 | 0.20 | 0.50 |
| Reporting Date: 06/03/2017 | QTSE Sample No | 255359 | 255360 | 255361 | 255362 | 255363 |

| Determinand | Unit | RL | Accreditation | | | | | |
|----------------------|-------------|-----------|----------------------|--------|--------|--------|--------|--------|
| Aliphatic >C5 - C6 | mg/kg | < 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Aliphatic >C6 - C8 | mg/kg | < 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Aliphatic >C8 - C10 | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 | < 2 |
| Aliphatic >C10 - C12 | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 | < 2 |
| Aliphatic >C12 - C16 | mg/kg | < 3 | MCERTS | < 3 | < 3 | < 3 | < 3 | < 3 |
| Aliphatic >C16 - C21 | mg/kg | < 3 | MCERTS | < 3 | < 3 | < 3 | < 3 | < 3 |
| Aliphatic >C21 - C34 | mg/kg | < 10 | MCERTS | 86 | < 10 | 82 | < 10 | < 10 |
| Aliphatic (C5 - C34) | mg/kg | < 21 | NONE | 86 | < 21 | 82 | < 21 | < 21 |
| Aromatic >C5 - C7 | mg/kg | < 0.01 | NONE | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Aromatic >C7 - C8 | mg/kg | < 0.05 | NONE | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Aromatic >C8 - C10 | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 | < 2 |
| Aromatic >C10 - C12 | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 | < 2 |
| Aromatic >C12 - C16 | mg/kg | < 2 | MCERTS | < 2 | < 2 | < 2 | < 2 | < 2 |
| Aromatic >C16 - C21 | mg/kg | < 3 | MCERTS | 10 | < 3 | 3 | < 3 | < 3 |
| Aromatic >C21 - C35 | mg/kg | < 10 | MCERTS | 332 | < 10 | 132 | < 10 | < 10 |
| Aromatic (C5 - C35) | mg/kg | < 21 | NONE | 342 | < 21 | 136 | < 21 | < 21 |
| Total >C5 - C35 | mg/kg | < 42 | NONE | 428 | < 42 | 218 | < 42 | < 42 |

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



| Soil Analysis Certificate - TPH CWG Banded | | | | | |
|---|------------------------|---------------|---------------|--|--|
| QTS Environmental Report No: 17-55706 | Date Sampled | 24/02/17 | 24/02/17 | | |
| Earth Environmental & Geotechnical Ltd | Time Sampled | None Supplied | None Supplied | | |
| Site Reference: Busker Lane, Scissett | TP / BH No | WS105 | WS106 | | |
| Project / Job Ref: A1819 | Additional Refs | None Supplied | None Supplied | | |
| Order No: A1819 | Depth (m) | 0.40 | 0.40 | | |
| Reporting Date: 06/03/2017 | QTSE Sample No | 255364 | 255365 | | |

| Determinand | Unit | RL | Accreditation | | | | |
|----------------------|-------|--------|---------------|--------|--------|--|--|
| Aliphatic >C5 - C6 | mg/kg | < 0.01 | NONE | < 0.01 | < 0.01 | | |
| Aliphatic >C6 - C8 | mg/kg | < 0.05 | NONE | < 0.05 | < 0.05 | | |
| Aliphatic >C8 - C10 | mg/kg | < 2 | MCERTS | < 2 | < 2 | | |
| Aliphatic >C10 - C12 | mg/kg | < 2 | MCERTS | < 2 | < 2 | | |
| Aliphatic >C12 - C16 | mg/kg | < 3 | MCERTS | < 3 | < 3 | | |
| Aliphatic >C16 - C21 | mg/kg | < 3 | MCERTS | < 3 | < 3 | | |
| Aliphatic >C21 - C34 | mg/kg | < 10 | MCERTS | < 10 | < 10 | | |
| Aliphatic (C5 - C34) | mg/kg | < 21 | NONE | < 21 | < 21 | | |
| Aromatic >C5 - C7 | mg/kg | < 0.01 | NONE | < 0.01 | < 0.01 | | |
| Aromatic >C7 - C8 | mg/kg | < 0.05 | NONE | < 0.05 | < 0.05 | | |
| Aromatic >C8 - C10 | mg/kg | < 2 | MCERTS | < 2 | < 2 | | |
| Aromatic >C10 - C12 | mg/kg | < 2 | MCERTS | < 2 | < 2 | | |
| Aromatic >C12 - C16 | mg/kg | < 2 | MCERTS | < 2 | < 2 | | |
| Aromatic >C16 - C21 | mg/kg | < 3 | MCERTS | < 3 | < 3 | | |
| Aromatic >C21 - C35 | mg/kg | < 10 | MCERTS | < 10 | < 10 | | |
| Aromatic (C5 - C35) | mg/kg | < 21 | NONE | < 21 | < 21 | | |
| Total >C5 - C35 | mg/kg | < 42 | NONE | < 42 | < 42 | | |

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



| Soil Analysis Certificate - BTEX / MTBE | | | | | | |
|---|------------------------|---------------|---------------|---------------|---------------|---------------|
| QTS Environmental Report No: 17-55706 | Date Sampled | 24/02/17 | 24/02/17 | 24/02/17 | 24/02/17 | 24/02/17 |
| Earth Environmental & Geotechnical Ltd | Time Sampled | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Site Reference: Busker Lane, Scissett | TP / BH No | WS101 | WS101 | WS102 | WS103 | WS104 |
| Project / Job Ref: A1819 | Additional Refs | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Order No: A1819 | Depth (m) | 0.40 | 1.20 | 1.00 | 0.20 | 0.50 |
| Reporting Date: 06/03/2017 | QTSE Sample No | 255359 | 255360 | 255361 | 255362 | 255363 |

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

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



| Soil Analysis Certificate - BTEX / MTBE | | | | | |
|---|------------------------|---------------|---------------|--|--|
| QTS Environmental Report No: 17-55706 | Date Sampled | 24/02/17 | 24/02/17 | | |
| Earth Environmental & Geotechnical Ltd | Time Sampled | None Supplied | None Supplied | | |
| Site Reference: Busker Lane, Scissett | TP / BH No | WS105 | WS106 | | |
| Project / Job Ref: A1819 | Additional Refs | None Supplied | None Supplied | | |
| Order No: A1819 | Depth (m) | 0.40 | 0.40 | | |
| Reporting Date: 06/03/2017 | QTSE Sample No | 255364 | 255365 | | |

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

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C



QTS Environmental Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



Soil Analysis Certificate - Sample Descriptions

| | |
|--|--|
| QTS Environmental Report No: 17-55706 | |
| Earth Environmental & Geotechnical Ltd | |
| Site Reference: Busker Lane, Scissett | |
| Project / Job Ref: A1819 | |
| Order No: A1819 | |
| Reporting Date: 06/03/2017 | |

| QTSE Sample No | TP / BH No | Additional Refs | Depth (m) | Moisture Content (%) | Sample Matrix Description |
|----------------|------------|-----------------|-----------|----------------------|--|
| 255359 | WS101 | None Supplied | 0.40 | 13.5 | Brown sandy gravel with brick and concrete |
| 255360 | WS101 | None Supplied | 1.20 | 19.3 | Brown sandy clay with concrete |
| 255361 | WS102 | None Supplied | 1.00 | 15.7 | Brown sandy gravel with brick and concrete |
| 255362 | WS103 | None Supplied | 0.20 | 18.4 | Brown sandy clay with stones |
| 255363 | WS104 | None Supplied | 0.50 | 19.6 | Brown clay |
| 255364 | WS105 | None Supplied | 0.40 | 15.8 | Brown clayey sand with brick |
| 255365 | WS106 | None Supplied | 0.40 | 13.9 | Brown clayey sand |

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

Insufficient Sample ^{I/S}

Unsuitable Sample ^{U/S}

| |
|--|
| Soil Analysis Certificate - Methodology & Miscellaneous Information |
| QTS Environmental Report No: 17-55706 |
| Earth Environmental & Geotechnical Ltd |
| Site Reference: Busker Lane, Scissett |
| Project / Job Ref: A1819 |
| Order No: A1819 |
| Reporting Date: 06/03/2017 |

| 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 | 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