

# Certificate of Analysis



1314  
0897  
1229  
1510

**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10552996**

Sample **1** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP1 0.40m**

Visual Description: **Black loam with occasional organic matter and some stones**

Sample Date: Sample Time: **1** Sample Received: **06 May 2008**

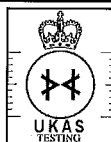
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method     |
|--------------------------------|--------|----------|---------------|------|---------------|------------|
| Stones BG 2.6/3.0              | 28     | %        | 08/05/2008    |      | N Mid         | Stones     |
| Moisture content at 30 C       | 7.2    | %        | 08/05/2008    |      | N Mid         | 33A        |
| Arsenic as As, dry weight      | 11     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C     |
| Boron as B, hot water sol dw   | 0.45   | mg/kg    | 09/05/2008    |      | M Mid         | 6          |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 13/05/2008    |      | M Mid         | 30         |
| Chromium as Cr, dry weight     | 6.3    | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Copper, as Dry Weight          | 45     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Lead, as Dry Weight            | 30     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Mercury as Hg, dry weight      | 0.30   | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Nickel as Ni, dry weight       | 37     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Selenium as Se, dry weight     | 1.3    | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Zinc as Zn, dry weight         | 63     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14         |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A        |
| Loss on ignition, dried solids | 16     | %        | 13/05/2008    |      | M Mid         | 337        |
| Sulphate Total as SO4 DW       | 2600   | mg/kg    | 08/05/2008    |      | M Mid         | 45         |
| Sulphate as SO4, Water Soluble | 0.10   | g/l      | 12/05/2008    |      | M Mid         | 46         |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47         |
| TOC (Ignition in O2)           | 16     | %        | 15/05/2008    |      | N Mid         | 27         |
| pH                             | 8.1    | pH units | 08/05/2008    |      | Y Mid         | 39         |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51         |
| MTBE                           | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Benzene                        | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Toluene                        | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Ethyl Benzene                  | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| m.p-xylene                     | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| o-xylene                       | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C5 to C6 Aliphatics           | 0.34   | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C6 to C8 Aliphatics           | 0.13   | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C8 to C10 Aliphatics          | 0.13   | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aliphatics         | 3.1    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aliphatics         | 4.0    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C35 Aliphatics         | 16     | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aliphatics         | 1.4    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aliphatics (>C5 to C44)  | 25     | mg/kg    | 13/05/2008    |      | Y Mid         | 304/317EPH |
| >C5 to C7 Aromatics            | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C7 to C8 Aromatics            | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10552996**

Sample **1** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP1 0.40m**

Visual Description: **Black loam with occasional organic matter and some stones**

Sample Date:

Sample Time:

**1**

Sample Received:

**06 May 2008**

| Test Description             | Result | Units | Analysis Date | UoM% | Accreditation | Method     |
|------------------------------|--------|-------|---------------|------|---------------|------------|
| >C8 to C10 Aromatics         | <0.11  | mg/kg | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aromatics        | 2.7    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aromatics        | 5.5    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C21 Aromatics        | 13     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C21 to C35 Aromatics        | 19     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aromatics        | 2.9    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aromatics (>C5 to C44) | 43     | mg/kg | 13/05/2008    |      | Y Mid         | 304/317EPH |
| Total EPH (>C5 to C44)       | 68     | mg/kg | 13/05/2008    |      | M Mid         | 304/317EPH |
| Naphthalene                  | 0.82   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| Acenaphthylene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Acenaphthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluorene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Phenanthrene                 | 1.2    | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Anthracene                   | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluoranthene                 | 0.53   | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Pyrene                       | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)anthracene           | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Chrysene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(b)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(k)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)pyrene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Indeno(123cd)pyrene          | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Dibenzo(ah)anthracene        | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(ghi)perylene           | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| PAH total                    | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |

Analyst Comments for 10552996:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

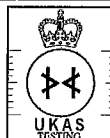
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10552997**

Sample **2** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP1 1.50m**

Visual Description: **Brown loam with occasional stones and organic matter**

Sample Date:

Sample Time:

**2**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 30     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 18     | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 23     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 1.4    | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 17     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 69     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 120    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 45     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 0.91   | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 130    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | 0.74   | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 16     | %        | 13/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 760    | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | 0.24   | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 12     | %        | 15/05/2008    |      | N Mid         | 27     |
| pH                             | 7.8    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | 260    | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | 0.62   | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | 0.57   | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



1314  
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1610

SEVERN  
TRENT

# STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10552997**

Sample **2** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP1 1.50m**

Visual Description: **Brown loam with occasional stones and organic matter**

Sample Date:

Sample Time:

**2**

Sample Received:

**06 May 2008**

| Test Description        | Result        | Units | Analysis Date | UoM% | Accreditation | Method |
|-------------------------|---------------|-------|---------------|------|---------------|--------|
| PAH total               | <5.0          | mg/kg | 19/05/2008    |      | Y Mid         | 313    |
| Description of Sample   | Analyst Comme | Text  | 19/05/2008    |      | N Mid         | 70     |
| Asbestos Identification | Analyst Comme | Text  | 19/05/2008    |      | Y Mid         | 70     |

Analyst Comments for 10552997:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered, I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10552998**

Sample **3** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP2 0.50m**

Visual Description: **Black loam with occasional organic matter and some stones**

Sample Date:

Sample Time:

**3**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method     |
|--------------------------------|--------|----------|---------------|------|---------------|------------|
| Stones BG 2.6/3.0              | 16     | %        | 08/05/2008    |      | N Mid         | Stones     |
| Moisture content at 30 C       | 7.1    | %        | 08/05/2008    |      | N Mid         | 33A        |
| Arsenic as As, dry weight      | 19     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C     |
| Boron as B, hot water sol dw   | 0.85   | mg/kg    | 09/05/2008    |      | M Mid         | 6          |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Chromium as Cr, dry weight     | 11     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Copper, as Dry Weight          | 75     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Lead, as Dry Weight            | 49     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Mercury as Hg, dry weight      | 0.47   | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Nickel as Ni, dry weight       | 65     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Selenium as Se, dry weight     | 2.3    | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Zinc as Zn, dry weight         | 97     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14         |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A        |
| Loss on ignition, dried solids | 23     | %        | 13/05/2008    |      | M Mid         | 337        |
| Sulphate Total as SO4 DW       | 2000   | mg/kg    | 08/05/2008    |      | M Mid         | 45         |
| Sulphate as SO4, Water Soluble | 0.14   | g/l      | 09/05/2008    |      | M Mid         | 46         |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47         |
| TOC (Ignition in O2)           | 24     | %        | 15/05/2008    |      | N Mid         | 27         |
| pH                             | 7.1    | pH units | 08/05/2008    |      | Y Mid         | 39         |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51         |
| MTBE                           | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Benzene                        | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Toluene                        | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Ethyl Benzene                  | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| m.p-xylene                     | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| o-xylene                       | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C5 to C6 Aliphatics           | <0.11  | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C6 to C8 Aliphatics           | 0.15   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C8 to C10 Aliphatics          | 0.15   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aliphatics         | 2.5    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aliphatics         | 3.9    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C35 Aliphatics         | 18     | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aliphatics         | 1.4    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aliphatics (>C5 to C44)  | 26     | mg/kg    | 14/05/2008    |      | Y Mid         | 304/317EPH |
| >C5 to C7 Aromatics            | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C7 to C8 Aromatics            | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10552998**

Sample **3** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP2 0.50m**

Visual Description: **Black loam with occasional organic matter and some stones**

Sample Date:

Sample Time:

**3**

Sample Received:

**06 May 2008**

| Test Description             | Result | Units | Analysis Date | UoM% | Accreditation | Method     |
|------------------------------|--------|-------|---------------|------|---------------|------------|
| >C8 to C10 Aromatics         | <0.11  | mg/kg | 14/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aromatics        | 2.8    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aromatics        | 5.8    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C21 Aromatics        | 14     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C21 to C35 Aromatics        | 22     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aromatics        | 2.8    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aromatics (>C5 to C44) | 47     | mg/kg | 14/05/2008    |      | Y Mid         | 304/317EPH |
| Total EPH (>C5 to C44)       | 73     | mg/kg | 14/05/2008    |      | M Mid         | 304/317EPH |
| Naphthalene                  | 0.81   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| Acenaphthylene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Acenaphthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluorene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Phenanthrene                 | 1.0    | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Anthracene                   | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluoranthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Pyrene                       | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)anthracene           | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Chrysene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(b)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(k)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)pyrene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Indeno(123cd)pyrene          | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Dibenzo(ah)anthracene        | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(ghi)perylene           | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| PAH total                    | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |

Analyst Comments for 10552998:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
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**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10552999**

Sample **4** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP2 2.50m**

Visual Description: **Brown loam with some stones**

Sample Date:

Sample Time:

**4**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 15     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 13     | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 21     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 1.0    | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 16     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 23     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 57     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 11     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 0.88   | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 41     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | 0.88   | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 16     | %        | 13/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | <240   | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 5.9    | %        | 15/05/2008    |      | N Mid         | 27     |
| pH                             | 6.9    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | 0.69   | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | 0.58   | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10552999**

Sample **4** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP2 2.50m**

Visual Description: **Brown loam with some stones**

Sample Date:

Sample Time:

**4**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10552999:

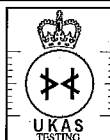
No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553000**

Sample **5** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP3 0.60m**

Visual Description: **Black gravel with some stones**

Sample Date:

Sample Time:

**5**

Sample Received:

**06 May 2008**

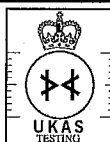
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 30     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 9.2    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 13     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.61   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 6.5    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 53     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 32     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | 0.25   | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 33     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 1.7    | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 68     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 27     | %        | 13/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 2400   | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 26     | %        | 15/05/2008    |      | N Mid         | 27     |
| pH                             | 7.0    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | 1.1    | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | 1.7    | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | 0.87   | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | 0.66   | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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# STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553000**

Sample **5** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP3 0.60m**

Visual Description: **Black gravel with some stones**

Sample Date:

Sample Time:

**5**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553000:

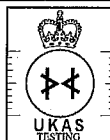
No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553001**

Sample **6** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP4 1.30m**

Visual Description: **Brown loam with occasional organic matter and stones**

Sample Date:

Sample Time:

**6**

Sample Received:

**06 May 2008**

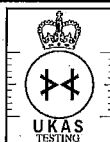
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 15     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 12     | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 8.6    | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.25   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 20     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 33     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 38     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 39     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | <0.30  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 87     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 5.1    | %        | 13/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | <240   | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 2.4    | %        | 15/05/2008    |      | N Mid         | 27     |
| pH                             | 6.2    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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SEVERN  
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STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553001**

Sample **6** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP4 1.30m**

Visual Description: **Brown loam with occasional organic matter and stones**

Sample Date: Sample Time: **6** Sample Received: **06 May 2008**

| Test Description        | Result        | Units | Analysis Date | UoM% | Accreditation | Method |
|-------------------------|---------------|-------|---------------|------|---------------|--------|
| PAH total               | <5.0          | mg/kg | 19/05/2008    |      | Y Mid         | 313    |
| Description of Sample   | Analyst Comme | Text  | 19/05/2008    |      | N Mid         | 70     |
| Asbestos Identification | Analyst Comme | Text  | 19/05/2008    |      | Y Mid         | 70     |

Analyst Comments for 10553001:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered, I/S=Insufficient sample

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TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553002**

Sample **7** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP5 0.10m**

Visual Description: **Brown loam with occasional organic matter and many stones**

Sample Date:

Sample Time:

**7**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method     |
|--------------------------------|--------|----------|---------------|------|---------------|------------|
| Stones BG 2.6/3.0              | 40     | %        | 08/05/2008    |      | N Mid         | Stones     |
| Moisture content at 30 C       | 6.1    | %        | 08/05/2008    |      | N Mid         | 33A        |
| Arsenic as As, dry weight      | 18     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C     |
| Boron as B, hot water sol dw   | 0.77   | mg/kg    | 09/05/2008    |      | M Mid         | 6          |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Chromium as Cr, dry weight     | 25     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Copper, as Dry Weight          | 110    | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Lead, as Dry Weight            | 85     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Nickel as Ni, dry weight       | 98     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Selenium as Se, dry weight     | <0.30  | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Zinc as Zn, dry weight         | 270    | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14         |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A        |
| Loss on ignition, dried solids | 6.0    | %        | 13/05/2008    |      | M Mid         | 337        |
| Sulphate Total as SO4 DW       | <240   | mg/kg    | 08/05/2008    |      | M Mid         | 45         |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46         |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47         |
| TOC (Ignition in O2)           | 2.6    | %        | 15/05/2008    |      | N Mid         | 27         |
| pH                             | 8.4    | pH units | 08/05/2008    |      | Y Mid         | 39         |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51         |
| MTBE                           | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Benzene                        | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Toluene                        | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Ethyl Benzene                  | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| m.p-xylene                     | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| o-xylene                       | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C5 to C6 Aliphatics           | 0.12   | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C6 to C8 Aliphatics           | <0.11  | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C8 to C10 Aliphatics          | <0.11  | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aliphatics         | <1.1   | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aliphatics         | 1.5    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C35 Aliphatics         | 6.9    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aliphatics         | <1.1   | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aliphatics (>C5 to C44)  | 8.5    | mg/kg    | 13/05/2008    |      | Y Mid         | 304/317EPH |
| >C5 to C7 Aromatics            | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C7 to C8 Aromatics            | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |

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# Certificate of Analysis



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SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553002**

Sample **7** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP5 0.10m**

Visual Description: **Brown loam with occasional organic matter and many stones**

Sample Date:

Sample Time:

**7**

Sample Received:

**06 May 2008**

| Test Description             | Result | Units | Analysis Date | UoM% | Accreditation | Method     |
|------------------------------|--------|-------|---------------|------|---------------|------------|
| >C8 to C10 Aromatics         | <0.11  | mg/kg | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aromatics        | <1.1   | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aromatics        | 3.8    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C21 Aromatics        | 5.4    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C21 to C35 Aromatics        | 8.3    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aromatics        | 2.4    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aromatics (>C5 to C44) | 20     | mg/kg | 13/05/2008    |      | Y Mid         | 304/317EPH |
| Total EPH (>C5 to C44)       | 29     | mg/kg | 13/05/2008    |      | M Mid         | 304/317EPH |
| Naphthalene                  | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| Acenaphthylene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Acenaphthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluorene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Phenanthrene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Anthracene                   | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluoranthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Pyrene                       | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)anthracene           | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Chrysene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(b)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(k)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)pyrene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Indeno(123cd)pyrene          | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Dibenzo(ah)anthracene        | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(ghi)perylene           | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| PAH total                    | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |

Analyst Comments for 10553002:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

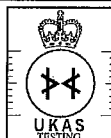
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered, I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553003**

Sample **8** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP6 0.50m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**8**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 39     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 2.6    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 10     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.75   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 30     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 67     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 45     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 77     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | <0.30  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 160    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 3.8    | %        | 13/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | <240   | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 1.2    | %        | 15/05/2008    |      | N Mid         | 27     |
| pH                             | 8.3    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553003**

Sample **8** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP6 0.50m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**8**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553003:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553004**

Sample **9** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP7 0.40m**

Visual Description: **Grey loam with many stones**

Sample Date:

Sample Time:

**9**

Sample Received:

**06 May 2008**

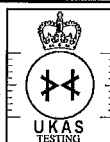
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method     |
|--------------------------------|--------|----------|---------------|------|---------------|------------|
| Stones BG 2.6/3.0              | 38     | %        | 08/05/2008    |      | N Mid         | Stones     |
| Moisture content at 30 C       | 5.0    | %        | 08/05/2008    |      | N Mid         | 33A        |
| Arsenic as As, dry weight      | 19     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C     |
| Boron as B, hot water sol dw   | 0.79   | mg/kg    | 09/05/2008    |      | M Mid         | 6          |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Chromium as Cr, dry weight     | 42     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Copper, as Dry Weight          | 110    | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Lead, as Dry Weight            | 110    | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Nickel as Ni, dry weight       | 94     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Selenium as Se, dry weight     | 0.68   | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Zinc as Zn, dry weight         | 240    | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14         |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A        |
| Loss on ignition, dried solids | 7.9    | %        | 13/05/2008    |      | M Mid         | 337        |
| Sulphate Total as SO4 DW       | 280    | mg/kg    | 08/05/2008    |      | M Mid         | 45         |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46         |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47         |
| TOC (Ignition in O2)           | 5.8    | %        | 15/05/2008    |      | N Mid         | 27         |
| pH                             | 8.3    | pH units | 08/05/2008    |      | Y Mid         | 39         |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51         |
| MTBE                           | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Benzene                        | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Toluene                        | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Ethyl Benzene                  | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| m.p-xylene                     | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| o-xylene                       | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C5 to C6 Aliphatics           | 0.18   | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C6 to C8 Aliphatics           | <0.11  | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C8 to C10 Aliphatics          | <0.11  | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aliphatics         | 2.5    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aliphatics         | 3.6    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C35 Aliphatics         | 12     | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aliphatics         | <1.1   | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aliphatics (>C5 to C44)  | 18     | mg/kg    | 13/05/2008    |      | Y Mid         | 304/317EPH |
| >C5 to C7 Aromatics            | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C7 to C8 Aromatics            | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553004**

Sample **9** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP7 0.40m**

Visual Description: **Grey loam with many stones**

Sample Date:

Sample Time:

**9**

Sample Received:

**06 May 2008**

| Test Description             | Result | Units | Analysis Date | UoM% | Accreditation | Method     |
|------------------------------|--------|-------|---------------|------|---------------|------------|
| >C8 to C10 Aromatics         | <0.11  | mg/kg | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aromatics        | <1.1   | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aromatics        | 5.1    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C21 Aromatics        | 8.0    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C21 to C35 Aromatics        | 21     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aromatics        | 5.6    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aromatics (>C5 to C44) | 40     | mg/kg | 13/05/2008    |      | Y Mid         | 304/317EPH |
| Total EPH (>C5 to C44)       | 57     | mg/kg | 13/05/2008    |      | M Mid         | 304/317EPH |
| Naphthalene                  | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| Acenaphthylene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Acenaphthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluorene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Phenanthrene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Anthracene                   | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluoranthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Pyrene                       | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)anthracene           | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Chrysene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(b)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(k)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)pyrene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Indeno(123cd)pyrene          | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Dibenzo(ah)anthracene        | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(ghi)perylene           | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| PAH total                    | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |

Analyst Comments for 10553004:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

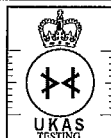
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553005**

Sample **10** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP8 0.40m**

Visual Description: **Grey loam with some stones**

Sample Date:

Sample Time:

**10**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 31     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 6.7    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 18     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.72   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 39     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 96     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 120    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 95     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 0.87   | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 210    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 7.2    | %        | 13/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 840    | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 5.1    | %        | 15/05/2008    |      | N Mid         | 27     |
| pH                             | 8.3    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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SEVERN  
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STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553005**

Sample **10** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP8 0.40m**

Visual Description: **Grey loam with some stones**

Sample Date:

Sample Time:

**10**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553005:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553006**

Sample **11** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP9 0.20m**

Visual Description: **Black loam with occasional organic matter and stones**

Sample Date:

Sample Time:

**11**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method     |
|--------------------------------|--------|----------|---------------|------|---------------|------------|
| Stones BG 2.6/3.0              | 30     | %        | 08/05/2008    |      | N Mid         | Stones     |
| Moisture content at 30 C       | 8.0    | %        | 08/05/2008    |      | N Mid         | 33A        |
| Arsenic as As, dry weight      | 18     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C     |
| Boron as B, hot water sol dw   | 0.71   | mg/kg    | 09/05/2008    |      | M Mid         | 6          |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Chromium as Cr, dry weight     | 21     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Copper, as Dry Weight          | 96     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Lead, as Dry Weight            | 58     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Mercury as Hg, dry weight      | 0.35   | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Nickel as Ni, dry weight       | 68     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Selenium as Se, dry weight     | 2.2    | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Zinc as Zn, dry weight         | 140    | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14         |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A        |
| Loss on ignition, dried solids | 16     | %        | 13/05/2008    |      | M Mid         | 337        |
| Sulphate Total as SO4 DW       | 2100   | mg/kg    | 08/05/2008    |      | M Mid         | 45         |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46         |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47         |
| TOC (Ignition in O2)           | 15     | %        | 15/05/2008    |      | N Mid         | 27         |
| pH                             | 6.8    | pH units | 08/05/2008    |      | Y Mid         | 39         |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51         |
| MTBE                           | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Benzene                        | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Toluene                        | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Ethyl Benzene                  | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| m,p-xylene                     | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| o-xylene                       | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C5 to C6 Aliphatics           | <0.11  | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C6 to C8 Aliphatics           | 0.14   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C8 to C10 Aliphatics          | <0.11  | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aliphatics         | <1.1   | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aliphatics         | 2.1    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C35 Aliphatics         | 15     | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aliphatics         | 1.8    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aliphatics (>C5 to C44)  | 20     | mg/kg    | 14/05/2008    |      | Y Mid         | 304/317EPH |
| >C5 to C7 Aromatics            | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C7 to C8 Aromatics            | <0.011 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |

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# Certificate of Analysis



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SEVERN  
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STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553006**

Sample **11** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP9 0.20m**

Visual Description: **Black loam with occasional organic matter and stones**

Sample Date:

Sample Time:

**11**

Sample Received:

**06 May 2008**

| Test Description             | Result | Units | Analysis Date | UoM% | Accreditation | Method     |
|------------------------------|--------|-------|---------------|------|---------------|------------|
| >C8 to C10 Aromatics         | <0.11  | mg/kg | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aromatics        | 2.9    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aromatics        | 5.2    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C21 Aromatics        | 12     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C21 to C35 Aromatics        | 17     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aromatics        | 3.2    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aromatics (>C5 to C44) | 40     | mg/kg | 13/05/2008    |      | Y Mid         | 304/317EPH |
| Total EPH (>C5 to C44)       | 59     | mg/kg | 14/05/2008    |      | M Mid         | 304/317EPH |
| Naphthalene                  | 0.64   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| Acenaphthylene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Acenaphthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluorene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Phenanthrene                 | 0.91   | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Anthracene                   | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluoranthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Pyrene                       | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)anthracene           | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Chrysene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(b)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(k)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)pyrene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Indeno(123cd)pyrene          | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Dibenzo(ah)anthracene        | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(ghi)perylene           | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| PAH total                    | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |

Analyst Comments for 10553006:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered, I/S=Insufficient sample

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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553007**

Sample **12** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP10 0.50m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**12**

Sample Received:

**06 May 2008**

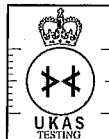
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 49     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 4.7    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 22     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.70   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 44     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 100    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 78     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 110    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | <0.30  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 210    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 4.8    | %        | 13/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | <240   | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 1.8    | %        | 16/05/2008    |      | N Mid         | 27     |
| pH                             | 7.8    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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SEVERN  
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STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553007**

Sample **12** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP10 0.50m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**12**

Sample Received:

**06 May 2008**

| Test Description        | Result        | Units | Analysis Date | UoM% | Accreditation | Method |
|-------------------------|---------------|-------|---------------|------|---------------|--------|
| PAH total               | <5.0          | mg/kg | 19/05/2008    |      | Y Mid         | 313    |
| Description of Sample   | Analyst Comme | Text  | 19/05/2008    |      | N Mid         | 70     |
| Asbestos Identification | Analyst Comme | Text  | 19/05/2008    |      | Y Mid         | 70     |

Analyst Comments for 10553007:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553008**

Sample **13** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP11 0.40m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**13**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method     |
|--------------------------------|--------|----------|---------------|------|---------------|------------|
| Stones BG 2.6/3.0              | 50     | %        | 08/05/2008    |      | N Mid         | Stones     |
| Moisture content at 30 C       | 2.5    | %        | 08/05/2008    |      | N Mid         | 33A        |
| Arsenic as As, dry weight      | 6.4    | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C     |
| Boron as B, hot water sol dw   | 0.78   | mg/kg    | 09/05/2008    |      | M Mid         | 6          |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Chromium as Cr, dry weight     | 31     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Copper, as Dry Weight          | 61     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Lead, as Dry Weight            | 43     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Nickel as Ni, dry weight       | 71     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Selenium as Se, dry weight     | <0.30  | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Zinc as Zn, dry weight         | 140    | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14         |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A        |
| Loss on ignition, dried solids | 3.3    | %        | 13/05/2008    |      | M Mid         | 337        |
| Sulphate Total as SO4 DW       | <240   | mg/kg    | 08/05/2008    |      | M Mid         | 45         |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46         |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47         |
| TOC (Ignition in O2)           | 0.88   | %        | 16/05/2008    |      | N Mid         | 27         |
| pH                             | 7.6    | pH units | 08/05/2008    |      | Y Mid         | 39         |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51         |
| MTBE                           | <0.010 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Benzene                        | <0.010 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Toluene                        | <0.010 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| Ethyl Benzene                  | <0.010 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| m,p-xylene                     | <0.010 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| o-xylene                       | <0.010 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C5 to C6 Aliphatics           | 0.13   | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C6 to C8 Aliphatics           | <0.10  | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C8 to C10 Aliphatics          | <0.10  | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aliphatics         | <1.0   | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aliphatics         | <1.0   | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C35 Aliphatics         | <1.0   | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aliphatics         | <1.0   | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aliphatics (>C5 to C44)  | <5.1   | mg/kg    | 13/05/2008    |      | Y Mid         | 304/317EPH |
| >C5 to C7 Aromatics            | <0.010 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |
| >C7 to C8 Aromatics            | <0.010 | mg/kg    | 13/05/2008    |      | M Mid         | 304        |

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# Certificate of Analysis



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SEVERN  
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STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553008**

Sample **13** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP11 0.40m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**13**

Sample Received:

**06 May 2008**

| Test Description             | Result | Units | Analysis Date | UoM% | Accreditation | Method     |
|------------------------------|--------|-------|---------------|------|---------------|------------|
| >C8 to C10 Aromatics         | <0.10  | mg/kg | 13/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aromatics        | <1.0   | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aromatics        | <1.0   | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C21 Aromatics        | <1.0   | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C21 to C35 Aromatics        | <1.0   | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aromatics        | <1.0   | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aromatics (>C5 to C44) | <5.1   | mg/kg | 13/05/2008    |      | Y Mid         | 304/317EPH |
| Total EPH (>C5 to C44)       | <5.1   | mg/kg | 13/05/2008    |      | M Mid         | 304/317EPH |
| Naphthalene                  | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| Acenaphthylene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Acenaphthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluorene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Phenanthrene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Anthracene                   | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluoranthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Pyrene                       | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)anthracene           | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Chrysene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(b)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(k)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)pyrene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Indeno(123cd)pyrene          | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Dibenzo(ah)anthracene        | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(ghi)perylene           | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| PAH total                    | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |

Analyst Comments for 10553008:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered, I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553009**

Sample **14** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP12 0.60m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**14**

Sample Received:

**06 May 2008**

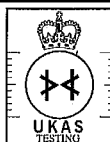
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 47     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 4.2    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 20     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.67   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 40     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 100    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 100    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 110    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 0.36   | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 250    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 4.0    | %        | 13/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | <240   | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 0.91   | %        | 16/05/2008    |      | N Mid         | 27     |
| pH                             | 7.4    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553009**

Sample **14** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP12 0.60m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**14**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553009:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcom.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered, I/S=Insufficient sample

# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553010**

Sample **15** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP13 0.20m**

Visual Description: **Grey loam with some stones**

Sample Date:

Sample Time:

**15**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 52     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 5.2    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 12     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.84   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 21     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 59     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 52     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 47     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | <0.30  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 110    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 4.8    | %        | 19/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 880    | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 2.0    | %        | 16/05/2008    |      | N Mid         | 27     |
| pH                             | 5.8    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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SEVERN  
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# STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553010**

Sample **15** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP13 0.20m**

Visual Description: **Grey loam with some stones**

Sample Date:

Sample Time:

**15**

Sample Received:

**06 May 2008**

| Test Description        | Result        | Units | Analysis Date | UoM% | Accreditation | Method |
|-------------------------|---------------|-------|---------------|------|---------------|--------|
| PAH total               | <5.0          | mg/kg | 19/05/2008    |      | Y Mid         | 313    |
| Description of Sample   | Analyst Comme | Text  | 19/05/2008    |      | N Mid         | 70     |
| Asbestos Identification | Analyst Comme | Text  | 19/05/2008    |      | Y Mid         | 70     |

Analyst Comments for 10553010:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered, I/S=Insufficient sample

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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553011**

Sample **16** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP13 3.50m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**16**

Sample Received:

**06 May 2008**

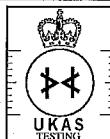
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 52     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 3.0    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 5.8    | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.86   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 20     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 49     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 35     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 90     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | <0.30  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 160    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 5.2    | %        | 19/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 430    | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 1.5    | %        | 16/05/2008    |      | N Mid         | 27     |
| pH                             | 6.2    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553011**

Sample **16** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP13 3.50m**

Visual Description: **Grey gravel with occasional loam**

Sample Date:

Sample Time:

**16**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553011:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553012**

Sample **17** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP14 0.10m**

Visual Description: **Black loam with some stones and occasional organic matter**

Sample Date:

Sample Time:

**17**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method     |
|--------------------------------|--------|----------|---------------|------|---------------|------------|
| Stones BG 2.6/3.0              | 37     | %        | 08/05/2008    |      | N Mid         | Stones     |
| Moisture content at 30 C       | 9.0    | %        | 08/05/2008    |      | N Mid         | 33A        |
| Arsenic as As, dry weight      | 13     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C     |
| Boron as B, hot water sol dw   | 0.67   | mg/kg    | 09/05/2008    |      | M Mid         | 6          |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Chromium as Cr, dry weight     | 10.0   | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Copper, as Dry Weight          | 44     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Lead, as Dry Weight            | 31     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Nickel as Ni, dry weight       | 34     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Selenium as Se, dry weight     | 0.78   | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Zinc as Zn, dry weight         | 83     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14         |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A        |
| Loss on ignition, dried solids | 13     | %        | 19/05/2008    |      | M Mid         | 337        |
| Sulphate Total as SO4 DW       | 730    | mg/kg    | 08/05/2008    |      | M Mid         | 45         |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46         |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47         |
| TOC (Ignition in O2)           | 12     | %        | 16/05/2008    |      | N Mid         | 27         |
| pH                             | 6.6    | pH units | 08/05/2008    |      | Y Mid         | 39         |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51         |
| MTBE                           | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Benzene                        | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Toluene                        | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Ethyl Benzene                  | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| m,p-xylene                     | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| o-xylene                       | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C5 to C6 Aliphatics           | <0.11  | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C6 to C8 Aliphatics           | 0.11   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C8 to C10 Aliphatics          | <0.11  | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aliphatics         | 4.1    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aliphatics         | 3.1    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C35 Aliphatics         | 12     | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aliphatics         | 1.5    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aliphatics (>C5 to C44)  | 21     | mg/kg    | 14/05/2008    |      | Y Mid         | 304/317EPH |
| >C5 to C7 Aromatics            | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C7 to C8 Aromatics            | <0.011 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |

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# Certificate of Analysis



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SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553012**

Sample **17** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP14 0.10m**

Visual Description: **Black loam with some stones and occasional organic matter**

Sample Date:

Sample Time:

**17**

Sample Received:

**06 May 2008**

| Test Description             | Result | Units | Analysis Date | UoM% | Accreditation | Method     |
|------------------------------|--------|-------|---------------|------|---------------|------------|
| >C8 to C10 Aromatics         | <0.11  | mg/kg | 14/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aromatics        | <1.1   | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aromatics        | 4.7    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C21 Aromatics        | 9.6    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C21 to C35 Aromatics        | 15     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aromatics        | 2.7    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aromatics (>C5 to C44) | 33     | mg/kg | 14/05/2008    |      | Y Mid         | 304/317EPH |
| Total EPH (>C5 to C44)       | 54     | mg/kg | 14/05/2008    |      | M Mid         | 304/317EPH |
| Naphthalene                  | 0.70   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| Acenaphthylene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Acenaphthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluorene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Phenanthrene                 | 0.99   | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Anthracene                   | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Fluoranthene                 | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Pyrene                       | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)anthracene           | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Chrysene                     | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(b)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(k)fluoranthene         | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(a)pyrene               | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Indeno(123cd)pyrene          | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Dibenzo(ah)anthracene        | <0.50  | mg/kg | 19/05/2008    |      | M Mid         | 313        |
| Benzo(ghi)perylene           | <0.50  | mg/kg | 19/05/2008    |      | Y Mid         | 313        |
| PAH total                    | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313        |

Analyst Comments for 10553012:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. //S=Insufficient sample

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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553013**

Sample **18** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP15 0.70m**

Visual Description: **Black loam with some stones and occasional organic matter**

Sample Date:

Sample Time:

**18**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 29     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 5.5    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 8.9    | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 1.5    | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | <5.0   | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 42     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 25     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 18     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 1.0    | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 43     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 19     | %        | 19/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 5900   | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | 0.062  | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 19     | %        | 16/05/2008    |      | N Mid         | 27     |
| pH                             | 5.4    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | 0.60   | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | 0.80   | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553013**

Sample **18** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP15 0.70m**

Visual Description: **Black loam with some stones and occasional organic matter**

Sample Date: Sample Time: **18** Sample Received: **06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553013:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553014**

Sample **19** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP16 0.30m**

Visual Description: **Purple loam with occasional stones and organic matter**

Sample Date:

Sample Time:

**19**

Sample Received:

**06 May 2008**

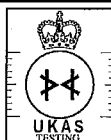
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 15     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 9.5    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 6.0    | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.40   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 27     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 30     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 13     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 16     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 0.38   | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 11     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 4.4    | %        | 19/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 430    | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | 0.092  | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | 120    | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 3.5    | %        | 16/05/2008    |      | N Mid         | 27     |
| pH                             | 7.5    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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# STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553014**

Sample **19** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP16 0.30m**

Visual Description: **Purple loam with occasional stones and organic matter**

Sample Date:

Sample Time:

**19**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553014:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553015**

Sample **20** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP17 0.40m**

Visual Description: **Black loam with some stones**

Sample Date:

Sample Time:

**20**

Sample Received:

**06 May 2008**

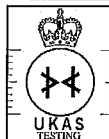
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 24     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 8.0    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 6.5    | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.75   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 5.2    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 38     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 20     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 40     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 0.83   | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 65     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 20     | %        | 19/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 940    | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | <0.060 | g/l      | 09/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 22     | %        | 16/05/2008    |      | N Mid         | 27     |
| pH                             | 7.3    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 09/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | 1.4    | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | 2.6    | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | 1.5    | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Pyrene                         | 1.1    | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | 0.53   | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 19/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 19/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



1314  
0897  
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1510

SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553015**

Sample **20** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP17 0.40m**

Visual Description: **Black loam with some stones**

Sample Date:

Sample Time:

**20**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | 7.1    | mg/kg | 19/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553015:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553016**

Sample **21** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP18 0.30m**

Visual Description: **Black loam with some stones**

Sample Date:

Sample Time:

**21**

Sample Received:

**06 May 2008**

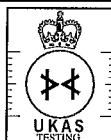
| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method |
|--------------------------------|--------|----------|---------------|------|---------------|--------|
| Stones BG 2.6/3.0              | 26     | %        | 08/05/2008    |      | N Mid         | Stones |
| Moisture content at 30 C       | 4.8    | %        | 08/05/2008    |      | N Mid         | 33A    |
| Arsenic as As, dry weight      | 9.6    | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C |
| Boron as B, hot water sol dw   | 0.82   | mg/kg    | 09/05/2008    |      | M Mid         | 6      |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Chromium as Cr, dry weight     | 5.5    | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Copper, as Dry Weight          | 47     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Lead, as Dry Weight            | 27     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Nickel as Ni, dry weight       | 33     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Selenium as Se, dry weight     | 1.2    | mg/kg    | 09/05/2008    |      | M Mid         | 30C    |
| Zinc as Zn, dry weight         | 63     | mg/kg    | 09/05/2008    |      | M Mid         | 30     |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14     |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A    |
| Loss on ignition, dried solids | 17     | %        | 19/05/2008    |      | M Mid         | 337    |
| Sulphate Total as SO4 DW       | 3200   | mg/kg    | 08/05/2008    |      | M Mid         | 45     |
| Sulphate as SO4, Water Soluble | 0.13   | g/l      | 12/05/2008    |      | M Mid         | 46     |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47     |
| TOC (Ignition in O2)           | 16     | %        | 16/05/2008    |      | N Mid         | 27     |
| pH                             | 6.3    | pH units | 08/05/2008    |      | Y Mid         | 39     |
| Sulphur (Elemental)            | <100   | mg/kg    | 12/05/2008    |      | M Mid         | 51     |
| Naphthalene                    | 1.1    | mg/kg    | 14/05/2008    |      | Y Mid         | 313    |
| Acenaphthylene                 | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Acenaphthene                   | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Fluorene                       | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Phenanthrene                   | 1.8    | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Anthracene                     | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Fluoranthene                   | 0.89   | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Pyrene                         | 0.64   | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Benzo(a)anthracene             | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Chrysene                       | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Benzo(b)fluoranthene           | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Benzo(k)fluoranthene           | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Benzo(a)pyrene                 | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Indeno(123cd)pyrene            | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Dibenzo(ah)anthracene          | <0.50  | mg/kg    | 14/05/2008    |      | M Mid         | 313    |
| Benzo(ghi)perylene             | <0.50  | mg/kg    | 14/05/2008    |      | Y Mid         | 313    |

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# Certificate of Analysis



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SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553016**

Sample **21** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP18 0.30m**

Visual Description: **Black loam with some stones**

Sample Date:

Sample Time:

**21**

Sample Received:

**06 May 2008**

| Test Description | Result | Units | Analysis Date | UoM% | Accreditation | Method |
|------------------|--------|-------|---------------|------|---------------|--------|
| PAH total        | <5.0   | mg/kg | 14/05/2008    |      | Y Mid         | 313    |

Analyst Comments for 10553016:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis



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**SEVERN  
TRENT**

**STL**

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553017**

Sample **22** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP19 0.50m**

Visual Description: **Black loam with some stones**

Sample Date:

Sample Time:

**22**

Sample Received:

**06 May 2008**

| Test Description               | Result | Units    | Analysis Date | UoM% | Accreditation | Method     |
|--------------------------------|--------|----------|---------------|------|---------------|------------|
| Stones BG 2.6/3.0              | 27     | %        | 08/05/2008    |      | N Mid         | Stones     |
| Moisture content at 30 C       | 17     | %        | 08/05/2008    |      | N Mid         | 33A        |
| Arsenic as As, dry weight      | 11     | mg/kg    | 09/05/2008    |      | M Mid         | 30/30C     |
| Boron as B, hot water sol dw   | 0.82   | mg/kg    | 09/05/2008    |      | M Mid         | 6          |
| Cadmium as Cd, dry weight      | <0.50  | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Chromium as Cr, dry weight     | <5.0   | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Copper, as Dry Weight          | 44     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Lead, as Dry Weight            | 27     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Mercury as Hg, dry weight      | <0.25  | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Nickel as Ni, dry weight       | 30     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Selenium as Se, dry weight     | 1.6    | mg/kg    | 09/05/2008    |      | M Mid         | 30C        |
| Zinc as Zn, dry weight         | 55     | mg/kg    | 09/05/2008    |      | M Mid         | 30         |
| Cyanide (Total), dry weight    | <2.5   | mg/kg    | 08/05/2008    |      | N Mid         | 14         |
| Monohydric phenols dw          | <0.50  | mg/kg    | 08/05/2008    |      | Y Mid         | 40A        |
| Loss on ignition, dried solids | 19     | %        | 19/05/2008    |      | M Mid         | 337        |
| Sulphate Total as SO4 DW       | 4500   | mg/kg    | 08/05/2008    |      | M Mid         | 45         |
| Sulphate as SO4, Water Soluble | 0.083  | g/l      | 12/05/2008    |      | M Mid         | 46         |
| Sulphide                       | <7.5   | mg/kg    | 08/05/2008    |      | M Mid         | 47         |
| TOC (Ignition in O2)           | 17     | %        | 16/05/2008    |      | N Mid         | 27         |
| pH                             | 6.4    | pH units | 08/05/2008    |      | Y Mid         | 39         |
| Sulphur (Elemental)            | <100   | mg/kg    | 12/05/2008    |      | M Mid         | 51         |
| MTBE                           | <0.012 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Benzene                        | 0.20   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Toluene                        | 0.063  | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| Ethyl Benzene                  | <0.012 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| m.p-xylene                     | <0.012 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| o-xylene                       | <0.012 | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C5 to C6 Aliphatics           | 0.13   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C6 to C8 Aliphatics           | 0.18   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C8 to C10 Aliphatics          | 0.16   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aliphatics         | 2.0    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aliphatics         | 2.8    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C35 Aliphatics         | 17     | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aliphatics         | 1.2    | mg/kg    | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aliphatics (>C5 to C44)  | 23     | mg/kg    | 14/05/2008    |      | Y Mid         | 304/317EPH |
| >C5 to C7 Aromatics            | 0.20   | mg/kg    | 14/05/2008    |      | M Mid         | 304        |
| >C7 to C8 Aromatics            | 0.063  | mg/kg    | 14/05/2008    |      | M Mid         | 304        |

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# Certificate of Analysis



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SEVERN  
TRENT

STL

Matrix: **Soil**

Report Number: **COV/513001/2008**

Issue **1**

Laboratory Number: **10553017**

Sample **22** of **22**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP19 0.50m**

Visual Description: **Black loam with some stones**

Sample Date:

Sample Time:

**22**

Sample Received:

**06 May 2008**

| Test Description             | Result | Units | Analysis Date | UoM% | Accreditation | Method     |
|------------------------------|--------|-------|---------------|------|---------------|------------|
| >C8 to C10 Aromatics         | <0.12  | mg/kg | 14/05/2008    |      | M Mid         | 304        |
| >C10 to C12 Aromatics        | 3.1    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C12 to C16 Aromatics        | 6.9    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C16 to C21 Aromatics        | 19     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C21 to C35 Aromatics        | 29     | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| >C35 to C44 Aromatics        | 3.4    | mg/kg | 13/05/2008    |      | M Mid         | 317EPH     |
| Total Aromatics (>C5 to C44) | 61     | mg/kg | 14/05/2008    |      | Y Mid         | 304/317EPH |
| Total EPH (>C5 to C44)       | 84     | mg/kg | 14/05/2008    |      | M Mid         | 304/317EPH |
| Naphthalene                  | 0.83   | mg/kg | 14/05/2008    |      | Y Mid         | 313        |
| Acenaphthylene               | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Acenaphthene                 | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Fluorene                     | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Phenanthrene                 | 1.5    | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Anthracene                   | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Fluoranthene                 | 0.68   | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Pyrene                       | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Benzo(a)anthracene           | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Chrysene                     | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Benzo(b)fluoranthene         | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Benzo(k)fluoranthene         | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Benzo(a)pyrene               | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Indeno(123cd)pyrene          | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Dibenzo(ah)anthracene        | <0.50  | mg/kg | 14/05/2008    |      | M Mid         | 313        |
| Benzo(ghi)perylene           | <0.50  | mg/kg | 14/05/2008    |      | Y Mid         | 313        |
| PAH total                    | <5.0   | mg/kg | 14/05/2008    |      | Y Mid         | 313        |

Analyst Comments for 10553017:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

Signed:

Name: **J. Fell**

Date: **19 May 2008**

Title: **Production Manager**

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DETERMINAND COMMENTS FOR REPORT COV/513001/2008

ISSUE 1

Date of Issue : 19 May 2008

| Sample No | Description     | Determinand             | Comments     |
|-----------|-----------------|-------------------------|--------------|
| 10552997  | 9913 TP1 1.50m  | Asbestos Identification | Non Detected |
| 10552997  | 9913 TP1 1.50m  | Description of Sample   | Soil         |
| 10553001  | 9913 TP4 1.30m  | Asbestos Identification | Non Detected |
| 10553001  | 9913 TP4 1.30m  | Description of Sample   | Soil         |
| 10553007  | 9913 TP10 0.50m | Asbestos Identification | Non Detected |
| 10553007  | 9913 TP10 0.50m | Description of Sample   | Soil         |
| 10553010  | 9913 TP13 0.20m | Asbestos Identification | Non Detected |
| 10553010  | 9913 TP13 0.20m | Description of Sample   | Soil         |

Signed:



Name: J. Fell

Date: 19 May 2008

Title: Production Manager

## METHOD COMMENTS FOR REPORT COV/513001/2008

Issue 1

Date of Issue :19 May 2008

| Method | Statement                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14     | The cyanides in the sample are determined in two stages. The free cyanide is liberated by heating with pH 4 buffer and the resulting gas collected in sodium hydroxide solution. Complex cyanide is liberated using phosphoric acid under the same conditions. the two portions of sodium hydroxide are then analysed for cyanide content using a discrete autoanalyser.                                               |
| 27     |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 30     | Metals are extracted from land samples by boiling with hydrochloric/nitric acids (3:1 ratio). The measurement of metal concentrations is determined directly on an ICP-OES at defined wavelengths.                                                                                                                                                                                                                     |
| 30/30C | Metals are extracted from land samples by boiling with hydrochloric/nitric acids (3:1 ratio). For the measurement of metal concentrations is determined on an ICP-OES at defined wavelengths. Where a result is 25mg/kg or above results are obtained directly. Otherwise results are obtained via hydride generation.                                                                                                 |
| 304    | The method employs the use of Headspace extraction of the volatile hydrocarbons from as received soil samples using a commercial headspace sampler followed by gas chromatograph (GC). The effluent from the chromatographic column is split between a flame ionisation detector (FID) for the determination of total VPH and a mass selective detector (MSD) for the determination of aromatic volatile hydrocarbons. |
| 30C    | Metals are extracted from land samples by boiling with hydrochloric/nitric acid (3:1 ratio). The measurement of metal concentrations is determined by means of hydride generation / atomic vapour on an ICP-OES at defined wavelengths.                                                                                                                                                                                |
| 313    | PAH?s are extracted from land samples using Dichloromethane, and sonication. An aliquot of the supernatant liquid is then transferred to a separate vial and analysed by GC-MS.                                                                                                                                                                                                                                        |
| 317EPH | A known amount of soil, with a surrogate spike added, is shaken and sonicated in an extraction vial containing hexane and acetone. Water is added to the sample and then centrifuged; a test portion of the resulting hexane layer is transferred to a 2ml vial. The extract can then be analysed by FC-FID. Fractionation is done by solid phase extraction using an unmodified silica column.                        |
| 337    | The loss on ignition of a pre-weighted portion of soil is determined by gravimetry after 4 hours at 450oC                                                                                                                                                                                                                                                                                                              |
| 33A    | Moisture Content is the weight difference between an as received sample and the air dried sample at 30 degrees C.                                                                                                                                                                                                                                                                                                      |
| 39     | The test is carried out by extraction using deionised water with agitation. The pH of this suspension is read directly from an electronic pH meter.                                                                                                                                                                                                                                                                    |
| 40A    | This method determines steam distillable phenolic compounds in land materials. Phenol is extracted from air dried soil using steam distillation. The pH adjusted distillate is measured colorimetrically at a defined wavelength.                                                                                                                                                                                      |
| 45     | The sulphates are extracted from land samples using boiling hydrochloric acid solution. After cooling and filtration the determination of sulphate is obtained from an aliquot of solution, via a turbidimetric measurement.                                                                                                                                                                                           |
| 46     | Water soluble sulphate is content of land samples is extracted by shaking with deionised water. The resultant solution is filtered and the determination of sulphate is obtained turbidimetrically from this filtrate via a reaction with barium chloride.                                                                                                                                                             |
| 47     | The sulphide content of land samples is determined via extraction with dilute sulphuric acid and steam distillation into zinc acetate solution and sodium hydroxide. The distillate is then titrated against sodium thiosulphate solution using iodine indicator.                                                                                                                                                      |
| 51     | Elemental sulphur is extracted from land samples using dichloromethane by microwave assisted extraction. Samples are cooled, centrifuged and transferred to separate vials before analysis by HPLC.                                                                                                                                                                                                                    |
| 6      | Boron is extracted from land samples using boiling deionised water followed by vacuum filtration. The measurement of boron in the filtrate is then determined directly by ICP-OES at the defined wavelength.                                                                                                                                                                                                           |
| 70     | Representative fibres are mounted in appropriate Refractive Index (RI) liquids on slides and the different fibrous components are identified using PLM. If no asbestos is found then additional searches for small asbestos fibres on random sub-samples are undertaken using PLM.                                                                                                                                     |
| Stones | The percentage weight of the stones that are naturally occurring and are greater than 10mm in diameter of the total weight of sample.                                                                                                                                                                                                                                                                                  |

# Report Summary

SEVERN  
TRENT

STL

**Mr Gary Shawley**  
**Integral Geotechnique**  
**50 Cathedral Road**  
**Cardiff**  
**CF1 9LL**

Date of Issue: **27 May 2008**

Report Number: **COV/516987/2008**

Issue **1**

**Job Description:** General Analysis

**Job Location:** Twynyrodyn 9913

Number of Samples  
included in this report **4**

Job Received: **20 May 2008**

Number of Test Results  
included in this report **4**

Analysis Commenced: **20 May 2008**

Signed:



Name: **L. Ellis**

Date: **27 May 2008**

Title: **Team Leader**

STL was not responsible for sampling unless otherwise stated. Sampling is not covered by our UKAS accreditation.

Information on the methods of analysis and performance characteristics are available on request.

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

Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory.

**Severn Trent Laboratories Ltd.**

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# Certificate of Analysis

SEVERN  
TRENT

STL

Report Number: **COV/516987/2008**

Issue **1**

Laboratory Number: **10578837**

Sample **1** of **4**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP3 0.60m**

Sample Date:

Sample Received

**20 May 2008**

Analysis Complete:

**27 May 2008**

| Test Description | Result | Units | Accreditation | Method |
|------------------|--------|-------|---------------|--------|
| Calorific Value  | 7600   | kJ/kg | N Mid         | 09     |

**Analyst Comments for 10578837:**

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis

SEVERN  
TRENT

STL

Report Number: **COV/516987/2008**

Issue **1**

Laboratory Number: **10578838**

Sample **2** of **4**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP2 0.50m**

Sample Date:                      Sample Received    **20 May 2008**      Analysis Complete:    **27 May 2008**

| Test Description | Result | Units | Accreditation | Method |
|------------------|--------|-------|---------------|--------|
| Calorific Value  | 6100   | kJ/kg | N    Mid      | 09     |

Analyst Comments for 10578838:                      No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis

SEVERN  
TRENT

STL

Report Number: **COV/516987/2008**

Issue **1**

Laboratory Number: **10578839**

Sample **3** of **4**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP17 0.40m**

Sample Date:

Sample Received

**20 May 2008**

Analysis Complete:

**27 May 2008**

| Test Description | Result | Units | Accreditation | Method |
|------------------|--------|-------|---------------|--------|
| Calorific Value  | 7000   | kJ/kg | N Mid         | 09     |

Analyst Comments for 10578839:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

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# Certificate of Analysis

SEVERN  
TRENT

STL

Report Number: **COV/516987/2008**

Issue **1**

Laboratory Number: **10578840**

Sample **4** of **4**

Sample Source: **Integral Geotechnique**

Sample Point Description: **Integral Geotechnique**

Sample Description: **9913 TP15 0.70m**

Sample Date:

Sample Received

**20 May 2008**

Analysis Complete:

**27 May 2008**

| Test Description | Result | Units | Accreditation | Method |
|------------------|--------|-------|---------------|--------|
| Calorific Value  | 5400   | kJ/kg | N Mid         | 09     |

Analyst Comments for 10578840:

No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.

Analysed at: Bri = STL Bridgend, Cov = STL Coventry, Mid = STL Midlands, Rea = STL Reading, Run = STL Runcom.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. I/S=Insufficient sample

Signed:



Name: **L. Ellis**

Date: **27 May 2008**

Title: **Team Leader**

Severn Trent Laboratories Ltd.

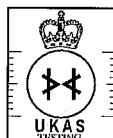
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## **APPENDIX I**

### **LABORATORY CHEMICAL TEST RESULTS (LEACHATE)**

# Report Summary



1314  
0897  
1229  
1510

**SEVERN  
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**STL**

**Mr Gary Shawley  
Integral Geotechnique  
50 Cathedral Road  
Cardiff  
CF1 9LL**

Date of Issue: **11 June 2008**

Report Number: **COV/516982/2008**

Issue **1**

**Job Description:** General Analysis

**Job Location:** Twynnyroddyn 9913

Number of Samples  
included in this report **6**

Job Received: **20 May 2008**

Number of Test Results  
included in this report **204**

Analysis Commenced: **20 May 2008**

Signed:

Name: **J. Fell**

Date: **11 June 2008**

Title: **Production Manager**

STL was not responsible for sampling unless otherwise stated. Sampling is not covered by our UKAS accreditation.

Information on the methods of analysis and performance characteristics are available on request.

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

Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory.

**Severn Trent Laboratories Ltd.**

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