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Mr Crean
O Callaghan Moran & Assoc.
Granary House
Rutland Street
Cork

14 August 2008

Test Report: MID/538002/2008

Dear Mr Crean

Analysis of your sample(s) submitted on 11 August 2008 is now complete and we have pleasure in enclosing the appropriate test report(s).

An invoice for the analysis carried out will be sent under separate cover.

Should you have any queries regarding this report(s) or any part of our service, please contact Customer Services on +44 (0)24 7658 4800 who will be happy to discuss your requirements.

If you would like to arrange any further analysis, please contact Customer Services. To arrange container delivery or sample collection, please call the Couriers Department directly on 024 7685 6562.

Thank you for using STL and we look forward to receiving your next samples.

Yours Sincerely,

Signed: *L. Ellis*

Name: L. Ellis

Title: Team Leader

STL Midlands

Rayner House, 80 Lockhurst Lane,
Coventry, CV6 5PZ

Severn Trent Laboratories Limited

Registered in England & Wales Registration No. 2148934 Registered Office: 2297 Coventry Road, Birmingham B26

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Certificate of Analysis



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Report Number: **MID/538002/2008**
Laboratory Number: **10715372**

Issue **1**
Sample **1** of **3**

Sample Source: **O Callaghan Moran & Assoc.**
Sample Point Description: **O Callaghan Moran & Assoc.**
Sample Description: **BH7 0.50m-1.00m**

Sample Date: Sample Received **11 August 2008** Analysis Complete: **14 August 2008**

Test Description	Result	Units	Accreditation	Method
Antimony as Sb, dry weight	1.6	mg/kg	Y Mid	30C
Arsenic as As, dry weight	16	mg/kg	Y Mid	30/30C
Barium as Ba, dry weight	150	mg/kg	Y Mid	30
Cadmium as Cd, dry weight	0.65	mg/kg	Y Mid	30
Chromium as Cr, dry weight	11	mg/kg	Y Mid	30
Copper as Cu, dry weight	19	mg/kg	Y Mid	30
Iron as Fe, dry weight	8900	mg/kg	Y Mid	30
Lead as Pb, dry weight	42	mg/kg	Y Mid	30
Manganese as Mn, dry weight	830	mg/kg	Y Mid	30
Mercury as Hg, dry weight	<0.25	mg/kg	Y Mid	30C
Nickel as Ni, dry weight	24	mg/kg	Y Mid	30
Tin as Sn, dry weight	<2.0	mg/kg	Y Mid	30
Zinc as Zn, dry weight	68	mg/kg	Y Mid	30
TPH >C6 - C10	<50	mg/kg	Y Mid	317
TPH >C10 - C20	<50	mg/kg	Y Mid	317
TPH >C20 - C40	180	mg/kg	Y Mid	317
TPH >C6 - C40, Total	180	mg/kg	Y Mid	317
naphthalene	0.80	mg/kg	Y Mid	307
acenaphthylene	<0.10	mg/kg	Y Mid	307
acenaphthene	0.48	mg/kg	Y Mid	307
fluorene	0.32	mg/kg	Y Mid	307
phenanthrene	4.0	mg/kg	Y Mid	307
anthracene	0.92	mg/kg	Y Mid	307
fluoranthene	4.0	mg/kg	Y Mid	307
pyrene	3.7	mg/kg	Y Mid	307
benzo(a)anthracene	1.7	mg/kg	Y Mid	307
chrysene	1.6	mg/kg	Y Mid	307
benzo(b)fluoranthene	1.4	mg/kg	Y Mid	307
benzo(k)fluoranthene	0.70	mg/kg	Y Mid	307
benzo(a)pyrene	1.6	mg/kg	Y Mid	307
Dibenz(a,h)anthracene	0.17	mg/kg	Y Mid	307
Benzo(g,h,i)perylene	1.1	mg/kg	Y Mid	307
Indeno(1,2,3-c,d)pyrene	0.83	mg/kg	Y Mid	307
PAH, Total of 16 EPA	23	mg/kg	Y Mid	307
benzene	<0.10	mg/kg	Y Mid	327

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Report Number: **MID/538002/2008**

Issue **1**

Laboratory Number: **10715373**

Sample **2** of **3**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH9 0.50m-1.00m**

Sample Date:

Sample Received

11 August 2008

Analysis Complete:

14 August 2008

Test Description	Result	Units	Accreditation	Method
Antimony as Sb, dry weight	1.6	mg/kg	Y Mid	30C
Arsenic as As, dry weight	12	mg/kg	Y Mid	30/30C
Barium as Ba, dry weight	72	mg/kg	Y Mid	30
Cadmium as Cd, dry weight	1.2	mg/kg	Y Mid	30
Chromium as Cr, dry weight	14	mg/kg	Y Mid	30
Copper as Cu, dry weight	28	mg/kg	Y Mid	30
Iron as Fe, dry weight	20000	mg/kg	Y Mid	30
Lead as Pb, dry weight	79	mg/kg	Y Mid	30
Manganese as Mn, dry weight	1100	mg/kg	Y Mid	30
Mercury as Hg, dry weight	0.34	mg/kg	Y Mid	30C
Nickel as Ni, dry weight	31	mg/kg	Y Mid	30
Tin as Sn, dry weight	3.5	mg/kg	Y Mid	30
Zinc as Zn, dry weight	86	mg/kg	Y Mid	30
TPH >C6 - C10	<50	mg/kg	Y Mid	317
TPH >C10 - C20	<50	mg/kg	Y Mid	317
TPH >C20 - C40	150	mg/kg	Y Mid	317
TPH >C6 - C40, Total	150	mg/kg	Y Mid	317
naphthalene	0.24	mg/kg	Y Mid	307
acenaphthylene	<0.10	mg/kg	Y Mid	307
acenaphthene	<0.10	mg/kg	Y Mid	307
fluorene	<0.10	mg/kg	Y Mid	307
phenanthrene	0.62	mg/kg	Y Mid	307
anthracene	0.13	mg/kg	Y Mid	307
fluoranthene	0.63	mg/kg	Y Mid	307
pyrene	0.51	mg/kg	Y Mid	307
benzo(a)anthracene	0.27	mg/kg	Y Mid	307
chrysene	0.26	mg/kg	Y Mid	307
benzo(b)fluoranthene	0.25	mg/kg	Y Mid	307
benzo(k)fluoranthene	0.13	mg/kg	Y Mid	307
benzo(a)pyrene	0.25	mg/kg	Y Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	Y Mid	307
Benzo(g,h,i)perylene	0.25	mg/kg	Y Mid	307
Indeno(1,2,3-c,d)pyrene	0.22	mg/kg	Y Mid	307
PAH, Total of 16 EPA	3.7	mg/kg	Y Mid	307
benzene	<0.10	mg/kg	Y Mid	327

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Page 4 of 7

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Report Number: **MID/538002/2008**

Issue **1**

Laboratory Number: **10715373**

Sample **2** of **3**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH9 0.50m-1.00m**

Sample Date: Sample Received **11 August 2008** Analysis Complete: **14 August 2008**

Test Description	Result	Units	Accreditation	Method
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327

Analyst Comments for 10715373: 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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Report Number: **MID/538002/2008**
 Laboratory Number: **10715374**

Issue **1**
 Sample **3** of **3**

Sample Source: **O Callaghan Moran & Assoc.**
 Sample Point Description: **O Callaghan Moran & Assoc.**
 Sample Description: **BH10 1.70m-2.50m**

Sample Date: Sample Received **11 August 2008** Analysis Complete: **14 August 2008**

Test Description	Result	Units	Accreditation	Method
Antimony as Sb, dry weight	1.7	mg/kg	Y Mid	30C
Arsenic as As, dry weight	13	mg/kg	Y Mid	30/30C
Barium as Ba, dry weight	79	mg/kg	Y Mid	30
Cadmium as Cd, dry weight	1.6	mg/kg	Y Mid	30
Chromium as Cr, dry weight	14	mg/kg	Y Mid	30
Copper as Cu, dry weight	30	mg/kg	Y Mid	30
Iron as Fe, dry weight	25000	mg/kg	Y Mid	30
Lead as Pb, dry weight	59	mg/kg	Y Mid	30
Manganese as Mn, dry weight	1500	mg/kg	Y Mid	30
Mercury as Hg, dry weight	<0.25	mg/kg	Y Mid	30C
Nickel as Ni, dry weight	37	mg/kg	Y Mid	30
Tin as Sn, dry weight	3.7	mg/kg	Y Mid	30
Zinc as Zn, dry weight	94	mg/kg	Y Mid	30
TPH >C6 - C10	<50	mg/kg	Y Mid	317
TPH >C10 - C20	<50	mg/kg	Y Mid	317
TPH >C20 - C40	<50	mg/kg	Y Mid	317
TPH >C6 - C40, Total	<50	mg/kg	Y Mid	317
naphthalene	<0.10	mg/kg	Y Mid	307
acenaphthylene	<0.10	mg/kg	Y Mid	307
acenaphthene	<0.10	mg/kg	Y Mid	307
fluorene	<0.10	mg/kg	Y Mid	307
phenanthrene	0.20	mg/kg	Y Mid	307
anthracene	<0.10	mg/kg	Y Mid	307
fluoranthene	0.13	mg/kg	Y Mid	307
pyrene	<0.10	mg/kg	Y Mid	307
benzo(a)anthracene	<0.10	mg/kg	Y Mid	307
chrysene	<0.10	mg/kg	Y Mid	307
benzo(b)fluoranthene	<0.10	mg/kg	Y Mid	307
benzo(k)fluoranthene	<0.10	mg/kg	Y Mid	307
benzo(a)pyrene	<0.10	mg/kg	Y Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	Y Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	Y Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	Y Mid	307
PAH, Total of 16 EPA	<1.0	mg/kg	Y Mid	307
benzene	<0.10	mg/kg	Y Mid	327

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Report Number: MID/538002/2008

Issue 1

Laboratory Number: 10715374

Sample 3 of 3

Sample Source: O Callaghan Moran & Assoc.

Sample Point Description: O Callaghan Moran & Assoc.

Sample Description: BH10 1.70m-2.50m

Sample Date: Sample Received 11 August 2008 Analysis Complete: 14 August 2008

Test Description	Result	Units	Accreditation	Method
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327

Analyst Comments for 10715374: 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: *L. Ellis*

Name: L. Ellis

Date: 14 August 2008

Title: Team Leader

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Page 7 of 7

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**Mr Crean
O Callaghan Moran & Assoc.
Granary House
Rutland Street
Cork**

19 November 2008

Test Report: COV/558587/2008

Dear Mr Crean

Analysis of your sample(s) submitted on 31 October 2008 is now complete and we have pleasure in enclosing the appropriate test report(s).

An invoice for the analysis carried out is included with this report.

Should you have any queries regarding this report(s) or any part of our service, please contact Customer Services on +44 (0)24 7642 1213 who will be happy to discuss your requirements.

If you would like to arrange any further analysis, please contact Customer Services. To arrange container delivery or sample collection, please call the Couriers Department directly on 024 7685 6562.

Thank you for using STL and we look forward to receiving your next samples.

Yours Sincerely,

Signed: *L. Ellis*

Name: L. Ellis

Title: Team Leader

STL Coventry

STL Business Centre, Torrington Avenue,
Coventry, CV4 9GU

Severn Trent Laboratories Limited

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Report Summary



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**Mr Donal Crean
O Callaghan Moran & Assoc.
Granary House
Rutland Street
Cork**

Date of Issue: **19 November 2008**

Report Number: **COV/558587/2008**

Issue **1**

Job Description: Donal Crean

Job Location: 08-014-05

Number of Samples
included in this report **16**

Job Received: 31 October 2008

Number of Test Results
included in this report **400**

Analysis Commenced: 31 October 2008

Signed: *L. Ellis*

Name: **L. Ellis**

Date: **19 November 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.

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Certificate of Analysis



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Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888346**

Sample **1** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH7 13.0-14.00m**

Sample Date:

Sample Received

31 October 2008

Analysis Complete:

13 November 2008

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	1.19	% ratio	N Mid	33
Moisture at 105c	1.2	%	N Mid	33
TOC by Ignition in O2	0.52	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	<50	mg/kg	Y Mid	317
Naphthalene	<0.10	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	<0.10	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	98.83	%	N Mid	Calculated

Analyst Comments for 10888346:

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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Page 2 of 17

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1510



Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888348**

Sample **3** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH15 1.0-2.00m**

Sample Date: Sample Received **31 October 2008** Analysis Complete: **13 November 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	1.51	% ratio	N Mid	33
Moisture at 105c	1.5	%	N Mid	33
TOC by Ignition in O2	5.2	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	86	mg/kg	Y Mid	317
Naphthalene	0.16	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	0.42	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	0.14	mg/kg	N Mid	307
Pyrene	0.12	mg/kg	N Mid	307
Benzo(a)anthracene	0.12	mg/kg	N Mid	307
Chrysene	0.32	mg/kg	N Mid	307
Benzo(b)fluoranthene	0.13	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	1.4	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	98.51	%	N Mid	Calculated

Analyst Comments for 10888348: 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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1510**SEVERN
TRENT** **STL**Report Number: **COV/558587/2008**
Laboratory Number: **10888349**Issue **1**
Sample **4** of **16**Sample Source: **O Callaghan Moran & Assoc.**
Sample Point Description: **O Callaghan Moran & Assoc.**
Sample Description: **BH15 12.0-13.00m**Sample Date: Sample Received **31 October 2008** Analysis Complete: **13 November 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.79	% ratio	N Mid	33
Moisture at 105c	0.79	%	N Mid	33
TOC by Ignition in O2	0.34	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	<50	mg/kg	Y Mid	317
Naphthalene	<0.10	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	<0.10	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.21	%	N Mid	Calculated

Analyst Comments for 10888349: No Analyst Comment

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS, S = Sub-contracted.
Analysed at: Bn = 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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Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888350**

Sample **5** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **W2 0.50-1.00m**

Sample Date:

Sample Received

31 October 2008

Analysis Complete:

13 November 2008

Test Description	Result	Units	Accreditation		Method
EN 12457-3 Leachate	Y		N	Mid	EN12457-3
Moisture Content Ratio at 105C	0.99	% ratio	N	Mid	33
Moisture at 105c	0.98	%	N	Mid	33
TOC by Ignition in O2	5.6	%	N	Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N	Mid	312
Mineral Oils, >C10 - C40	150	mg/kg	Y	Mid	317
Naphthalene	5.5	mg/kg	N	Mid	307
Acenaphthylene	0.11	mg/kg	N	Mid	307
Acenaphthene	7.1	mg/kg	N	Mid	307
Fluorene	4.4	mg/kg	N	Mid	307
Phenanthrene	40	mg/kg	N	Mid	307
Anthracene	13	mg/kg	N	Mid	307
Fluoranthene	38	mg/kg	N	Mid	307
Pyrene	34	mg/kg	N	Mid	307
Benzo(a)anthracene	18	mg/kg	N	Mid	307
Chrysene	17	mg/kg	N	Mid	307
Benzo(b)fluoranthene	14	mg/kg	N	Mid	307
Benzo(k)fluoranthene	7.7	mg/kg	N	Mid	307
Benzo(a)pyrene	19	mg/kg	N	Mid	307
Dibenz(a,h)anthracene	1.1	mg/kg	N	Mid	307
Benzo(g,h,i)perylene	6.9	mg/kg	N	Mid	307
Indeno(1,2,3-c,d)pyrene	6.9	mg/kg	N	Mid	307
Coronene	1.5	mg/kg	N	Mid	307
PAH, Total of 17 WAC	230	mg/kg	N	Mid	307
benzene	<0.10	mg/kg	Y	Mid	327
toluene	<0.10	mg/kg	Y	Mid	327
ethylbenzene	<0.10	mg/kg	Y	Mid	327
m&p-Xylene	<0.20	mg/kg	Y	Mid	327
o-xylene	<0.10	mg/kg	Y	Mid	327
Dry Ratio (BSEN 12457)	99.02	%	N	Mid	Calculated

Analyst Comments for 10888350:

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

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**SEVERN
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Report Number: **COV/558587/2008**
Laboratory Number: **10888351**

Issue **1**
Sample **6** of **16**

Sample Source: **O Callaghan Moran & Assoc.**
Sample Point Description: **O Callaghan Moran & Assoc.**
Sample Description: **W2 1.00-2.00m**

Sample Date: Sample Received **31 October 2008** Analysis Complete: **13 November 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	2.00	% ratio	N Mid	33
Moisture at 105c	2.0	%	N Mid	33
TOC by Ignition in O2	5.4	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	5000	mg/kg	Y Mid	317
Naphthalene	16	mg/kg	N Mid	307
Acenaphthylene	0.29	mg/kg	N Mid	307
Acenaphthene	16	mg/kg	N Mid	307
Fluorene	8.1	mg/kg	N Mid	307
Phenanthrene	97	mg/kg	N Mid	307
Anthracene	25	mg/kg	N Mid	307
Fluoranthene	87	mg/kg	N Mid	307
Pyrene	88	mg/kg	N Mid	307
Benzo(a)anthracene	44	mg/kg	N Mid	307
Chrysene	42	mg/kg	N Mid	307
Benzo(b)fluoranthene	35	mg/kg	N Mid	307
Benzo(k)fluoranthene	19	mg/kg	N Mid	307
Benzo(a)pyrene	47	mg/kg	N Mid	307
Dibenz(a,h)anthracene	3.0	mg/kg	N Mid	307
Benzo(g,h,i)perylene	20	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	18	mg/kg	N Mid	307
Coronene	4.0	mg/kg	N Mid	307
PAH, Total of 17 WAC	570	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	98.04	%	N Mid	Calculated

Analyst Comments for 10888351:

{(*)}TPH soils: detection limits raised due to original sample being over-range. {(*)}

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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1314
0897
1229
1510

SEVERN
TRENT **STL**

Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888352**

Sample **7** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH8 0.50-1.00m**

Sample Date: Sample Received **31 October 2008** Analysis Complete: **13 November 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	2.38	% ratio	N Mid	33
Moisture at 105c	2.3	%	N Mid	33
TOC by Ignition in O2	3.1	%	N Mid	27
PCB, Total of 7 Congeners	0.028	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	510	mg/kg	Y Mid	317
Naphthalene	1.3	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	0.56	mg/kg	N Mid	307
Fluorene	1.3	mg/kg	N Mid	307
Phenanthrene	5.3	mg/kg	N Mid	307
Anthracene	1.7	mg/kg	N Mid	307
Fluoranthene	8.4	mg/kg	N Mid	307
Pyrene	6.4	mg/kg	N Mid	307
Benzo(a)anthracene	3.8	mg/kg	N Mid	307
Chrysene	3.4	mg/kg	N Mid	307
Benzo(b)fluoranthene	2.9	mg/kg	N Mid	307
Benzo(k)fluoranthene	1.6	mg/kg	N Mid	307
Benzo(a)pyrene	3.8	mg/kg	N Mid	307
Dibenz(a,h)anthracene	0.23	mg/kg	N Mid	307
Benzo(g,h,i)perylene	1.4	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	1.3	mg/kg	N Mid	307
Coronene	0.52	mg/kg	N Mid	307
PAH, Total of 17 WAC	44	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	97.67	%	N Mid	Calculated

Analyst Comments for 10888352: 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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1314
0897
1229
1510



STL

Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888353**

Sample **8** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH8 1.00-2.00m**

Sample Date:

Sample Received

31 October 2008

Analysis Complete:

13 November 2008

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	1.50	% ratio	N Mid	33
Moisture at 105c	1.5	%	N Mid	33
TOC by Ignition in O2	3.0	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	1800	mg/kg	Y Mid	317
Naphthalene	11	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	3.3	mg/kg	N Mid	307
Fluorene	4.6	mg/kg	N Mid	307
Phenanthrene	33	mg/kg	N Mid	307
Anthracene	13	mg/kg	N Mid	307
Fluoranthene	52	mg/kg	N Mid	307
Pyrene	43	mg/kg	N Mid	307
Benzo(a)anthracene	23	mg/kg	N Mid	307
Chrysene	21	mg/kg	N Mid	307
Benzo(b)fluoranthene	16	mg/kg	N Mid	307
Benzo(k)fluoranthene	9.5	mg/kg	N Mid	307
Benzo(a)pyrene	24	mg/kg	N Mid	307
Dibenz(a,h)anthracene	1.1	mg/kg	N Mid	307
Benzo(g,h,i)perylene	8.7	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	9.2	mg/kg	N Mid	307
Coronene	1.8	mg/kg	N Mid	307
PAH, Total of 17 WAC	280	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	98.53	%	N Mid	Calculated

Analyst Comments for 10888353:

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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1314
0897
1229
1510



Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888354**

Sample **9** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH7 13.0-14.00m 10:1**

Sample Date: Sample Received **31 October 2008** Analysis Complete: **13 November 2008**

Test Description	Result	Units	Accreditation	Method
Leachate BSEN 10:1 extract	Y		N Mid	EN12457-3 10:1
Antimony, Soluble	<0.030	mg/l	N Mid	25C
Arsenic, Soluble	<50	ug/l	N Mid	25C
Barium, Soluble	0.014	mg/l	Y Mid	54F
Cadmium, Soluble	<0.10	ug/l	Y Mid	56
Calcium, Soluble	12	mg/l	Y Mid	53F
Chromium, Soluble	<10	ug/l	Y Mid	53F
Copper, Soluble	<10	ug/l	Y Mid	53F
Lead, Soluble	<10	ug/l	Y Mid	53F
Mercury, Soluble	0.38	ug/l	Y Mid	56
Molybdenum, Soluble	0.0085	mg/l	N Mid	68
Nickel, Soluble	<10	ug/l	Y Mid	53F
Selenium, Soluble	<6.0	ug/l	N Mid	25C
Zinc, Soluble	<10	ug/l	Y Mid	53F
Phenol Index	<0.050	mg/l	N Mid	32A
Sulphate as SO4	<11	mg/l	Y Mid	60
Chloride as Cl	7.1	mg/l	Y Mid	60
Dissolved Solids	<200	mg/l	N Mid	18
Fluoride as F-	0.42	mg/l	Y Mid	20
TOC (Filtered)	3.9	mg/l	Y Mid	41

Analyst Comments for 10888354: 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

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1314
0897
1229
1510



Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888355**

Sample **10** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH15 0.5-1.00m 10:1**

Sample Date: Sample Received **31 October 2008** Analysis Complete: **13 November 2008**

Test Description	Result	Units	Accreditation	Method
Leachate BSEN 10:1 extract	Y		N Mid	EN12457-3 10:1
Antimony, Soluble	<0.030	mg/l	N Mid	25C
Arsenic, Soluble	<50	ug/l	N Mid	25C
Barium, Soluble	0.0060	mg/l	Y Mid	54F
Cadmium, Soluble	<0.10	ug/l	Y Mid	56
Calcium, Soluble	54	mg/l	Y Mid	53F
Chromium, Soluble	18	ug/l	Y Mid	53F
Copper, Soluble	36	ug/l	Y Mid	53F
Lead, Soluble	42	ug/l	Y Mid	53F
Mercury, Soluble	0.35	ug/l	Y Mid	56
Molybdenum, Soluble	0.016	mg/l	N Mid	68
Nickel, Soluble	15	ug/l	Y Mid	53F
Selenium, Soluble	<6.0	ug/l	N Mid	25C
Zinc, Soluble	<10	ug/l	Y Mid	53F
Phenol Index	<0.050	mg/l	N Mid	32A
Sulphate as SO4	50	mg/l	Y Mid	60
Chloride as Cl	<2.5	mg/l	Y Mid	60
Dissolved Solids	420	mg/l	N Mid	18
Fluoride as F-	0.23	mg/l	Y Mid	20
TOC (Filtered)	6.2	mg/l	Y Mid	41

Analyst Comments for 10888355: 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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1314
0897
1229
1510

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Report Number: COV/558587/2008

Issue 1

Laboratory Number: 10888356

Sample 11 of 16

Sample Source: O Callaghan Moran & Assoc.

Sample Point Description: O Callaghan Moran & Assoc.

Sample Description: BH15 1.0-2.00m 10:1

Sample Date: Sample Received 31 October 2008 Analysis Complete: 13 November 2008

Test Description	Result	Units	Accreditation	Method
Leachate BSEN 10:1 extract	Y		N Mid	EN12457-3 10:1
Antimony, Soluble	<0.030	mg/l	N Mid	25C
Arsenic, Soluble	<50	ug/l	N Mid	25C
Barium, Soluble	0.0055	mg/l	Y Mid	54F
Cadmium, Soluble	<0.10	ug/l	Y Mid	56
Calcium, Soluble	26	mg/l	Y Mid	53F
Chromium, Soluble	<10	ug/l	Y Mid	53F
Copper, Soluble	28	ug/l	Y Mid	53F
Lead, Soluble	43	ug/l	Y Mid	53F
Mercury, Soluble	0.49	ug/l	Y Mid	56
Molybdenum, Soluble	0.013	mg/l	N Mid	68
Nickel, Soluble	14	ug/l	Y Mid	53F
Selenium, Soluble	<6.0	ug/l	N Mid	25C
Zinc, Soluble	13	ug/l	Y Mid	53F
Phenol Index	<0.050	mg/l	N Mid	32A
Sulphate as SO4	19	mg/l	Y Mid	60
Chloride as Cl	<2.5	mg/l	Y Mid	60
Dissolved Solids	<200	mg/l	N Mid	18
Fluoride as F-	<0.20	mg/l	Y Mid	20
TOC (Filtered)	3.6	mg/l	Y Mid	41

Analyst Comments for 10888356: 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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1314
0697
1229
1510

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Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888357**

Sample **12** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH15 12.0-13.00m 10:1**

Sample Date:

Sample Received

31 October 2008

Analysis Complete:

13 November 2008

Test Description	Result	Units	Accreditation	Method
Leachate BSEN 10:1 extract	Y		N Mid	EN12457-3 10:1
Antimony, Soluble	<0.030	mg/l	N Mid	25C
Arsenic, Soluble	<50	ug/l	N Mid	25C
Barium, Soluble	0.017	mg/l	Y Mid	54F
Cadmium, Soluble	<0.10	ug/l	Y Mid	56
Calcium, Soluble	17	mg/l	Y Mid	53F
Chromium, Soluble	<10	ug/l	Y Mid	53F
Copper, Soluble	15	ug/l	Y Mid	53F
Lead, Soluble	41	ug/l	Y Mid	53F
Mercury, Soluble	<0.30	ug/l	Y Mid	56
Molybdenum, Soluble	0.0046	mg/l	N Mid	68
Nickel, Soluble	14	ug/l	Y Mid	53F
Selenium, Soluble	<6.0	ug/l	N Mid	25C
Zinc, Soluble	<10	ug/l	Y Mid	53F
Phenol Index	<0.050	mg/l	N Mid	32A
Sulphate as SO4	13	mg/l	Y Mid	60
Chloride as Cl	10	mg/l	Y Mid	60
Dissolved Solids	<200	mg/l	N Mid	18
Fluoride as F-	0.47	mg/l	Y Mid	20
TOC (Filtered)	3.7	mg/l	Y Mid	41

Analyst Comments for 10888357:

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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1314
0897
1229
1510

**SEVERN
TRENT** **STL**

Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888358**

Sample **13** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **W2 0.50-1.00m 10:1**

Sample Date:

Sample Received

31 October 2008

Analysis Complete:

13 November 2008

Test Description	Result	Units	Accreditation	Method
Leachate BSEN 10:1 extract	Y		N Mid	EN12457-3 10:1
Antimony, Soluble	0.036	mg/l	N Mid	25C
Arsenic, Soluble	<50	ug/l	N Mid	25C
Barium, Soluble	0.024	mg/l	Y Mid	54F
Cadmium, Soluble	<0.10	ug/l	Y Mid	56
Calcium, Soluble	43	mg/l	Y Mid	53F
Chromium, Soluble	21	ug/l	Y Mid	53F
Copper, Soluble	34	ug/l	Y Mid	53F
Lead, Soluble	43	ug/l	Y Mid	53F
Mercury, Soluble	<0.30	ug/l	Y Mid	56
Molybdenum, Soluble	0.0066	mg/l	N Mid	68
Nickel, Soluble	13	ug/l	Y Mid	53F
Selenium, Soluble	<6.0	ug/l	N Mid	25C
Zinc, Soluble	11	ug/l	Y Mid	53F
Phenol Index	<0.050	mg/l	N Mid	32A
Sulphate as SO4	44	mg/l	Y Mid	60
Chloride as Cl	2.7	mg/l	Y Mid	60
Dissolved Solids	210	mg/l	N Mid	18
Fluoride as F-	0.41	mg/l	Y Mid	20
TOC (Filtered)	4.5	mg/l	Y Mid	41

Analyst Comments for 10888358:

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



1314
0897
1228
1510



Report Number: **COV/558587/2008**

Issue **1**

Laboratory Number: **10888360**

Sample **15** of **16**

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH8 0.50-1.00m 10:1**

Sample Date: Sample Received **31 October 2008** Analysis Complete: **13 November 2008**

Test Description	Result	Units	Accreditation	Method
Leachate BSEN 10:1 extract	Y		N Mid	EN12457-3 10:1
Antimony, Soluble	<0.030	mg/l	N Mid	25C
Arsenic, Soluble	<50	ug/l	N Mid	25C
Barium, Soluble	0.021	mg/l	Y Mid	54F
Cadmium, Soluble	<0.10	ug/l	Y Mid	56
Calcium, Soluble	690	mg/l	Y Mid	53F
Chromium, Soluble	<100	ug/l	Y Mid	53F
Copper, Soluble	<100	ug/l	Y Mid	53F
Lead, Soluble	<100	ug/l	Y Mid	53F
Mercury, Soluble	<0.30	ug/l	Y Mid	56
Molybdenum, Soluble	0.010	mg/l	N Mid	68
Nickel, Soluble	<100	ug/l	Y Mid	53F
Selenium, Soluble	<6.0	ug/l	N Mid	25C
Zinc, Soluble	<100	ug/l	Y Mid	53F
Phenol Index	<0.050	mg/l	N Mid	32A
Sulphate as SO4	1500	mg/l	Y Mid	60
Chloride as Cl	4.3	mg/l	Y Mid	60
Dissolved Solids	2400	mg/l	N Mid	18
Fluoride as F-	<0.20	mg/l	Y Mid	20
TOC (Filtered)	5.2	mg/l	Y Mid	41

Analyst Comments for 10888360: 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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1314
0897
1229
1510Report Number: **COV/558587/2008**Issue **1**Laboratory Number: **10888361**Sample **16** of **16**Sample Source: **O Callaghan Moran & Assoc.**Sample Point Description: **O Callaghan Moran & Assoc.**Sample Description: **BH8 1.00-2.00m 10:1**

Sample Date:

Sample Received

31 October 2008

Analysis Complete:

13 November 2008

Test Description	Result	Units	Accreditation	Method
Leachate BSEN 10:1 extract	Y		N Mid	EN12457-3 10:1
Antimony, Soluble	<0.030	mg/l	N Mid	25C
Arsenic, Soluble	<50	ug/l	N Mid	25C
Barium, Soluble	0.025	mg/l	Y Mid	54F
Cadmium, Soluble	<0.10	ug/l	Y Mid	56
Calcium, Soluble	650	mg/l	Y Mid	53F
Chromium, Soluble	<100	ug/l	Y Mid	53F
Copper, Soluble	<100	ug/l	Y Mid	53F
Lead, Soluble	<100	ug/l	Y Mid	53F
Mercury, Soluble	<0.30	ug/l	Y Mid	56
Molybdenum, Soluble	0.0095	mg/l	N Mid	68
Nickel, Soluble	<100	ug/l	Y Mid	53F
Selenium, Soluble	<6.0	ug/l	N Mid	25C
Zinc, Soluble	<100	ug/l	Y Mid	53F
Phenol Index	<0.050	mg/l	N Mid	32A
Sulphate as SO ₄	1400	mg/l	Y Mid	60
Chloride as Cl	5.8	mg/l	Y Mid	60
Dissolved Solids	2400	mg/l	N Mid	18
Fluoride as F-	<0.20	mg/l	Y Mid	20
TOC (Filtered)	7.3	mg/l	Y Mid	41

Analyst Comments for 10888361:

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: *L. Ellis*Name: **L. Ellis**Date: **19 November 2008**Title: **Team Leader****Severn Trent Laboratories Ltd.**STL Business Centre, Torrington Avenue, Coventry, CV4 9GU Tel:+44 (0)24 7642 1213 Fax:+44 (0)24 7685 6575 **Page 17 of 17**

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Mr Crean
O Callaghan Moran & Assoc.
Granary House
Rutland Street
Cork

24 December 2008

Test Report: COV/569308/2008

Dear Mr Crean

Analysis of your sample(s) submitted on 12 December 2008 is now complete and we have pleasure in enclosing the appropriate test report(s).

An invoice for the analysis carried out will be sent under separate cover.

Should you have any queries regarding this report(s) or any part of our service, please contact Customer Services on +44 (0)24 7642 1213 who will be happy to discuss your requirements.

If you would like to arrange any further analysis, please contact Customer Services. To arrange container delivery or sample collection, please call the Couriers Department directly on 024 7685 6562.

Thank you for using STL and we look forward to receiving your next samples.

Yours Sincerely,

Signed: 

Name: G. Smith

Title: Inorg and License Chem Manager

STL Coventry

STL Business Centre, Torrington Avenue,
Coventry, CV4 9GU

Severn Trent Laboratories Limited

Registered in England & Wales Registration No. 2148934 Registered Office: 2297 Coventry Road, Birmingham B26

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Report Summary



1314
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1229
1510

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Mr Donal Crean
O Callaghan Moran & Assoc.
Granary House
Rutland Street
Cork

Date of Issue: **24 December 2008**

Report Number: **COV/569308/2008**

Issue **1**

Job Description: Donal Crean

Job Location: O Callaghan Moran & Associates

Number of Samples
included in this report **22**

Job Received: **12 December 2008**

Number of Test Results
included in this report **550**

Analysis Commenced: **12 December 2008**

Signed:

Name: **G. Smith**

Date: **24 December 2008**

Title: **Inorg and License Chem 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.

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Certificate of Analysis



1314
0897
1229
1510

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Report Number: COV/569308/2008

Issue 1

Laboratory Number: 10956741

Sample 1 of 22

Sample Source: O Callaghan Moran & Assoc.

Sample Point Description: O Callaghan Moran & Assoc.

Sample Description: BH7 4.00m-5.00m

Sample Date: Sample Received 12 December 2008 Analysis Complete: 24 December 2008

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.10	% ratio	N Mid	33
Moisture at 105c	0.10	%	N Mid	33
TOC by Ignition in O2	3.1	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	<50	mg/kg	Y Mid	317
Naphthalene	<0.10	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	<0.10	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.90	%	N Mid	Calculated

Analyst Comments for 10956741:

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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.

I/S=Insufficient sample

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Certificate of Analysis



Report Number: **COV/569308/2008**

Issue **1**

Laboratory Number: **10956742**

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

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH12 0.50m-1.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.39	% ratio	N Mid	33
Moisture at 105c	0.39	%	N Mid	33
TOC by Ignition in O2	5.3	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	640	mg/kg	Y Mid	317
Naphthalene	0.47	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	0.18	mg/kg	N Mid	307
Fluorene	0.11	mg/kg	N Mid	307
Phenanthrene	1.3	mg/kg	N Mid	307
Anthracene	0.19	mg/kg	N Mid	307
Fluoranthene	0.87	mg/kg	N Mid	307
Pyrene	1.1	mg/kg	N Mid	307
Benzo(a)anthracene	0.43	mg/kg	N Mid	307
Chrysene	0.36	mg/kg	N Mid	307
Benzo(b)fluoranthene	0.26	mg/kg	N Mid	307
Benzo(k)fluoranthene	0.15	mg/kg	N Mid	307
Benzo(a)pyrene	0.34	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	0.45	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	0.37	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	6.6	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.61	%	N Mid	Calculated

Analyst Comments for 10956742: 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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.
 I/S=Insufficient sample

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1314
0897
1229
1510



Report Number: **COV/569308/2008**
Laboratory Number: **10956743**

Issue **1**
Sample **3** of **22**

Sample Source: **O Callaghan Moran & Assoc.**
Sample Point Description: **O Callaghan Moran & Assoc.**
Sample Description: **BH12 3.00m-4.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.29	% ratio	N Mid	33
Moisture at 105c	0.29	%	N Mid	33
TOC by Ignition in O2	3.0	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	170	mg/kg	Y Mid	317
Naphthalene	<0.10	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	0.11	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.71	%	N Mid	Calculated

Analyst Comments for 10956743: 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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.
I/S=Insufficient sample

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0897
1229
1510

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Report Number: **COV/569308/2008**
Laboratory Number: **10956744**

Issue **1**
Sample **4** of **22**

Sample Source: **O Callaghan Moran & Assoc.**
Sample Point Description: **O Callaghan Moran & Assoc.**
Sample Description: **BH12 4.00m-5.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.28	% ratio	N Mid	33
Moisture at 105c	0.28	%	N Mid	33
TOC by Ignition in O2	2.4	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	57	mg/kg	Y Mid	317
Naphthalene	0.15	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	<0.10	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.72	%	N Mid	Calculated

Analyst Comments for 10956744: 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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml. I/S=Insufficient sample

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Report Number: **COV/569308/2008**
 Laboratory Number: **10956745**

Issue **1**
 Sample **5** of **22**

Sample Source: **O Callaghan Moran & Assoc.**
 Sample Point Description: **O Callaghan Moran & Assoc.**
 Sample Description: **BH12 8.00m-10.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.37	% ratio	N Mid	33
Moisture at 105c	0.37	%	N Mid	33
TOC by Ignition in O2	1.4	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	<50	mg/kg	Y Mid	317
Naphthalene	0.18	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	<0.10	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.63	%	N Mid	Calculated

Analyst Comments for 10956745: 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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.
 I/S=Insufficient sample

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1314
0897
1229
1510

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Report Number: **COV/569308/2008**

Issue **1**

Laboratory Number: **10956746**

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

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH14 0.50m-1.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	1.60	% ratio	N Mid	33
Moisture at 105c	1.6	%	N Mid	33
TOC by Ignition in O2	4.4	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	99	mg/kg	Y Mid	317
Naphthalene	0.59	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	0.25	mg/kg	N Mid	307
Fluorene	0.11	mg/kg	N Mid	307
Phenanthrene	1.6	mg/kg	N Mid	307
Anthracene	0.26	mg/kg	N Mid	307
Fluoranthene	1.1	mg/kg	N Mid	307
Pyrene	1.2	mg/kg	N Mid	307
Benzo(a)anthracene	0.60	mg/kg	N Mid	307
Chrysene	0.57	mg/kg	N Mid	307
Benzo(b)fluoranthene	0.45	mg/kg	N Mid	307
Benzo(k)fluoranthene	0.18	mg/kg	N Mid	307
Benzo(a)pyrene	0.56	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	0.37	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	0.26	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	8.1	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	98.43	%	N Mid	Calculated

Analyst Comments for 10956746:

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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml. I/S=Insufficient sample

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1314
0897
1229
1510

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Report Number: COV/569308/2008

Issue 1

Laboratory Number: 10956747

Sample 7 of 22

Sample Source: O Callaghan Moran & Assoc.

Sample Point Description: O Callaghan Moran & Assoc.

Sample Description: BH14 1.00m-2.00m

Sample Date: Sample Received 12 December 2008 Analysis Complete: 24 December 2008

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.91	% ratio	N Mid	33
Moisture at 105c	0.90	%	N Mid	33
TOC by Ignition in O2	3.8	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	180	mg/kg	Y Mid	317
Naphthalene	0.48	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	0.17	mg/kg	N Mid	307
Fluorene	0.13	mg/kg	N Mid	307
Phenanthrene	1.7	mg/kg	N Mid	307
Anthracene	0.27	mg/kg	N Mid	307
Fluoranthene	1.1	mg/kg	N Mid	307
Pyrene	1.2	mg/kg	N Mid	307
Benzo(a)anthracene	0.62	mg/kg	N Mid	307
Chrysene	0.62	mg/kg	N Mid	307
Benzo(b)fluoranthene	0.52	mg/kg	N Mid	307
Benzo(k)fluoranthene	0.23	mg/kg	N Mid	307
Benzo(a)pyrene	0.44	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	0.43	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	0.39	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	8.3	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.10	%	N Mid	Calculated

Analyst Comments for 10956747:

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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.

I/S=insufficient sample

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1314
0897
1228
1510



Report Number: **COV/569308/2008**
Laboratory Number: **10956748**

Issue **1**
Sample **8** of **22**

Sample Source: **O Callaghan Moran & Assoc.**
Sample Point Description: **O Callaghan Moran & Assoc.**
Sample Description: **BH14 2.00m-3.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	1.67	% ratio	N Mid	33
Moisture at 105c	1.6	%	N Mid	33
TOC by Ignition in O2	3.6	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	<50	mg/kg	Y Mid	317
Naphthalene	0.32	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	0.19	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	98.36	%	N Mid	Calculated

Analyst Comments for 10956748: 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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.
IS=insufficient sample

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Report Number: **COV/569308/2008**

Issue **1**

Laboratory Number: **10956749**

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

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH14 3.00m-4.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.40	% ratio	N Mid	33
Moisture at 105c	0.40	%	N Mid	33
TOC by Ignition in O2	3.5	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	<50	mg/kg	Y Mid	317
Naphthalene	0.31	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	0.12	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.60	%	N Mid	Calculated

Analyst Comments for 10956749:

No Analyst Comment

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

Analysed at: Brl = 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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.

I/S=insufficient sample

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Report Number: **COV/569308/2008**
Laboratory Number: **10956750**

Issue **1**
Sample **10** of **22**

Sample Source: **O Callaghan Moran & Assoc.**
Sample Point Description: **O Callaghan Moran & Assoc.**
Sample Description: **BH14 8.00m-10.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	0.50	% ratio	N Mid	33
Moisture at 105c	0.49	%	N Mid	33
TOC by Ignition in O2	1.4	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	<50	mg/kg	Y Mid	317
Naphthalene	0.28	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	<0.10	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.51	%	N Mid	Calculated

Analyst Comments for 10956750: 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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.
I/S=insufficient sample

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Report Number: **COV/569308/2008**
Laboratory Number: **10956751**

Issue **1**
Sample **11** of **22**

Sample Source: **O Callaghan Moran & Assoc.**
Sample Point Description: **O Callaghan Moran & Assoc.**
Sample Description: **BH9 4.00m-5.00m**

Sample Date: Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
EN 12457-3 Leachate	Y		N Mid	EN12457-3
Moisture Content Ratio at 105C	<0.10	% ratio	N Mid	33
Moisture at 105c	<0.10	%	N Mid	33
TOC by Ignition in O2	2.8	%	N Mid	27
PCB, Total of 7 Congeners	<0.010	mg/kg	N Mid	312
Mineral Oils, >C10 - C40	<50	mg/kg	Y Mid	317
Naphthalene	0.12	mg/kg	N Mid	307
Acenaphthylene	<0.10	mg/kg	N Mid	307
Acenaphthene	<0.10	mg/kg	N Mid	307
Fluorene	<0.10	mg/kg	N Mid	307
Phenanthrene	<0.10	mg/kg	N Mid	307
Anthracene	<0.10	mg/kg	N Mid	307
Fluoranthene	<0.10	mg/kg	N Mid	307
Pyrene	<0.10	mg/kg	N Mid	307
Benzo(a)anthracene	<0.10	mg/kg	N Mid	307
Chrysene	<0.10	mg/kg	N Mid	307
Benzo(b)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(k)fluoranthene	<0.10	mg/kg	N Mid	307
Benzo(a)pyrene	<0.10	mg/kg	N Mid	307
Dibenz(a,h)anthracene	<0.10	mg/kg	N Mid	307
Benzo(g,h,i)perylene	<0.10	mg/kg	N Mid	307
Indeno(1,2,3-c,d)pyrene	<0.10	mg/kg	N Mid	307
Coronene	<0.10	mg/kg	N Mid	307
PAH, Total of 17 WAC	<1.0	mg/kg	N Mid	307
benzene	<0.10	mg/kg	Y Mid	327
toluene	<0.10	mg/kg	Y Mid	327
ethylbenzene	<0.10	mg/kg	Y Mid	327
m&p-Xylene	<0.20	mg/kg	Y Mid	327
o-xylene	<0.10	mg/kg	Y Mid	327
Dry Ratio (BSEN 12457)	99.90	%	N Mid	Calculated

Analyst Comments for 10956751: 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. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.
I/S=insufficient sample

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Report Number: **COV/569308/2008**

Issue **1**

Laboratory Number: **10956752**

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

Sample Source: **O Callaghan Moran & Assoc.**

Sample Point Description: **O Callaghan Moran & Assoc.**

Sample Description: **BH7 4.00m-5.00m 10:1**

Sample Date:

Sample Received **12 December 2008** Analysis Complete: **24 December 2008**

Test Description	Result	Units	Accreditation	Method
Leachate BSEN 10:1 extract	Y		N Mid	EN12457-3 10:1
Antimony, Soluble	<0.030	mg/l	N Mid	25C
Arsenic, Soluble	<50	ug/l	N Mid	25C
Barium, Soluble	0.0084	mg/l	Y Mid	54F
Cadmium, Soluble	<0.10	ug/l	Y Mid	56
Calcium, Soluble	9.7	mg/l	Y Mid	53F
Chromium, Soluble	<10	ug/l	Y Mid	53F
Copper, Soluble	<10	ug/l	Y Mid	53F
Lead, Soluble	<10	ug/l	Y Mid	53F
Mercury, Soluble	1.2	ug/l	Y Mid	56
Molybdenum, Soluble	<0.0030	mg/l	N Mid	68
Nickel, Soluble	<10	ug/l	Y Mid	53F
Selenium, Soluble	<6.0	ug/l	N Mid	25C
Zinc, Soluble	<10	ug/l	Y Mid	53F
Phenol Index	<0.050	mg/l	N Mid	32A
Sulphate as SO ₄	<11	mg/l	Y Mid	60
Chloride as Cl	<2.5	mg/l	Y Mid	60
Dissolved Solids	<200	mg/l	N Mid	18
Fluoride as F-	0.30	mg/l	Y Mid	20
TOC (Filtered)	1.3	mg/l	Y Mid	41

Analyst Comments for 10956752:

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, Raa = STL Reading, Run = STL Runcorn.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. Relating to Legionella volume analysed 1g is approximately equivalent to 1ml.

I/S=Insufficient sample

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