

██████████  
**Telford & Wrekin Council**  
**Lawn Central**  
**Darby House**  
**Telford TF3 4JA**  
**Shropshire**

08 March 2010

**Test Report: BRD/670505/2010**

Dear ██████████

Analysis of your sample(s) submitted on 09 February 2010 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)16 5664 7557 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: ██████████

Title: Deputy Manager

**STL Bridgend**

2 Technology Drive, Bridgend Science Park,  
Bridgend, CF31 3NA

Tel: +44 (0)16 5664 7557

Fax: +44 (0)16 5664 6526

[www.stl-ltd.com](http://www.stl-ltd.com)

**Severn Trent Laboratories Limited**

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



1314  
0897  
1229  
1510



Cert. No. 10269  
Environmental Management Systems



Certificate No. FS67435

# Report Summary



1314  
0897  
1229  
1510



# STL

**Telford & Wrekin Council**  
**Lawn Central**  
**Darby House**  
**Telford**  
**Shropshire**  
**TF3 4JA**

Date of Issue: **08 March 2010**

Report Number: **BRD/670505/2010**

Issue **1**

**Job Description:** Leachate Analysis

**Job Location:** Stoney Hill Landfill

Number of Samples  
included in this report **1**

Job Received: **09 February 2010**

Number of Test Results  
included in this report **225**

Analysis Commenced: **09 February 2010**

Signed:

[Redacted Signature]

Name:

[Redacted Name]

Date: **08 March 2010**

Title: **Deputy Manager**

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

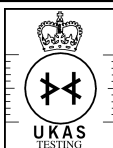
Information on the methods of analysis and performance characteristics are available on request.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. The results relate only to the items tested.

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

(c) Severn Trent Laboratories Limited 2010. All rights reserved. We, Severn Trent Laboratories Limited, are the owner of all copyright in this report. You must not copy, reproduce, amend or adapt this report, its contents or any format in which it is delivered without our prior written agreement. If you copy, reproduce, amend, or adapt this report in any way without our agreement you will be liable for any damage or loss to us. In the event of a dispute the copy of the report held by us shall be the reference copy.

# Certificate of Analysis



1314  
0897  
1229  
1510



Report Number: **BRD/670505/2010**

Issue **1**

Laboratory Number: **11603570**

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

Sample Source: **Telford & Wrekin Council**

Sample Point Description: **Leachate**

Sample Description: **Jan Sample/Tank**

Sample Matrix: **Leachates from landfill**

Sample Date: **08 February 2010** Sample Received **09 February 2010** Analysis Complete: **24 February 2010**

Test Description	Result	Units	Accreditation	Method
Aluminium, Total as Al	1.7	mg/l	Y Cov	WAS049
Cadmium , Total as Cd	0.0010	mg/l	Y Cov	WAS049
Cadmium, Filtered as Cd	0.0005	mg/l	Y Cov	WAS049
Chromium , Total as Cr	0.017	mg/l	Y Cov	WAS049
Copper, Total as Cu	0.12	mg/l	Y Cov	WAS049
Iron , Total as Fe	26.03	mg/l	Y Cov	WAS049
Lead , Total as Pb	0.064	mg/l	Y Cov	WAS049
Manganese , Total as Mn	0.78	mg/l	Y Cov	WAS049
Mercury, Filtered as Hg	<0.0001	mg/l	Y Cov	WAS013
Nickel , Total as Ni	0.0268	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.23	mg/l	Y Cov	WAS049
pH	7.6	pH units	Y Cov	WAS039
Ammoniacal Nitrogen as N	27.7	mg/l	Y Cov	WAS036
Suspended Solids	361	mg/l	Y Cov	WAS006
BOD + ATU (5 day)	7	mg/l	Y Cov	WAS001
COD (Total)	154	mg/l	Y Cov	WAS040
Cyanide, Free as CN	<0.1	mg/l	Y Cov	WAS018
Cyanide, Total as CN	<10	ug/l	Y Cov	WAS018
Phenols Mono (Phenol Index)	<0.1	mg/l	Y Cov	WAS019
Sulphide as S	<0.01	mg/l	Y Cov	WAS033
1,2,3-Trichlorobenzene	<6	ng/l	Y Cov	GEO47
1,2,4-Trichlorobenzene	7	ng/l	Y Cov	GEO47
1,3,5-Trichlorobenzene	<6	ng/l	Y Cov	GEO47
Aldrin	<6	ng/l	Y Cov	GEO47
alpha-Endosulphan	<6	ng/l	Y Cov	GEO47
alpha-HCH	<2	ng/l	Y Cov	GEO47
beta-Endosulphan	<6	ng/l	Y Cov	GEO47
beta-HCH	<2	ng/l	Y Cov	GEO47
alpha-Chlordane	<2	ng/l	Y Cov	GEO47
Dichlobenil	6	ng/l	Y Cov	GEO47
Dieldrin	<6	ng/l	Y Cov	GEO47
Endrin	<6	ng/l	Y Cov	GEO47
gamma-HCH	<2	ng/l	Y Cov	GEO47
Heptachlor Epoxide	<2	ng/l	Y Cov	GEO47
Hexachlorobenzene	<2	ng/l	Y Cov	GEO47

Severn Trent Laboratories Ltd.

# Certificate of Analysis



1314  
0897  
1229  
1510



# STL

Report Number: **BRD/670505/2010**

Issue **1**

Laboratory Number: **11603570**

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

Sample Source: **Telford & Wrekin Council**

Sample Point Description: **Leachate**

Sample Description: **Jan Sample/Tank**

Sample Matrix: **Leachates from landfill**

Sample Date: **08 February 2010** Sample Received **09 February 2010** Analysis Complete: **24 February 2010**

Test Description	Result	Units	Accreditation	Method
Hexachlorobutadiene	<2	ng/l	Y Cov	GEO47
Isodrin	<6	ng/l	Y Cov	GEO47
o,p - DDE	<2	ng/l	Y Cov	GEO47
p,p - DDE	<2	ng/l	Y Cov	GEO47
o,p - TDE	<2	ng/l	Y Cov	GEO47
p,p - TDE	<2	ng/l	Y Cov	GEO47
o,p - DDT	<2	ng/l	Y Cov	GEO47
p,p - DDT	<2	ng/l	Y Cov	GEO47
Tecnazene	<10	ng/l	Y Cov	GEO47
gamma-Chlordane	<2	ng/l	Y Cov	GEO47
Triallate	<10	ng/l	Y Cov	GEO47
Trifluralin	<10	ng/l	Y Cov	GEO47
Azinphos-ethyl	<0.002	ug/l	Y Cov	GEO47
Azinphos-methyl	<0.002	ug/l	Y Cov	GEO47
Carbophenothion	<0.002	ug/l	Y Cov	GEO47
Chlorfenvinphos	<0.002	ug/l	Y Cov	GEO47
Chlorpyrifos	<0.002	ug/l	Y Cov	GEO47
Demeton-s-methyl	Analyst Comment	ug/l	Y Cov	GEO47
Diazinon	<0.002	ug/l	Y Cov	GEO47
Dichlorvos	<0.002	ug/l	Y Cov	GEO47
Dimethoate	<0.020	ug/l	Y Cov	GEO47
Disulphoton	Analyst Comment	ug/l	Y Cov	GEO47
Fenitrothion	<0.002	ug/l	Y Cov	GEO47
Fenthion	<0.002	ug/l	Y Cov	GEO47
Malathion	<0.002	ug/l	Y Cov	GEO47
Mevinphos	<0.002	ug/l	Y Cov	GEO47
Parathion-ethyl	<0.002	ug/l	Y Cov	GEO47
Parathion-methyl	<0.002	ug/l	Y Cov	GEO47
Phorate	<0.002	ug/l	Y Cov	GEO47
Phosalone	<0.020	ug/l	Y Cov	GEO47
Pirimiphos-methyl	<0.002	ug/l	Y Cov	GEO47
Propetamphos	<0.020	ug/l	Y Cov	GEO47
Triazophos	<0.002	ug/l	Y Cov	GEO47
Atrazine	<0.020	ug/l	Y Cov	GEO47
Prometryne	<0.020	ug/l	Y Cov	GEO47

Severn Trent Laboratories Ltd.

# Certificate of Analysis



1314  
0897  
1229  
1510



# STL

Report Number: **BRD/670505/2010**

Issue **1**

Laboratory Number: **11603570**

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

Sample Source: **Telford & Wrekin Council**

Sample Point Description: **Leachate**

Sample Description: **Jan Sample/Tank**

Sample Matrix: **Leachates from landfill**

Sample Date: **08 February 2010** Sample Received **09 February 2010** Analysis Complete: **24 February 2010**

Test Description	Result	Units	Accreditation	Method
Propazine	<0.020	ug/l	Y Cov	GEO47
Simazine	<0.020	ug/l	Y Cov	GEO47
Terbutryn	<0.020	ug/l	Y Cov	GEO47
Trietazine	<0.020	ug/l	Y Cov	GEO47
TPH >C6-C40	<20	ug/l	Y Cov	GEO35
TPH >C6-C8	<20	ug/l	N Cov	GEO35
TPH >C8-C10	<20	ug/l	N Cov	GEO35
TPH >C16-C24	<20	ug/l	N Cov	GEO35
TPH >C24-C40	<20	ug/l	N Cov	GEO35
TPH >C10-C16	<20	ug/l	N Cov	GEO35
Acenaphthene	<0.02	ug/l	Y Cov	GEO19
Acenaphthylene	<0.02	ug/l	Y Cov	GEO19
Anthracene	<0.02	ug/l	Y Cov	GEO19
Benzo (a) anthracene	<0.02	ug/l	Y Cov	GEO19
Benzo (g,h,i) perylene	<0.02	ug/l	Y Cov	GEO19
Benzo (a) pyrene	<0.02	ug/l	Y Cov	GEO19
Benzo (b) fluoranthene	<0.02	ug/l	Y Cov	GEO19
Benzo (k) fluoranthene	<0.02	ug/l	Y Cov	GEO19
Chrysene	<0.02	ug/l	Y Cov	GEO19
Dibenz (a,h) anthracene	<0.02	ug/l	Y Cov	GEO19
Fluoranthene	<0.02	ug/l	Y Cov	GEO19
Fluorene	<0.02	ug/l	Y Cov	GEO19
Indeno (1,2,3) cd pyrene	<0.02	ug/l	Y Cov	GEO19
Naphthalene	<0.02	ug/l	Y Cov	GEO19
Phenanthrene	<0.02	ug/l	Y Cov	GEO19
Pyrene	<0.02	ug/l	Y Cov	GEO19
PAH, Total	<0.02	ug/l	N Cov	GEO19
Dichlorodifluoromethane	<1.0	ug/l	N Cov	GEO32
Chloromethane	<1.0	ug/l	Y Cov	GEO32
Chloroethane	<1.0	ug/l	Y Cov	GEO32
Bromomethane	<1.0	ug/l	Y Cov	GEO32
Trichlorofluoromethane	<1.0	ug/l	Y Cov	GEO32
1,1-Dichloroethene	<1.0	ug/l	Y Cov	GEO32
Dichloromethane	<1.0	ug/l	Y Cov	GEO32
1,1-Dichloroethane	<1.0	ug/l	Y Cov	GEO32

Severn Trent Laboratories Ltd.

# Certificate of Analysis



1314  
0897  
1229  
1510



# STL

Report Number: **BRD/670505/2010**

Issue **1**

Laboratory Number: **11603570**

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

Sample Source: **Telford & Wrekin Council**

Sample Point Description: **Leachate**

Sample Description: **Jan Sample/Tank**

Sample Matrix: **Leachates from landfill**

Sample Date: **08 February 2010** Sample Received **09 February 2010** Analysis Complete: **24 February 2010**

Test Description	Result	Units	Accreditation	Method
cis-1,2-Dichloroethene	<1.0	ug/l	Y Cov	GEO32
2,2-Dichloropropane	<1.0	ug/l	Y Cov	GEO32
Chloroform	<1.0	ug/l	Y Cov	GEO32
Bromochloromethane	<1.0	ug/l	Y Cov	GEO32
1,1,1-Trichloroethane	<1.0	ug/l	Y Cov	GEO32
1,1-Dichloropropene	<1.0	ug/l	Y Cov	GEO32
1,2-Dichloroethane	<1.0	ug/l	Y Cov	GEO32
Benzene	<1.0	ug/l	Y Cov	GEO32
1,2-Dichloropropane	<1.0	ug/l	Y Cov	GEO32
Trichloroethene	<1.0	ug/l	Y Cov	GEO32
Bromodichloromethane	<1.0	ug/l	Y Cov	GEO32
Dibromomethane	<1.0	ug/l	Y Cov	GEO32
cis-1,3-Dichloropropene	<1.0	ug/l	Y Cov	GEO32
Toluene	<1.0	ug/l	Y Cov	GEO32
trans-1,3-Dichloropropene	<1.0	ug/l	Y Cov	GEO32
1,1,2-Trichloroethane	<1.0	ug/l	Y Cov	GEO32
Carbon Tetrachloride	<1.0	ug/l	Y Cov	GEO32
Vinyl Chloride	<1.0	ug/l	Y Cov	GEO32
1,3-Dichloropropane	<1.0	ug/l	Y Cov	GEO32
Tetrachloroethene	<1.0	ug/l	Y Cov	GEO32
Dibromochloromethane	<1.0	ug/l	Y Cov	GEO32
1,2-Dibromoethane	<1.0	ug/l	Y Cov	GEO32
Chlorobenzene	<1.0	ug/l	Y Cov	GEO32
1,1,1,2-Tetrachloroethane	<1.0	ug/l	Y Cov	GEO32
Ethyl Benzene	<1.0	ug/l	Y Cov	GEO32
m,p-Xylene	<1.0	ug/l	Y Cov	GEO32
o-Xylene	<1.0	ug/l	Y Cov	GEO32
Styrene	<1.0	ug/l	Y Cov	GEO32
Bromoform	<1.0	ug/l	Y Cov	GEO32
trans-1,2-Dichloroethene	<1.0	ug/l	Y Cov	GEO32
Isopropylbenzene	<1.0	ug/l	Y Cov	GEO32
1,1,2,2-Tetrachloroethane	<1.0	ug/l	Y Cov	GEO32
1,2,3-Trichloropropane	<1.0	ug/l	Y Cov	GEO32
n-Propylbenzene	<1.0	ug/l	Y Cov	GEO32
Bromobenzene	<1.0	ug/l	Y Cov	GEO32

Severn Trent Laboratories Ltd.

# Certificate of Analysis



1314  
0897  
1229  
1510



# STL

Report Number: **BRD/670505/2010**

Issue **1**

Laboratory Number: **11603570**

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

Sample Source: **Telford & Wrekin Council**

Sample Point Description: **Leachate**

Sample Description: **Jan Sample/Tank**

Sample Matrix: **Leachates from landfill**

Sample Date: **08 February 2010** Sample Received **09 February 2010** Analysis Complete: **24 February 2010**

Test Description	Result	Units	Accreditation		Method
2-Chlorotoluene	<1.0	ug/l	Y	Cov	GEO32
1,3,5-Trimethylbenzene	<1.0	ug/l	Y	Cov	GEO32
4-Chlorotoluene	<1.0	ug/l	Y	Cov	GEO32
tert-Butylbenzene	<1.0	ug/l	Y	Cov	GEO32
1,2,4-Trimethylbenzene	<1.0	ug/l	Y	Cov	GEO32
sec-Butylbenzene	<1.0	ug/l	Y	Cov	GEO32
p-Isopropyltoluene	<1.0	ug/l	Y	Cov	GEO32
1,3-Dichlorobenzene	<1.0	ug/l	Y	Cov	GEO32
1,4-Dichlorobenzene	<1.0	ug/l	Y	Cov	GEO32
n-Butylbenzene	<1.0	ug/l	Y	Cov	GEO32
1,2-Dichlorobenzene	<1.0	ug/l	Y	Cov	GEO32
1,2-Dibromo-3-chloropropane	<2.0	ug/l	Y	Cov	GEO32
1,2,4-Trichlorobenzene	<1.0	ug/l	Y	Cov	GEO32
Hexachlorobutadiene	<1.0	ug/l	N	Cov	GEO32
Naphthalene	<1.0	ug/l	N	Cov	GEO32
1,2,3-Trichlorobenzene	<1.0	ug/l	N	Cov	GEO32
MTBE	<1.0	ug/l	N	Cov	GEO32
Dibromofluoromethane	95.6	%Recovery	N	Cov	GEO32
Toluene-d8	110.6	%Recovery	N	Cov	GEO32
4-Bromofluorobenzene	96.5	%Recovery	N	Cov	GEO32
SVOC	y	ug/l	Y	Cov	GEO40
Phenol	<2.0	ug/l	Y	Cov	GEO40
Bis(2-chloroethyl)ether	<2.0	ug/l	Y	Cov	GEO40
2-Chlorophenol	<2.0	ug/l	Y	Cov	GEO40
1,3-Dichlorobenzene	<2.0	ug/l	Y	Cov	GEO40
1,4-Dichlorobenzene	<2.0	ug/l	Y	Cov	GEO40
2-Methylphenol	<2.0	ug/l	N	Cov	GEO40
3&4-Methylphenol	<2.0	ug/l	N	Cov	GEO40
Dibenzofuran	<2.0	ug/l	N	Cov	GEO40
1,2-Dichlorobenzene	<2.0	ug/l	Y	Cov	GEO40
Bis(2-chloroisopropyl)ether	<2.0	ug/l	Y	Cov	GEO40
n-Nitrosodi-n-propylamine	<2.0	ug/l	Y	Cov	GEO40
Hexachloroethane	<2.0	ug/l	Y	Cov	GEO40
VOC	Y	ug/l	Y	Cov	GEO32
Nitrobenzene	<2.0	ug/l	Y	Cov	GEO40

Severn Trent Laboratories Ltd.

# Certificate of Analysis



1314  
0897  
1229  
1510



# STL

Report Number: **BRD/670505/2010**

Issue **1**

Laboratory Number: **11603570**

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

Sample Source: **Telford & Wrekin Council**

Sample Point Description: **Leachate**

Sample Description: **Jan Sample/Tank**

Sample Matrix: **Leachates from landfill**

Sample Date: **08 February 2010** Sample Received **09 February 2010** Analysis Complete: **24 February 2010**

Test Description	Result	Units	Accreditation	Method
Isophorone	<2.0	ug/l	Y Cov	GEO40
2,4-Dimethylphenol	<2.0	ug/l	Y Cov	GEO40
2-Nitrophenol	<2.0	ug/l	Y Cov	GEO40
Bis(2-chloroethoxy)methane	<4.0	ug/l	Y Cov	GEO40
2,4-Dichlorophenol	<2.0	ug/l	Y Cov	GEO40
1,2,4-Trichlorobenzene	<2.0	ug/l	Y Cov	GEO40
Naphthalene	<4.0	ug/l	Y Cov	GEO40
Hexachlorobutadiene	<2.0	ug/l	Y Cov	GEO40
4-Chloro-3-methylphenol	<2.0	ug/l	Y Cov	GEO40
2-Methylnaphthalene	<2.0	ug/l	Y Cov	GEO40
2,4,6-Trichlorophenol	<2.0	ug/l	Y Cov	GEO40
2,4,5-Trichlorophenol	<2.0	ug/l	Y Cov	GEO40
2-Chloronaphthalene	<2.0	ug/l	Y Cov	GEO40
Dimethylphthalate	<2.0	ug/l	Y Cov	GEO40
2,6-Dinitrotoluene	<2.0	ug/l	Y Cov	GEO40
Acenaphthylene	<2.0	ug/l	Y Cov	GEO40
Acenaphthene	<2.0	ug/l	Y Cov	GEO40
2,4-Dinitrotoluene	<2.0	ug/l	Y Cov	GEO40
Diethylphthalate	<2.0	ug/l	Y Cov	GEO40
4-Nitrophenol	<10.0	ug/l	Y Cov	GEO40
4-Chlorophenyl phenyl ether	<2.0	ug/l	Y Cov	GEO40
Fluorene	<2.0	ug/l	Y Cov	GEO40
Diphenylamine	<2.0	ug/l	N Cov	GEO40
4-Bromophenyl Phenyl Ether	<2.0	ug/l	Y Cov	GEO40
Hexachlorobenzene	<2.0	ug/l	Y Cov	GEO40
Pentachlorophenol	<2.0	ug/l	Y Cov	GEO40
Phenanthrene	<2.0	ug/l	Y Cov	GEO40
Anthracene	<2.0	ug/l	Y Cov	GEO40
di-n-Butylphthalate	<2.0	ug/l	Y Cov	GEO40
Fluoranthene	<2.0	ug/l	Y Cov	GEO40
Pyrene	<2.0	ug/l	Y Cov	GEO40
Benzyl Butyl Phthalate	<2.0	ug/l	Y Cov	GEO40
Benzo(a)anthracene	<2.0	ug/l	Y Cov	GEO40
Chrysene	<2.0	ug/l	Y Cov	GEO40
Bis(2-ethylhexyl)phthalate	<20.0	ug/l	Y Cov	GEO40

Severn Trent Laboratories Ltd.



# Certificate of Analysis



1314  
0897  
1229  
1510



# STL

Report Number: **BRD/670505/2010**  
Laboratory Number: **11603570**

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

Sample Source: **Telford & Wrekin Council**  
Sample Point Description: **Leachate**  
Sample Description: **Jan Sample/Tank**  
Sample Matrix: **Leachates from landfill**

Sample Date: **08 February 2010** Sample Received **09 February 2010** Analysis Complete: **24 February 2010**

Test Description	Result	Units	Accreditation	Method
Di-n-octylphthalate	<2.0	ug/l	Y Cov	GEO40
Benzo(b)fluoranthene	<2.0	ug/l	Y Cov	GEO40
Benzo(k)fluoranthene	<2.0	ug/l	Y Cov	GEO40
Benzo(a)pyrene	<2.0	ug/l	Y Cov	GEO40
Indeno(1,2,3-c,d)pyrene	<2.0	ug/l	Y Cov	GEO40
Dibenz(a,h)anthracene	<2.0	ug/l	Y Cov	GEO40
Benzo(g,h,i)perylene	<2.0	ug/l	Y Cov	GEO40
2-Fluorophenol	86.0	%Recovery	N Cov	GEO40
Phenol-d6	85.6	%Recovery	N Cov	GEO40
Nitrobenzene-d5	87.0	%Recovery	N Cov	GEO40
2-Fluorobiphenyl	87.1	%Recovery	N Cov	GEO40
2,4,6-Tribromophenol	92.6	%Recovery	N Cov	GEO40
Terphenyl-d14	94.8	%Recovery	N Cov	GEO40
Arsenic, Total as As	0.005	mg/l	Y Cov	WAS051
Methane, Dissolved	0.024	mg/l	N Mid	62

### Analyst Comments for 11603570:

SVOC reporting limits raised due to nature of sample matrix.  
Unable to report results for Demeton-s-methyl and Disulphoton due to AQC breaches.  
Reporting limits raised for TPH due to sample matrix.

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS.

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

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

I/S=Insufficient sample

Signed: 

Name: 

Date: **08 March 2010**

Title: **Deputy Manager**