

**Analytical Services** 2 Technology Drive, Bridgend Science Park, Bridgend, CF31 3NA

T: +44 (0)16 5664 7557 F: +44 (0)16 5664 6526

www.stsanalytical.com

10 October 2011

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

Dear

Analysis of your sample(s) submitted on 22 September 2011 is now complete and we have pleasure in enclosing the appropriate test report(s).

Test Report: BRD/808284/2011

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

Should you have any gueries 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 Severn Trent Services and we look forward to receiving your next samples.

Yours Sincerely,

Signed:

Name:









# Report Summary





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

Date of Issue: 10 October 2011

Report Number: BRD/808284/2011 Issue 1

Job Description: Stoneyhill Landfill Monitoring

Job Location: Stoneyhill Landfill Monitoring

Number of Samples Job Received: 22 September 2011

included in this report 16

Number of Test Results Analysis Commenced: 23 September 2011

included in this report 168

Signed:

Name: Date: 10 October 2011

Title: Chemistry Operations Manager

Severn Trent Services 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.

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4409

Issue

Sample 1

of 16



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Report Number: BRD/808284/2011

Laboratory Number: 12614395

Sample Source: Telford & Wrekin Council

Sample Point Description:

Sample Description: Well 15

Sample Matrix: Ground waters
Sample Date/Time: 22 September 2011
Sample Received: 22 September 2011
Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.536	mg/l	Y Cov	WAS049
Copper, Total as Cu	<0.001	mg/l	Y Cov	WAS049
Zinc, Total as Zn	5.05	mg/l	Y Cov	WAS049
рН	5.7	pH units	Y Cov	WAS039
Conductivity- Electrical 20C	2910	uS/cm	Y Cov	WAS039
Alkalinity as CaCO3	6.7	mg/l	Y Cov	WAS025
Ammoniacal Nitrogen as N	2.61	mg/l	Y Cov	WAS036
Chloride as Cl	55.7	mg/l	Y Cov	WAS036
Nitrite as N	<0.006	mg/l	Y Cov	WAS036
Nitrate as N	<0.29	mg/l	Y Cov	WAS036
Sulphate as SO4	2310	mg/l	Y Cov	WAS036
Suspended Solids	218	mg/l	Y Cov	WAS006
BOD + ATU (5 day)	11	mg/l	Y Cov	WAS001
COD (1 hr settled)	163	mg/l	Y Cov	WAS040
Sulphide as S	<0.029	mg/l	Y Cov	WAS033
Methane, Dissolved	0.053	mg/l	N Cov	62

Analyst Comments for 12614395: This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised.

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS.
Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.
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

Signed: Name: Date: 10 October 2011

Title: Chemistry Operations Manager



Issue



Report Number: BRD/808284/2011

Laboratory Number: 12614396 Sample 2 of 16

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

Well 15 Filtered Sample Description: Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

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Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.063	mg/l	Y Cov	WAS049
Copper, Total as Cu	<0.001	mg/l	Y Cov	WAS049
Zinc, Total as Zn	5.00	mg/l	Y Cov	WAS049
Ammoniacal Nitrogen as N	2.64	mg/l	Y Cov	WAS036
Sulphide as S	0.04	mg/l	Y Cov	WAS033

Analyst Comments for 12614396: Sample filtered through a 0.45um filter prior to analysis

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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.

Signed:

Name:

Date: 10 October 2011

Title:



4409

Issue



Report Number: BRD/808284/2011

Laboratory Number: 12614397 Sample 3 of 16

Sample Source: Telford & Wrekin Council

Sample Point Description:

Sample Description: Well 17

Sample Matrix: Ground waters
Sample Date/Time: 22 September 2011
Sample Received: 22 September 2011
Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium, Total as Al	1.92	mg/l	Y Cov	WAS049
Copper, Total as Cu	0.026	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.125	mg/l	Y Cov	WAS049
рН	7.0	pH units	Y Cov	WAS039
Conductivity- Electrical 20C	3640	uS/cm	Y Cov	WAS039
Alkalinity as CaCO3	1840	mg/l	Y Cov	WAS025
Ammoniacal Nitrogen as N	137	mg/l	Y Cov	WAS036
Chloride as Cl	482	mg/l	Y Cov	WAS036
Nitrite as N	<0.006	mg/l	Y Cov	WAS036
Nitrate as N	<0.29	mg/l	Y Cov	WAS036
Sulphate, total as SO4 by I.C.	62.5	mg/l	Y Cov	CON27
Suspended Solids	536	mg/l	Y Cov	WAS006
BOD + ATU (5 day)	14	mg/l	Y Cov	WAS001
COD (1 hr settled)	279	mg/l	Y Cov	WAS040
Sulphide as S	<0.029	mg/l	Y Cov	WAS033
Methane, Dissolved	12	mg/l	N Cov	62

Analyst Comments for 12614397:

This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Sulphate analysed by ion chromatography due to interference with turbidimetric determination

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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

Signed: Date: 10 October 2011

Title: Chemistry Operations Manager



Issue



Report Number: BRD/808284/2011

Laboratory Number: 12614398 Sample 4 of 16

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

Well 17 Filtered Sample Description: Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.059	mg/l	Y Cov	WAS049
Copper, Total as Cu	<0.001	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.015	mg/l	Y Cov	WAS049
Ammoniacal Nitrogen as N	139	mg/l	Y Cov	WAS036
Sulphide as S	<0.029	mg/l	Y Cov	WAS033

Analyst Comments for 12614398: Sample filtered through a 0.45um filter prior to analysis

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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.

Signed:

Name:

Date: 10 October 2011

Title:



4409

Issue

Sample 5

of 16



Report Number: BRD/808284/2011

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

Laboratory Number: 12614399

Sample Description: **Well 18** 

Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium, Total as Al	0.951	mg/l	Y Cov	WAS049
Copper, Total as Cu	<0.001	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.179	mg/l	Y Cov	WAS049
pH	6.2	pH units	Y Cov	WAS039
Conductivity- Electrical 20C	18500	uS/cm	Y Cov	WAS039
Alkalinity as CaCO3	10600	mg/l	Y Cov	WAS025
Ammoniacal Nitrogen as N	24.3	mg/l	Y Cov	WAS036
Chloride as CI	1910	mg/l	Y Cov	WAS036
Nitrite as N	<0.006	mg/l	Y Cov	WAS036
Nitrate as N	<0.29	mg/l	Y Cov	WAS036
Sulphate as SO4	141	mg/l	Y Cov	WAS036
Suspended Solids	740	mg/l	Y Cov	WAS006
BOD + ATU (5 day)	Analyst Comment	mg/l	Y Cov	WAS001
COD (1 hr settled)	43300	mg/l	Y Cov	WAS040
Sulphide as S	0.33	mg/l	Y Cov	WAS033
Methane, Dissolved	5.6	mg/l	N Cov	62

Analyst Comments for 12614399:

This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised. No BOD due to underdilution of sample, indications are that the expected result will be > 1150 mg/l

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS. Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.
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

Name: Signed: Title: **Chemistry Operations Manager** 

Date: 10 October 2011



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Issue



Report Number: BRD/808284/2011

Laboratory Number: 12614400 Sample 6 of 16

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

Well 18 Filtered Sample Description: Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.574	mg/l	Y Cov	WAS049
Copper, Total as Cu	<0.001	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.105	mg/l	Y Cov	WAS049
Ammoniacal Nitrogen as N	50.2	mg/l	Y Cov	WAS036
Sulphide as S	1.67	mg/l	Y Cov	WAS033

Analyst Comments for 12614400: Sample filtered through a 20-25um filter prior to analysis

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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

Signed:

Name:

Date: 10 October 2011

Title:



4409

Issue



Report Number: BRD/808284/2011

Laboratory Number: 12614401 Sample 7 of 16

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

Sample Description: **Well 20** 

Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.768	mg/l	Y Cov	WAS049
Copper, Total as Cu	0.011	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.119	mg/l	Y Cov	WAS049
pH	7.7	pH units	Y Cov	WAS039
Conductivity- Electrical 20C	11200	uS/cm	Y Cov	WAS039
Alkalinity as CaCO3	5360	mg/l	Y Cov	WAS025
Ammoniacal Nitrogen as N	898	mg/l	Y Cov	WAS036
Chloride as Cl	1470	mg/l	Y Cov	WAS036
Nitrite as N	<0.006	mg/l	Y Cov	WAS036
Nitrate as N	<0.29	mg/l	Y Cov	WAS036
Sulphate, total as SO4 by I.C.	<5.00	mg/l	Y Cov	CON27
Suspended Solids	118	mg/l	Y Cov	WAS006
BOD + ATU (5 day)	135	mg/l	Y Cov	WAS001
COD (1 hr settled)	1380	mg/l	Y Cov	WAS040
Sulphide as S	0.04	mg/l	Y Cov	WAS033
Methane, Dissolved	8.7	mg/l	N Cov	62

Analyst Comments for 12614401:

This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Sulphate analysed by ion chromatography due to interference with turbidimetric determination

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.
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

Signed:

Name:

Date: 10 October 2011

Title:



4409

Issue

of 16



Report Number: BRD/808284/2011

Laboratory Number: 12614402 Sample 8

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

Well 20 Filtered Sample Description: Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

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Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.150	mg/l	Y Cov	WAS049
Copper, Total as Cu	0.012	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.060	mg/l	Y Cov	WAS049
Ammoniacal Nitrogen as N	907	mg/l	Y Cov	WAS036
Sulphide as S	<0.029	mg/l	Y Cov	WAS033

Sample filtered through a 20-25um filter prior to analysis Analyst Comments for 12614402:

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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.

Signed:

Name:

Date: 10 October 2011

Title:



4409



Report Number: BRD/808284/2011

Laboratory Number: 12614403

Issue 1

Sample 9 of 16

Sample Source: Telford & Wrekin Council

Sample Point Description:

Sample Description: **GEW 6** 

Sample Matrix: Ground waters
Sample Date/Time: 22 September 2011
Sample Received: 22 September 2011
Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.756	mg/l	Y Cov	WAS049
Copper, Total as Cu	0.030	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.674	mg/l	Y Cov	WAS049
рН	8.0	pH units	Y Cov	WAS039
Conductivity- Electrical 20C	17900	uS/cm	Y Cov	WAS039
Alkalinity as CaCO3	9270	mg/l	Y Cov	WAS025
Ammoniacal Nitrogen as N	1500	mg/l	Y Cov	WAS036
Chloride as Cl	2410	mg/l	Y Cov	WAS036
Nitrite as N	0.331	mg/l	Y Cov	WAS036
Nitrate as N	<0.29	mg/l	Y Cov	WAS036
Sulphate as SO4	145	mg/l	Y Cov	WAS036
Suspended Solids	282	mg/l	Y Cov	WAS006
BOD + ATU (5 day)	223	mg/l	Y Cov	WAS001
COD (1 hr settled)	2690	mg/l	Y Cov	WAS040
Sulphide as S	0.38	mg/l	Y Cov	WAS033
Methane, Dissolved	10	mg/l	N Cov	62

Analyst Comments for 12614403:

This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised.

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS.
Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.
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

Signed:

Name: Date: 10 October 2011

Title: Chemistry Operations Manager



Issue



Report Number: BRD/808284/2011

Laboratory Number: 12614404 Sample 10 of 16

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

**GEW 6 Filtered** Sample Description: Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

Result	Units	Accreditation	Method
0.639	mg/l	Y Cov	WAS049
0.036	mg/l	Y Cov	WAS049
0.616	mg/l	Y Cov	WAS049
1480	mg/l	Y Cov	WAS036
0.40	mg/l	Y Cov	WAS033
	0.639 0.036 0.616 1480	0.639 mg/l 0.036 mg/l 0.616 mg/l 1480 mg/l	0.639         mg/l         Y         Cov           0.036         mg/l         Y         Cov           0.616         mg/l         Y         Cov           1480         mg/l         Y         Cov

Analyst Comments for 12614404: Sample filtered through a 20-25um filter prior to analysis

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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.

Signed:

Name:

Date: 10 October 2011

Title:



4409



Report Number: BRD/808284/2011

Laboratory Number: 12614405

Issue 1

Sample **11** of **16** 

Sample Source: Telford & Wrekin Council

Sample Point Description:

Sample Description: GEW 2

Sample Matrix: Ground waters
Sample Date/Time: 22 September 2011
Sample Received: 22 September 2011
Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.193	mg/l	Y Cov	WAS049
Copper, Total as Cu	0.050	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.048	mg/l	Y Cov	WAS049
рН	7.2	pH units	Y Cov	WAS039
Conductivity- Electrical 20C	2740	uS/cm	Y Cov	WAS039
Alkalinity as CaCO3	1560	mg/l	Y Cov	WAS025
Ammoniacal Nitrogen as N	91.8	mg/l	Y Cov	WAS036
Chloride as Cl	255	mg/l	Y Cov	WAS036
Nitrite as N	<0.006	mg/l	Y Cov	WAS036
Nitrate as N	<0.29	mg/l	Y Cov	WAS036
Sulphate as SO4	12.1	mg/l	Y Cov	WAS036
Suspended Solids	46.0	mg/l	Y Cov	WAS006
BOD + ATU (5 day)	13	mg/l	Y Cov	WAS001
COD (1 hr settled)	198	mg/l	Y Cov	WAS040
Sulphide as S	<0.029	mg/l	Y Cov	WAS033
Methane, Dissolved	8.1	mg/l	N Cov	62

Analyst Comments for 12614405: This sample has been

This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised.

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS.
Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.
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

Signed:

Name: Date: 10 October 2011

Title: Chemistry Operations Manager





Report Number: BRD/808284/2011

Laboratory Number: 12614406

Issue

Sample 12 of 16

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

**GEW 2 Filtered** Sample Description: Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

Result	Units	Accreditation	Method
0.101	mg/l	Y Cov	WAS049
0.014	mg/l	Y Cov	WAS049
0.052	mg/l	Y Cov	WAS049
88.1	mg/l	Y Cov	WAS036
<0.029	mg/l	Y Cov	WAS033
	0.101 0.014 0.052 88.1	0.101 mg/l 0.014 mg/l 0.052 mg/l 88.1 mg/l	0.101       mg/l       Y       Cov         0.014       mg/l       Y       Cov         0.052       mg/l       Y       Cov         88.1       mg/l       Y       Cov

Analyst Comments for 12614406: Sample filtered through a 0.45um filter prior to analysis

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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.

Signed:

Name:

Date: 10 October 2011

Title:



4409

Issue



Report Number: BRD/808284/2011

Laboratory Number: 12614407 Sample 13 of 16

Sample Source: Telford & Wrekin Council

Sample Point Description:

Sample Description: Well 9

Sample Matrix: Ground waters
Sample Date/Time: 22 September 2011
Sample Received: 22 September 2011
Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	1.14	mg/l	Y Cov	WAS049
Copper, Total as Cu	0.028	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.118	mg/l	Y Cov	WAS049
рН	7.4	pH units	Y Cov	WAS039
Conductivity- Electrical 20C	6570	uS/cm	Y Cov	WAS039
Alkalinity as CaCO3	2250	mg/l	Y Cov	WAS025
Ammoniacal Nitrogen as N	290	mg/l	Y Cov	WAS036
Chloride as Cl	1350	mg/l	Y Cov	WAS036
Nitrite as N	<0.006	mg/l	Y Cov	WAS036
Nitrate as N	<0.29	mg/l	Y Cov	WAS036
Sulphate as SO4	22.0	mg/l	Y Cov	WAS036
Suspended Solids	292	mg/l	Y Cov	WAS006
BOD + ATU (5 day)	24	mg/l	Y Cov	WAS001
COD (1 hr settled)	760	mg/l	Y Cov	WAS040
Sulphide as S	0.05	mg/l	Y Cov	WAS033
Methane, Dissolved	7.4	mg/l	N Cov	62

Analyst Comments for 12614407: This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised.

Accreditation Codes: Y = UKAS Accredited, N = Not UKAS Accredited, M = MCERTS.
Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.
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

Signed: Date: 10 October 2011

Title: Chemistry Operations Manager





Report Number: BRD/808284/2011

Laboratory Number: 12614408

Issue

Sample 14 of 16

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

**Well 9 Filtered** Sample Description: Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method
Aluminium,Total as Al	0.123	mg/l	Y Cov	WAS049
Copper, Total as Cu	0.027	mg/l	Y Cov	WAS049
Zinc, Total as Zn	0.070	mg/l	Y Cov	WAS049
Ammoniacal Nitrogen as N	301	mg/l	Y Cov	WAS036
Sulphide as S	0.03	mg/l	Y Cov	WAS033

Analyst Comments for 12614408: Sample filtered through a 20-25um filter prior to analysis

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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.

Date: 10 October 2011 Name: Signed: Title: **Chemistry Operations Manager** 



4409

Issue



Report Number: BRD/808284/2011

Laboratory Number: 12614409 Sample 15 of 16

Sample Source: Telford & Wrekin Council

Sample Point Description:

Sample Description: Well 3

Sample Matrix: Ground waters
Sample Date/Time: 22 September 2011
Sample Received: 22 September 2011
Analysis Complete: 09 October 2011

Test Description	Result	Units	Accreditation	Method	
Aluminium, Total as Al	2.92	mg/l	Y Cov	WAS049	
Copper, Total as Cu	0.065	mg/l	Y Cov	WAS049	
Zinc, Total as Zn	0.357	mg/l	Y Cov	WAS049	
рН	7.8	pH units	Y Cov	WAS039	
Conductivity- Electrical 20C	9450	uS/cm	Y Cov	WAS039	
Alkalinity as CaCO3	4580	mg/l	Y Cov	WAS025	
Ammoniacal Nitrogen as N	841	mg/l	Y Cov	WAS036	
Chloride as Cl	828	mg/l	Y Cov	WAS036	
Nitrite as N	<0.006	mg/l	Y Cov	WAS036	
Nitrate as N	<0.29	mg/l	Y Cov	WAS036	
Sulphate, total as SO4 by I.C.	7.26	mg/l	Y Cov	CON27	
Suspended Solids	498	mg/l	Y Cov	WAS006	
BOD + ATU (5 day)	66	mg/l	Y Cov	WAS001	
COD (1 hr settled)	1400	mg/l	Y Cov	WAS040	
Sulphide as S	0.91	mg/l	Y Cov	WAS033	
Methane, Dissolved	9.0	mg/l	N Cov	62	

Analyst Comments for 12614409:

This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Sulphate analysed by ion chromatography due to interference with turbidimetric determination

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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

Signed: Date: 10 October 2011

Title: Chemistry Operations Manager





Report Number: BRD/808284/2011

Laboratory Number: 12614410

Issue

Sample 16 of 16

Sample Source: **Telford & Wrekin Council** 

Sample Point Description:

**Well 3 Filtered** Sample Description: Sample Matrix: **Ground waters** Sample Date/Time: 22 September 2011 Sample Received: 22 September 2011 Analysis Complete: 09 October 2011

Result	Units	Accreditation	Method
0.268	mg/l	Y Cov	WAS049
0.018	mg/l	Y Cov	WAS049
0.059	mg/l	Y Cov	WAS049
217	mg/l	Y Cov	WAS036
0.48	mg/l	Y Cov	WAS033
	0.268 0.018 0.059 217	0.268 mg/l 0.018 mg/l 0.059 mg/l 217 mg/l	0.268         mg/l         Y         Cov           0.018         mg/l         Y         Cov           0.059         mg/l         Y         Cov           217         mg/l         Y         Cov

Analyst Comments for 12614410:

Sample filtered through a 0.45um filter prior to analysis

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

Analysed at: Brd = Bridgend, Cov = Coventry, Rea = Reading, Run = Runcorn, S = Subcontracted, Wak = Wakefield.

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

Signed:

Name:

Date: 10 October 2011

Title: