

ALS Environmental Ltd
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Mr Lloyd
Caerphilly County B.C.
Caerphilly County Borough
Council
Unit B5
Tiryberth Depot
Hengoed CF82 8AU
Caerphilly

01 September 2016

Test Report: COV/1310660/2016

Dear Mr Lloyd

Analysis of your sample(s) submitted on 22 August 2016 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 ALS Environmental Ltd and we look forward to receiving your next samples.

Yours Sincerely,

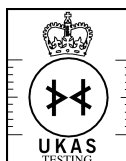
Signed: 

Name: R. Stocks

Title: Inorganic Team Leader



Report Summary



1314
0897
4409



**Mr Rhodri Lloyd
Caerphilly County B.C.
Caerphilly County Borough
Council
Unit B5
Tiryberth Depot
Hengoed
Caerphilly**

Date of Issue: **01 September 2016**

Report Number: **COV/1310660/2016**

Issue **1**

Job Description: Trehir Landfill Site

Job Location: Caerphilly

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

Job Received: **22 August 2016**

Number of Test Results
included in this report **119**

Analysis Commenced: **22 August 2016**

Signed: 

Name: **R. Stocks**

Date: **01 September 2016**

Title: **Inorganic Team Leader**

ALS Environmental Ltd was responsible for sampling. Sampling is not covered by our UKAS accreditation.

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

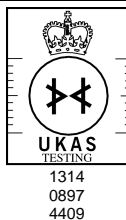
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. The results relate only to the items tested.

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

This communication has been sent to you by ALS Environmental Ltd. Registered in England and Wales. Registration No. 02148934. Registered Office: ALS Environmental Limited, Torrington Avenue, Coventry, CV4 9GU.

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503605**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **08**

Sample Description: **08**

Sample Matrix: **Land Leachate**

Sample Date/Time: **22 August 2016 12:53**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	16.9	Deg C	22/08/2016	N Cov	FIELD
pH	8.3	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	1180	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	20.1	mg/l	31/08/2016	Y Cov	WAS036
BOD + ATU (5 day)	5	mg/l	30/08/2016	Y Cov	WAS001
COD (Total)	65.0	mg/l	26/08/2016	Y Cov	WAS040
Chloride as Cl, High Level	119	mg/l	23/08/2016	Y Cov	WAS036

Analyst Comments for 15503605:

This sample has been analysed for Ammoniacal Nitrogen as N outside recommended stability times. It is therefore possible that the results provided may be compromised. {(*)}Ammonia analysed by colorimetric method{(*)}

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG). For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

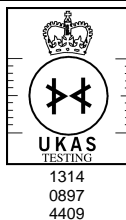
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503606**

Sample **2** of **16**

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **MHL28**

Sample Description: **MHL28**

Sample Matrix: **Land Leachate**

Sample Date/Time: **22 August 2016 12:37**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	18.4	Deg C	22/08/2016	N Cov	FIELD
pH	8.1	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	2270	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	106	mg/l	01/09/2016	Y Cov	WAS055
BOD + ATU (5 day)	15	mg/l	30/08/2016	Y Cov	WAS001
COD (Total)	161	mg/l	26/08/2016	Y Cov	WAS040
Chloride as Cl, High Level	207	mg/l	23/08/2016	Y Cov	WAS036

Analyst Comments for 15503606:

This sample has been analysed for Ammoniacal Nitrogen as N outside recommended stability times. It is therefore possible that the results provided may be compromised. {(*)}Ammonia analysed by colorimetric method{(*)}

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG). For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503607**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **N2**

Sample Description: **N2**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 09:39**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	13.4	Deg C	22/08/2016	N Cov	FIELD
pH	7.3	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	155	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	12.7	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	6.8	mg/l	23/08/2016	Y Cov	WAS052
COD (Total)	13.0	mg/l	26/08/2016	Y Cov	WAS040
Water Level to top of Casing	9.40	m	22/08/2016	N Cov	IN SITU M

Analyst Comments for 15503607:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

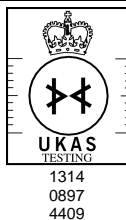
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503608**

Sample **4** of **16**

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **N6**

Sample Description: **N6**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 12:05**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	13.8	Deg C	22/08/2016	N Cov	FIELD
pH	7.5	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	968	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	21.5	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	63.8	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	2.6	mg/l	23/08/2016	Y Cov	WAS052
COD (Total)	60.0	mg/l	26/08/2016	Y Cov	WAS040
Water Level to top of Casing	0.00	m	22/08/2016	N Cov	IN SITU M

Analyst Comments for 15503608:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

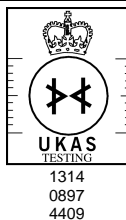
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503609**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **N8**

Sample Description: **N8**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 09:39**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation		Method
Field Temperature	14.1	Deg C	22/08/2016	N	Cov	FIELD
pH	8.0	pH units	24/08/2016	Y	Cov	WAS039
Conductivity- Electrical 20C	859	uS/cm	24/08/2016	Y	Cov	WAS039
Ammoniacal Nitrogen as N	1.88	mg/l	23/08/2016	N	Cov	WAS036
Chloride as Cl	186	mg/l	23/08/2016	N	Cov	WAS036
Dissolved Oxygen, Fixed	2.1	mg/l	23/08/2016	Y	Cov	WAS052
COD (Total)	43.0	mg/l	26/08/2016	Y	Cov	WAS040
Water Level to top of Casing	4.30	m	22/08/2016	N	Cov	IN SITU M

Analyst Comments for 15503609:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503610**

Sample **6** of **16**

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **NBH1**

Sample Description: **NBH1**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 11:20**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation		Method
Field Temperature	14.5	Deg C	23/08/2016	N	Cov	FIELD
pH	7.2	pH units	24/08/2016	Y	Cov	WAS039
Conductivity- Electrical 20C	1930	uS/cm	24/08/2016	Y	Cov	WAS039
Ammoniacal Nitrogen as N	55.2	mg/l	23/08/2016	N	Cov	WAS036
Chloride as Cl	207	mg/l	23/08/2016	N	Cov	WAS036
Dissolved Oxygen, Fixed	1.0	mg/l	23/08/2016	Y	Cov	WAS052
COD (Total)	111	mg/l	26/08/2016	Y	Cov	WAS040
Water Level to top of Casing	3.10	m	22/08/2016	N	Cov	IN SITU M

Analyst Comments for 15503610:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

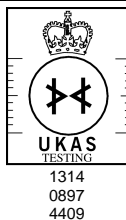
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503611**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **NBH3**

Sample Description: **NBH3**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 11:00**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	15.0	Deg C	22/08/2016	N Cov	FIELD
pH	7.0	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	1060	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	19.4	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	51.5	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	2.4	mg/l	23/08/2016	Y Cov	WAS052
COD (Total)	103	mg/l	26/08/2016	Y Cov	WAS040
Water Level to top of Casing	6.50	m	22/08/2016	N Cov	IN SITU M

Analyst Comments for 15503611:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

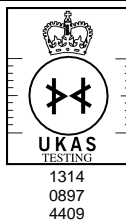
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503612**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **NBH4**

Sample Description: **NBH4**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 10:25**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation		Method
Field Temperature	13.0	Deg C	22/08/2016	N	Cov	FIELD
pH	7.4	pH units	24/08/2016	Y	Cov	WAS039
Conductivity- Electrical 20C	410	uS/cm	24/08/2016	Y	Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	23/08/2016	N	Cov	WAS036
Chloride as Cl	14.6	mg/l	23/08/2016	N	Cov	WAS036
Dissolved Oxygen, Fixed	7.1	mg/l	23/08/2016	Y	Cov	WAS052
COD (Total)	43.0	mg/l	26/08/2016	Y	Cov	WAS040
Water Level to top of Casing	12.51	m	22/08/2016	N	Cov	IN SITU M

Analyst Comments for 15503612:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

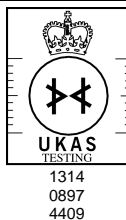
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Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503613**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **NBH5**

Sample Description: **NBH5**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 09:50**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation		Method
Field Temperature	12.7	Deg C	22/08/2016	N	Cov	FIELD
pH	7.1	pH units	24/08/2016	Y	Cov	WAS039
Conductivity- Electrical 20C	426	uS/cm	24/08/2016	Y	Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	23/08/2016	N	Cov	WAS036
Chloride as Cl	20.2	mg/l	23/08/2016	N	Cov	WAS036
Dissolved Oxygen, Fixed	4.1	mg/l	25/08/2016	Y	Cov	WAS052
COD (Total)	226	mg/l	26/08/2016	Y	Cov	WAS040
Water Level to top of Casing	7.08	m	22/08/2016	N	Cov	IN SITU M

Analyst Comments for 15503613:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

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Name: **R. Stocks**

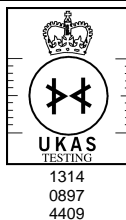
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Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503614**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **W1**

Sample Description: **W1**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 13:15**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	16.3	Deg C	22/08/2016	N Cov	FIELD
pH	8.2	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	265	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	16.0	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	8.2	mg/l	25/08/2016	Y Cov	WAS052
COD (Total)	<11.0	mg/l	26/08/2016	Y Cov	WAS040

Analyst Comments for 15503614:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

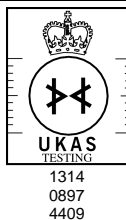
Date: **01 September 2016**

Title: **Inorganic Team Leader**

ALS Environmental Ltd

Torrington Avenue, Coventry, CV4 9GU
Tel:+44 (0)24 7642 1213 Fax:+44 (0)24 7685 6575

Certificate of Analysis



Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503615**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **W2**

Sample Description: **W2**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 13:15**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	16.3	Deg C	22/08/2016	N Cov	FIELD
pH	8.2	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	265	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	16.0	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	8.4	mg/l	25/08/2016	Y Cov	WAS052
COD (Total)	12.0	mg/l	26/08/2016	Y Cov	WAS040

Analyst Comments for 15503615:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

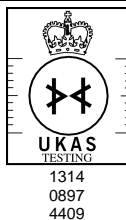
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503616**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **W3**

Sample Description: **W3**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 13:10**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	16.1	Deg C	22/08/2016	N Cov	FIELD
pH	8.2	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	262	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	15.6	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	8.2	mg/l	25/08/2016	Y Cov	WAS052
COD (Total)	18.0	mg/l	26/08/2016	Y Cov	WAS040

Analyst Comments for 15503616:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

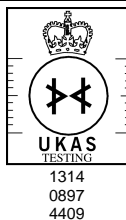
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503617**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **Groundwater Sump**

Sample Description: **SUMP**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 12:30**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	14.0	Deg C	23/08/2016	N Cov	FIELD
pH	7.7	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	1470	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	18.7	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	192	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	6.6	mg/l	25/08/2016	Y Cov	WAS052
COD (Total)	1110	mg/l	26/08/2016	Y Cov	WAS040

Analyst Comments for 15503617:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG). For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

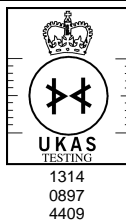
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503618**

Sample **14** of **16**

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **Land Drain 1**

Sample Description: **LAND DRAIN 1a**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 12:49**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	19.4	Deg C	22/08/2016	N Cov	FIELD
pH	8.2	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	1940	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	72.4	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	200	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	6.1	mg/l	25/08/2016	Y Cov	WAS052
COD (Total)	114	mg/l	26/08/2016	Y Cov	WAS040

Analyst Comments for 15503618:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

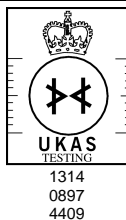
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503619**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **Land Drain 1b**

Sample Description: **LAND DRAIN 1b**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 12:49**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	19.4	Deg C	22/08/2016	N Cov	FIELD
pH	7.5	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	60.0	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	<3.7	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	6.4	mg/l	25/08/2016	Y Cov	WAS052
COD (Total)	28.0	mg/l	26/08/2016	Y Cov	WAS040

Analyst Comments for 15503619:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG). For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

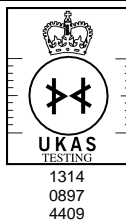
Date: **01 September 2016**

Title: **Inorganic Team Leader**

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Report Number: **COV/1310660/2016**

Issue **1**

Laboratory Number: **15503620**

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

Sample Source: **Caerphilly County B.C.**

Sample Point Description: **Land Drain 2**

Sample Description: **LAND DRAIN 2**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2016 12:55**

Sample Received: **22 August 2016**

Analysis Complete: **01 September 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	18.6	Deg C	22/08/2016	N Cov	FIELD
pH	8.5	pH units	24/08/2016	Y Cov	WAS039
Conductivity- Electrical 20C	843	uS/cm	24/08/2016	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	23/08/2016	N Cov	WAS036
Chloride as Cl	94.9	mg/l	23/08/2016	N Cov	WAS036
Dissolved Oxygen, Fixed	5.7	mg/l	25/08/2016	Y Cov	WAS052
COD (Total)	24.0	mg/l	26/08/2016	Y Cov	WAS040

Analyst Comments for 15503620:

No Analyst Comment

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **R. Stocks**

Date: **01 September 2016**

Title: **Inorganic Team Leader**

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ANALYST COMMENTS FOR REPORT

COV/1310660/2016

Issue 1

Date of Issue: 01 September 2016

Sample No	Analysis Comments
15503605	This sample has been analysed for Ammoniacal Nitrogen as N outside recommended stability times. It is therefore possible that the results provided may be compromised. {/*}Ammonia analysed by colorimetric method{*/}
15503606	This sample has been analysed for Ammoniacal Nitrogen as N outside recommended stability times. It is therefore possible that the results provided may be compromised. {/*}Ammonia analysed by colorimetric method{*/}
15503607	
15503608	
15503609	
15503610	
15503611	
15503612	
15503613	
15503614	
15503615	
15503616	
15503617	
15503618	
15503619	
15503620	

Signed: 

Name: **R. Stocks**

Date: **01 September 2016**

Title: **Inorganic Team Leader**

DETERMINAND COMMENTS FOR REPORT COV/1310660/2016

ISSUE 1

Date of Issue : 01 September 2016

Sample No	Description	Determinand	Comments

Signed:



Name: R. Stocks

Date: 01 September 2016

Title: Inorganic Team Leader