

ALS Environmental Ltd
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Mr Chand
Caerphilly County B.C.
ALS Environmental
Torrington Avenue
Coventry CV4 9GU
Warwickshire

05 September 2017

Test Report: COV/1427489/2017

Dear Mr Chand

Analysis of your sample(s) submitted on 22 August 2017 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,

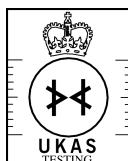
Signed: 

Name: P. Patel

Title: Inorganic Team Leader



Report Summary



1314
0897
4409



**Mr Sarup Chand
Caerphilly County B.C.
ALS Environmental
Torrington Avenue
Coventry
Warwickshire
CV4 9GU**

Date of Issue: **05 September 2017**

Report Number: **COV/1427489/2017**

Issue **1**

This issue replaces
all previous issues

Job Description: Trehir Landfill Site

Job Location: Caerphilly

Number of Samples
included in this report **17**

Job Received: **22 August 2017**

Number of Test Results
included in this report **128**

Analysis Commenced: **22 August 2017**

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

ALS Environmental Ltd was responsible for sampling.

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/1427489/2017**

Issue **1**

Laboratory Number: **16342751**

Sample **1** of **17**

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

Sample Point Description: **08**

Sample Description: **08**

Sample Matrix: **Land Leachate**

Sample Date/Time: **22 August 2017 10:40**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	15.5	Deg C	22/08/2017	N Cov	FIELD
pH	7.7	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	1350	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	22.7	mg/l	31/08/2017	Y Cov	WAS036
BOD + ATU (5 day)	Analyst Com	mg/l	29/08/2017	Y Cov	WAS001
COD (Total)	61.0	mg/l	28/08/2017	Y Cov	WAS040
Chloride as Cl, High Level	112	mg/l	23/08/2017	Y Cov	WAS036

Analyst Comments for 16342751:

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.

{/*}No BOD due to underdilution of sample, indications are that the expected result will be > 29 mg/l
Ammonia analysed by colorimetric analysis.{/*}

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342752**

Sample **2** of **17**

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

Sample Point Description: **MHL28**

Sample Description: **MHL28**

Sample Matrix: **Land Leachate**

Sample Date/Time: **22 August 2017 11:05**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	17.5	Deg C	22/08/2017	N Cov	FIELD
pH	7.4	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	2720	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	113	mg/l	31/08/2017	Y Cov	WAS055
BOD + ATU (5 day)	10	mg/l	29/08/2017	Y Cov	WAS001
COD (Total)	162	mg/l	28/08/2017	Y Cov	WAS040
Chloride as Cl, High Level	215	mg/l	23/08/2017	Y Cov	WAS036

Analyst Comments for 16342752:

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 analysis.{*/}

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342753**

Sample **3** of **17**

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

Sample Point Description: **N2**

Sample Description: **N2**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 10:30**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	12.8	Deg C	22/08/2017	N Cov	FIELD
pH	6.6	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	195	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	7.6	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	2.4	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y Cov	WAS040
Water Level to top of Casing	8.11	m	22/08/2017	N Cov	COM05

Analyst Comments for 16342753:

No Analyst Comment

This issue replaces all previous issues

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).

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Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342754**

Sample **4** of **17**

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

Sample Point Description: **N5**

Sample Description: **N5**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 12:50**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	12.3	Deg C	22/08/2017	N Cov	FIELD
pH	6.9	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	1510	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	2.55	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	232	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	1.2	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	85.0	mg/l	28/08/2017	Y Cov	WAS040
Water Level to top of Casing	8.60	m	22/08/2017	N Cov	COM05

Analyst Comments for 16342754:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342755**

Sample **5** of **17**

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

Sample Point Description: **N6**

Sample Description: **N6**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 13:10**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	11.9	Deg C	22/08/2017	N Cov	FIELD
pH	6.7	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	1030	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	20.8	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	61.1	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	<0.5	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y Cov	WAS040
Water Level to top of Casing	0.00	m	22/08/2017	N Cov	COM05

Analyst Comments for 16342755:

No Analyst Comment

This issue replaces all previous issues

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).

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Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342756**

Sample **6** of **17**

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

Sample Point Description: **N8**

Sample Description: **N8**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 13:25**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	12.6	Deg C	22/08/2017	N Cov	FIELD
pH	7.1	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	931	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	2.10	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	194	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	<0.5	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y Cov	WAS040
Water Level to top of Casing	4.45	m	22/08/2017	N Cov	COM05

Analyst Comments for 16342756:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342757**

Sample **7** of **17**

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

Sample Point Description: **NBH1**

Sample Description: **NBH1**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 12:22**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	17.9	Deg C	22/08/2017	N Cov	FIELD
pH	7.2	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	2520	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	55.1	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	286	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	1.9	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	772	mg/l	28/08/2017	Y Cov	WAS040
Water Level to top of Casing	4.94	m	22/08/2017	N Cov	COM05

Analyst Comments for 16342757:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342758**

Sample **8** of **17**

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

Sample Point Description: **NBH2**

Sample Description: **NBH2**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 12:00**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	15.8	Deg C	22/08/2017	N Cov	FIELD
pH	7.0	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	2900	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	137	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	223	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	<0.5	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	472	mg/l	28/08/2017	Y Cov	WAS040
Water Level to top of Casing	3.00	m	22/08/2017	N Cov	COM05

Analyst Comments for 16342758:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342759**

Sample **9** of **17**

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

Sample Point Description: **NBH3**

Sample Description: **NBH3**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 11:39**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	15.0	Deg C	22/08/2017	N Cov	FIELD
pH	6.7	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	1340	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	20.7	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	43.9	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	1.9	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	38.0	mg/l	28/08/2017	Y Cov	WAS040
Water Level to top of Casing	6.46	m	22/08/2017	N Cov	COM05

Analyst Comments for 16342759:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342760**

Sample **10** of **17**

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

Sample Point Description: **NBH5**

Sample Description: **NBH5**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 11:00**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation		Method
Field Temperature	13.2	Deg C	22/08/2017	N	Cov	FIELD
pH	6.4	pH units	23/08/2017	Y	Cov	WAS039
Conductivity- Electrical 20C	604	uS/cm	23/08/2017	Y	Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	25/08/2017	N	Cov	WAS036
Chloride as Cl	21.2	mg/l	25/08/2017	N	Cov	WAS036
Dissolved Oxygen, Fixed	2.1	mg/l	23/08/2017	Y	Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y	Cov	WAS040
Water Level to top of Casing	6.38	m	22/08/2017	N	Cov	COM05

Analyst Comments for 16342760:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342761**

Sample **11** of **17**

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

Sample Point Description: **NBH6**

Sample Description: **NBH6**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 10:40**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	13.2	Deg C	22/08/2017	N Cov	FIELD
pH	6.8	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	272	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	8.6	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	5.4	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	130	mg/l	28/08/2017	Y Cov	WAS040
Water Level to top of Casing	17.46	m	22/08/2017	N Cov	COM05

Analyst Comments for 16342761:

No Analyst Comment

This issue replaces all previous issues

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).

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Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342762**

Sample **12** of **17**

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

Sample Point Description: **W1**

Sample Description: **W1**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 10:00**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	15.4	Deg C	22/08/2017	N Cov	FIELD
pH	8.1	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	336	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	10.9	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	9.5	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y Cov	WAS040

Analyst Comments for 16342762:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

Name: **P. Patel**

Date: **05 September 2017**

Title: **Inorganic Team Leader**

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342763**

Sample **13** of **17**

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

Sample Point Description: **W2**

Sample Description: **W2**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 10:05**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	15.4	Deg C	22/08/2017	N Cov	FIELD
pH	8.1	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	338	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	11.1	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	9.2	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y Cov	WAS040

Analyst Comments for 16342763:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342764**

Sample **14** of **17**

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

Sample Point Description: **W3**

Sample Description: **W3**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 10:10**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	15.4	Deg C	22/08/2017	N Cov	FIELD
pH	8.1	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	337	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	11.0	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	9.8	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y Cov	WAS040

Analyst Comments for 16342764:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342765**

Sample **15** of **17**

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

Sample Point Description: **W5**

Sample Description: **W5**

Sample Matrix: **Ground Water**

Sample Date/Time: **22 August 2017 11:15**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	17.5	Deg C	22/08/2017	N Cov	FIELD
pH	7.7	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	131	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	<0.41	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	10.6	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	9.6	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y Cov	WAS040

Analyst Comments for 16342765:

No Analyst Comment

This issue replaces all previous issues

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).

Signed:

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342766**

Sample **16** of **17**

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 2017 10:20**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	16.7	Deg C	22/08/2017	N Cov	FIELD
pH	7.5	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	2700	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	109	mg/l	25/08/2017	N Cov	WAS036
Chloride as Cl	209	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	3.2	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	112	mg/l	28/08/2017	Y Cov	WAS040

Analyst Comments for 16342766:

No Analyst Comment

This issue replaces all previous issues

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).

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Certificate of Analysis



Report Number: **COV/1427489/2017**

Issue **1**

Laboratory Number: **16342767**

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

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 2017 10:25**

Sample Received: **22 August 2017**

Analysis Complete: **05 September 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Field Temperature	15.0	Deg C	22/08/2017	N Cov	FIELD
pH	7.3	pH units	23/08/2017	Y Cov	WAS039
Conductivity- Electrical 20C	801	uS/cm	23/08/2017	Y Cov	WAS039
Ammoniacal Nitrogen as N	0.55	mg/l	27/08/2017	N Cov	WAS036
Chloride as Cl	68.3	mg/l	25/08/2017	N Cov	WAS036
Dissolved Oxygen, Fixed	5.3	mg/l	23/08/2017	Y Cov	WAS052
COD (Total)	<11.0	mg/l	28/08/2017	Y Cov	WAS040

Analyst Comments for 16342767:

No Analyst Comment

This issue replaces all previous issues

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).

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ANALYST COMMENTS FOR REPORT

COV/1427489/2017

Issue 1

Date of Issue: 05 September 2017

Sample No	Analysis Comments
16342751	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. {/*}No BOD due to underdilution of sample, indications are that the expected result will be > 29 mg/l Ammonia analysed by colorimetric analysis.{*/}
16342752	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 analysis.{*/}
16342753	
16342754	
16342755	
16342756	
16342757	
16342758	
16342759	
16342760	
16342761	
16342762	
16342763	
16342764	
16342765	
16342766	
16342767	

Signed: 

Name: P. Patel

Date: 05 September 2017

Title: Inorganic Team Leader

DETERMINAND COMMENTS FOR REPORT COV/1427489/2017

ISSUE 1

Date of Issue : 05 September 2017

Sample No	Description	Determinand	Comments

Signed:



Name: P. Patel

Date: 05 September 2017

Title: Inorganic Team Leader