

ALS Environmental Ltd
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Mr Griffiths
Rhondda Cynon Taf County
Borough Council
Environmental Services Group
Sardis House
Sardis Road
Pontypridd CF37 1DU

30 June 2017

Test Report: COV/1399544/2017

Dear Mr Griffiths

Analysis of your sample(s) submitted on 15 June 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: C. Law

Title: Inorganics Operations Manager



Report Summary

Mr Owen Griffiths
Rhondda Cynon Taf County Borough
Council
Environmental Services Group
Sardis House
Sardis Road
Pontypridd
CF37 1DU



1314
0897
4409



Date of Issue: **30 June 2017**

Report Number: **COV/1399544/2017**

Issue **1**

This issue replaces all previous issues

Number of Samples
included in this report: **12**
Number of Test Results
included in this report: **384**

Site Name: **Coed Ely**
Job Received: **15 June 2017**
Analysis Commenced: **16 June 2017**
Order No: **307935**

Signed:

Name: **C. Law**

Date: **30 June 2017**

Title: **Inorganics Operations Manager**

ALS Environmental Ltd was not responsible for sampling unless otherwise stated.

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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ALS Environmental Ltd

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Certificate of Analysis



Report Number: **COV/1399544/2017**

Issue **1**

Site Name: **Coed Ely**

Group	Determinand	Unit	Method / Analysis Site	Ground Water																	
				16157892	16157893	16157894	16157895	16157896	16157897	16157898	16157899	16157900	16157901								
				GW1	GW3	GW4	GW6	GW8	GW9	GW10	GW11	GW12	GW13								
	Sulphate as SO4	g/l	WAS036 Cov	N 0.0590	N 0.0538	N 0.0433	N 0.1811	N 0.0404	N 0.0179	N 0.0436	N 0.0165	N 0.0103	N 0.0090								
Metals	Iron, Filtered as Fe	ug/l	WAS049 Cov	Y <230	Y <230	Y <230	Y <230	Y <230	Y <230	Y <230	Y <230	Y <230	Y <230								
	Iron, Total as Fe	mg/l	WAS049 Cov	Y 13.2	Y 10.1	Y 0.51	Y 56.8	Y 30.6	Y 97.5	Y 118	Y 13.1	Y 30.6	Y 24.8								
Inorganics	pH	pH units	WAS039 Cov	Y 6.4	Y 6.3	Y 6.2	Y 5.4	Y 7.1	Y 6.1	Y 7.0	Y 6.1	Y 5.9	Y 6.0								
	Conductivity- Electrical 20C	uS/cm	WAS039 Cov	Y 304	Y 258	Y 117	Y 445	Y 825	Y 134	Y 644	Y 131	Y 110	Y 132								
	Ammoniacal Nitrogen as N (LL)	mg/l	WAS067 Cov	Y <0.06	Y <0.06	Y <0.06	Y 0.12	Y <0.06	Y <0.06	Y <0.06	Y <0.06	Y <0.06	Y <0.06								
	Cyanide, Free as CN	mg/l	WAS018 Cov	N <0.008	N <0.008	N <0.008	N <0.008	N <0.008	N <0.008	N <0.008	N <0.008	N <0.008	N <0.008								
	Phenols Mono (Phenol Index)	mg/l	WAS019 Cov	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10								
Chlor. Solvents	Benzene	ug/l	GEO56 Cov	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10								
	Ethyl Benzene	ug/l	GEO56 Cov	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10								
TPH	EH >C6 - C40	ug/l	GEO35 Cov	N <40	N <40	N <10	N <20	N 26	N <100	N <40	N <20	N <20	N <40								
PAH	Acenaphthene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Acenaphthylene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Anthracene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Benzo (a) anthracene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.022	Y 0.018	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Benzo (g,h,i) perylene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.013	Y <0.01	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Benzo (a) pyrene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.021	Y 0.013	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Benzo (b) fluoranthene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.026	Y 0.014	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Benzo (k) fluoranthene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.012	Y <0.01	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Chrysene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.021	Y 0.014	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Dibenz (a,h) anthracene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Fluoranthene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.044	Y 0.050	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Fluorene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.014	Y 0.012	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Indeno (1,2,3) cd pyrene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.011	Y <0.01	Y <0.01	Y <0.02	Y <0.02	Y <0.04								
	Naphthalene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.015	Y <0.01	Y <0.01	Y <0.02	Y <0.02	Y <0.04								

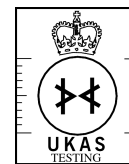
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Certificate of Analysis



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0897
4409



Report Number: **COV/1399544/2017**

Issue **1**

Site Name: **Coed Ely**

				Ground Water											
				16157892	16157893	16157894	16157895	16157896	16157897	16157898	16157899	16157900	16157901		
				GW1	GW3	GW4	GW6	GW8	GW9	GW10	GW11	GW12	GW13		
Group	Determinand	Unit	Method / Analysis Site	12/06/2017	12/06/2017	12/06/2017	12/06/2017	12/06/2017	12/06/2017	12/06/2017	12/06/2017	12/06/2017	12/06/2017		
PAH	Phenanthrene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.058	Y 0.028	Y <0.01	Y <0.02	Y <0.02	Y <0.04		
	Pyrene	ug/l	GEO19 Cov	Y <0.01	Y <0.01	Y <0.01	Y <0.02	Y 0.036	Y 0.043	Y <0.01	Y <0.02	Y <0.02	Y <0.04		
	PAH, Total	ug/l	GEO19 Cov	N <0.01	N <0.01	N <0.01	N <0.02	N 0.292	N 0.192	N <0.01	N <0.02	N <0.02	N <0.04		
Other	Toluene	ug/l	GEO56 Cov	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10		
	m&p Xylene	ug/l	GEO56 Cov	Y <0.20	Y <0.20	Y <0.20	Y <0.20	Y <0.20	Y <0.20	Y <0.20	Y <0.20	Y <0.20	Y <0.20		
	o-Xylene	ug/l	GEO56 Cov	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10	Y <0.10		
	Total Xylenes	ug/l	GEO56 Cov	N <0.20	N <0.20	N <0.20	N <0.20	N <0.20	N <0.20	N <0.20	N <0.20	N <0.20	N <0.20		

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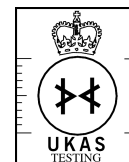
Torrington Avenue, Coventry, CV4 9GU Tel:+44 (0)24 7642 1213 Fax:+44 (0)24 7685 6575

Certificate of Analysis

Report Number: **COV/1399544/2017**

Issue **1**

Site Name: **Coed Ely**



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Group	Determinand	Unit	Method / Analysis Site	Ground Water			
				16157902		16157903	
				GW15	GW17	13/06/2017	13/06/2017
	Sulphate as SO4	g/l	WAS036 Cov	N	0.0059	N	0.0148
Metals	Iron, Filtered as Fe	ug/l	WAS049 Cov	Y	<230	Y	<230
	Iron, Total as Fe	mg/l	WAS049 Cov	Y	269	Y	19.0
Inorganics	pH	pH units	WAS039 Cov	Y	6.8	Y	6.3
	Conductivity- Electrical 20C	uS/cm	WAS039 Cov	Y	259	Y	167
	Ammoniacal Nitrogen as N (LL)	mg/l	WAS067 Cov	Y	<0.06	Y	<0.06
	Cyanide, Free as CN	mg/l	WAS018 Cov	N	<0.008	N	<0.008
	Phenols Mono (Phenol Index)	mg/l	WAS019 Cov	Y	<0.10	Y	<0.10
Chlor. Solvents	Benzene	ug/l	GEO56 Cov	Y	<0.10	Y	<0.10
	Ethyl Benzene	ug/l	GEO56 Cov	Y	<0.10	Y	<0.10
TPH	EH >C6 - C40	ug/l	GEO35 Cov	N	<40	N	<40
PAH	Acenaphthene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Acenaphthylene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Anthracene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Benzo (a) anthracene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Benzo (g,h,i) perylene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Benzo (a) pyrene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Benzo (b) fluoranthene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Benzo (k) fluoranthene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Chrysene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Dibenz (a,h) anthracene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Fluoranthene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Fluorene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Indeno (1,2,3) cd pyrene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01
	Naphthalene	ug/l	GEO19 Cov	Y	<0.04	Y	<0.01

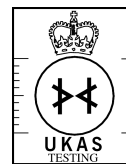
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Report Number: **COV/1399544/2017**

Issue **1**

Site Name: **Coed Ely**

Group	Determinand	Unit	Method / Analysis Site	Ground Water		
				16157902	16157903	
				GW15	GW17	
				13/06/2017	13/06/2017	
PAH	Phenanthrene	ug/l	GEO19	Cov	Y <0.04	Y 0.012
	Pyrene	ug/l	GEO19	Cov	Y <0.04	Y <0.01
	PAH, Total	ug/l	GEO19	Cov	N <0.04	N 0.012
Other	Toluene	ug/l	GEO56	Cov	Y <0.10	Y <0.10
	m&p Xylene	ug/l	GEO56	Cov	Y <0.20	Y <0.20
	o-Xylene	ug/l	GEO56	Cov	Y <0.10	Y <0.10
	Total Xylenes	ug/l	GEO56	Cov	N <0.20	N <0.20

Signed: 	Name: C. Law	Date: 30 June 2017
	Title: Inorganics Operations Manager	

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ANALYST COMMENTS FOR REPORT

COV/1399544/2017

Issue 1

Date of Issue: 30 June 2017

Sample No	Analyst Comments
16157892	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. This sample was re-extracted for EH outside recommended stability times due to quality failure. It is therefore possible that the results provided could be compromised. Reporting limits raised for EH analysis due to quality control failure on the original.
16157893	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. This sample was re-extracted for EH outside recommended stability times due to quality failure. It is therefore possible that the results provided could be compromised. Reporting limits raised for EH analysis due to quality control failure on the original.
16157894	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to quality control failure on the original. Sample re-analysed from different container. It is therefore possible that the results provided for EH could be compromised.
16157895	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to nature of sample matrix.
16157896	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to quality control failure on the original. Sample re-analysed from different container. It is therefore possible that the results provided for EH could be compromised.
16157897	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to quality control failure on the original. Sample re-analysed outside stability time. It is therefore possible that the results provided for EH could be compromised.
16157898	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to quality control failure on the original. Sample re-analysed outside stability time. It is therefore possible that the results provided for EH could be compromised.
16157899	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to quality control failure on the original. Sample re-analysed outside stability time. It is therefore possible that the results provided for EH could be compromised.
16157900	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to quality control failure on the original. Sample re-analysed outside stability time. It is therefore possible that the results provided for EH could be compromised.
16157901	This sample has been analysed for PAH Waters method GEO19, pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to quality control failure on the original. Sample re-analysed outside stability time. It is therefore possible that the results provided for EH could be compromised.
16157902	This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to nature of sample matrix.

ANALYST COMMENTS FOR REPORT

COV/1399544/2017

Issue 1

Date of Issue: 30 June 2017

Sample No	Analyst Comments
16157903	This sample has been analysed for pH outside recommended stability times. It is therefore possible that the results provided may be compromised. Reporting limits raised for EH analysis due to nature of sample matrix.

Signed:



Name: C. Law


Date: 30 June 2017

Title: Inorganics Operations Manager



Date of Issue : 30 June 2017

Sample No	Description	Determinand	Comments

Signed: 	Name: C. Law Title: Inorganics Operations Manager	Date: 30 June 2017
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