

ALS Environmental Ltd Torrington Avenue Coventry CV4 9GU

T: +44 (0)24 7642 1213 F: +44 (0)24 7685 6575 www.alsenvironmental.co.uk

01 September 2022

Test Report: COV/2361745/2022

Dear Mr Morris

Mr Morris Enviroarm Ltd

597 Walsall Road

Walsall WS6 6AE Staffordshire

Great Wyrley

Analysis of your sample(s) submitted on 19 August 2022 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:

Inorganics Chemistry Manager



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.

Report Summary

ANALYSED BY

Mr Andy Morris Enviroarm Ltd 597 Walsall Road Great Wyrley Walsall Staffordshire WS6 6AE	
Date of Issue: 01 September 2022	
Report Number: COV/236174	5/2022 ISSUE 1 This issue replaces all previous issues
Job Description: Water Analysis	
Job Location: Chadwich Lane	
Number of Samples included in this report 5	Job Received: 19 August 2022
Number of Test Results included in this report 125	Analysis Commenced: 20 August 2022
Signed: Ratio	Name:P. PatelDate:01 September 2022Title:Inorganics Chemistry 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 and where relevant sampled.

Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory. This test report is not a statement of conformity to any specification or standard.

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ANALYSED BY



Report Number: Laboratory Number:

Sample Source: Sample Point Description: Sample Description: Sample Matrix: Sample Date/Time: Sample Received: Analysis Complete: Enviroarm Ltd BH1 Not Specified 18 August 2022 19 August 2022 01 September 2022

COV/2361745/2022

21951350

Issue 1 Sample 1 of 5

Test Description	Result	Units	Analysis Date	Accreditation	Method
Cadmium , Total as Cd	<0.0006	mg/l	26/08/2022	N Cov	WAS049
Calcium , Total as Ca	35.6	mg/l	26/08/2022	N Cov	WAS049
Chromium , Total as Cr	<0.002	mg/l	26/08/2022	N Cov	WAS049
Copper, Total as Cu	<0.009	mg/l	26/08/2022	N Cov	WAS049
Iron , Total as Fe	0.26	mg/l	26/08/2022	N Cov	WAS049
Lead , Total as Pb	<0.006	mg/l	26/08/2022	N Cov	WAS049
Magnesium, Total as Mg	13.0	mg/l	31/08/2022	N Cov	WAS049
Manganese , Total as Mn	46.2	ug/l	26/08/2022	N Cov	WAS049
Mercury, Total as Hg	<0.00001	mg/l	26/08/2022	N Cov	WAS013
Nickel , Total as Ni	13.1	ug/l	26/08/2022	N Cov	WAS049
Potassium , Total as K	8.13	mg/l	31/08/2022	N Cov	WAS049
Sodium , Total as Na	14.0	mg/l	31/08/2022	N Cov	WAS049
Zinc, Total as Zn	0.02	mg/l	26/08/2022	N Cov	WAS049
рН	6.3	pH units	20/08/2022	N Cov	WAS039
Conductivity- Electrical 20C	403	uS/cm	20/08/2022	N Cov	WAS039
Alkalinity as CaCO3	76.0	mg/l	24/08/2022	N Cov	WAS025
Ammoniacal Nitrogen as N (LL)	<0.06	mg/l	22/08/2022	N Cov	WAS067
Chloride as Cl	28.8	mg/l	22/08/2022	N Cov	WAS036
Nitrite as N	<0.08	mg/l	22/08/2022	N Cov	WAS036
Nitrate as N	5.3	mg/l	22/08/2022	N Cov	WAS036
Sulphate as SO4	55.1	mg/l	22/08/2022	N Cov	WAS036
Dissolved Oxygen, Fixed	4.6	mg/l	22/08/2022	N Cov	WAS052
COD (Total)	13.0	mg/l	25/08/2022	N Cov	WAS040

Certificate of Analysis			ANALYSED E	BY			
			ALS				
Report Number: Laboratory Number:	COV/2361745/2022 21951350				lss Sai	ue 1 mple 1	of 5
Sample Source: Sample Point Description							
Sample Description: Sample Matrix: Sample Date/Time:	BH1 Not Specified 18 August 2022						
Sample Received: Analysis Complete:	19 August 2022 01 September 2022						
Test Des	cription	2.8	Units mg/l	Analysis Date 23/08/2022		tation Cov	Method WAS005

Analyst	Comments	for	21951350:
Analyse	001111101110		21001000.

This sample has been analysed for Nitrite as N, Nitrate as N, COD (Total) outside recommended stability times. It is therefore possible that the results provided may be compromised.

22/08/2022

Ν

Cov

WAS018

Cyanide, Total as CN

This issue replaces all previous issues Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS. Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO21 2RU), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer. For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered.

< 0.009

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

P. Satra Signed:

Name: P. Patel

mg/l

Date: 01 September 2022

Title: **Inorganics Chemistry Manager**

ANALYSED BY



Report Number: Laboratory Number:

Sample Source: Sample Point Description: Sample Description: Sample Matrix: Sample Date/Time: Sample Received: Analysis Complete:

Enviroarm Ltd BH2 Not Specified 18 August 2022 19 August 2022 01 September 2022

COV/2361745/2022

21951351

Issue 1 Sample 2 of 5

Test Description	Result	Units	Analysis Date	Accreditation	Method
Cadmium , Total as Cd	0.0018	mg/l	26/08/2022	N Cov	WAS049
Calcium , Total as Ca	39.2	mg/l	26/08/2022	N Cov	WAS049
Chromium , Total as Cr	0.025	mg/l	26/08/2022	N Cov	WAS049
Copper, Total as Cu	<0.009	mg/l	26/08/2022	N Cov	WAS049
Iron , Total as Fe	2.06	mg/l	26/08/2022	N Cov	WAS049
Lead , Total as Pb	0.008	mg/l	26/08/2022	N Cov	WAS049
Magnesium, Total as Mg	18.6	mg/l	31/08/2022	N Cov	WAS049
Manganese , Total as Mn	225	ug/l	26/08/2022	N Cov	WAS049
Mercury, Total as Hg	0.00003	mg/l	26/08/2022	N Cov	WAS013
Nickel , Total as Ni	108	ug/l	26/08/2022	N Cov	WAS049
Potassium , Total as K	3.60	mg/l	31/08/2022	N Cov	WAS049
Sodium , Total as Na	10.8	mg/l	31/08/2022	N Cov	WAS049
Zinc, Total as Zn	0.107	mg/l	26/08/2022	N Cov	WAS049
рН	5.5	pH units	20/08/2022	N Cov	WAS039
Conductivity- Electrical 20C	414	uS/cm	20/08/2022	N Cov	WAS039
Alkalinity as CaCO3	4.8	mg/l	24/08/2022	N Cov	WAS025
Ammoniacal Nitrogen as N (LL)	<0.06	mg/l	22/08/2022	N Cov	WAS067
Chloride as Cl	28.3	mg/l	22/08/2022	N Cov	WAS036
Nitrite as N	<0.08	mg/l	22/08/2022	N Cov	WAS036
Nitrate as N	20.4	mg/l	22/08/2022	N Cov	WAS036
Sulphate as SO4	85.6	mg/l	22/08/2022	N Cov	WAS036
Dissolved Oxygen, Fixed	7.0	mg/l	22/08/2022	N Cov	WAS052
COD (Total)	21.0	mg/l	25/08/2022	N Cov	WAS040

Certificate of Analysis		ANALYSED BY	
		ALS	
Report Number: _aboratory Number:	COV/2361745/2022 21951351		lssue 1 Sample 2 of 5
Sample Source: Sample Point Description:	Enviroarm Ltd		
Sample Description:	BH2		
Sample Matrix:	Not Specified		
Sample Date/Time:	18 August 2022		
Sample Received:	19 August 2022		
Analysis Complete:	01 September 2022		

Test Description	Result	Units	Analysis Date	Accre	ditation	Method
TOC (Filtered)	1.8	mg/l	23/08/2022	Ν	Cov	WAS005
Cyanide, Total as CN	<0.009	mg/l	22/08/2022	Ν	Cov	WAS018

Analyst Comments for 21951351:

This sample has been analysed for Nitrite as N, Nitrate as N, COD (Total) outside recommended stability times. It is therefore possible that the results provided may be compromised. {/*}Sample filtered through 0.45um filter prior to Cyanide analysis.{*/}

This issue replaces all previous issues Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS. Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO21 2RU), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

F = Data supplied by customer.
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered.
I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed: Rate

Name: P. Patel Date: 01 September 2022

Title: **Inorganics Chemistry Manager**

ANALYSED BY



Report Number: Laboratory Number:

Sample Source: Sample Point Description: Sample Description: Sample Matrix: Sample Date/Time: Sample Received: Analysis Complete: 21951352 Enviroarm Ltd BH3 Not Specified 18 August 2022 19 August 2022

01 September 2022

COV/2361745/2022

Issue 1 Sample 3 of 5

Test Description	Result	Units	Analysis Date	Accreditation	Method
Cadmium , Total as Cd	0.0008	mg/l	26/08/2022	N Cov	WAS049
Calcium , Total as Ca	51.6	mg/l	26/08/2022	N Cov	WAS049
Chromium , Total as Cr	0.048	mg/l	26/08/2022	N Cov	WAS049
Copper, Total as Cu	<0.009	mg/l	26/08/2022	N Cov	WAS049
Iron , Total as Fe	1.93	mg/l	26/08/2022	N Cov	WAS049
Lead , Total as Pb	<0.006	mg/l	26/08/2022	N Cov	WAS049
Magnesium, Total as Mg	13.9	mg/l	31/08/2022	N Cov	WAS049
Manganese , Total as Mn	338	ug/l	26/08/2022	N Cov	WAS049
Mercury, Total as Hg	0.00034	mg/l	26/08/2022	N Cov	WAS013
Nickel , Total as Ni	85.2	ug/l	26/08/2022	N Cov	WAS049
Potassium , Total as K	5.96	mg/l	31/08/2022	N Cov	WAS049
Sodium , Total as Na	9.28	mg/l	31/08/2022	N Cov	WAS049
Zinc, Total as Zn	0.113	mg/l	26/08/2022	N Cov	WAS049
РН	6.6	pH units	20/08/2022	N Cov	WAS039
Conductivity- Electrical 20C	600	uS/cm	20/08/2022	N Cov	WAS039
Alkalinity as CaCO3	4.6	mg/l	24/08/2022	N Cov	WAS025
Ammoniacal Nitrogen as N (LL)	<0.06	mg/l	22/08/2022	N Cov	WAS067
Chloride as Cl	28.1	mg/l	22/08/2022	N Cov	WAS036
Nitrite as N	<0.08	mg/l	22/08/2022	N Cov	WAS036
Nitrate as N	4.4	mg/l	22/08/2022	N Cov	WAS036
Sulphate as SO4	152	mg/l	22/08/2022	N Cov	WAS036
Dissolved Oxygen, Fixed	7.7	mg/l	22/08/2022	N Cov	WAS052
COD (Total)	29.0	mg/l	25/08/2022	N Cov	WAS040

Certificate of Analysis		ANALYSED BY	
		ALS	
Report Number: Laboratory Number:	COV/2361745/2022 21951352		Issue 1 Sample 3 of 5
Sample Source: Sample Point Descriptio	Enviroarm Ltd		
Sample Description:	BH3		
Sample Matrix:	Not Specified		
Sample Date/Time:	18 August 2022		
Sample Received:	19 August 2022 01 September 2022		

Test Description	Result	Units	Analysis Date	Accreditation	on Method
TOC (Filtered)	1.7	mg/l	23/08/2022	N Cov	WAS005
Cyanide, Total as CN	<0.009	mg/l	22/08/2022	N Cov	WAS018

Analyst Comments for 21951352:

This sample has been analysed for Nitrite as N, Nitrate as N, COD (Total) outside recommended stability times. It is therefore possible that the results provided may be compromised. {/*}Sample filtered through 0.45um filter prior to Cyanide analysis.{*/}

This issue replaces all previous issues Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS. Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO21 2RU), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

F = Data supplied by customer.
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered.
I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed: Rate

Name: P. Patel Date: 01 September 2022

Title: **Inorganics Chemistry Manager**

ANALYSED BY



Report Number: Laboratory Number:

Sample Source: Sample Point Description: Sample Description: Sample Matrix: Sample Date/Time: Sample Received: Analysis Complete: 21951353 Enviroarm Ltd BH4 Not Specified 18 August 2022 19 August 2022 01 September 2022

COV/2361745/2022

Issue 1 Sample 4 of 5

Test Description	Result	Units	Analysis Data	Accreditation	Method
•			-		Wethod WAS049
Cadmium , Total as Cd	<0.0006	mg/l	26/08/2022	N Cov	
Calcium , Total as Ca	23.0	mg/l	26/08/2022	N Cov	WAS049
Chromium , Total as Cr	0.002	mg/l	26/08/2022	N Cov	WAS049
Copper, Total as Cu	<0.009	mg/l	26/08/2022	N Cov	WAS049
Iron , Total as Fe	1.21	mg/l	26/08/2022	N Cov	WAS049
Lead , Total as Pb	<0.006	mg/l	26/08/2022	N Cov	WAS049
Magnesium, Total as Mg	6.3	mg/l	31/08/2022	N Cov	WAS049
Manganese , Total as Mn	111	ug/l	26/08/2022	N Cov	WAS049
Mercury, Total as Hg	0.00001	mg/l	26/08/2022	N Cov	WAS013
Nickel , Total as Ni	13.7	ug/l	26/08/2022	N Cov	WAS049
Potassium , Total as K	3.93	mg/l	31/08/2022	N Cov	WAS049
Sodium , Total as Na	6.96	mg/l	31/08/2022	N Cov	WAS049
Zinc, Total as Zn	<0.018	mg/l	26/08/2022	N Cov	WAS049
рН	5.7	pH units	20/08/2022	N Cov	WAS039
Conductivity- Electrical 20C	211	uS/cm	27/08/2022	N Cov	WAS039
Alkalinity as CaCO3	7.2	mg/l	24/08/2022	N Cov	WAS025
Ammoniacal Nitrogen as N (LL)	<0.06	mg/l	22/08/2022	N Cov	WAS067
Chloride as Cl	11.9	mg/l	22/08/2022	N Cov	WAS036
Nitrite as N	<0.08	mg/l	22/08/2022	N Cov	WAS036
Nitrate as N	7.1	mg/l	22/08/2022	N Cov	WAS036
Sulphate as SO4	48.0	mg/l	22/08/2022	N Cov	WAS036
Dissolved Oxygen, Fixed	8.5	mg/l	22/08/2022	N Cov	WAS052
COD (Total)	15.0	mg/l	25/08/2022	N Cov	WAS040

ALS Environmental Ltd

Certificate of		ANALYSED	ЗΥ					
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Report Number:	COV/2361745/2022				I	Issue	1	
Laboratory Number:	21951353				:	Sample	4	of 5
Sample Source: Sample Point Description:	Enviroarm Ltd							
Sample Description:	BH4							
Sample Matrix:	Not Specified							
Sample Date/Time: Sample Received:	18 August 2022 19 August 2022							
Sample Received: Analysis Complete:	01 September 2022							
Test Desc	ription	Result	Units	Analysis Date	Accre	ditation		Method
OC (Filtered)		1.2	mg/l	23/08/2022	N	Cov		WAS005
			1				1	

Cyanide, Total as CN

Analyst Comments for 21951353:

This sample has been analysed for Nitrite as N, Nitrate as N, COD (Total) outside recommended stability times. It is therefore possible that the results provided may be compromised.

22/08/2022

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Cov

WAS018

This issue replaces all previous issues Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS. Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO21 2RU), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG),

< 0.009

F = Data supplied by customer. For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered.

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

P. Salin Signed:

Name: P. Patel Date: 01 September 2022

Title: **Inorganics Chemistry Manager**

mg/l

ANALYSED BY



Report Number: Laboratory Number:

Sample Source: Sample Point Description: Sample Description: Sample Matrix: Sample Date/Time: Sample Received: Analysis Complete:

Enviroarm Ltd BH5 Not Specified 18 August 2022 19 August 2022 01 September 2022

COV/2361745/2022

21951354

Issue 1 Sample 5 of 5

Test Description	Result	Units	Analysis Date	Accreditation	Method
Cadmium , Total as Cd	<0.0006	mg/l	26/08/2022	N Cov	WAS049
Calcium , Total as Ca	21.4	mg/l	26/08/2022	N Cov	WAS049
Chromium , Total as Cr	<0.002	mg/l	26/08/2022	N Cov	WAS049
Copper, Total as Cu	<0.009	mg/l	26/08/2022	N Cov	WAS049
Iron , Total as Fe	<0.23	mg/l	26/08/2022	N Cov	WAS049
Lead , Total as Pb	<0.006	mg/l	26/08/2022	N Cov	WAS049
Magnesium, Total as Mg	4.9	mg/l	31/08/2022	N Cov	WAS049
Manganese , Total as Mn	26.7	ug/l	26/08/2022	N Cov	WAS049
Mercury, Total as Hg	<0.00001	mg/l	26/08/2022	N Cov	WAS013
Nickel , Total as Ni	3.20	ug/l	26/08/2022	N Cov	WAS049
Potassium , Total as K	5.06	mg/l	31/08/2022	N Cov	WAS049
Sodium , Total as Na	26.0	mg/l	26/08/2022	N Cov	WAS049
Zinc, Total as Zn	<0.018	mg/l	26/08/2022	N Cov	WAS049
рН	6.1	pH units	20/08/2022	N Cov	WAS039
Conductivity- Electrical 20C	299	uS/cm	20/08/2022	N Cov	WAS039
Alkalinity as CaCO3	11.6	mg/l	24/08/2022	N Cov	WAS025
Ammoniacal Nitrogen as N (LL)	<0.06	mg/l	22/08/2022	N Cov	WAS067
Chloride as Cl	33.6	mg/l	22/08/2022	N Cov	WAS036
Nitrite as N	<0.08	mg/l	22/08/2022	N Cov	WAS036
Nitrate as N	8.2	mg/l	22/08/2022	N Cov	WAS036
Sulphate as SO4	53.4	mg/l	22/08/2022	N Cov	WAS036
Dissolved Oxygen, Fixed	9.2	mg/l	22/08/2022	N Cov	WAS052
COD (Total)	<11.0	mg/l	25/08/2022	N Cov	WAS040

Certificate of Analysis			ANALYSED I	BY		
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Report Number: Laboratory Number:	COV/2361745/2022 21951354				lssue Sample	1 5 of 5
Sample Source: Sample Point Description Sample Description: Sample Matrix: Sample Date/Time: Sample Received: Analysis Complete:	Enviroarm Ltd BH5 Not Specified 18 August 2022 19 August 2022 01 September 2022					
Test Des	cription	Result	Units	Analysis Date	Accreditation	Method

Test Description	Result	Units	Analysis Date	Accred	litation	Method
TOC (Filtered)	1.1	mg/l	23/08/2022	Ν	Cov	WAS005
Cyanide, Total as CN	<0.009	mg/l	22/08/2022	Ν	Cov	WAS018

Analyst Comments for 21951354:

This sample has been analysed for Nitrite as N, Nitrate as N, COD (Total) outside recommended stability times. It is therefore possible that the results provided may be compromised.

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P. Katry Signed:

Name: P. Patel

Date: 01 September 2022

Title: **Inorganics Chemistry Manager**

ALS Environmental Ltd Torrington Avenue, Coventry, CV4 9GU Tel:+44 (0)24 7642 1213 Fax:+44 (0)24 7685 6575 Page Intentionally Left Blank