



Tuesday, August 2, 2022

Randy Evans  
Randy Evans  
328 South Overland Tr.  
Fort Collins, CO 80521

Re: ALS Workorder: 2207449  
Project Name: WPWT Facility  
Project Number:

Dear Mr. Evans:

One water sample was received from Randy Evans, on 7/20/2022. The sample was scheduled for the following analyses:

Inorganics

Metals

Cl, F, SO4, TDS - Subcontracted to ALS Holland, MI

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

 FOR

ALS Environmental  
Katie M. OBrien  
Project Manager

	<h2>Accreditations</h2>	Effective June 7, 2022
	ALS   Environmental – Fort Collins	

**Accreditations:** ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Arizona	AZ0828
California (CA)	2926
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
Oklahoma	1301
Louisiana	197538
Maryland (MD)	285
PJLA (DoD ELAP/ISO 170250)	95377
PJLA (DOE-AP/ISO 17025)	95377
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO010992018-1
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	TN02976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280
Virginia	460305

**40 CFR Part 136:** All analyses for Clean Water Act samples are analyzed using the 40 CFR Part 136 specified method and include all the QC requirements.



**2207449**

**Metals:**

The sample was analyzed following SW-846, 3<sup>rd</sup> Edition procedures. Analysis by Trace ICP followed method 6010D and the current revision of SOP 834.

All acceptance criteria were met.

# ALS -- Fort Collins

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 2207449

**Client Name:** Randy Evans

**Client Project Name:** WPWT Facility

**Client Project Number:**

**Client PO Number:** WO 032

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Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Outfall 050B	2207449-1		WATER	20-Jul-22	14:00





**ALS Environmental - Fort Collins**  
**CONDITION OF SAMPLE UPON RECEIPT FORM**

Client: RANDY EVANS Workorder No: 2207449  
 Project Manager: KMO Initials: AXK Date: 07/21/2022

		N/A	YES	NO
1.	Are airbills / shipping documents present and/or removable?	X		
	Tracking number:			
2.	Are custody seals on shipping containers intact?	X		
3.	Are custody seals on sample containers intact?	X		
4.	Is there a COC (chain-of-custody) present?		X	
5.	Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)		X	
6.	Are short-hold samples present?			X
7.	Are all samples within holding times for the requested analyses?		X	
8.	Were all sample containers received intact? (not broken or leaking)		X	
9.	Is there sufficient sample for the requested analyses?		X	
10.	Are samples in proper containers for requested analyses? (form 250, <i>Sample Handling Guidelines</i> )		X	
11.	Are all aqueous samples preserved correctly, if required? (excluding volatiles)		X	
12.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm (1/4 inch) diameter? (i.e. size of green pea)	X		
13.	Were the samples shipped on ice?		X	
14.	Were cooler temperatures measured at 0.1-6.0°C?	IR gun used*: #6	RAD ONLY	X
	Cooler #: <u>1</u>			
	Temperature (°C): <u>2.3</u>			
	# of custody seals on cooler: <u>0</u>			
	External µR/hr reading: <u>-</u>			
	Background µR/hr reading: <u>11</u>			
	Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <u>NA</u> (If no, see Form 008.)			

\* Please provide details here for NO responses to boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.

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Were unpreserved bottles pH checked? NA All client bottle ID's vs ALS lab ID's double-checked by: AK

If applicable, was the client contacted? YES / NO / NA Contact: Margaret G. Brown Date/Time: 7/21/22

Project Manager Signature / Date: Margaret G. Brown 7/21/22

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 050B  
**Legal Location:**  
**Collection Date:** 7/20/2022 14:00

**Date:** 01-Aug-22  
**Work Order:** 2207449  
**Lab ID:** 2207449-1  
**Matrix:** WATER  
**Percent Moisture:**

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>Total Recoverable ICP Metals</b>			<b>SW6010</b>		Prep Date: <b>7/27/2022</b>	PrepBy: <b>ETC</b>
<b>BORON</b>	<b>0.89</b>		<b>0.1</b>	<b>MG/L</b>	1	7/29/2022 12:49
<b>BARIUM</b>	<b>ND</b>		<b>0.1</b>	<b>MG/L</b>	1	7/29/2022 12:49
<b>SODIUM</b>	<b>230</b>		<b>1</b>	<b>MG/L</b>	1	7/29/2022 12:49

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 050B  
**Legal Location:**  
**Collection Date:** 7/20/2022 14:00

**Date:** 01-Aug-22  
**Work Order:** 2207449  
**Lab ID:** 2207449-1  
**Matrix:** WATER  
**Percent Moisture:**

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
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**Explanation of Qualifiers**

**Radiochemistry:**

- "Report Limit" is the MDC
- U or ND - Result is less than the sample specific MDC.
- Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
- Y2 - Chemical Yield outside default limits.
- W - DER is greater than Warning Limit of 1.42
- \* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
- # - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
- G - Sample density differs by more than 15% of LCS density.
- D - DER is greater than Control Limit
- M - Requested MDC not met.
- M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
- L - LCS Recovery below lower control limit.
- H - LCS Recovery above upper control limit.
- P - LCS, Matrix Spike Recovery within control limits.
- N - Matrix Spike Recovery outside control limits
- NC - Not Calculated for duplicate results less than 5 times MDC
- B - Analyte concentration greater than MDC.
- B3 - Analyte concentration greater than MDC but less than Requested MDC.

**Inorganics:**

- B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
- U or ND - Indicates that the compound was analyzed for but not detected.
- E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
- M - Duplicate injection precision was not met.
- N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
- Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
- \* - Duplicate analysis (relative percent difference) not within control limits.
- S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

**Organics:**

- U or ND - Indicates that the compound was analyzed for but not detected.
- B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
- E - Analyte concentration exceeds the upper level of the calibration range.
- J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
- A - A tentatively identified compound is a suspected aldol-condensation product.
- X - The analyte was diluted below an accurate quantitation level.
- \* - The spike recovery is equal to or outside the control criteria used.
- + - The relative percent difference (RPD) equals or exceeds the control criteria.
- G - A pattern resembling gasoline was detected in this sample.
- D - A pattern resembling diesel was detected in this sample.
- M - A pattern resembling motor oil was detected in this sample.
- C - A pattern resembling crude oil was detected in this sample.
- 4 - A pattern resembling JP-4 was detected in this sample.
- 5 - A pattern resembling JP-5 was detected in this sample.
- H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
- L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
- Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
  - gasoline
  - JP-8
  - diesel
  - mineral spirits
  - motor oil
  - Stoddard solvent
  - bunker C

ALS -- Fort Collins

Date: 8/1/2022 1:36:30

Client: Randy Evans  
 Work Order: 2207449  
 Project: WPWT Facility

QC BATCH REPORT

Batch ID: IP220727-5-2 Instrument ID: ICP5900 Method: SW6010

**LCS** Sample ID: IP220727-5 Units: MG/L Analysis Date: 7/29/2022 12:45

Client ID: Run ID: IT220729-1A8 Prep Date: 7/27/2022 DF: 1

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BARIUM	1.01	0.1	1		101	80-120				20	
BORON	1.04	0.1	1		104	80-120				20	
SODIUM	40.2	1	40		100	80-120				20	

**LCSD** Sample ID: IP220727-5 Units: MG/L Analysis Date: 7/29/2022 12:46

Client ID: Run ID: IT220729-1A8 Prep Date: 7/27/2022 DF: 1

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BARIUM	0.942	0.1	1		94	80-120		1.01	7	20	
BORON	0.98	0.1	1		98	80-120		1.04	6	20	
SODIUM	37.5	1	40		94	80-120		40.2	7	20	

**MB** Sample ID: IP220727-5 Units: MG/L Analysis Date: 7/29/2022 12:44

Client ID: Run ID: IT220729-1A8 Prep Date: 7/27/2022 DF: 1

Analyte	Result	ReportLimit										Qual
BARIUM	ND	0.1										
BORON	ND	0.1										
SODIUM	ND	1										

The following samples were analyzed in this batch:



29-Jul-2022

Katie O'Brien  
ALS Environmental  
225 Commerce Dr  
Ft. Collins, CO 80524

Re: **2207449**

Work Order: **22072012**

Dear Katie,

ALS Environmental received 1 sample on 22-Jul-2022 03:30 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA  
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in cursive script that reads "Jodi Blouw".

Electronically approved by: Jodi Blouw

Jodi Blouw

### Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** ALS Environmental  
**Project:** 2207449  
**Work Order:** 22072012

**Work Order Sample Summary**

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<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
22072012-01	Outfall 050B	Water		7/20/2022 14:00	7/22/2022 15:30	<input type="checkbox"/>

**Client:** ALS Environmental  
**Project:** 2207449  
**WorkOrder:** 22072012

**QUALIFIERS,  
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCS D	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
mg/L	Milligrams per Liter

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**Client:** ALS Environmental  
**Project:** 2207449  
**Work Order:** 22072012

**Case Narrative**

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Samples for the above noted Work Order were received on 07/22/2022. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Wet Chemistry:  
No deviations or anomalies were noted.

**ALS Group USA, Corp**

Date: 29-Jul-22

**CLIENT:** ALS Environmental  
**Project:** 2207449

**Work Order:** 22072012

**Lab ID:** 22072012-01A  
**Client Sample ID:** Outfall 050B

**Collection Date:** 7/20/2022 2:00:00 PM  
**Matrix:** WATER

Analyses	Result	Report Limit	MDL	Qual	Units	Dilution Factor	Date Analyzed
<b>ANIONS BY ION CHROMATOGRAPHY</b>		<b>E300.0</b>		Analyst: <b>AML</b>			
Chloride	170	40	12		mg/L	40	7/27/2022 06:03 PM
Fluoride	1.9	0.10	0.067		mg/L	1	7/28/2022 12:06 PM
Sulfate	410	40	7.6		mg/L	40	7/27/2022 06:03 PM
<b>TOTAL DISSOLVED SOLIDS</b>		<b>A2540 C-11</b>		Analyst: <b>LAD</b>			
Total Dissolved Solids	1,400	100	74		mg/L	1	7/28/2022 12:39 PM

**Qualifiers:** U - Analyzed for but Not Detected      S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits      P - Dual Column results RPD > 40%  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level      H - Analyzed outside of Hold Time

Client: ALS Environmental  
 Work Order: 22072012  
 Project: 2207449

**QC BATCH REPORT**

Batch ID: **200270** Instrument ID **TDS** Method: **A2540 C-11**

<b>MBLK</b>		Sample ID: <b>MBLK-200270-200270</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 12:39 PM</b>			
Client ID:		Run ID: <b>TDS_220728B</b>				SeqNo: <b>8659302</b>		Prep Date: <b>7/26/2022</b>		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	U	22	30								

<b>LCS</b>		Sample ID: <b>LCS-200270-200270</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 12:39 PM</b>			
Client ID:		Run ID: <b>TDS_220728B</b>				SeqNo: <b>8659300</b>		Prep Date: <b>7/26/2022</b>		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	494	22	30	495	0	99.8	85-109	0			

<b>DUP</b>		Sample ID: <b>22072004-01A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 12:39 PM</b>			
Client ID:		Run ID: <b>TDS_220728B</b>				SeqNo: <b>8659275</b>		Prep Date: <b>7/26/2022</b>		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	1660	74	100	0	0	0	0-0	1627	2.03	10	

<b>DUP</b>		Sample ID: <b>22072173-03B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 12:39 PM</b>			
Client ID:		Run ID: <b>TDS_220728B</b>				SeqNo: <b>8659298</b>		Prep Date: <b>7/26/2022</b>		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	873.3	74	100	0	0	0	0-0	873.3	0	10	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental  
 Work Order: 22072012  
 Project: 2207449

# QC BATCH REPORT

Batch ID: **R349810** Instrument ID **IC3** Method: **E300.0**

MBLK		Sample ID: <b>MBLK/CCB-A-R349810</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 04:45 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8657992</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.31	1.0								
Sulfate	U	0.19	1.0								

MBLK		Sample ID: <b>MBLK/CCB-R349810</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 06:52 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8658005</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.31	1.0								
Sulfate	U	0.19	1.0								

MBLK		Sample ID: <b>MBLK/CCB-R349810</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 08:49 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8658017</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.31	1.0								
Sulfate	U	0.19	1.0								

MBLK		Sample ID: <b>MBLK/CCB-R349810</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 09:28 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8658021</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.31	1.0								
Sulfate	U	0.19	1.0								

LCS		Sample ID: <b>MLCCV/LCS-A-R349810</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 04:36 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8657991</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.721	0.31	1.0	10	0	97.2	90-110	0			
Sulfate	9.916	0.19	1.0	10	0	99.2	90-110	0			

LCS		Sample ID: <b>MLCCV/LCS-R349810</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 06:42 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8658004</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.673	0.31	1.0	10	0	96.7	90-110	0			
Sulfate	10.25	0.19	1.0	10	0	103	90-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental  
 Work Order: 22072012  
 Project: 2207449

# QC BATCH REPORT

Batch ID: **R349810** Instrument ID **IC3** Method: **E300.0**

LCS		Sample ID: <b>MLCCV/LCS-R349810</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 08:39 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8658016</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.704	0.31	1.0	10	0	97	90-110	0			
Sulfate	10.32	0.19	1.0	10	0	103	90-110	0			

LCS		Sample ID: <b>MLCCV/LCS-R349810</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 09:18 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8658020</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.754	0.31	1.0	10	0	97.5	90-110	0			
Sulfate	10.16	0.19	1.0	10	0	102	90-110	0			

MS		Sample ID: <b>22072027-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 08:20 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8658014</b>		Prep Date:		DF: <b>4</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	43.18	1.2	4.0	40	6.244	92.3	80-120	0			
Sulfate	73.36	0.76	4.0	40	34.8	96.4	80-120	0			

MSD		Sample ID: <b>22072027-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/27/2022 08:29 PM</b>			
Client ID:		Run ID: <b>IC3_220727A</b>				SeqNo: <b>8658015</b>		Prep Date:		DF: <b>4</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	43.25	1.2	4.0	40	6.244	92.5	80-120	43.18	0.16	20	
Sulfate	73.25	0.76	4.0	40	34.8	96.1	80-120	73.36	0.151	20	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental  
 Work Order: 22072012  
 Project: 2207449

# QC BATCH REPORT

Batch ID: **R349929** Instrument ID **IC3** Method: **E300.0**

MBLK		Sample ID: <b>CCB/MBLK-A-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 11:27 AM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661727</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.067	0.10								

MBLK		Sample ID: <b>CCB/MBLK-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 02:17 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661739</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.067	0.10								

MBLK		Sample ID: <b>CCB/MBLK-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 05:29 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661751</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.067	0.10								

MBLK		Sample ID: <b>CCB/MBLK-B-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 06:08 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661755</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.067	0.10								

MBLK		Sample ID: <b>CCB/MBLK-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 08:05 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661767</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.067	0.10								

MBLK		Sample ID: <b>CCB/MBLK-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 09:52 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661778</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.067	0.10								

LCS		Sample ID: <b>MLCCV/LCS-A-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 11:17 AM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661726</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.06	0.067	0.10	2	0	103	90-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental  
 Work Order: 22072012  
 Project: 2207449

# QC BATCH REPORT

Batch ID: **R349929** Instrument ID **IC3** Method: **E300.0**

LCS		Sample ID: <b>MLCCV/LCS-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 02:08 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661738</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.156	0.067	0.10	2	0	108	90-110	0			

LCS		Sample ID: <b>MLCCV/LCS-R349929</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 05:19 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661750</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.155	0.067	0.10	2	0	108	90-110	0			

MS		Sample ID: <b>22072027-02A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 01:48 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661736</b>		Prep Date:		DF: <b>10</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	23.3	0.67	1.0	20	0	116	80-120	0			

MS		Sample ID: <b>22072004-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 02:56 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661743</b>		Prep Date:		DF: <b>100</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	223.8	6.7	10	200	-4.38	114	80-120	0			

MSD		Sample ID: <b>22072027-02A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 01:58 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661737</b>		Prep Date:		DF: <b>10</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	23.38	0.67	1.0	20	0	117	80-120	23.3	0.343	20	

MSD		Sample ID: <b>22072004-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>7/28/2022 03:06 PM</b>			
Client ID:		Run ID: <b>IC3_220728A</b>				SeqNo: <b>8661744</b>		Prep Date:		DF: <b>100</b>	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	217.3	6.7	10	200	-4.38	111	80-120	223.8	2.94	20	

The following samples were analyzed in this batch: 22072012-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Sample Receipt Checklist

Client Name: **ALS - FORT COLLINS**

Date/Time Received: **22-Jul-22 15:30**

Work Order: **22072012**

Received by: **KRW**

Checklist completed by Keith Wierenga 25-Jul-22  
eSignature Date

Reviewed by: Jadi Blawie 25-Jul-22  
eSignature Date

Matrices: **Water**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<input type="text" value="4.8/5.8 C"/>		<input type="text" value="IR3"/>
Cooler(s)/Kit(s):	<input type="text"/>		
Date/Time sample(s) sent to storage:	<input type="text" value="7/25/2022 9:02:51 AM"/>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<input type="text"/>		

Login Notes:

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Client Contacted: \_\_\_\_\_ Date Contacted: \_\_\_\_\_ Person Contacted: \_\_\_\_\_

Contacted By: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments:

CorrectiveAction: