



Thursday, November 11, 2021

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

Re: ALS Workorder: 2110525  
Project Name: WPWT Facility  
Project Number:

Dear Mr. Evans:

Two water samples were received from Randy Evans, on 10/22/2021. The samples were scheduled for the following analyses:

GC/MS Volatiles

Inorganics

Metals

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,

ALS Environmental  
Katie M. OBrien  
Project Manager

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
California (CA)	2926
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
PJ-LA (DoD ELAP/ISO 170250)	95377
Maryland (MD)	285
Missouri (MO)	175
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

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.



## 2110525

### **GC/MS Volatiles:**

The sample was analyzed using GC/MS following the current revision of SOP 525 based on SW-846 Method 8260C.

All acceptance criteria were met.

### **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. Analysis by ICPMS followed method 6020B and the current revision of SOP 827.

All acceptance criteria were met.

### **Inorganics:**

The sample was analyzed following EMSL and Standard Method procedures for the current revisions of the following SOPs and methods:

<u>Analyte</u>	<u>Method</u>	<u>SOP #</u>
TDS	SM2540C	1101
Chloride	300.0 Revision 2.1	1113
Fluoride	300.0 Revision 2.1	1113
Sulfate	300.0 Revision 2.1	1113

All acceptance criteria were met.

# ALS -- Fort Collins

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 2110525

**Client Name:** Randy Evans

**Client Project Name:** WPWT Facility

**Client Project Number:**

**Client PO Number:** WO 014

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Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Outfall 001 A	2110525-1		WATER	22-Oct-21	13:15
Outfall 001 A	2110525-2		WATER	22-Oct-21	11:15



2225 Commerce Drive, Fort Collins, Colorado 80524  
 T: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

## Chain-of-Custody

2110525

Form 202r8



2 1 1 0 5 2 5 - C



[illegible]

\*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

**For metals or anions, please detail analytes below.**

Comments:		4.2	
Outfall Facility ID #: 767700			
QC PACKAGE (check below)			
LEVEL II (Standard QC)			
LEVEL III (Std QC + forms)			
LEVEL IV (Std QC + forms + raw data)			
Preservative Key:		1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

For metals or anions, please detail analytes below.

SIGNATURE	PRINTED NAME	DATE	TIME
	Randy Evans	10/22/2021	1330
	Amy Kaplan	10/22/21	1400

5 of 14



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

Client: RANDY EVANS Workorder No: 2110525  
 Project Manager: KMO Initials: AXK Date: 10/22/2021

				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*: #5	RAD ONLY	X
Cooler #: <u>1</u> Temperature (°C): <u>4.2</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? YES (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.

Sample 1 bottle 1 had initial pH of 6 so added 1.0ml HNO3 lot 267725 to achieve pH <2.

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: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Project Manager Signature / Date: [Signature] 10/25/21

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 001 A  
**Legal Location:**  
**Collection Date:** 10/22/2021 13:15

**Date:** 08-Nov-21  
**Work Order:** 2110525  
**Lab ID:** 2110525-1  
**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>10/27/2021</b>	PrepBy: <b>WJS</b>
BORON	2.3		0.1	MG/L	1	10/28/2021 12:51
BARIUM	6.3		0.1	MG/L	1	10/28/2021 12:51
SODIUM	760		10	MG/L	10	10/28/2021 12:56
<b>Total Recoverable ICPMS Metals</b>		<b>SW6020</b>			Prep Date: <b>10/27/2021</b>	PrepBy: <b>WJS</b>
THALLIUM	ND		0.15	UG/L	10	11/2/2021 18:03
<b>Ion Chromatography</b>		<b>EPA300.0</b>			Prep Date: <b>11/3/2021</b>	PrepBy: <b>AOW</b>
CHLORIDE	410		5	MG/L	25	11/3/2021 14:22
FLUORIDE	4.5		2.5	MG/L	25	11/3/2021 14:22
SULFATE	ND		25	MG/L	25	11/3/2021 14:22
<b>Total Dissolved Solids</b>		<b>SM2540C</b>			Prep Date: <b>10/26/2021</b>	PrepBy: <b>BMK</b>
TOTAL DISSOLVED SOLIDS	2300		80	MG/L	1	11/3/2021

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 001 A  
**Legal Location:**  
**Collection Date:** 10/22/2021 11:15

**Date:** 08-Nov-21  
**Work Order:** 2110525  
**Lab ID:** 2110525-2  
**Matrix:** WATER  
**Percent Moisture:**

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>GC/MS Volatiles</b>			<b>SW8260_25</b>		Prep Date: <b>10/25/2021</b>	PrepBy: <b>DJL</b>
BENZENE	ND		1	UG/L	1	10/25/2021 15:24
TOLUENE	ND		1	UG/L	1	10/25/2021 15:24
ETHYLBENZENE	ND		1	UG/L	1	10/25/2021 15:24
M+P-XYLENE	ND		1	UG/L	1	10/25/2021 15:24
O-XYLENE	ND		1	UG/L	1	10/25/2021 15:24
NAPHTHALENE	ND		1	UG/L	1	10/25/2021 15:24
Surr: DIBROMOFLUOROMETHANE	101		80-120	%REC	1	10/25/2021 15:24
Surr: TOLUENE-D8	98		80-120	%REC	1	10/25/2021 15:24
Surr: 4-BROMOFLUOROBENZENE	99		80-120	%REC	1	10/25/2021 15:24



**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 001 A  
**Legal Location:**  
**Collection Date:** 10/22/2021 11:15

**Date:** 08-Nov-21  
**Work Order:** 2110525  
**Lab ID:** 2110525-2  
**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	M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
U or ND - Result is less than the sample specific MDC.	L - LCS Recovery below lower control limit.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.	H - LCS Recovery above upper control limit.
Y2 - Chemical Yield outside default limits.	P - LCS, Matrix Spike Recovery within control limits.
W - DER is greater than Warning Limit of 1.42	N - Matrix Spike Recovery outside control limits
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.	NC - Not Calculated for duplicate results less than 5 times MDC
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.	B - Analyte concentration greater than MDC.
G - Sample density differs by more than 15% of LCS density.	B3 - Analyte concentration greater than MDC but less than Requested MDC.
D - DER is greater than Control Limit	
M - Requested MDC not met.	

#### 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

Client: Randy Evans  
Work Order: 2110525  
Project: WPWT Facility

Date: 11/8/2021 3:51:

## QC BATCH REPORT

Batch ID: IP211027-4-4 Instrument ID ICPTTrace2 Method: SW6010

LCS	Sample ID: IP211027-4				Units: MG/L		Analysis Date: 10/28/2021 12:44				
Client ID:	Run ID: IT211028-1A8				Prep Date: 10/27/2021			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
BARIUM	0.991	0.1	1		99	80-120				20	
BORON	0.981	0.1	1		98	80-120				20	
SODIUM	40.9	1	40		102	80-120				20	

LCSD	Sample ID: IP211027-4				Units: MG/L		Analysis Date: 10/28/2021 12:48				
Client ID:	Run ID: IT211028-1A8				Prep Date: 10/27/2021			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
BARIUM	0.984	0.1	1		98	80-120		0.991	1	20	
BORON	0.978	0.1	1		98	80-120		0.981	0	20	
SODIUM	40.7	1	40		102	80-120		40.9	0	20	

MB	Sample ID: IP211027-4	Units: MG/L	Analysis Date: 10/28/2021 12:43
Client ID:	Run ID: IT211028-1A8	Prep Date: 10/27/2021	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:

2110525-1

**Client:** Randy Evans  
**Work Order:** 2110525  
**Project:** WPWT Facility

## QC BATCH REPORT

Batch ID: **IP211027-4-7** Instrument ID **ICPMS2** Method: **SW6020**

LCS	Sample ID: IM211027-4				Units: UG/L		Analysis Date: 11/2/2021 17:39				
Client ID:	Run ID: IM211102-10A7				Prep Date: 10/27/2021			DF: 10			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
THALLIUM	1.96	0.15	2		98	80-120				20	

LCSD	Sample ID: <b>IM211027-4</b>				Units: <b>UG/L</b>		Analysis Date: <b>11/2/2021 17:45</b>				
Client ID:	Run ID: <b>IM211102-10A7</b>				Prep Date: <b>10/27/2021</b>			DF: <b>10</b>			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
THALLIUM	2	0.15	2		100	80-120		1.96	2	20	

MB		Sample ID: IP211027-4			Units: UG/L		Analysis Date: 11/2/2021 17:36			
Client ID:		Run ID: IM211102-10A7			Prep Date: 10/27/2021		DF: 10			
Analyte		Result	ReportLimit							Qual
THALLIUM		ND	0.15							

The following samples were analyzed in this batch:

2110525-1

Client: Randy Evans  
 Work Order: 2110525  
 Project: WPWT Facility

# QC BATCH REPORT

Batch ID: VL211025-3-4 Instrument ID HPV1 Method: SW8260\_25

LCS	Sample ID: VL211025-3			Units: UG/L			Analysis Date: 10/25/2021 11:43				
Client ID:		Run ID: VL211025-3a				Prep Date: 10/25/2021			DF: 1		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
BENZENE	10.7	1	10		107	80-120				20	
TOLUENE	10.6	1	10		106	80-120				20	
ETHYLBENZENE	10.7	1	10		107	80-120				20	
M+P-XYLENE	21.7	1	20		108	80-120				20	
O-XYLENE	10.7	1	10		107	80-120				20	
NAPHTHALENE	10.7	1	10		107	62-136				20	
Surr: DIBROMOFLUOROMETHANE	25.2		25		101	80-120					
Surr: TOLUENE-D8	25		25		100	80-120					
Surr: 4-BROMOFLUOROBENZENE	24.8		25		99	80-120					

LCSD	Sample ID: VL211025-3			Units: UG/L			Analysis Date: 10/25/2021 12:05				
Client ID:	Run ID: VL211025-3a			Prep Date: 10/25/2021			DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
BENZENE	11.2	1	10		112	80-120		10.7	4	20	
TOLUENE	11	1	10		110	80-120		10.6	4	20	
ETHYLBENZENE	11.1	1	10		111	80-120		10.7	3	20	
M+P-XYLENE	22.3	1	20		112	80-120		21.7	3	20	
O-XYLENE	11.3	1	10		113	80-120		10.7	5	20	
NAPHTHALENE	12.6	1	10		126	62-136		10.7	16	20	
Surr: DIBROMOFLUOROMETHANE	25.4		25		102	80-120			1		
Surr: TOLUENE-D8	24.4		25		98	80-120			2		
Surr: 4-BROMOFLUOROBENZENE	24.5		25		98	80-120			1		

**Client:** Randy Evans  
**Work Order:** 2110525  
**Project:** WPWT Facility

## QC BATCH REPORT

Batch ID: **VL211025-3-4** Instrument ID **HPV1** Method: **SW8260\_25**

**MB** Sample ID: **VL211025-3** Units: **UG/L** Analysis Date: **10/25/2021 12:49**  
Client ID: Run ID: **VL211025-3a** Prep Date: **10/25/2021** DF: **1**

Analyte	Result	ReportLimit	Qual	
BENZENE	ND	1		
TOLUENE	ND	1		
ETHYLBENZENE	ND	1		
M+P-XYLENE	ND	1		
O-XYLENE	ND	1		
NAPHTHALENE	ND	1		
Surr: DIBROMOFLUOROMETHANE	25.6		103	80-120
Surr: TOLUENE-D8	24.9		99	80-120
Surr: 4-BROMOFLUOROBENZENE	25		100	80-120

The following samples were analyzed in this batch:

2110525-2

Client: Randy Evans  
 Work Order: 2110525  
 Project: WPWT Facility

## QC BATCH REPORT

Batch ID: **IC211103-2-1** Instrument ID **IC3** Method: **EPA300.0**

LCS	Sample ID: IC211103-2			Units: MG/L			Analysis Date: 11/3/2021 16:05				
Client ID:	Run ID: IC211103-1A1			Prep Date: 11/3/2021			DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
FLUORIDE	5.17	0.1	5		103	90-110				15	
CHLORIDE	10.5	0.2	10		105	90-110				15	
SULFATE	49.5	1	50		99	90-110				15	

LCSD	Sample ID: IC211103-2			Units: MG/L		Analysis Date: 11/3/2021 17:17					
Client ID:	Run ID: IC211103-1A1			Prep Date: 11/3/2021			DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
FLUORIDE	5.24	0.1	5		105	90-110		5.17	1	15	
CHLORIDE	10.7	0.2	10		107	90-110		10.5	2	15	
SULFATE	49.8	1	50		100	90-110		49.5	0	15	

<b>MB</b>	Sample ID: <b>IC211103-2</b>	Units: <b>MG/L</b>	Analysis Date: <b>11/3/2021 14:58</b>
Client ID:	Run ID: <b>IC211103-1A1</b>	Prep Date: <b>11/3/2021</b>	DF: <b>1</b>
Analyte	Result	ReportLimit	Qual
FLUORIDE	ND	0.1	
CHLORIDE	ND	0.2	
SULFATE	ND	1	

The following samples were analyzed in this batch:

2110525-1

**Client:** Randy Evans  
**Work Order:** 2110525  
**Project:** WPWT Facility

## QC BATCH REPORT

Batch ID: **TD211026-1-1** Instrument ID **Balance** Method: **SM2540C**

LCS		Sample ID: TD211026-1				Units: MG/L		Analysis Date: 11/3/2021			
Client ID:		Run ID: TD211103-1A1				Prep Date: 10/26/2021			DF: 1		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL DISSOLVED SOLIDS	382	20	400		95	85-115				14	

LCSD	Sample ID: TD211026-1			Units: MG/L			Analysis Date: 11/3/2021				
Client ID:	Run ID: TD211103-1A1			Prep Date: 10/26/2021			DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL DISSOLVED SOLIDS	393	20	400		98	85-115		382	3	14	

MB		Sample ID: TD211026-1			Units: MG/L		Analysis Date: 11/3/2021		
Client ID:		Run ID: TD211103-1A1			Prep Date: 10/26/2021		DF: 1		
Analyte		Result	ReportLimit						
TOTAL DISSOLVED SOLIDS		ND	20						

The following samples were analyzed in this batch:

2110525-1