



Tuesday, August 31, 2021

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

Re: ALS Workorder: 2108098  
Project Name: WPWT  
Project Number:

Dear Mr. Evans:

Two water samples were received from Randy Evans, on 8/5/2021. 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.



## 2108098

### **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:** 2108098

**Client Name:** Randy Evans

**Client Project Name:** WPWT

**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 001A	2108098-1		WATER	04-Aug-21	16:00
Outfall 001A	2108098-2		WATER	04-Aug-21	16:00

5 of 15



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

Client: WELLINGTON OPERATING Workorder No: 2108097  
 Project Manager: KMO Initials: CXT Date: 8/5/21

	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		
Cooler #: <u>1</u> Temperature (°C): <u>1.5</u> # of custody seals on cooler: <u>0</u> External µR/hr reading: <u>NA</u> Background µR/hr reading: <u>10</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.

Sample 1 bottle 2 initial pH 7; added 3ml HNO3 Lot #267725; Final pH <2

Were unpreserved bottles pH checked? N/A All client bottle ID's vs ALS lab ID's double-checked by: CT

If applicable, was the client contacted? YES / NO / NA Contact: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager Signature / Date: [Signature] 8/08/21

**Client:** Randy Evans  
**Project:** WPWT  
**Sample ID:** Outfall 001A  
**Legal Location:**  
**Collection Date:** 8/4/2021 16:00

**Date:** 31-Aug-21  
**Work Order:** 2108098  
**Lab ID:** 2108098-1  
**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>8/19/2021</b>	PrepBy: <b>TXS</b>
BORON	2.4		0.1	MG/L	1	8/19/2021 15:49
BARIUM	7		0.1	MG/L	1	8/19/2021 15:49
SODIUM	800		10	MG/L	10	8/19/2021 15:55
<b>Total Recoverable ICPMS Metals</b>		<b>SW6020</b>			Prep Date: <b>8/19/2021</b>	PrepBy: <b>TXS</b>
THALLIUM	ND		0.15	UG/L	10	8/21/2021 17:07
<b>Ion Chromatography</b>		<b>EPA300.0</b>			Prep Date: <b>8/6/2021</b>	PrepBy: <b>AOW</b>
CHLORIDE	390		4	MG/L	20	8/10/2021 15:06
FLUORIDE	4.5		0.5	MG/L	5	8/9/2021 18:43
SULFATE	9.9		5	MG/L	5	8/9/2021 18:43
<b>Total Dissolved Solids</b>		<b>SM2540C</b>			Prep Date: <b>8/9/2021</b>	PrepBy: <b>BMK</b>
TOTAL DISSOLVED SOLIDS	2300		80	MG/L	1	8/17/2021

**Client:** Randy Evans  
**Project:** WPWT  
**Sample ID:** Outfall 001A  
**Legal Location:**  
**Collection Date:** 8/4/2021 16:00

**Date:** 31-Aug-21  
**Work Order:** 2108098  
**Lab ID:** 2108098-2  
**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: 8/17/2021	PrepBy: TWK
BENZENE	ND		1	UG/L	1	8/17/2021 23:50
TOLUENE	ND		1	UG/L	1	8/17/2021 23:50
ETHYLBENZENE	ND		1	UG/L	1	8/17/2021 23:50
M+P-XYLENE	ND		1	UG/L	1	8/17/2021 23:50
O-XYLENE	ND		1	UG/L	1	8/17/2021 23:50
NAPHTHALENE	ND		1	UG/L	1	8/17/2021 23:50
Surr: DIBROMOFLUOROMETHANE	95		80-120	%REC	1	8/17/2021 23:50
Surr: TOLUENE-D8	99		80-120	%REC	1	8/17/2021 23:50
Surr: 4-BROMOFLUOROBENZENE	101		80-120	%REC	1	8/17/2021 23:50



**Client:** Randy Evans  
**Project:** WPWT  
**Sample ID:** Outfall 001A  
**Legal Location:**  
**Collection Date:** 8/4/2021 16:00

**Date:** 31-Aug-21  
**Work Order:** 2108098  
**Lab ID:** 2108098-2  
**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  
 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

Client: Randy Evans  
Work Order: 2108098  
Project: WPWT

Date: 8/31/2021 2:21:2

## QC BATCH REPORT

Batch ID: IP210819-1-5 Instrument ID: ICPTrace2 Method: SW6010

LCS Sample ID: IP210819-1 Units: MG/L Analysis Date: 8/19/2021 15:23

Client ID: Run ID: IT210819-1A10 Prep Date: 8/19/2021 DF: 1

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BARIUM	0.97	0.1	1		97	80-120				20	
BORON	0.983	0.1	1		98	80-120				20	
SODIUM	39.4	1	40		98	80-120				20	

MB Sample ID: IP210819-1 Units: MG/L Analysis Date: 8/19/2021 15:22

Client ID: Run ID: IT210819-1A10 Prep Date: 8/19/2021 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:

2108098-1

**Client:** Randy Evans  
**Work Order:** 2108098  
**Project:** WPWT

## QC BATCH REPORT

Batch ID: **IP210819-1-7** Instrument ID: **ICPMS2** Method: **SW6020**

<b>LCS</b>		Sample ID: <b>IM210819-1</b>			Units: <b>UG/L</b>			Analysis Date: <b>8/21/2021 15:41</b>			
Client ID:		Run ID: <b>IM210821-10A21</b>			Prep Date: <b>8/19/2021</b>			DF: <b>10</b>			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
THALLIUM	2.08	0.15	2		104	80-120				20	

<b>MB</b>		Sample ID: <b>IP210819-1</b>			Units: <b>UG/L</b>			Analysis Date: <b>8/21/2021 15:38</b>			
Client ID:		Run ID: <b>IM210821-10A21</b>			Prep Date: <b>8/19/2021</b>			DF: <b>10</b>			
Analyte	Result	ReportLimit									Qual
THALLIUM	ND	0.15									

The following samples were analyzed in this batch:

2108098-1

Client: Randy Evans  
 Work Order: 2108098  
 Project: WPWT

## QC BATCH REPORT

Batch ID: VL210817-4-4 Instrument ID: HPV4 Method: SW8260\_25

LCS		Sample ID: VL210817-4			Units: UG/L		Analysis Date: 8/17/2021 18:24				
Client ID:		Run ID: VL210817-4A			Prep Date: 8/17/2021			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BENZENE	10.1	1	10		101	80-120				20	
TOLUENE	9.89	1	10		99	80-120				20	
ETHYLBENZENE	10.2	1	10		102	80-120				20	
M+P-XYLENE	19.4	1	20		97	80-120				20	
O-XYLENE	10.1	1	10		101	80-120				20	
NAPHTHALENE	10.7	1	10		107	62-136				20	
Surr: DIBROMOFLUOROMETHANE	24.8		25		99	80-120					
Surr: TOLUENE-D8	24.2		25		97	80-120					
Surr: 4-BROMOFLUOROBENZENE	24.2		25		97	80-120					

LCSD		Sample ID: VL210817-4				Units: UG/L		Analysis Date: 8/17/2021 18:44			
Client ID:		Run ID: VL210817-4A				Prep Date: 8/17/2021				DF: 1	
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BENZENE	10	1	10		100	80-120		10.1	1	20	
TOLUENE	9.75	1	10		98	80-120		9.89	1	20	
ETHYLBENZENE	10.1	1	10		101	80-120		10.2	1	20	
M+P-XYLENE	19.6	1	20		98	80-120		19.4	1	20	
O-XYLENE	9.99	1	10		100	80-120		10.1	1	20	
NAPHTHALENE	11.7	1	10		117	62-136		10.7	8	20	
Surr: DIBROMOFLUOROMETHANE	24.6		25		98	80-120			1		
Surr: TOLUENE-D8	23.9		25		95	80-120			1		
Surr: 4-BROMOFLUOROBENZENE	23.6		25		95	80-120			3		

**Client:** Randy Evans  
**Work Order:** 2108098  
**Project:** WPWT

## QC BATCH REPORT

Batch ID: **VL210817-4-4** Instrument ID: **HPV4** Method: **SW8260\_25**

**MB** Sample ID: **VL210817-4** Units: **UG/L** Analysis Date: **8/17/2021 19:04**  
Client ID: Run ID: **VL210817-4A** Prep Date: **8/17/2021** 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	24.1	96	80-120
Surr: TOLUENE-D8	24.3	97	80-120
Surr: 4-BROMOFLUOROBENZENE	25.5	102	80-120

The following samples were analyzed in this batch:

2108098-2

Client: Randy Evans  
Work Order: 2108098  
Project: WPWT

## QC BATCH REPORT

Batch ID: IC210809-1-1 Instrument ID: IC3 Method: EPA300.0

LCS	Sample ID: IC210809-1				Units: MG/L		Analysis Date: 8/9/2021 12:02				
Client ID:	Run ID: IC210809-1A1				Prep Date: 8/6/2021			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
FLUORIDE	5.11	0.1	5		102	90-110				15	
CHLORIDE	9.46	0.2	10		95	90-110				15	
SULFATE	50.1	1	50		100	90-110				15	

LCSD	Sample ID: IC210809-1				Units: MG/L		Analysis Date: 8/9/2021 14:41				
Client ID:	Run ID: IC210809-1A1				Prep Date: 8/6/2021			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
FLUORIDE	5.02	0.1	5		100	90-110		5.11	2	15	
CHLORIDE	9.44	0.2	10		94	90-110		9.46	0	15	
SULFATE	50.6	1	50		101	90-110		50.1	1	15	

MB		Sample ID: IC210809-1		Units: MG/L		Analysis Date: 8/9/2021 12:15	
Client ID:		Run ID: IC210809-1A1		Prep Date: 8/6/2021		DF: 1	
Analyte		Result	ReportLimit	Qual			
FLUORIDE		ND	0.1				
CHLORIDE		ND	0.2				
SULFATE		ND	1				

The following samples were analyzed in this batch:

2108098-1

**Client:** Randy Evans  
**Work Order:** 2108098  
**Project:** WPWT

## QC BATCH REPORT

Batch ID: **TD210809-1-1** Instrument ID: **Balance** Method: **SM2540C**

LCS	Sample ID: TD210809-1			Units: MG/L			Analysis Date: 8/17/2021				
Client ID:	Run ID: TD210817-1A1			Prep Date: 8/9/2021			DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
TOTAL DISSOLVED SOLIDS	400	20	400		100	85-115				14	

LCSD		Sample ID: TD210809-1			Units: MG/L		Analysis Date: 8/17/2021				
Client ID:		Run ID: TD210817-1A1			Prep Date: 8/9/2021			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
TOTAL DISSOLVED SOLIDS	418	20	400		104	85-115		400	4	14	

MB		Sample ID: TD210809-1			Units: MG/L		Analysis Date: 8/17/2021		
Client ID:		Run ID: TD210817-1A1			Prep Date: 8/9/2021			DF: 1	
Analyte		Result	ReportLimit						
TOTAL DISSOLVED SOLIDS		ND	20						

The following samples were analyzed in this batch:

2108098-1