



Friday, June 17, 2022

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

Re: ALS Workorder: 2205354  
Project Name: WPWT Facility  
Project Number:

Dear Mr. Evans:

Five water samples were received from Randy Evans, on 5/18/2022. The samples were scheduled for the following analyses:

GC/MS Volatiles

Inorganics

Metals

Radium-226

Radium-228

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

	<h1>Accreditations</h1>	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.



## 2205354

### **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 samples were 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.

### **Inorganics:**

The samples were 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.

### **Radium-228:**

The sample was analyzed for the presence of <sup>228</sup>Ra by low background gas flow proportional counting of <sup>228</sup>Ac, which is the ingrown progeny of <sup>228</sup>Ra, according to the current revision of SOP 724.

All remaining acceptance criteria were met.

### **Radium-226:**

The sample was prepared and analyzed according to the current revision of SOP 783.

All remaining acceptance criteria were met.

# ALS -- Fort Collins

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 2205354

**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 050A	2205354-1		WATER	17-May-22	9:00
Outfall 050B	2205354-2		WATER	17-May-22	10:00
Outfall 050C	2205354-3		WATER	17-May-22	11:00
Outfall 050D	2205354-4		WATER	17-May-22	12:00
Outfall 050E	2205354-5		WATER	17-May-22	13:00



# ALS Environmental

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

## Chain-of-Custody

Form 202r8

WORKORDER # 2205354									
PAGE 1 of 1									
By Lab or Return to Client									
DATE									
TURNAROUND									
TDS, Chloride, Fluoride, Sulfate									
BTEX, Naphthalene, 1,2,4 Trimethylbenzene, 1,3,5 Trimethylbenzene									
Radium 226									
Radium 228									
Sodium, Boron, Barium,									
Matrix									
Sample Date									
Sample Time									
# Bottles									
Pres.									
QC									
Lab ID									
Field ID									
Outfall 050A; EDD Facility ID 767702									
Outfall 050B; EDD Facility ID 767706									
Outfall 050C; EDD Facility ID 767703									
Outfall 050D; EDD Facility ID 767704									
Outfall 050E; EDD Facility ID 767705									

\*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:	
EDD Facility ID Number is listed in Field ID for Reference	
Do not use Facility Number as part of the Field ID	
5 of 18	
C.I. 26° C2: 1.6°	
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

RELINQUISHED BY	SIGNATURE	PRINTED NAME	DATE	TIME
RECEIVED BY		Randy Evans	5/18/22	0845
RELINQUISHED BY		Claire Thomas	5/18/22	0845
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				



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

Client: Randy Evans Workorder No: 2205354  
 Project Manager: KMO Initials: CXT Date: 05/17/2022

	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?	RAD ONLY	X	
IR gun used*: <u>#6</u> Cooler #: <u>1</u> <u>2</u> Temperature (°C): <u>2.6</u> <u>1.6</u> # of custody seals on cooler: <u>0</u> <u>0</u> External µR/hr reading: <u>NA</u> <u>NA</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: CT

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

Project Manager Signature / Date: [Signature] 5/19/22

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 050A  
**Legal Location:**  
**Collection Date:** 5/17/2022 09:00

**Date:** 17-Jun-22  
**Work Order:** 2205354  
**Lab ID:** 2205354-1  
**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>6/1/2022</b>	PrepBy: <b>ETC</b>
<b>BORON</b>	<b>0.2</b>		<b>0.1</b>	<b>MG/L</b>	1	6/6/2022 13:15
<b>BARIUM</b>	<b>ND</b>		<b>0.1</b>	<b>MG/L</b>	1	6/6/2022 13:15
<b>SODIUM</b>	<b>51</b>		<b>1</b>	<b>MG/L</b>	1	6/6/2022 13:15
<b>Ion Chromatography</b>			<b>EPA300.0</b>		Prep Date: <b>5/31/2022</b>	PrepBy: <b>AOW</b>
<b>CHLORIDE</b>	<b>17</b>		<b>1</b>	<b>MG/L</b>	5	5/31/2022 12:22
<b>FLUORIDE</b>	<b>0.73</b>		<b>0.5</b>	<b>MG/L</b>	5	5/31/2022 12:22
<b>SULFATE</b>	<b>810</b>		<b>20</b>	<b>MG/L</b>	20	5/31/2022 15:00
<b>Total Dissolved Solids</b>			<b>SM2540C</b>		Prep Date: <b>5/23/2022</b>	PrepBy: <b>AOW</b>
<b>TOTAL DISSOLVED SOLIDS</b>	<b>1300</b>		<b>40</b>	<b>MG/L</b>	1	5/25/2022

## ALS -- Fort Collins

## SAMPLE SUMMARY REPORT

Client: Randy Evans  
 Project: WPWT Facility  
 Sample ID: Outfall 050B  
 Legal Location:  
 Collection Date: 5/17/2022 10:00

Date: 17-Jun-22  
 Work Order: 2205354  
 Lab ID: 2205354-2  
 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>5/23/2022</b>	PrepBy: <b>TWK</b>
BENZENE	ND		1	UG/L	1	5/23/2022 19:06
TOLUENE	ND		1	UG/L	1	5/23/2022 19:06
ETHYLBENZENE	ND		1	UG/L	1	5/23/2022 19:06
M+P-XYLENE	ND		1	UG/L	1	5/23/2022 19:06
O-XYLENE	ND		1	UG/L	1	5/23/2022 19:06
1,3,5-TRIMETHYLBENZENE	ND		1	UG/L	1	5/23/2022 19:06
1,2,4-TRIMETHYLBENZENE	ND		1	UG/L	1	5/23/2022 19:06
NAPHTHALENE	ND		1	UG/L	1	5/23/2022 19:06
Surr: DIBROMOFLUOROMETHANE	102		80-120	%REC	1	5/23/2022 19:06
Surr: TOLUENE-D8	96		80-120	%REC	1	5/23/2022 19:06
Surr: 4-BROMOFLUOROBENZENE	99		80-120	%REC	1	5/23/2022 19:06
<b>Total Recoverable ICP Metals</b>						
			<b>SW6010</b>		Prep Date: <b>6/1/2022</b>	PrepBy: <b>ETC</b>
BORON	0.74		0.1	MG/L	1	6/6/2022 13:16
BARIUM	0.13		0.1	MG/L	1	6/6/2022 13:16
SODIUM	230		1	MG/L	1	6/6/2022 13:16
<b>Ion Chromatography</b>						
			<b>EPA300.0</b>		Prep Date: <b>5/31/2022</b>	PrepBy: <b>AOW</b>
CHLORIDE	90		1	MG/L	5	5/31/2022 12:29
FLUORIDE	0.99		0.5	MG/L	5	5/31/2022 12:29
SULFATE	520		20	MG/L	20	5/31/2022 15:06
<b>Radium-226 by Radon Emanation - Method 903.1</b>						
			<b>SOP 783</b>		Prep Date: <b>6/7/2022</b>	PrepBy: <b>EJE</b>
Ra-226	ND (+/- 0.25)	U	0.44	pCi/l	NA	6/15/2022 11:58
Carr: BARIUM	96.6		40-110	%REC	DL = NA	6/15/2022 11:58
<b>Radium-228 Analysis by GFPC</b>						
			<b>SOP 724</b>		Prep Date: <b>5/27/2022</b>	PrepBy: <b>MMS</b>
Ra-228	ND (+/- 0.42)	U	0.82	pCi/l	NA	6/8/2022 09:01
Carr: BARIUM	90.2		40-110	%REC	DL = NA	6/8/2022 09:01
<b>Total Dissolved Solids</b>						
			<b>SM2540C</b>		Prep Date: <b>5/23/2022</b>	PrepBy: <b>AOW</b>
TOTAL DISSOLVED SOLIDS	1200		40	MG/L	1	5/25/2022

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 050C  
**Legal Location:**  
**Collection Date:** 5/17/2022 11:00

**Date:** 17-Jun-22  
**Work Order:** 2205354  
**Lab ID:** 2205354-3  
**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>6/1/2022</b>	PrepBy: <b>ETC</b>
<b>BORON</b>	<b>0.22</b>		<b>0.1</b>	<b>MG/L</b>	1	6/6/2022 13:19
<b>BARIUM</b>	<b>ND</b>		<b>0.1</b>	<b>MG/L</b>	1	6/6/2022 13:19
<b>SODIUM</b>	<b>56</b>		<b>1</b>	<b>MG/L</b>	1	6/6/2022 13:19
<b>Ion Chromatography</b>			<b>EPA300.0</b>		Prep Date: <b>5/31/2022</b>	PrepBy: <b>AOW</b>
<b>CHLORIDE</b>	<b>22</b>		<b>1</b>	<b>MG/L</b>	5	5/31/2022 12:35
<b>FLUORIDE</b>	<b>0.76</b>		<b>0.5</b>	<b>MG/L</b>	5	5/31/2022 12:35
<b>SULFATE</b>	<b>790</b>		<b>20</b>	<b>MG/L</b>	20	5/31/2022 15:12
<b>Total Dissolved Solids</b>			<b>SM2540C</b>		Prep Date: <b>5/23/2022</b>	PrepBy: <b>AOW</b>
<b>TOTAL DISSOLVED SOLIDS</b>	<b>1300</b>		<b>40</b>	<b>MG/L</b>	1	5/25/2022

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 050D  
**Legal Location:**  
**Collection Date:** 5/17/2022 12:00

**Date:** 17-Jun-22  
**Work Order:** 2205354  
**Lab ID:** 2205354-4  
**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>6/1/2022</b>	PrepBy: <b>ETC</b>
<b>BORON</b>	<b>0.17</b>		<b>0.1</b>	<b>MG/L</b>	<b>1</b>	6/6/2022 13:20
<b>BARIUM</b>	<b>ND</b>		<b>0.1</b>	<b>MG/L</b>	<b>1</b>	6/6/2022 13:20
<b>SODIUM</b>	<b>36</b>		<b>1</b>	<b>MG/L</b>	<b>1</b>	6/6/2022 13:20
<b>Ion Chromatography</b>			<b>EPA300.0</b>		Prep Date: <b>5/31/2022</b>	PrepBy: <b>AOW</b>
<b>CHLORIDE</b>	<b>12</b>		<b>1</b>	<b>MG/L</b>	<b>5</b>	5/31/2022 12:47
<b>FLUORIDE</b>	<b>0.77</b>		<b>0.5</b>	<b>MG/L</b>	<b>5</b>	5/31/2022 12:47
<b>SULFATE</b>	<b>670</b>		<b>20</b>	<b>MG/L</b>	<b>20</b>	5/31/2022 15:24
<b>Total Dissolved Solids</b>			<b>SM2540C</b>		Prep Date: <b>5/23/2022</b>	PrepBy: <b>AOW</b>
<b>TOTAL DISSOLVED SOLIDS</b>	<b>1000</b>		<b>40</b>	<b>MG/L</b>	<b>1</b>	5/25/2022

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 050E  
**Legal Location:**  
**Collection Date:** 5/17/2022 13:00

**Date:** 17-Jun-22  
**Work Order:** 2205354  
**Lab ID:** 2205354-5  
**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>6/1/2022</b>	PrepBy: <b>ETC</b>
<b>BORON</b>	<b>0.12</b>		<b>0.1</b>	<b>MG/L</b>	<b>1</b>	6/6/2022 13:21
<b>BARIUM</b>	<b>ND</b>		<b>0.1</b>	<b>MG/L</b>	<b>1</b>	6/6/2022 13:21
<b>SODIUM</b>	<b>36</b>		<b>1</b>	<b>MG/L</b>	<b>1</b>	6/6/2022 13:21
<b>Ion Chromatography</b>			<b>EPA300.0</b>		Prep Date: <b>5/31/2022</b>	PrepBy: <b>AOW</b>
<b>CHLORIDE</b>	<b>27</b>		<b>1</b>	<b>MG/L</b>	<b>5</b>	5/31/2022 12:53
<b>FLUORIDE</b>	<b>0.78</b>		<b>0.5</b>	<b>MG/L</b>	<b>5</b>	5/31/2022 12:53
<b>SULFATE</b>	<b>470</b>		<b>5</b>	<b>MG/L</b>	<b>5</b>	5/31/2022 12:53
<b>Total Dissolved Solids</b>			<b>SM2540C</b>		Prep Date: <b>5/23/2022</b>	PrepBy: <b>AOW</b>
<b>TOTAL DISSOLVED SOLIDS</b>	<b>800</b>		<b>40</b>	<b>MG/L</b>	<b>1</b>	5/25/2022

**Client:** Randy Evans  
**Project:** WPWT Facility  
**Sample ID:** Outfall 050E  
**Legal Location:**  
**Collection Date:** 5/17/2022 13:00

**Date:** 17-Jun-22  
**Work Order:** 2205354  
**Lab ID:** 2205354-5  
**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: 6/17/2022 9:43:5

Client: Randy Evans

## QC BATCH REPORT

Work Order: 2205354

Project: WPWT Facility

Batch ID: RE220607-1-2

Instrument ID: Alpha Scin

Method: Radium-226 by Radon Emanation

LCS	Sample ID: RE220607-1				Units: pCi/l		Analysis Date: 6/15/2022 11:58				
Client ID:	Run ID: RE220607-1A				Prep Date: 6/7/2022			DF: NA			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-226	51 (+/- 13)	0	46.77		110	80-120					P
Carr: BARIUM	15220		16030		95	40-110					

LCSD	Sample ID: RE220607-1				Units: pCi/l		Analysis Date: 6/15/2022 11:58				
Client ID:	Run ID: RE220607-1A				Prep Date: 6/7/2022			DF: NA			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-226	47 (+/- 12)	0	46.77		101	80-120		51	0.25	2.13	P
Carr: BARIUM	15700		16030		98	40-110		15220			

MB	Sample ID: RE220607-1				Units: pCi/l			Analysis Date: 6/15/2022 11:58			
Client ID:	Run ID: RE220607-1A				Prep Date: 6/7/2022			DF: NA			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-226	ND	0.36									U
Carr: BARIUM	15870		16030		99	40-110					

The following samples were analyzed in this batch:

Client: Randy Evans  
Work Order: 2205354  
Project: WPWT Facility

## QC BATCH REPORT

Batch ID: RA220527-2-1 Instrument ID: LB4100-c Method: Radium-228 Analysis by GFPC

LCS	Sample ID: RA220527-2				Units: pCi/l		Analysis Date: 6/8/2022 09:01				
Client ID:		Run ID: RA220527-2A				Prep Date: 5/27/2022			DF: NA		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-228	20.9 (+/- 4.9)	0.9	21.5		97	70-130					P
Carr: BARIUM	27040		32190		84	40-110					

LCSD		Sample ID: RA220527-2				Units: pCi/l		Analysis Date: 6/8/2022 09:01			
Client ID:		Run ID: RA220527-2A				Prep Date: 5/27/2022			DF: NA		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-228	22 (+/- 5.2)	0.9	21.5		102	70-130		20.9	0.16	2.13	P
Carr: BARIUM	29020		32190		90.2	40-110		27040			

MB	Sample ID: RA220527-2				Units: pCi/l			Analysis Date: 6/8/2022 09:01			
Client ID:	Run ID: RA220527-2A				Prep Date: 5/27/2022			DF: NA			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref Value	DER	DER Limit	Qual
Ra-228	ND	0.88									U
Carr: BARIUM	27490		32190		85.4	40-110					

The following samples were analyzed in this batch:

2205354-2

Client: Randy Evans  
Work Order: 2205354  
Project: WPWT Facility

## QC BATCH REPORT

Batch ID: **IP220601-2-2** Instrument ID: **ICP5900** Method: **SW6010**

LCS	Sample ID: IP220601-2				Units: MG/L		Analysis Date: 6/6/2022 13:12				
Client ID:	Run ID: IT220606-2A9				Prep Date: 6/1/2022			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	1.02	0.1	1		102	80-120				20	
SODIUM	38.6	1	40		97	80-120				20	

LCSD	Sample ID: IP220601-2				Units: MG/L		Analysis Date: 6/6/2022 13:13				
Client ID:	Run ID: IT220606-2A9				Prep Date: 6/1/2022			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		1.01	0	20	
BORON	1.01	0.1	1		101	80-120		1.02	0	20	
SODIUM	38.6	1	40		97	80-120		38.6	0	20	

<b>MB</b>		Sample ID: <b>IP220601-2</b>		Units: <b>MG/L</b>		Analysis Date: <b>6/6/2022 13:11</b>	
Client ID:		Run ID: <b>IT220606-2A9</b>		Prep Date: <b>6/1/2022</b>		DF: <b>1</b>	
Analyte	Result	ReportLimit					Qual
BARIUM	ND	0.1					
BORON	ND	0.1					
SODIUM	ND	1					

The following samples were analyzed in this batch:

2205354-1	2205354-2	2205354-3
2205354-4	2205354-5	

Client: Randy Evans  
Work Order: 2205354  
Project: WPWT Facility

## QC BATCH REPORT

Batch ID: VL220523-3-7 Instrument ID: HPV3 Method: SW8260\_25

LCS	Sample ID: VL220523-3			Units: UG/L			Analysis Date: 5/23/2022 09:59				
Client ID:		Run ID: VL220523-3A			Prep Date: 5/23/2022			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BENZENE	10.8	1	10		108	80-120				20	
TOLUENE	10.2	1	10		102	80-120				20	
Surr: DIBROMOFLUOROMETHANE	24.5		25		98	80-120					
Surr: TOLUENE-D8	24.5		25		98	80-120					
Surr: 4-BROMOFLUOROBENZENE	24.3		25		97	80-120					

LCSD	Sample ID: VL220523-3				Units: UG/L		Analysis Date: 5/23/2022 10:21				
Client ID:	Run ID: VL220523-3A				Prep Date: 5/23/2022				DF: 1		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BENZENE	10.9	1	10		109	80-120		10.8	1	20	
TOLUENE	10.3	1	10		103	80-120		10.2	0	20	
Surr: DIBROMOFLUOROMETHANE	25.4		25		101	80-120			3		
Surr: TOLUENE-D8	24.5		25		98	80-120			0		
Surr: 4-BROMOFLUOROBENZENE	24.4		25		98	80-120			1		

MB		Sample ID: VL220523-3		Units: UG/L		Analysis Date: 5/23/2022 12:15	
Client ID:		Run ID: VL220523-3A		Prep Date: 5/23/2022		DF: 1	
Analyte	Result	ReportLimit					Qual
BENZENE	ND	1					
TOLUENE	ND	1					
ETHYLBENZENE	ND	1					
M+P-XYLENE	ND	1					
O-XYLENE	ND	1					
1,3,5-TRIMETHYLBENZENE	ND	1					
1,2,4-TRIMETHYLBENZENE	ND	1					
NAPHTHALENE	ND	1					
Surr: DIBROMOFLUOROMETHANE	26.5		106	80-120			
Surr: TOLUENE-D8	24.2		97	80-120			
Surr: 4-BROMOFLUOROBENZENE	25		100	80-120			

The following samples were analyzed in this batch:

2205354-2

**Client:** Randy Evans  
**Work Order:** 2205354  
**Project:** WPWT Facility

## QC BATCH REPORT

Batch ID: **IC220531-1-1** Instrument ID: **IC3** Method: **EPA300.0**

LCS	Sample ID: IC220531-1				Units: MG/L		Analysis Date: 5/31/2022 12:04				
Client ID:	Run ID: IC220531-1A1				Prep Date: 5/31/2022			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
FLUORIDE	4.88	0.1	5		98	90-110				15	
CHLORIDE	9.87	0.2	10		99	90-110				15	
SULFATE	48.2	1	50		96	90-110				15	

LCSD	Sample ID: IC220531-1				Units: MG/L		Analysis Date: 5/31/2022 14:30				
Client ID:	Run ID: IC220531-1A1				Prep Date: 5/31/2022			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
FLUORIDE	4.92	0.1	5		98	90-110		4.88	1	15	
CHLORIDE	9.98	0.2	10		100	90-110		9.87	1	15	
SULFATE	49	1	50		98	90-110		48.2	2	15	

MB		Sample ID: IC220531-1		Units: MG/L		Analysis Date: 5/31/2022 12:10	
Client ID:		Run ID: IC220531-1A1		Prep Date: 5/31/2022		DF: 1	
Analyte		Result	ReportLimit	Qual			
FLUORIDE		ND	0.1				
CHLORIDE		ND	0.2				
SULFATE		ND	1				

MS		Sample ID: 2205354-3				Units: MG/L		Analysis Date: 5/31/2022 12:41			
Client ID: Outfall 050C		Run ID: IC220531-1A1				Prep Date: 5/31/2022			DF: 5		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
FLUORIDE	11.3	0.5	10	0.76	105	85-115				15	
CHLORIDE	47.3	1	25	22	102	85-115				15	
SULFATE	1140	20	400	790	88	85-115				15	

The following samples were analyzed in this batch:

2205354-1	2205354-2	2205354-3
2205354-4	2205354-5	

**Client:** Randy Evans  
**Work Order:** 2205354  
**Project:** WPWT Facility

## QC BATCH REPORT

Batch ID: **TD220523-1-1** Instrument ID: **Balance** Method: **SM2540C**

LCS		Sample ID: TD220523-1			Units: MG/L		Analysis Date: 5/25/2022				
Client ID:		Run ID: TD220525-1A1					Prep Date: 5/23/2022			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	361	20	400		90	85-115				14	

LCSD		Sample ID: TD220523-1			Units: MG/L		Analysis Date: 5/25/2022				
Client ID:		Run ID: TD220525-1A1			Prep Date: 5/23/2022			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	367	20	400		92	85-115		361	2	14	

MB		Sample ID: TD220523-1			Units: MG/L		Analysis Date: 5/25/2022		
Client ID:		Run ID: TD220525-1A1			Prep Date: 5/23/2022			DF: 1	
Analyte		Result	ReportLimit						
TOTAL DISSOLVED SOLIDS		ND	20						

The following samples were analyzed in this batch:

2205354-1	2205354-2	2205354-3
2205354-4	2205354-5	