



23-Feb-2018

Bruce Smith
Western Water & Land, Inc.
743 Horizon Court
Suite 330
Grand Junction, CO 81506

Re: **TEP GV 80-4 Pad 317B**

Work Order: **1802061**

Dear Bruce,

ALS Environmental received 2 samples on 01-Feb-2018 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental 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 32.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton", is written over a white background.

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental The logo icon for ALS Environmental, a stylized blue triangle with a yellow flame-like shape inside.

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Client: Western Water & Land, Inc.
Project: TEP GV 80-4 Pad 317B
Work Order: 1802061

Work Order Sample Summary

<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>
1802061-01	BM2	Surface Wate		1/31/2018 11:00	2/1/2018 09:30	<input type="checkbox"/>
1802061-02	CO River	Surface Wate		1/31/2018 09:30	2/1/2018 09:30	<input type="checkbox"/>

Client: Western Water & Land, Inc.

Project: TEP GV 80-4 Pad 317B

Work Order: 1802061

Case Narrative

Batch 113848, Method ICP_6020_WD, Sample 1802061-02D MS/MSD: The MS/MSD recovery was outside of the control limit for Sodium; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required.

Client: Western Water & Land, Inc.
Project: TEP GV 80-4 Pad 317B
WorkOrder: 1802061

**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
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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
LCSD	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>
µg/L	Micrograms per Liter
µmhos/cm	Micromhos per Centimeter
mg/L	Milligrams per Liter
s.u.	Standard Units

ALS Group, USA

Date: 23-Feb-18

Client: Western Water & Land, Inc.
Project: TEP GV 80-4 Pad 317B
Sample ID: BM2
Collection Date: 1/31/2018 11:00 AM

Work Order: 1802061
Lab ID: 1802061-01
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID							
				Method: SW8015C		Prep: SW3511 / 2/5/18	Analyst: MEB
DRO (C10-C28)	U		0.040	0.50	mg/L	1	2/11/2018 01:59
Surr: 4-Terphenyl-d14	81.5			35-161	%REC	1	2/11/2018 01:59
GASOLINE RANGE ORGANICS BY GC-FID							
				Method: SW8015D			Analyst: MEB
GRO (C6-C10)	U		76	200	µg/L	1	2/14/2018 16:43
Surr: Toluene-d8	104			76-120	%REC	1	2/14/2018 16:43
METALS BY ICP-MS (DISSOLVED)							
				Method: SW6020A		Prep: FILTER / 2/6/18	Analyst: JF
Barium	0.044		0.0022	0.0050	mg/L	1	2/6/2018 13:56
Boron	0.037		0.0018	0.020	mg/L	1	2/6/2018 13:56
Calcium	66		0.086	0.50	mg/L	1	2/6/2018 13:56
Iron	0.012	J	0.0046	0.080	mg/L	1	2/6/2018 13:56
Magnesium	14		0.0068	0.20	mg/L	1	2/6/2018 13:56
Manganese	0.0083		0.00051	0.0050	mg/L	1	2/6/2018 13:56
Potassium	4.0		0.017	0.20	mg/L	1	2/6/2018 13:56
Selenium	U		0.00090	0.0050	mg/L	1	2/6/2018 13:56
Sodium	140		0.034	0.20	mg/L	1	2/7/2018 13:11
Strontium	0.60		0.000060	0.0050	mg/L	1	2/6/2018 13:56
SEMI-VOLATILE ORGANIC COMPOUNDS							
				Method: SW846 8270D		Prep: SW3511 / 2/5/18	Analyst: RS
2-Methylnaphthalene	U		0.85	1.0	µg/L	1	2/5/2018 15:35
Acenaphthene	U		0.37	1.0	µg/L	1	2/5/2018 15:35
Acenaphthylene	U		0.46	1.0	µg/L	1	2/5/2018 15:35
Anthracene	U		0.19	1.0	µg/L	1	2/5/2018 15:35
Benzo(a)anthracene	U		0.32	1.0	µg/L	1	2/5/2018 15:35
Benzo(a)pyrene	U		0.13	1.0	µg/L	1	2/5/2018 15:35
Benzo(b)fluoranthene	U		0.20	1.0	µg/L	1	2/5/2018 15:35
Benzo(g,h,i)perylene	U		0.35	1.0	µg/L	1	2/5/2018 15:35
Benzo(k)fluoranthene	U		0.27	1.0	µg/L	1	2/5/2018 15:35
Chrysene	U		0.20	1.0	µg/L	1	2/5/2018 15:35
Dibenzo(a,h)anthracene	U		0.17	1.0	µg/L	1	2/5/2018 15:35
Fluoranthene	U		0.15	1.0	µg/L	1	2/5/2018 15:35
Fluorene	U		0.17	1.0	µg/L	1	2/5/2018 15:35
Indeno(1,2,3-cd)pyrene	U		0.16	1.0	µg/L	1	2/5/2018 15:35
Naphthalene	U		0.98	1.0	µg/L	1	2/5/2018 15:35
Phenanthrene	U		0.18	1.0	µg/L	1	2/5/2018 15:35
Pyrene	U		0.19	1.0	µg/L	1	2/5/2018 15:35
Surr: 2-Fluorobiphenyl	83.5			20-140	%REC	1	2/5/2018 15:35
Surr: 4-Terphenyl-d14	98.7			20-172	%REC	1	2/5/2018 15:35
Surr: Nitrobenzene-d5	40.2			10-140	%REC	1	2/5/2018 15:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 23-Feb-18

Client: Western Water & Land, Inc.
Project: TEP GV 80-4 Pad 317B
Sample ID: BM2
Collection Date: 1/31/2018 11:00 AM

Work Order: 1802061
Lab ID: 1802061-01
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Method: SW8260B			Analyst: EMR	
Benzene	U		0.42	1.0	µg/L	1	2/2/2018 18:30
Ethylbenzene	U		0.29	1.0	µg/L	1	2/2/2018 18:30
m,p-Xylene	U		0.53	2.0	µg/L	1	2/2/2018 18:30
o-Xylene	U		0.19	1.0	µg/L	1	2/2/2018 18:30
Toluene	U		0.32	1.0	µg/L	1	2/2/2018 18:30
Xylenes, Total	U		0.74	3.0	µg/L	1	2/2/2018 18:30
Surr: 1,2-Dichloroethane-d4	110			75-120	%REC	1	2/2/2018 18:30
Surr: 4-Bromofluorobenzene	95.0			80-110	%REC	1	2/2/2018 18:30
Surr: Dibromofluoromethane	99.8			85-115	%REC	1	2/2/2018 18:30
Surr: Toluene-d8	103			85-110	%REC	1	2/2/2018 18:30
ALKALINITY			Method: A2320 B-11			Analyst: ED	
Alkalinity, Bicarbonate (as CaCO3)	130		8.4	10	mg/L	1	2/1/2018 19:55
Alkalinity, Carbonate (as CaCO3)	U		8.4	10	mg/L	1	2/1/2018 19:55
Alkalinity, Total (as CaCO3)	130		8.4	10	mg/L	1	2/1/2018 19:55
ANIONS BY ION CHROMATOGRAPHY			Method: E300.0			Analyst: EE	
Bromide	U		0.067	0.20	mg/L	1	2/6/2018 13:04
Chloride	210		6.2	20	mg/L	20	2/6/2018 13:23
Fluoride	0.22		0.067	0.10	mg/L	1	2/6/2018 13:04
Sulfate	120		6.9	20	mg/L	20	2/6/2018 13:23
NITROGEN, NITRITE			Method: A4500-NO2 B-11			Analyst: STP	
Nitrogen, Nitrite	0.0023	J	0.00090	0.020	mg/L	1	2/1/2018 16:30
NITROGEN, NITRATE			Method: E353.2 R2.0			Analyst: JJG	
Nitrogen, Nitrate	0.082		0.0034	0.020	mg/L	1	2/7/2018 16:10
NITROGEN, NITRATE-NITRITE			Method: E353.2 R2.0			Analyst: JJG	
Nitrogen, Nitrate-Nitrite	0.084		0.012	0.020	mg/L	1	2/7/2018 16:10
PH (LABORATORY)			Method: SW9040C			Analyst: ED	
pH (laboratory)	8.2		0.10	0.10	s.u.	1	2/1/2018 19:55
SPECIFIC CONDUCTANCE @ 25°C			Method: A2510 B-11			Analyst: ED	
Specific Conductance	1,100		0.97	5.0	µmhos/cm	1	2/1/2018 19:55
TOTAL DISSOLVED SOLIDS			Method: A2540 C-11			Analyst: MT	
Total Dissolved Solids	650		6.1	10	mg/L	1	2/6/2018 13:38

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 23-Feb-18

Client: Western Water & Land, Inc.
Project: TEP GV 80-4 Pad 317B
Sample ID: CO River
Collection Date: 1/31/2018 09:30 AM

Work Order: 1802061
Lab ID: 1802061-02
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			Method: SW8015C		Prep: SW3511 / 2/5/18		Analyst: MEB
DRO (C10-C28)	0.075	J	0.040	0.50	mg/L	1	2/11/2018 02:28
Surr: 4-Terphenyl-d14	78.7			35-161	%REC	1	2/11/2018 02:28
GASOLINE RANGE ORGANICS BY GC-FID			Method: SW8015D		Prep: SW3511 / 2/5/18		Analyst: MEB
GRO (C6-C10)	U		76	200	µg/L	1	2/14/2018 17:09
Surr: Toluene-d8	103			76-120	%REC	1	2/14/2018 17:09
METALS BY ICP-MS (DISSOLVED)			Method: SW6020A		Prep: FILTER / 2/6/18		Analyst: JF
Barium	0.044		0.0022	0.0050	mg/L	1	2/6/2018 13:58
Boron	0.034		0.0018	0.020	mg/L	1	2/6/2018 13:58
Calcium	64		0.086	0.50	mg/L	1	2/6/2018 13:58
Iron	0.012	J	0.0046	0.080	mg/L	1	2/6/2018 13:58
Magnesium	14		0.0068	0.20	mg/L	1	2/6/2018 13:58
Manganese	0.0083		0.00051	0.0050	mg/L	1	2/6/2018 13:58
Potassium	3.9		0.017	0.20	mg/L	1	2/6/2018 13:58
Selenium	U		0.00090	0.0050	mg/L	1	2/6/2018 13:58
Sodium	140		0.034	0.20	mg/L	1	2/7/2018 13:12
Strontium	0.59		0.000060	0.0050	mg/L	1	2/6/2018 13:58
SEMI-VOLATILE ORGANIC COMPOUNDS			Method: SW846 8270D		Prep: SW3511 / 2/5/18		Analyst: RM
2-Methylnaphthalene	U		0.85	1.0	µg/L	1	2/6/2018 17:44
Acenaphthene	U		0.37	1.0	µg/L	1	2/6/2018 17:44
Acenaphthylene	U		0.46	1.0	µg/L	1	2/6/2018 17:44
Anthracene	U		0.19	1.0	µg/L	1	2/6/2018 17:44
Benzo(a)anthracene	U		0.32	1.0	µg/L	1	2/6/2018 17:44
Benzo(a)pyrene	U		0.13	1.0	µg/L	1	2/6/2018 17:44
Benzo(b)fluoranthene	U		0.20	1.0	µg/L	1	2/6/2018 17:44
Benzo(g,h,i)perylene	U		0.35	1.0	µg/L	1	2/6/2018 17:44
Benzo(k)fluoranthene	U		0.27	1.0	µg/L	1	2/6/2018 17:44
Chrysene	U		0.20	1.0	µg/L	1	2/6/2018 17:44
Dibenzo(a,h)anthracene	U		0.17	1.0	µg/L	1	2/6/2018 17:44
Fluoranthene	U		0.15	1.0	µg/L	1	2/6/2018 17:44
Fluorene	U		0.17	1.0	µg/L	1	2/6/2018 17:44
Indeno(1,2,3-cd)pyrene	U		0.16	1.0	µg/L	1	2/6/2018 17:44
Naphthalene	U		0.98	1.0	µg/L	1	2/6/2018 17:44
Phenanthrene	U		0.18	1.0	µg/L	1	2/6/2018 17:44
Pyrene	U		0.19	1.0	µg/L	1	2/6/2018 17:44
Surr: 2-Fluorobiphenyl	83.2			20-140	%REC	1	2/6/2018 17:44
Surr: 4-Terphenyl-d14	109			20-172	%REC	1	2/6/2018 17:44
Surr: Nitrobenzene-d5	26.5			10-140	%REC	1	2/6/2018 17:44

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 23-Feb-18

Client: Western Water & Land, Inc.
Project: TEP GV 80-4 Pad 317B
Sample ID: CO River
Collection Date: 1/31/2018 09:30 AM

Work Order: 1802061
Lab ID: 1802061-02
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Method: SW8260B			Analyst: EMR	
Benzene	U		0.42	1.0	µg/L	1	2/2/2018 18:55
Ethylbenzene	U		0.29	1.0	µg/L	1	2/2/2018 18:55
m,p-Xylene	U		0.53	2.0	µg/L	1	2/2/2018 18:55
o-Xylene	U		0.19	1.0	µg/L	1	2/2/2018 18:55
Toluene	U		0.32	1.0	µg/L	1	2/2/2018 18:55
Xylenes, Total	U		0.74	3.0	µg/L	1	2/2/2018 18:55
Surr: 1,2-Dichloroethane-d4	109			75-120	%REC	1	2/2/2018 18:55
Surr: 4-Bromofluorobenzene	95.5			80-110	%REC	1	2/2/2018 18:55
Surr: Dibromofluoromethane	99.6			85-115	%REC	1	2/2/2018 18:55
Surr: Toluene-d8	106			85-110	%REC	1	2/2/2018 18:55
ALKALINITY			Method: A2320 B-11			Analyst: ED	
Alkalinity, Bicarbonate (as CaCO3)	130		8.4	10	mg/L	1	2/1/2018 19:55
Alkalinity, Carbonate (as CaCO3)	U		8.4	10	mg/L	1	2/1/2018 19:55
Alkalinity, Total (as CaCO3)	130		8.4	10	mg/L	1	2/1/2018 19:55
ANIONS BY ION CHROMATOGRAPHY			Method: E300.0			Analyst: EE	
Bromide	U		0.067	0.20	mg/L	1	2/6/2018 13:42
Chloride	210		6.2	20	mg/L	20	2/6/2018 14:01
Fluoride	0.22		0.067	0.10	mg/L	1	2/6/2018 13:42
Sulfate	110		6.9	20	mg/L	20	2/6/2018 14:01
NITROGEN, NITRITE			Method: A4500-NO2 B-11			Analyst: STP	
Nitrogen, Nitrite	0.0023	J	0.00090	0.020	mg/L	1	2/1/2018 16:30
NITROGEN, NITRATE			Method: E353.2 R2.0			Analyst: JJG	
Nitrogen, Nitrate	0.074		0.0034	0.020	mg/L	1	2/7/2018 16:10
NITROGEN, NITRATE-NITRITE			Method: E353.2 R2.0			Analyst: JJG	
Nitrogen, Nitrate-Nitrite	0.076		0.012	0.020	mg/L	1	2/7/2018 16:10
PH (LABORATORY)			Method: SW9040C			Analyst: ED	
pH (laboratory)	8.3		0.10	0.10	s.u.	1	2/1/2018 19:55
SPECIFIC CONDUCTANCE @ 25°C			Method: A2510 B-11			Analyst: ED	
Specific Conductance	1,100		0.97	5.0	µmhos/cm	1	2/1/2018 19:55
TOTAL DISSOLVED SOLIDS			Method: A2540 C-11			Analyst: MT	
Total Dissolved Solids	650		6.1	10	mg/L	1	2/6/2018 13:38

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Western Water & Land, Inc.
Work Order: 1802061
Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **113789** Instrument ID **GC8** Method: **SW8015C**

MBLK		Sample ID: DBLKW1-113789-113789				Units: mg/L		Analysis Date: 2/10/2018 07:43 PM		
Client ID:		Run ID: GC8_180210A		SeqNo: 4887222		Prep Date: 2/5/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	U	0.10								
<i>Surr: 4-Terphenyl-d14</i>	<i>0.03917</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>93.9</i>	<i>35-161</i>	<i>0</i>			

LCS		Sample ID: DLCSW1-113789-113789				Units: mg/L		Analysis Date: 2/10/2018 08:12 PM		
Client ID:		Run ID: GC8_180210A		SeqNo: 4887223		Prep Date: 2/5/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	3.94	0.10	4.17	0	94.5	60-150	0			
<i>Surr: 4-Terphenyl-d14</i>	<i>0.03583</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>85.9</i>	<i>35-161</i>	<i>0</i>			

MS		Sample ID: 18011552-01B MS				Units: mg/L		Analysis Date: 2/10/2018 09:39 PM		
Client ID:		Run ID: GC8_180210A		SeqNo: 4887228		Prep Date: 2/5/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	42.47	0.10	4.17	35.58	165	60-150	0			SEO
<i>Surr: 4-Terphenyl-d14</i>	<i>0.05467</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>131</i>	<i>35-161</i>	<i>0</i>			

DUP		Sample ID: 18011552-02B DUP				Units: mg/L		Analysis Date: 2/10/2018 10:37 PM		
Client ID:		Run ID: GC8_180210A		SeqNo: 4887230		Prep Date: 2/5/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	1.945	0.10	0	2.01	0		2.01	3.33	30	
<i>Surr: 4-Terphenyl-d14</i>	<i>0.0235</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>56.4</i>	<i>44-159</i>	<i>0.0215</i>	<i>8.89</i>	<i>30</i>	

The following samples were analyzed in this batch:

1802061-01B	1802061-02B
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Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229908** Instrument ID **GC10** Method: **SW8015D**

MBLK		Sample ID: GBLKW1-180212-R229908				Units: µg/L		Analysis Date: 2/14/2018 07:18 AM		
Client ID:		Run ID: GC10_180212C				SeqNo: 4891475		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	U	200								
<i>Surr: Toluene-d8</i>	100.9	0	100	0	101	76-120	0			

LCS		Sample ID: GLCSW1-180212-R229908				Units: µg/L		Analysis Date: 2/14/2018 06:26 AM		
Client ID:		Run ID: GC10_180212C				SeqNo: 4891474		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10070	200	10000	0	101	76-126	0			
<i>Surr: Toluene-d8</i>	97.82	0	100	0	97.8	76-120	0			

MS		Sample ID: 1802356-02A MS				Units: µg/L		Analysis Date: 2/14/2018 12:23 PM		
Client ID:		Run ID: GC10_180212C				SeqNo: 4892178		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	7657	200	10000	82.9	75.7	76-126	0			S
<i>Surr: Toluene-d8</i>	102.9	0	100	0	103	76-120	0			

MSD		Sample ID: 1802356-02A MSD				Units: µg/L		Analysis Date: 2/14/2018 12:49 PM		
Client ID:		Run ID: GC10_180212C				SeqNo: 4892179		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	5763	200	10000	82.9	56.8	76-126	7657	28.2	30	S
<i>Surr: Toluene-d8</i>	104.2	0	100	0	104	76-120	102.9	1.24	30	

The following samples were analyzed in this batch: 1802061-01A 1802061-02A

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **113848** Instrument ID **ICPMS3** Method: **SW6020A** (Dissolve)

MBLK		Sample ID: MBLK-113848-113848				Units: mg/L		Analysis Date: 2/6/2018 01:52 PM		
Client ID:		Run ID: ICPMS3_180206A			SeqNo: 4879669		Prep Date: 2/6/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	U	0.0050								
Boron	U	0.020								
Calcium	U	0.50								
Iron	U	0.080								
Magnesium	U	0.20								
Manganese	U	0.0050								
Potassium	U	0.20								
Selenium	U	0.0050								
Sodium	0.05006	0.20								J
Strontium	U	0.0050								

LCS		Sample ID: LCS-113848-113848				Units: mg/L		Analysis Date: 2/6/2018 01:54 PM		
Client ID:		Run ID: ICPMS3_180206A			SeqNo: 4879670		Prep Date: 2/6/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.08852	0.0050	0.1	0	88.5	80-120	0			
Boron	0.4318	0.020	0.5	0	86.4	80-120	0			
Calcium	9.01	0.50	10	0	90.1	80-120	0			
Iron	9.051	0.080	10	0	90.5	80-120	0			
Magnesium	9.224	0.20	10	0	92.2	80-120	0			
Manganese	0.09194	0.0050	0.1	0	91.9	80-120	0			
Potassium	9.384	0.20	10	0	93.8	80-120	0			
Selenium	0.08729	0.0050	0.1	0	87.3	80-120	0			
Strontium	0.09125	0.0050	0.1	0	91.3	80-120	0			

LCS		Sample ID: LCS-113848-113848				Units: mg/L		Analysis Date: 2/7/2018 01:09 PM		
Client ID:		Run ID: ICPMS3_180207A			SeqNo: 4881722		Prep Date: 2/6/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	9.428	0.20	10	0	94.3	80-120	0			

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113848 Instrument ID ICPMS3 Method: SW6020A (Dissolve)

MS		Sample ID: 1802061-02DMS				Units: mg/L		Analysis Date: 2/6/2018 02:00 PM		
Client ID: CO River		Run ID: ICPMS3_180206A				SeqNo: 4879673		Prep Date: 2/6/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.1367	0.0050	0.1	0.04353	93.2	75-125	0			
Boron	0.492	0.020	0.5	0.03377	91.6	75-125	0			
Calcium	74.28	0.50	10	64.16	101	75-125	0			O
Iron	9.132	0.080	10	0.01153	91.2	75-125	0			
Magnesium	22.79	0.20	10	13.83	89.6	75-125	0			
Manganese	0.1028	0.0050	0.1	0.008252	94.6	75-125	0			
Potassium	13.17	0.20	10	3.876	92.9	75-125	0			
Selenium	0.0938	0.0050	0.1	0.000539	93.3	75-125	0			
Strontium	0.6788	0.0050	0.1	0.5888	89.9	75-125	0			O

MS		Sample ID: 1802061-02DMS				Units: mg/L		Analysis Date: 2/7/2018 01:14 PM		
Client ID: CO River		Run ID: ICPMS3_180207A				SeqNo: 4881725		Prep Date: 2/6/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	146.9	0.20	10	140.8	60.1	75-125	0			SO

MSD		Sample ID: 1802061-02DMSD				Units: mg/L		Analysis Date: 2/6/2018 02:01 PM		
Client ID: CO River		Run ID: ICPMS3_180206A				SeqNo: 4879674		Prep Date: 2/6/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.1363	0.0050	0.1	0.04353	92.8	75-125	0.1367	0.271	20	
Boron	0.5019	0.020	0.5	0.03377	93.6	75-125	0.492	1.99	20	
Calcium	74.22	0.50	10	64.16	101	75-125	74.28	0.0734	20	O
Iron	9.217	0.080	10	0.01153	92.1	75-125	9.132	0.919	20	
Magnesium	22.76	0.20	10	13.83	89.3	75-125	22.79	0.108	20	
Manganese	0.1014	0.0050	0.1	0.008252	93.2	75-125	0.1028	1.36	20	
Potassium	13.22	0.20	10	3.876	93.5	75-125	13.17	0.402	20	
Selenium	0.09525	0.0050	0.1	0.000539	94.7	75-125	0.0938	1.54	20	
Strontium	0.692	0.0050	0.1	0.5888	103	75-125	0.6788	1.93	20	O

MSD		Sample ID: 1802061-02DMSD				Units: mg/L		Analysis Date: 2/7/2018 01:15 PM		
Client ID: CO River		Run ID: ICPMS3_180207A				SeqNo: 4881726		Prep Date: 2/6/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	145.1	0.20	10	140.8	42.6	75-125	146.9	1.2	20	SO

The following samples were analyzed in this batch: 1802061-01D 1802061-02D

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113788 Instrument ID SVMS6 Method: SW846 8270D

MBLK		Sample ID: SBLKW1-113788-113788				Units: µg/L		Analysis Date: 2/5/2018 02:27 PM		
Client ID:		Run ID: SVMS6_180205A		SeqNo: 4879222		Prep Date: 2/5/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	U	1.0								
Acenaphthene	U	1.0								
Acenaphthylene	U	1.0								
Anthracene	U	1.0								
Benzo(a)anthracene	U	1.0								
Benzo(a)pyrene	U	1.0								
Benzo(b)fluoranthene	U	1.0								
Benzo(g,h,i)perylene	U	1.0								
Benzo(k)fluoranthene	U	1.0								
Chrysene	U	1.0								
Dibenzo(a,h)anthracene	U	1.0								
Fluoranthene	U	1.0								
Fluorene	U	1.0								
Indeno(1,2,3-cd)pyrene	U	1.0								
Naphthalene	U	1.0								
Phenanthrene	U	1.0								
Pyrene	U	1.0								
Surr: 2-Fluorobiphenyl	35.89	0	41.7	0	86.1	20-140	0			
Surr: 4-Terphenyl-d14	43.97	0	41.7	0	105	20-172	0			
Surr: Nitrobenzene-d5	18.45	0	41.7	0	44.3	10-140	0			

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113788 Instrument ID SVMS6 Method: SW846 8270D

MBLK		Sample ID: SBLKW1-113788-113788				Units: µg/L		Analysis Date: 2/6/2018 03:39 PM		
Client ID:		Run ID: SVMS6_180206A		SeqNo: 4881821		Prep Date: 2/5/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	U	1.0								
Acenaphthene	U	1.0								
Acenaphthylene	U	1.0								
Anthracene	U	1.0								
Benzo(a)anthracene	U	1.0								
Benzo(a)pyrene	U	1.0								
Benzo(b)fluoranthene	U	1.0								
Benzo(g,h,i)perylene	U	1.0								
Benzo(k)fluoranthene	U	1.0								
Chrysene	U	1.0								
Dibenzo(a,h)anthracene	U	1.0								
Fluoranthene	U	1.0								
Fluorene	U	1.0								
Indeno(1,2,3-cd)pyrene	U	1.0								
Naphthalene	U	1.0								
Phenanthrene	U	1.0								
Pyrene	U	1.0								
Surr: 2-Fluorobiphenyl	35.19	0	41.7	0	84.4	20-140	0			
Surr: 4-Terphenyl-d14	51.68	0	41.7	0	124	20-172	0			
Surr: Nitrobenzene-d5	13.45	0	41.7	0	32.3	10-140	0			

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113788 Instrument ID SVMS6 Method: SW846 8270D

LCS		Sample ID: SLCSW1-113788-113788				Units: µg/L		Analysis Date: 2/5/2018 02:54 PM		
Client ID:		Run ID: SVMS6_180205A		SeqNo: 4879224		Prep Date: 2/5/2018		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	27.05	1.0	33.3	0	81.2	40-140	0			
Acenaphthene	29.55	1.0	33.3	0	88.7	40-140	0			
Acenaphthylene	28.17	1.0	33.3	0	84.6	40-140	0			
Anthracene	35.68	1.0	33.3	0	107	40-140	0			
Benzo(a)anthracene	42.75	1.0	33.3	0	128	40-140	0			
Benzo(a)pyrene	36.63	1.0	33.3	0	110	40-140	0			
Benzo(b)fluoranthene	38.41	1.0	33.3	0	115	40-140	0			
Benzo(g,h,i)perylene	40.2	1.0	33.3	0	121	40-140	0			
Benzo(k)fluoranthene	34.15	1.0	33.3	0	103	40-140	0			
Chrysene	36.98	1.0	33.3	0	111	40-140	0			
Dibenzo(a,h)anthracene	43.85	1.0	33.3	0	132	40-140	0			
Fluoranthene	35.23	1.0	33.3	0	106	40-140	0			
Fluorene	31.16	1.0	33.3	0	93.6	40-140	0			
Indeno(1,2,3-cd)pyrene	42.07	1.0	33.3	0	126	40-140	0			
Naphthalene	25.22	1.0	33.3	0	75.7	40-140	0			
Phenanthrene	30.27	1.0	33.3	0	90.9	40-140	0			
Pyrene	32.56	1.0	33.3	0	97.8	40-140	0			
Surr: 2-Fluorobiphenyl	35.14	0	41.7	0	84.3	20-140	0			
Surr: 4-Terphenyl-d14	45.53	0	41.7	0	109	20-172	0			
Surr: Nitrobenzene-d5	18.45	0	41.7	0	44.2	10-140	0			

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113788 Instrument ID SVMS6 Method: SW846 8270D

LCS		Sample ID: SLCSW1-113788-113788				Units: µg/L		Analysis Date: 2/6/2018 04:07 PM		
Client ID:		Run ID: SVMS6_180206A			SeqNo: 4881823		Prep Date: 2/5/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	28.7	1.0	33.3	0	86.2	40-140	0			
Acenaphthene	27.83	1.0	33.3	0	83.6	40-140	0			
Acenaphthylene	26.64	1.0	33.3	0	80	40-140	0			
Anthracene	36.62	1.0	33.3	0	110	40-140	0			
Benzo(a)anthracene	44.67	1.0	33.3	0	134	40-140	0			
Benzo(a)pyrene	33.89	1.0	33.3	0	102	40-140	0			
Benzo(b)fluoranthene	41.19	1.0	33.3	0	124	40-140	0			
Benzo(g,h,i)perylene	31.59	1.0	33.3	0	94.9	40-140	0			
Benzo(k)fluoranthene	37.94	1.0	33.3	0	114	40-140	0			
Chrysene	34.18	1.0	33.3	0	103	40-140	0			
Dibenzo(a,h)anthracene	33.35	1.0	33.3	0	100	40-140	0			
Fluoranthene	38.15	1.0	33.3	0	115	40-140	0			
Fluorene	27.64	1.0	33.3	0	83	40-140	0			
Indeno(1,2,3-cd)pyrene	31.34	1.0	33.3	0	94.1	40-140	0			
Naphthalene	26.1	1.0	33.3	0	78.4	40-140	0			
Phenanthrene	30.9	1.0	33.3	0	92.8	40-140	0			
Pyrene	34.08	1.0	33.3	0	102	40-140	0			
<i>Surr: 2-Fluorobiphenyl</i>	<i>34.46</i>	<i>0</i>	<i>41.7</i>	<i>0</i>	<i>82.6</i>	<i>20-140</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>50.29</i>	<i>0</i>	<i>41.7</i>	<i>0</i>	<i>121</i>	<i>20-172</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>14.14</i>	<i>0</i>	<i>41.7</i>	<i>0</i>	<i>33.9</i>	<i>10-140</i>	<i>0</i>			

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113788 Instrument ID SVMS6 Method: SW846 8270D

MS		Sample ID: 1802061-01C MS				Units: µg/L		Analysis Date: 2/5/2018 03:08 PM		
Client ID: BM2		Run ID: SVMS6_180205A			SeqNo: 4879225		Prep Date: 2/5/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	28.21	1.0	33.3	0	84.7	40-140	0			
Acenaphthene	31.46	1.0	33.3	0	94.5	40-140	0			
Acenaphthylene	29.86	1.0	33.3	0	89.7	40-140	0			
Anthracene	35.46	1.0	33.3	0	106	40-140	0			
Benzo(a)anthracene	34.3	1.0	33.3	0	103	40-140	0			
Benzo(a)pyrene	31.37	1.0	33.3	0	94.2	40-140	0			
Benzo(b)fluoranthene	30.96	1.0	33.3	0	93	40-140	0			
Benzo(g,h,i)perylene	32.87	1.0	33.3	0	98.7	40-140	0			
Benzo(k)fluoranthene	24.63	1.0	33.3	0	74	40-140	0			
Chrysene	29.33	1.0	33.3	0	88.1	40-140	0			
Dibenzo(a,h)anthracene	37.26	1.0	33.3	0	112	40-140	0			
Fluoranthene	30.15	1.0	33.3	0	90.5	40-140	0			
Fluorene	32.47	1.0	33.3	0	97.5	40-140	0			
Indeno(1,2,3-cd)pyrene	35.29	1.0	33.3	0	106	40-140	0			
Naphthalene	25.98	1.0	33.3	0	78	40-140	0			
Phenanthrene	30.8	1.0	33.3	0	92.5	40-140	0			
Pyrene	28.37	1.0	33.3	0	85.2	40-140	0			
Surr: 2-Fluorobiphenyl	36.83	0	41.7	0	88.3	20-140	0			
Surr: 4-Terphenyl-d14	25.91	0	41.7	0	62.1	20-172	0			
Surr: Nitrobenzene-d5	18.81	0	41.7	0	45.1	10-140	0			

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113788 Instrument ID SVMS6 Method: SW846 8270D

MS		Sample ID: 1802061-01C MS				Units: µg/L		Analysis Date: 2/6/2018 04:21 PM		
Client ID: BM2		Run ID: SVMS6_180206A			SeqNo: 4881824		Prep Date: 2/5/2018		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	31.13	1.0	33.3	0	93.5	40-140	0			
Acenaphthene	29.75	1.0	33.3	0	89.3	40-140	0			
Acenaphthylene	29.55	1.0	33.3	0	88.7	40-140	0			
Anthracene	33.92	1.0	33.3	0	102	40-140	0			
Benzo(a)anthracene	33.71	1.0	33.3	0	101	40-140	0			
Benzo(a)pyrene	28.5	1.0	33.3	0	85.6	40-140	0			
Benzo(b)fluoranthene	32.15	1.0	33.3	0	96.6	40-140	0			
Benzo(g,h,i)perylene	30.9	1.0	33.3	0	92.8	40-140	0			
Benzo(k)fluoranthene	28.29	1.0	33.3	0	84.9	40-140	0			
Chrysene	28.2	1.0	33.3	0	84.7	40-140	0			
Dibenzo(a,h)anthracene	33.41	1.0	33.3	0	100	40-140	0			
Fluoranthene	32.84	1.0	33.3	0	98.6	40-140	0			
Fluorene	28.58	1.0	33.3	0	85.8	40-140	0			
Indeno(1,2,3-cd)pyrene	31.17	1.0	33.3	0	93.6	40-140	0			
Naphthalene	27.34	1.0	33.3	0	82.1	40-140	0			
Phenanthrene	31.49	1.0	33.3	0	94.6	40-140	0			
Pyrene	29.43	1.0	33.3	0	88.4	40-140	0			
Surr: 2-Fluorobiphenyl	36.99	0	41.7	0	88.7	20-140	0			
Surr: 4-Terphenyl-d14	29.21	0	41.7	0	70	20-172	0			
Surr: Nitrobenzene-d5	14.5	0	41.7	0	34.8	10-140	0			

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113788 Instrument ID SVMS6 Method: SW846 8270D

MSD		Sample ID: 1802061-01C MSD				Units: µg/L		Analysis Date: 2/5/2018 03:22 PM		
Client ID: BM2		Run ID: SVMS6_180205A				SeqNo: 4879226		Prep Date: 2/5/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	29.27	1.0	33.3	0	87.9	40-140	28.21	3.69	30	
Acenaphthene	29.04	1.0	33.3	0	87.2	40-140	31.46	7.97	30	
Acenaphthylene	27.16	1.0	33.3	0	81.6	40-140	29.86	9.47	30	
Anthracene	33.22	1.0	33.3	0	99.8	40-140	35.46	6.52	30	
Benzo(a)anthracene	32.14	1.0	33.3	0	96.5	40-140	34.3	6.51	30	
Benzo(a)pyrene	30.04	1.0	33.3	0	90.2	40-140	31.37	4.33	30	
Benzo(b)fluoranthene	28.59	1.0	33.3	0	85.9	40-140	30.96	7.96	30	
Benzo(g,h,i)perylene	30	1.0	33.3	0	90.1	40-140	32.87	9.13	30	
Benzo(k)fluoranthene	25.67	1.0	33.3	0	77.1	40-140	24.63	4.13	30	
Chrysene	27.77	1.0	33.3	0	83.4	40-140	29.33	5.46	30	
Dibenzo(a,h)anthracene	34.22	1.0	33.3	0	103	40-140	37.26	8.52	30	
Fluoranthene	28.25	1.0	33.3	0	84.8	40-140	30.15	6.51	30	
Fluorene	31.45	1.0	33.3	0	94.4	40-140	32.47	3.19	30	
Indeno(1,2,3-cd)pyrene	31.42	1.0	33.3	0	94.3	40-140	35.29	11.6	30	
Naphthalene	28.22	1.0	33.3	0	84.8	40-140	25.98	8.27	30	
Phenanthrene	30.02	1.0	33.3	0	90.2	40-140	30.8	2.56	30	
Pyrene	28.38	1.0	33.3	0	85.2	40-140	28.37	0.0229	30	
Surr: 2-Fluorobiphenyl	34.02	0	41.7	0	81.6	20-140	36.83	7.93	30	
Surr: 4-Terphenyl-d14	33.19	0	41.7	0	79.6	20-172	25.91	24.6	30	
Surr: Nitrobenzene-d5	18.35	0	41.7	0	44	10-140	18.81	2.5	30	

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113788 Instrument ID SVMS6 Method: SW846 8270D

MSD		Sample ID: 1802061-01C MSD				Units: µg/L		Analysis Date: 2/6/2018 04:35 PM		
Client ID: BM2		Run ID: SVMS6_180206A				SeqNo: 4881825		Prep Date: 2/5/2018		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	29.93	1.0	33.3	0	89.9	40-140	31.13	3.95	30	
Acenaphthene	28.05	1.0	33.3	0	84.2	40-140	29.75	5.86	30	
Acenaphthylene	26.73	1.0	33.3	0	80.3	40-140	29.55	10	30	
Anthracene	32.29	1.0	33.3	0	97	40-140	33.92	4.94	30	
Benzo(a)anthracene	32.1	1.0	33.3	0	96.4	40-140	33.71	4.88	30	
Benzo(a)pyrene	27.15	1.0	33.3	0	81.5	40-140	28.5	4.84	30	
Benzo(b)fluoranthene	28.66	1.0	33.3	0	86.1	40-140	32.15	11.5	30	
Benzo(g,h,i)perylene	28.15	1.0	33.3	0	84.5	40-140	30.9	9.31	30	
Benzo(k)fluoranthene	29.48	1.0	33.3	0	88.5	40-140	28.29	4.11	30	
Chrysene	26.36	1.0	33.3	0	79.2	40-140	28.2	6.75	30	
Dibenzo(a,h)anthracene	30.63	1.0	33.3	0	92	40-140	33.41	8.67	30	
Fluoranthene	31.82	1.0	33.3	0	95.6	40-140	32.84	3.13	30	
Fluorene	27.04	1.0	33.3	0	81.2	40-140	28.58	5.56	30	
Indeno(1,2,3-cd)pyrene	30.32	1.0	33.3	0	91	40-140	31.17	2.78	30	
Naphthalene	27.91	1.0	33.3	0	83.8	40-140	27.34	2.08	30	
Phenanthrene	29.76	1.0	33.3	0	89.4	40-140	31.49	5.66	30	
Pyrene	28.4	1.0	33.3	0	85.3	40-140	29.43	3.55	30	
Surr: 2-Fluorobiphenyl	34.09	0	41.7	0	81.7	20-140	36.99	8.16	30	
Surr: 4-Terphenyl-d14	35.79	0	41.7	0	85.8	20-172	29.21	20.2	30	
Surr: Nitrobenzene-d5	13.75	0	41.7	0	33	10-140	14.5	5.32	30	

The following samples were analyzed in this batch: | 1802061-01C | 1802061-02C |

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229298** Instrument ID **VMS6** Method: **SW8260B**

MBLK		Sample ID: VBLKW1-180202-R229298				Units: µg/L		Analysis Date: 2/2/2018 01:18 PM		
Client ID:		Run ID: VMS6_180202A				SeqNo: 4877610		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	1.0								
Ethylbenzene	U	1.0								
m,p-Xylene	U	2.0								
o-Xylene	U	1.0								
Toluene	U	1.0								
Xylenes, Total	U	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	19.34	0	20	0	96.7	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	19.53	0	20	0	97.6	80-110	0			
<i>Surr: Dibromofluoromethane</i>	19.29	0	20	0	96.4	85-115	0			
<i>Surr: Toluene-d8</i>	19.37	0	20	0	96.8	85-110	0			

LCS		Sample ID: VLCSW1-180202-R229298				Units: µg/L		Analysis Date: 2/2/2018 12:02 PM		
Client ID:		Run ID: VMS6_180202A				SeqNo: 4877609		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.6	1.0	20	0	103	85-125	0			
Ethylbenzene	19.38	1.0	20	0	96.9	78-113	0			
m,p-Xylene	37.4	2.0	40	0	93.5	75-130	0			
o-Xylene	18.61	1.0	20	0	93	80-125	0			
Toluene	19.53	1.0	20	0	97.6	85-125	0			
Xylenes, Total	56.01	3.0	60	0	93.4	80-126	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	19.16	0	20	0	95.8	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	20.03	0	20	0	100	80-110	0			
<i>Surr: Dibromofluoromethane</i>	19.79	0	20	0	99	85-115	0			
<i>Surr: Toluene-d8</i>	19.38	0	20	0	96.9	85-110	0			

MS		Sample ID: 18011422-03A MS				Units: µg/L		Analysis Date: 2/2/2018 09:50 PM		
Client ID:		Run ID: VMS6_180202A				SeqNo: 4877628		Prep Date:		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	205	10	200	16.7	94.2	85-125	0			
Ethylbenzene	232.2	10	200	22.8	105	78-113	0			
m,p-Xylene	475	20	400	79.8	98.8	75-130	0			
o-Xylene	237.6	10	200	40.4	98.6	80-125	0			
Toluene	223.5	10	200	20.8	101	85-125	0			
Xylenes, Total	712.6	30	600	120.2	98.7	80-126	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	219.5	0	200	0	110	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	199.1	0	200	0	99.6	80-110	0			
<i>Surr: Dibromofluoromethane</i>	204.9	0	200	0	102	85-115	0			
<i>Surr: Toluene-d8</i>	216.9	0	200	0	108	85-110	0			

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229298** Instrument ID **VMS6** Method: **SW8260B**

MSD		Sample ID: 18011422-03A MSD				Units: µg/L		Analysis Date: 2/2/2018 10:15 PM		
Client ID:		Run ID: VMS6_180202A			SeqNo: 4877629		Prep Date:		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	248.5	10	200	16.7	116	85-125	205	19.2	30	
Ethylbenzene	269.9	10	200	22.8	124	78-113	232.2	15	30	S
m,p-Xylene	542.5	20	400	79.8	116	75-130	475	13.3	30	
o-Xylene	270.9	10	200	40.4	115	80-125	237.6	13.1	30	
Toluene	269.5	10	200	20.8	124	85-125	223.5	18.7	30	
Xylenes, Total	813.4	30	600	120.2	116	80-126	712.6	13.2	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	221.3	0	200	0	111	75-120	219.5	0.817	30	
<i>Surr: 4-Bromofluorobenzene</i>	194.6	0	200	0	97.3	80-110	199.1	2.29	30	
<i>Surr: Dibromofluoromethane</i>	210.2	0	200	0	105	85-115	204.9	2.55	30	
<i>Surr: Toluene-d8</i>	218.6	0	200	0	109	85-110	216.9	0.781	30	

The following samples were analyzed in this batch: 1802061-01A 1802061-02A

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: 113834 Instrument ID TDS Method: A2540 C-11

MBLK	Sample ID: MBLK-113834-113834		Units: mg/L		Analysis Date: 2/6/2018 01:38 PM					
Client ID:	Run ID: TDS_180206A		SeqNo: 4879872		Prep Date: 2/6/2018 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids U 10

LCS	Sample ID: LCS-113834-113834		Units: mg/L		Analysis Date: 2/6/2018 01:38 PM					
Client ID:	Run ID: TDS_180206A		SeqNo: 4879871		Prep Date: 2/6/2018 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 473 10 495 0 95.6 80-120 0

DUP	Sample ID: 1802061-01E DUP		Units: mg/L		Analysis Date: 2/6/2018 01:38 PM					
Client ID: BM2	Run ID: TDS_180206A		SeqNo: 4879865		Prep Date: 2/6/2018 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 628 10 0 0 0 0-0 648 3.13 10

The following samples were analyzed in this batch: 1802061-01E 1802061-02E

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229268** Instrument ID **WETCHEM** Method: **A4500-NO2 B-11**

MBLK	Sample ID: MB-R229268-R229268		Units: mg/L		Analysis Date: 2/1/2018 04:30 PM					
Client ID:	Run ID: WETCHEM_180201G		SeqNo: 4874583		Prep Date:			DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrite U 0.020

LCS	Sample ID: LCS-R229268-R229268		Units: mg/L		Analysis Date: 2/1/2018 04:30 PM					
Client ID:	Run ID: WETCHEM_180201G		SeqNo: 4874584		Prep Date:			DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrite 0.1968 0.020 0.2 0 98.4 80-120 0

MS	Sample ID: 1802050-01C MS		Units: mg/L		Analysis Date: 2/1/2018 04:30 PM					
Client ID:	Run ID: WETCHEM_180201G		SeqNo: 4874587		Prep Date:			DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrite 0.2881 0.020 0.2 0.1111 88.5 75-125 0

MSD	Sample ID: 1802050-01C MSD		Units: mg/L		Analysis Date: 2/1/2018 04:30 PM					
Client ID:	Run ID: WETCHEM_180201G		SeqNo: 4874588		Prep Date:			DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrite 0.2846 0.020 0.2 0.1111 86.8 75-125 0.2881 1.22 20

The following samples were analyzed in this batch: 1802061-01E 1802061-02E

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

Client: Western Water & Land, Inc.
Work Order: 1802061
Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229311b** Instrument ID **Titrator 1** Method: **SW9040C**

LCS		Sample ID: WLCSW1-180201-R229311b				Units: s.u.		Analysis Date: 2/1/2018 07:55 PM		
Client ID:		Run ID: TITRATOR 1_180201A			SeqNo: 4875636		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH (laboratory)	4.65	0.10	4.4	0	106	90-110	0			

The following samples were analyzed in this batch:

1802061-01E	1802061-02E
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Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229313a** Instrument ID **Titrator 1** Method: **A2510 B-11**

MBLK	Sample ID: WBLKW1-180201-R229313a				Units: µmhos/cm			Analysis Date: 2/1/2018 07:55 PM		
Client ID:	Run ID: TITRATOR 1_180201B				SeqNo: 4875687		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Specific Conductance U 5.0

DUP	Sample ID: 1802032-02A DUP				Units: µmhos/cm			Analysis Date: 2/1/2018 07:55 PM		
Client ID:	Run ID: TITRATOR 1_180201B				SeqNo: 4875693		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Specific Conductance 22640 5.0 0 0 0 0-0 23540 3.89 5

LCS1	Sample ID: WLCS1W1-180201-R229313a				Units: µmhos/cm			Analysis Date: 2/1/2018 07:55 PM		
Client ID:	Run ID: TITRATOR 1_180201B				SeqNo: 4875688		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Specific Conductance 14.87 5.0 14.9 0 99.8 85-107 0

LCS2	Sample ID: WLCS2W1-180201-R229313a				Units: µmhos/cm			Analysis Date: 2/1/2018 07:55 PM		
Client ID:	Run ID: TITRATOR 1_180201B				SeqNo: 4875689		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Specific Conductance 586.2 5.0 592 0 99 85-107 0

The following samples were analyzed in this batch: 1802061-01E 1802061-02E

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229317** Instrument ID **Titrator 1** Method: **A2320 B-11**

MBLK		Sample ID: WBLKW1-180201-R229317				Units: mg/L		Analysis Date: 2/1/2018 07:55 PM		
Client ID:		Run ID: TITRATOR 1_180201C				SeqNo: 4875812		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	U	10								
Alkalinity, Carbonate (as CaCO3)	U	10								
Alkalinity, Total (as CaCO3)	U	10								

LCS		Sample ID: WLCSW1-180201-R229317				Units: mg/L		Analysis Date: 2/1/2018 07:55 PM		
Client ID:		Run ID: TITRATOR 1_180201C				SeqNo: 4875813		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (as CaCO3)	914.3	10	925	0	98.8	85-110	0			
Alkalinity, Total (as CaCO3)	973.8	10	1000	0	97.4	86-104	0			

DUP		Sample ID: 1802032-02A DUP				Units: mg/L		Analysis Date: 2/1/2018 07:55 PM		
Client ID:		Run ID: TITRATOR 1_180201C				SeqNo: 4875816		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	149.5	10	0	0	0		147.4	1.46	20	
Alkalinity, Carbonate (as CaCO3)	U	10	0	0	0		0	0	20	
Alkalinity, Total (as CaCO3)	149.5	10	0	0	0		147.4	1.46	20	

The following samples were analyzed in this batch: 1802061-01E 1802061-02E

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229491** Instrument ID **IC3** Method: **E300.0**

MBLK		Sample ID: CCB/MBLK-R229491				Units: mg/L		Analysis Date: 2/6/2018 11:09 AM		
Client ID:		Run ID: IC3_180206A			SeqNo: 4880273		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	U	0.20								
Chloride	U	1.0								
Fluoride	U	0.10								
Sulfate	U	1.0								

LCS		Sample ID: LCS-R229491				Units: mg/L		Analysis Date: 2/6/2018 11:28 AM		
Client ID:		Run ID: IC3_180206A			SeqNo: 4880274		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	1.986	0.20	2	0	99.3	90-110	0			
Chloride	9.449	1.0	10	0	94.5	90-110	0			
Fluoride	1.889	0.10	2	0	94.4	90-110	0			
Sulfate	9.803	1.0	10	0	98	90-110	0			

MS		Sample ID: 1802061-01E MS				Units: mg/L		Analysis Date: 2/6/2018 02:21 PM		
Client ID: BM2		Run ID: IC3_180206A			SeqNo: 4880283		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	101.6	10	100	0	102	80-120	0			
Chloride	680.9	50	500	210.1	94.2	80-120	0			
Fluoride	95.94	5.0	100	0	95.9	80-120	0			
Sulfate	608.3	50	500	115.2	98.6	80-120	0			

MSD		Sample ID: 1802061-01E MSD				Units: mg/L		Analysis Date: 2/6/2018 02:40 PM		
Client ID: BM2		Run ID: IC3_180206A			SeqNo: 4880284		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	101.5	10	100	0	102	80-120	101.6	0.0345	20	
Chloride	680.7	50	500	210.1	94.1	80-120	680.9	0.0331	20	
Fluoride	96.12	5.0	100	0	96.1	80-120	95.94	0.193	20	
Sulfate	607.2	50	500	115.2	98.4	80-120	608.3	0.188	20	

The following samples were analyzed in this batch: 1802061-01E 1802061-02E

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

Client: Western Water & Land, Inc.
 Work Order: 1802061
 Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229565A** Instrument ID **LACHAT2** Method: **E353.2 R2.0**

MBLK	Sample ID: MBLK-R229565A				Units: mg/L			Analysis Date: 2/7/2018 04:10 PM		
Client ID:	Run ID: LACHAT2_180207C			SeqNo: 4882221		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate U 0.020

LCS	Sample ID: LCS-R229565A				Units: mg/L			Analysis Date: 2/7/2018 04:10 PM		
Client ID:	Run ID: LACHAT2_180207C			SeqNo: 4882249		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate 4.586 0.020 5 0 91.7 90-110 0

MS	Sample ID: 1802050-03A MS				Units: mg/L			Analysis Date: 2/7/2018 04:10 PM		
Client ID:	Run ID: LACHAT2_180207C			SeqNo: 4882226		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate 6.567 0.020 5 2.492 81.5 90-110 0 S

MS	Sample ID: 1802108-03D MS				Units: mg/L			Analysis Date: 2/7/2018 04:10 PM		
Client ID:	Run ID: LACHAT2_180207C			SeqNo: 4882238		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate 4.397 0.020 5 0.0911 86.1 90-110 0 S

MSD	Sample ID: 1802050-03A MSD				Units: mg/L			Analysis Date: 2/7/2018 04:10 PM		
Client ID:	Run ID: LACHAT2_180207C			SeqNo: 4882227		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate 6.534 0.020 5 2.492 80.8 90-110 6.567 0.504 20 S

MSD	Sample ID: 1802108-03D MSD				Units: mg/L			Analysis Date: 2/7/2018 04:10 PM		
Client ID:	Run ID: LACHAT2_180207C			SeqNo: 4882239		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate 4.315 0.020 5 0.0911 84.5 90-110 4.397 1.88 20 S

The following samples were analyzed in this batch: 1802061-01F 1802061-02F

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

Client: Western Water & Land, Inc.
Work Order: 1802061
Project: TEP GV 80-4 Pad 317B

QC BATCH REPORT

Batch ID: **R229565B** Instrument ID **LACHAT2** Method: **E353.2 R2.0**

MBLK		Sample ID: MBLK-R229565B				Units: mg/L		Analysis Date: 2/7/2018 04:10 PM		
Client ID:		Run ID: LACHAT2_180207C		SeqNo: 4882254		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	U	0.020								

LCS		Sample ID: LCS-R229565B				Units: mg/L		Analysis Date: 2/7/2018 04:10 PM		
Client ID:		Run ID: LACHAT2_180207C		SeqNo: 4882255		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite	4.586	0.020	5	0	91.7	80-120	0			

The following samples were analyzed in this batch: 1802061-01F 1802061-02F

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



ALS Laboratory Group

3352 128th Ave, Holland, MI 49424
 PH: (616) 399-6070

Chain-of-Custody

Form 2028

WORKORDER #	1802061
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PROJECT NAME	TEP 6V 80-4 Pad 317 B	SAMPLER	Shelby	DATE	1-31-18	PAGE	1 of 1
FACILITY NAME		PROJECT NO.		TURNAROUND	Standard	DISPOSAL	By Lab or Return to Client
FACILITY ID (API)		EDD FORMAT					
COMPANY NAME	Western Water & Land, Inc.	PURCHASE ORDER					
SEND REPORT TO	Bruce Smith	BILL TO COMPANY	TEP Rocky Mtn LLC				
ADDRESS	743 Horizon Ct, Ste 330	INVOICE ATTN TO	Tammy Gose				
CITY / STATE / ZIP	Grand Junction, CO 81506	ADDRESS	1058 CR 215				
PHONE	(970) 242-0170	CITY / STATE / ZIP	Parachute, CO 81635				
FAX		PHONE	(970) 712-6049				
E-MAIL	bsmith@westernwaterandland.com	FAX					
		E-MAIL	tgose@terraep.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	NG1	BART	BTEX	GRO	DRO	Dissolved Metals, lab filtered	Anions, Alk, TDS, pH, SpC, nitrates	Total Phosphorus	Dissolved gases - HCl preserved	Dissolved gases - unpreserved	PAH's	
1	BM 2	SW	1-31-18	1100	8	1	IV												
2	CO RIVER	SW	1-31-18	0930	8	1	IV												

Field Parameters

Field ID	Temp (°C)	DO (%)	SpC (uS/cm)	Turb (NTUs)	pH (s.u.)	DO (mg/L)	ORP (mv)	Disch (gpm)
BM 2	2.22	79.0	1242	2.59	6.86	10.90	220.6	NM
CO RIVER	2.29	79.7	1242	NM	7.56	10.89	190.5	NM

*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: Wells: PA 344-5 & PA 444-5 PH9 3.2° SPZ	QC PACKAGE (check below)	
	<input type="checkbox"/>	LEVEL II (Standard QC)
	<input type="checkbox"/>	LEVEL III (Std QC + forms)
	<input checked="" type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)

SIGNATURE	PRINTED NAME	DATE	TIME
<i>[Signature]</i>	Shelby Goodwin	1-31-18	1145
<i>[Signature]</i>	N.M.	1-31-18	1300
<i>[Signature]</i>	N.M.	1-31-18	1830
<i>[Signature]</i>	Kevin Wickens	2/1/18	0930

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

(C)

Sample Receipt Checklist

Client Name: **WESTERNW&L**

Date/Time Received: **01-Feb-18 09:30**

Work Order: **1802061**

Received by: **KRW**

Checklist completed by Keith Wierenga 01-Feb-18
eSignature Date

Reviewed by: Chad Whelton 02-Feb-18
eSignature Date

Matrices: Water

Carrier name: FedEx

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container/Temp Blank temperature in compliance? Yes No
- Sample(s) received on ice? Yes No

Temperature(s)/Thermometer(s):

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

Water - VOA vials have zero headspace? Yes No No VOA vials submitted

Water - pH acceptable upon receipt? Yes No N/A

pH adjusted? Yes No N/A

pH adjusted by:

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: