



1904395

GC/MS Volatiles:

The sample was analyzed using GC/MS following the current revision of SOP 525 based on SW-846 Method 8260C. The samples were also analyzed for Gasoline Range Organics (GRO).

All acceptance criteria were met.

Dissolved Gasses:

The sample was prepared and analyzed according to method RSK-175 procedures and the current revision of SOP 449.

All acceptance criteria were met.

DRO:

The sample was analyzed following the current revision of SOP 406 generally based on SW-846 Methods 8000C and 8015D. TEPH is a multicomponent mixture and is quantitated by summing the entire carbon range, rather than individual peaks. The carbon range integrated in this test extends from C10 to C28.

All acceptance criteria were met.

BART:

The Biological Activity Reaction Test was completed with the Iron-Related Bacteria, Sulfate-Reducing Bacteria, and Slime-Forming Bacteria kit manufactured by Hach Company. The analysis was performed following the manufacturer provided instructions. If the target analyte is not detected (absent), then the sample will be reported with "ND" in the result field. If the target analyte is detected (present), then the sample will be reported with the estimated colony forming units/mL (cfu/mL) as provided by the manufacturer based on the day reaction was observed.

Metals:

The sample was analyzed following Methods for the Determination of Metals in Environmental Samples – Supplement 1 procedures. Analysis by ICPMS followed method 200.8 and the current revision of SOP 827.

The sample was to be analyzed for dissolved metals. The sample was filtered through a 0.45 micron filter and preserved with nitric acid to a pH less than two prior to analysis.

All acceptance criteria were met.



Inorganics:

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

<u>Analyte</u>	<u>Method</u>	<u>SOP #</u>
Alkalinity	SM2320B	1106
Bicarbonate	SM2320B	1106
Carbonate	SM2320B	1106
pH	SM4500-H ⁺ B	1126
Total phosphorus	365.2	1119
Specific conductance	SM2510B	1128
TDS	SM2540C	1101
Bromide	300.0 Revision 2.1	1113
Chloride	300.0 Revision 2.1	1113
Fluoride	300.0 Revision 2.1	1113
Nitrate as N	300.0 Revision 2.1	1113
Nitrite as N	300.0 Revision 2.1	1113
Total Nitrates	300.0 Revision 2.1	1113
Sulfate	300.0 Revision 2.1	1113

All acceptance criteria were met.

ALS -- Fort Collins

SAMPLE SUMMARY REPORT

Client: Western Water and Land, Inc.
 Project: PA 22-25 BWQ
 Sample ID: Naugle 202848
 Legal Location:
 Collection Date: 4/17/2019 12:50

Date: 01-May-19
 Work Order: 1904395
 Lab ID: 1904395-1
 Matrix: WATER
 Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ALKALINITY AS CALCIUM CARBONATE			SM2320B				
BICARBONATE AS CaCO3	440		20	MG/L	1		4/22/2019
CARBONATE AS CaCO3	ND		20	MG/L	1		4/22/2019
TOTAL ALKALINITY AS CaCO3	440		20	MG/L	1		4/22/2019
BIOLOGICAL ACTIVITY REACTION TEST			BART				
IRON RELATED BACTERIA	35000		1	cfu/ml	1		5/1/2019
SLIME FORMING BACTERIA	66500		1	cfu/ml	1		5/1/2019
SULFATE REDUCING BACTERIA	100000		1	cfu/ml	1		5/1/2019
DIESEL RANGE ORGANICS			SW8015M				
Diesel Range Organics	ND		0.52	MG/L	1	0.26	4/22/2019 15:34
Surr: O-TERPHENYL	93		63-126	%REC	1		4/22/2019 15:34
DISSOLVED GASSES			RSK175				
METHANE	ND		1	UG/L	1	1	4/23/2019 14:22
ETHANE	ND		2	UG/L	1	2	4/23/2019 14:22
PROPANE	ND		1	UG/L	1	1	4/23/2019 14:22
GC/MS VOLATILES			SW8260_25				
BENZENE	ND		1	UG/L	1	0.3	4/19/2019 13:23
TOLUENE	ND		1	UG/L	1	0.3	4/19/2019 13:23
ETHYLBENZENE	ND		1	UG/L	1	0.3	4/19/2019 13:23
M+P-XYLENE	ND		1	UG/L	1	0.3	4/19/2019 13:23
O-XYLENE	ND		1	UG/L	1	0.3	4/19/2019 13:23
TOTAL XYLENES	ND		1	UG/L	1		4/19/2019 13:23
Surr: 4-BROMOFLUOROBENZENE	101		85-115	%REC	1		4/19/2019 13:23
Surr: DIBROMOFLUOROMETHANE	95		84-118	%REC	1		4/19/2019 13:23
Surr: TOLUENE-D8	105		85-115	%REC	1		4/19/2019 13:23
GASOLINE RANGE ORGANICS	ND		100	UG/L	1	30	4/19/2019 13:23
ION CHROMATOGRAPHY			EPA300.0				
BROMIDE	ND		2	MG/L	10	0.6	4/18/2019 20:01
CHLORIDE	390		20	MG/L	100	6	4/18/2019 20:13
FLUORIDE	0.57	J	1	MG/L	10	0.3	4/18/2019 20:01
NITRATE/NITRITE AS N	10		0.1	MG/L	1		4/18/2019 20:01
NITRATE AS N	10		2	MG/L	10	0.6	4/18/2019 20:01
NITRITE AS N	ND		1	MG/L	10	0.3	4/18/2019 20:01
SULFATE	2700		100	MG/L	100	30	4/18/2019 20:13
METALS BY 200.8			EPA200.8				
BARIUM	0.0085		0.001	MG/L	10	0.000086	4/24/2019 13:52
BORON	0.14		0.05	MG/L	10	0.0007	4/24/2019 13:52
CALCIUM	340		1	MG/L	10	0.087	4/24/2019 13:52
IRON	0.084	J	0.1	MG/L	10	0.00065	4/24/2019 13:52
MAGNESIUM	200		0.1	MG/L	10	0.014	4/24/2019 13:52
MANGANESE	0.28		0.002	MG/L	10	0.000079	4/24/2019 13:52

ALS -- Fort Collins

SAMPLE SUMMARY REPORT

Client: Western Water and Land, Inc.
Project: PA 22-25 BWQ
Sample ID: Naugle 202848
Legal Location:
Collection Date: 4/17/2019 12:50

Date: 01-May-19
Work Order: 1904395
Lab ID: 1904395-1
Matrix: WATER

Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
POTASSIUM	7.9		1	MG/L	10	0.057	4/24/2019 13:52
SELENIUM	0.036		0.001	MG/L	10	0.00012	4/24/2019 13:52
SODIUM	870		1	MG/L	10	0.022	4/24/2019 13:52
STRONTIUM	4.7		0.001	MG/L	10	0.00013	4/24/2019 13:52
PH			SM4500-H		Prep Date: 4/19/2019		PrepBy: AEJ
PH	7.32		0.1	pH	1		4/19/2019
SPECIFIC CONDUCTANCE IN WATER			SM2510B		Prep Date: 4/19/2019		PrepBy: AEJ
SPECIFIC CONDUCTIVITY	5590		1	umhos/cm	1		4/19/2019
TOTAL DISSOLVED SOLIDS			SM2540C		Prep Date: 4/22/2019		PrepBy: AEJ
TOTAL DISSOLVED SOLIDS	4600		200	MG/L	1		4/23/2019
TOTAL PHOSPHORUS AS P			EPA365.2		Prep Date: 4/19/2019		PrepBy: AEJ
TOTAL PHOSPHORUS	ND		0.1	MG/L	2	0.03	4/22/2019

Client: Western Water and Land, Inc.
Project: PA 22-25 BWQ
Sample ID: Naugle 202848
Legal Location:
Collection Date: 4/17/2019 12:50

Date: 01-May-19
Work Order: 1904395
Lab ID: 1904395-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	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

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Date: 5/1/2019 12:36:

Client: Western Water and Land, Inc.

QC BATCH REPORT

Work Order: 1904395

Project: PA 22-25 BWQ

Batch ID: **HC190419-81-1**

Instrument ID **FUELS-1**

Method: **SW8015M**

LCS Sample ID: **HC190419-81** Units: **MG/L** Analysis Date: **4/20/2019 02:22**

Client ID: Run ID: **HC190419-8A2** Prep Date: **4/19/2019** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Diesel Range Organics	8.01	0.533	8.33		96	36-150				20	
Surr: O-TERPHENYL	1.7		1.67		102	63-126					

MB Sample ID: **HC190419-81** Units: **MG/L** Analysis Date: **4/19/2019 22:21**

Client ID: Run ID: **HC190419-8A2** Prep Date: **4/19/2019** DF: **1**

Analyte	Result	ReportLimit	MDL							Qual
Diesel Range Organics	ND	0.53	0.27							
Surr: O-TERPHENYL	1.6				96	63-126				

The following samples were analyzed in this batch:

1904395-1

Client: Western Water and Land, Inc.
 Work Order: 1904395
 Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: **HC190423-91-2** Instrument ID **MEE-1** Method: **RSK175**

LCS		Sample ID: HC190423-91			Units: UG/L		Analysis Date: 4/23/2019 13:41				
Client ID:		Run ID: HC190423-9A			Prep Date: 4/23/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
METHANE	131	1	142		92	80-120				25	
ETHANE	235	2	267		88	80-120				25	
PROPANE	342	1	391		87	80-120				25	

LCSD		Sample ID: HC190423-91			Units: UG/L		Analysis Date: 4/23/2019 14:17				
Client ID:		Run ID: HC190423-9A			Prep Date: 4/23/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
METHANE	134	1	142		94	80-120		131	2	25	
ETHANE	237	2	267		89	80-120		235	1	25	
PROPANE	348	1	391		89	80-120		342	2	25	

MB		Sample ID: HC190423-91			Units: UG/L		Analysis Date: 4/23/2019 13:43				
Client ID:		Run ID: HC190423-9A			Prep Date: 4/23/2019		DF: 1				
Analyte	Result	ReportLimit	MDL								
METHANE	ND	1	1								
ETHANE	ND	2	2								
PROPANE	ND	1	1								

The following samples were analyzed in this batch:

Client: Western Water and Land, Inc.
 Work Order: 1904395
 Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: **IP190423-5-3** Instrument ID **ICPMS2** Method: **EPA200.8**

LCS		Sample ID: IM190423-5			Units: MG/L		Analysis Date: 4/24/2019 13:43				
Client ID:		Run ID: IM190424-10A8			Prep Date: 4/23/2019		DF: 10				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
BARIUM	0.102	0.001	0.1		102	85-115				20	
BORON	1.06	0.05	1		106	85-115				20	
CALCIUM	10.9	1	10		109	85-115				20	
IRON	4.83	0.1	5		97	85-115				20	
MAGNESIUM	10.3	0.1	10		103	85-115				20	
MANGANESE	0.11	0.002	0.1		110	85-115				20	
POTASSIUM	4.88	1	5		98	85-115				20	
SELENIUM	0.108	0.001	0.1		108	85-115				20	
SODIUM	10.5	1	10		105	85-115				20	
STRONTIUM	0.109	0.001	0.1		109	85-115				20	

MB		Sample ID: FP190419-5			Units: MG/L		Analysis Date: 4/24/2019 13:37				
Client ID:		Run ID: IM190424-10A8			Prep Date: 4/23/2019		DF: 10				
Analyte	Result	ReportLimit	MDL								Qual
BARIUM	ND	0.001	0.000086								
BORON	0.0063	0.05	0.0007								J
CALCIUM	ND	1	0.087								
IRON	0.017	0.1	0.00065								J
MAGNESIUM	ND	0.1	0.014								
MANGANESE	ND	0.002	0.000079								
POTASSIUM	ND	1	0.057								
SELENIUM	ND	0.001	0.00012								
SODIUM	ND	1	0.022								
STRONTIUM	ND	0.001	0.00013								

The following samples were analyzed in this batch:

1904395-1

Client: Western Water and Land, Inc.
 Work Order: 1904395
 Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: VL190419-4-1 Instrument ID: HPV4 Method: SW8260_25

LCS		Sample ID: VL190419-4			Units: %REC		Analysis Date: 4/19/2019 10:54				
Client ID:		Run ID: VL190419-4A			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Surr: 4-BROMOFLUOROBENZENE	24.4		25		98	85-115					
Surr: DIBROMOFLUOROMETHANE	24.1		25		97	84-118					
Surr: TOLUENE-D8	26.1		25		104	85-115					
BENZENE	10.7	1	10		107	83-117				20	
TOLUENE	11.1	1	10		111	82-113				20	
ETHYLBENZENE	11.3	1	10		113	81-113				20	
M+P-XYLENE	21.7	1	20		108	82-115				20	
O-XYLENE	10.7	1	10		107	81-115				20	

LCSD		Sample ID: VL190419-4			Units: %REC		Analysis Date: 4/19/2019 11:15				
Client ID:		Run ID: VL190419-4A			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Surr: 4-BROMOFLUOROBENZENE	24.5		25		98	85-115			0		
Surr: DIBROMOFLUOROMETHANE	24.5		25		98	84-118			2		
Surr: TOLUENE-D8	26		25		104	85-115			0		
BENZENE	10.8	1	10		108	83-117		10.7	1	20	
TOLUENE	10.9	1	10		109	82-113		11.1	2	20	
ETHYLBENZENE	11.3	1	10		113	81-113		11.3	0	20	
M+P-XYLENE	21.7	1	20		108	82-115		21.7	0	20	
O-XYLENE	10.7	1	10		107	81-115		10.7	0	20	

MB		Sample ID: VL190419-4			Units: %REC		Analysis Date: 4/19/2019 13:02				
Client ID:		Run ID: VL190419-4A			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	MDL								Qual
Surr: 4-BROMOFLUOROBENZENE	26				104	85-115					
Surr: DIBROMOFLUOROMETHANE	23.4				94	84-118					
Surr: TOLUENE-D8	26.5				106	85-115					
BENZENE	ND	1	0.3								
TOLUENE	ND	1	0.3								
ETHYLBENZENE	ND	1	0.3								
M+P-XYLENE	ND	1	0.3								
O-XYLENE	ND	1	0.3								
TOTAL XYLENES	ND	1									

The following samples were analyzed in this batch:

Client: Western Water and Land, Inc.
 Work Order: 1904395
 Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: VL190419-4-2 Instrument ID HPV4 Method: SW8260_25

LCS		Sample ID: VL190419-8			Units: UG/L		Analysis Date: 4/19/2019 11:59				
Client ID:		Run ID: VL190419-4A			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
GASOLINE RANGE ORGANICS	1040	100	1000		104	80-120				20	

LCSD		Sample ID: VL190419-8			Units: UG/L		Analysis Date: 4/19/2019 12:20				
Client ID:		Run ID: VL190419-4A			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
GASOLINE RANGE ORGANICS	1010	100	1000		101	80-120		1040	3	20	

MB		Sample ID: VL190419-4			Units: UG/L		Analysis Date: 4/19/2019 13:02				
Client ID:		Run ID: VL190419-4A			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	MDL								
GASOLINE RANGE ORGANICS	ND	100	30								

The following samples were analyzed in this batch:

Client: Western Water and Land, Inc.
Work Order: 1904395
Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: **AK190422-1-1** Instrument ID **NONE** Method: **SM2320B**

LCS Sample ID: **AK190422-1** Units: **MG/L** Analysis Date: **4/22/2019**
 Client ID: Run ID: **AK190422-1A1** Prep Date: **4/22/2019** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL ALKALINITY AS CaCO3	107	5	100		107	85-115				15	

MB Sample ID: **AK190422-1** Units: **MG/L** Analysis Date: **4/22/2019**
 Client ID: Run ID: **AK190422-1A1** Prep Date: **4/22/2019** DF: **1**

Analyte	Result	ReportLimit	MDL	Qual
BICARBONATE AS CaCO3	ND	5		
CARBONATE AS CaCO3	ND	5		
TOTAL ALKALINITY AS CaCO3	ND	5		

The following samples were analyzed in this batch:

1904395-1

Client: Western Water and Land, Inc.
 Work Order: 1904395
 Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: **IC190418-1-2** Instrument ID **IC3** Method: **EPA300.0**

LCS		Sample ID: IC190418-1		Units: MG/L			Analysis Date: 4/18/2019 13:02				
Client ID:		Run ID: IC190418-1A3			Prep Date: 4/18/2019			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
BROMIDE	10	0.2	10		100	90-110				15	
CHLORIDE	9.68	0.2	10		97	90-110				15	
FLUORIDE	4.95	0.1	5		99	90-110				15	
NITRATE AS N	9.67	0.2	10		97	90-110				15	
NITRITE AS N	5.09	0.1	5		102	90-110				15	
SULFATE	50.1	1	50		100	90-110				15	

LCSD		Sample ID: IC190418-1		Units: MG/L			Analysis Date: 4/18/2019 15:29				
Client ID:		Run ID: IC190418-1A3			Prep Date: 4/18/2019			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
BROMIDE	9.89	0.2	10		99	90-110		10	1	15	
CHLORIDE	9.85	0.2	10		98	90-110		9.68	2	15	
FLUORIDE	5	0.1	5		100	90-110		4.95	1	15	
NITRATE AS N	9.72	0.2	10		97	90-110		9.67	0	15	
NITRITE AS N	5.1	0.1	5		102	90-110		5.09	0	15	
SULFATE	50.2	1	50		100	90-110		50.1	0	15	

MB		Sample ID: IC190418-1		Units: MG/L			Analysis Date: 4/18/2019 13:14					
Client ID:		Run ID: IC190418-1A3			Prep Date: 4/18/2019			DF: 1				
Analyte	Result	ReportLimit	MDL									Qual
BROMIDE	ND	0.2	0.06									
CHLORIDE	ND	0.2	0.06									
FLUORIDE	ND	0.1	0.03									
NITRATE/NITRITE AS N	0.068	0.1										J
NITRATE AS N	0.068	0.2	0.06									J
NITRITE AS N	ND	0.1	0.03									
SULFATE	ND	1	0.3									

The following samples were analyzed in this batch:

Client: Western Water and Land, Inc.
 Work Order: 1904395
 Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: **pH190419-1-1** Instrument ID **pH-1** Method: **SM4500-H**

CCV		Sample ID: CCV1			Units: pH		Analysis Date: 4/19/2019				
Client ID:		Run ID: Ph190419-1a1			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
PH	7.03	0.1	7			6.9-7.1					

CCV		Sample ID: CCV2			Units: pH		Analysis Date: 4/19/2019				
Client ID:		Run ID: Ph190419-1a1			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
PH	7.09	0.1	7			6.9-7.1					

ICV		Sample ID: ICV			Units: pH		Analysis Date: 4/19/2019				
Client ID:		Run ID: Ph190419-1a1			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
PH	7	0.1	7			6.9-7.1					

The following samples were analyzed in this batch:

1904395-1

Client: Western Water and Land, Inc.
 Work Order: 1904395
 Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: **SC190419-1-1** Instrument ID **pH-1** Method: **SM2510B**

CCV		Sample ID: CCV1			Units: umhos/cm		Analysis Date: 4/19/2019				
Client ID:		Run ID: SC190419-1A1			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
SPECIFIC CONDUCTIVITY	1430	1	1410		101		71.7-1554				

CCV		Sample ID: CCV2			Units: umhos/cm		Analysis Date: 4/19/2019				
Client ID:		Run ID: SC190419-1A1			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
SPECIFIC CONDUCTIVITY	1400	1	1410		99		71.7-1554				

ICV		Sample ID: ICV			Units: umhos/cm		Analysis Date: 4/19/2019				
Client ID:		Run ID: SC190419-1A1			Prep Date: 4/19/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
SPECIFIC CONDUCTIVITY	704	1	718		98		46.2-789.7				

The following samples were analyzed in this batch:

1904395-1

Client: Western Water and Land, Inc.
Work Order: 1904395
Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: **TD190422-1-1** Instrument ID **Balance** Method: **SM2540C**

LCS		Sample ID: TD190422-1			Units: MG/L		Analysis Date: 4/23/2019				
Client ID:		Run ID: TD190423-1A1			Prep Date: 4/22/2019		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL DISSOLVED SOLIDS	418	20	400		105	85-115				5	

MB		Sample ID: TD190422-1			Units: MG/L		Analysis Date: 4/23/2019				
Client ID:		Run ID: TD190423-1A1			Prep Date: 4/22/2019		DF: 1				
Analyte	Result	ReportLimit	MDL								Qual
TOTAL DISSOLVED SOLIDS	ND	20									

The following samples were analyzed in this batch:

1904395-1

Client: Western Water and Land, Inc.
Work Order: 1904395
Project: PA 22-25 BWQ

QC BATCH REPORT

Batch ID: **TP190419-1-1** Instrument ID: **Spec** Method: **EPA365.2**

LCS Sample ID: **TP190419-1** Units: **MG/L** Analysis Date: **4/22/2019**
 Client ID: Run ID: **TP190422-1A2** Prep Date: **4/19/2019** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL PHOSPHORUS	0.52	0.05	0.5		104	80-120				20	

MB Sample ID: **TP190419-1** Units: **MG/L** Analysis Date: **4/22/2019**
 Client ID: Run ID: **TP190422-1A2** Prep Date: **4/19/2019** DF: **1**

Analyte	Result	ReportLimit	MDL	Qual
TOTAL PHOSPHORUS	ND	0.05	0.015	

The following samples were analyzed in this batch:

1904395-1
