



Sunday, November 29, 2020

Jeremy Pike  
LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada, CO 80003

Re: ALS Workorder: 2011131  
Project Name: North Platte J-F-23HNB (449663)  
Project Number: TE034520039

Dear Mr. Pike:

One water sample was received from LT Environmental, Inc., on 11/5/2020. The sample was scheduled for the following analyses:

Dissolved Gasses

GC/MS Volatiles

Inorganics

Metals

Total Extractable Petroleum Hydrocarbons (Diesel)

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental  
Katie M. O'Brien  
Project Manager

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
Alaska (AK)	17-003
Arizona (AZ)	AZ0742
California (CA)	2926
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
PJ-LA (DoD ELAP/ISO 170250)	95377
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO010992018-1
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	TN02976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280



## 2011131

### GC/MS Volatiles:

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

All laboratory control sample and laboratory control sample duplicate recoveries and RPDs were within the acceptance criteria with the following exceptions:

Spiked Compound	QC Sample	Direction
Toluene	LCSD	High
Ethylbenzene	LCSD	High
M+P-xylene	LCSD	High
O-xylene	LCSD	High

The high recoveries seem to be isolated to the LCSD. All recoveries were within acceptance criteria in the LCS. No further action was taken.

All surrogate recoveries were within acceptance criteria with the following exception:

Surrogate	Sample	Direction
Dibromofluoromethane	-1	Low

The low surrogate recovery is likely due to the high pH of the sample. No further action was taken.

All remaining 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.

**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.

All acceptance criteria were met.

**Inorganics:**

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

<u>Analyte</u>	<u>Method</u>	<u>SOP #</u>
Alkalinity	SM2320B	1106
Bicarbonate	SM2320B	1106
Carbonate	SM2320B	1106
TDS	SM2540C	1101
Chloride	300.0 Revision 2.1	1113
Sulfate	300.0 Revision 2.1	1113

All acceptance criteria were met.

# ALS -- Fort Collins

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 2011131

**Client Name:** LT Environmental, Inc.

**Client Project Name:** North Platte J-F-23HNB (449663)

**Client Project Number:** TE034520039

**Client PO Number:**

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Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
North Platte J-F-23HNB (449663)	2011131-1		WATER	05-Nov-20	8:30



## Chain-of-Custody

Form 202r8

**\*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.**

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

**Comments:**

2.60L

QC PACKAGE (check below)			
	LEVEL II (Standard QC)		
	LEVEL III (Std QC + forms)		
	LEVEL IV (Std QC + forms + raw data)		

6 of 17

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

6 of 17

**Preservative Key:** 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-NaHSO<sub>4</sub> 7-Other 8-4 degrees C 9-5035



ALS Environmental - Fort Collins  
CONDITION OF SAMPLE UPON RECEIPT FORM

Client Name/ID:

LTE

Workorder No:

2011131

Project Manager:

KMO

Initials:

TM

Date:

11/6/20

1. Are airbills / shipping documents present and/or removable?	<input checked="" type="checkbox"/> Drop Off	<input type="checkbox"/> YES	<input type="checkbox"/> NO
2. Are custody seals on <b>shipping</b> containers intact?	<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
3. Are custody seals on <b>sample</b> containers intact?	<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
4. Is there a COC (chain-of-custody) present?	<input checked="" type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
5. Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
6. Are short-hold samples present?	<input type="checkbox"/>	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
7. Are all samples within holding times for the requested analyses?	<input checked="" type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
8. Were all sample containers received intact? (not broken or leaking)	<input checked="" type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
9. Is there sufficient sample for the requested analyses?	<input checked="" type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
10. Are samples in proper containers for requested analyses? (form 250, Sample Handling Guidelines)	<input checked="" type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
11. Are all aqueous samples preserved correctly, if required?	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO*
12. Were unpreserved samples pH checked, if required?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO
13. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm in diameter?	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
14. Were the samples shipped on ice?	<input checked="" type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
15. Were cooler temperatures measured at 0.1 - 6.0°C?	IR gun used: <input type="checkbox"/> #3 <input checked="" type="checkbox"/> #5	<input type="checkbox"/> Rad Only	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

Cooler #: 1

Temperature (°C): 2.6

# of custody seals on cooler: 0

External mR/hr reading: -

Background mR/hr reading: 11

Were external mR/hr readings ≤ two times background and within DOT acceptance criteria? (If no, see Form 008)

☒ N/A ☐ YES ☐ NO

\* Please provide details below for 'NO' responses in gray boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.

11.) 131-1-2 read initial pH of 12; added 1.0mL HNO<sub>3</sub> (lot# 234822) for final pH of 12

13.) 131-1-4,5 have notable headspace

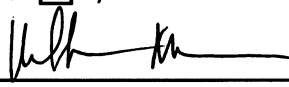
All client bottle ID's vs ALS lab ID's double-checked by: TM

If applicable, was the client contacted? ☐ YES ☐ N/A

Contact Name

Date:

Project Manager Signature / Date:

 11/9/20

Client: LT Environmental, Inc.

Date: 29-Nov-20

Project: TE034520039 North Platte J-F-23HNB (449663)

Work Order: 2011131

Sample ID: North Platte J-F-23HNB (449663)

Lab ID: 2011131-1

Legal Location:

Matrix: WATER

Collection Date: 11/5/2020 08:30

Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>Alkalinity as Calcium Carbonate</b>						
			<b>SM2320B</b>		Prep Date: 11/10/2020	PrepBy: KJS
TOTAL ALKALINITY AS CaCO3	7900		500	MG/L	1	11/10/2020
BICARBONATE AS CaCO3	ND		500	MG/L	1	11/10/2020
CARBONATE AS CaCO3	990		500	MG/L	1	11/10/2020
<b>Diesel Range Organics</b>						
			<b>SW8015M</b>		Prep Date: 11/18/2020	PrepBy: ASZ
Diesel Range Organics	2.4		1	MG/L	1	11/23/2020 12:43
Surr: O-TERPHENYL	107		69-120	%REC	1	11/23/2020 12:43
<b>Dissolved Gasses</b>						
			<b>RSK175</b>		Prep Date: 11/12/2020	PrepBy: ASZ
METHANE	1600		3	UG/L	3	11/12/2020 06:59
ETHANE	1600		6	UG/L	3	11/12/2020 06:59
PROPANE	1700		3	UG/L	3	11/12/2020 06:59
<b>GC/MS Volatiles</b>						
			<b>SW8260_25</b>		Prep Date: 11/18/2020	PrepBy: TWK
BENZENE	130		10	UG/L	10	11/19/2020 01:54
TOLUENE	300		10	UG/L	10	11/19/2020 01:54
ETHYLBENZENE	64		10	UG/L	10	11/19/2020 01:54
M+P-XYLENE	260		10	UG/L	10	11/19/2020 01:54
O-XYLENE	140		10	UG/L	10	11/19/2020 01:54
TOTAL XYLENES	400		1	UG/L	1	11/19/2020 01:54
Surr: 4-BROMOFLUOROBENZENE	102		80-120	%REC	10	11/19/2020 01:54
Surr: DIBROMOFLUOROMETHANE	56	*	80-120	%REC	10	11/19/2020 01:54
Surr: TOLUENE-D8	99		80-120	%REC	10	11/19/2020 01:54
GASOLINE RANGE ORGANICS	3600		1000	UG/L	10	11/19/2020 01:54
<b>Ion Chromatography</b>						
			<b>EPA300.0</b>		Prep Date: 11/10/2020	PrepBy: KJS
CHLORIDE	280		4	MG/L	20	11/11/2020 08:03
SULFATE	120		20	MG/L	20	11/11/2020 08:03
<b>Total Recoverable Metals by 200.8</b>						
			<b>EPA200.8</b>		Prep Date: 11/14/2020	PrepBy: JML
CALCIUM	420		1	MG/L	10	11/18/2020 14:38
MAGNESIUM	ND		0.1	MG/L	10	11/18/2020 14:38
POTASSIUM	4300		10	MG/L	100	11/18/2020 14:43
SODIUM	1100		1	MG/L	10	11/18/2020 14:38
<b>Total Dissolved Solids</b>						
			<b>SM2540C</b>		Prep Date: 11/11/2020	PrepBy: LMC
TOTAL DISSOLVED SOLIDS	6600		1000	MG/L	1	11/13/2020

<b>Client:</b>	LT Environmental, Inc.	<b>Date:</b>	29-Nov-20
<b>Project:</b>	TE034520039 North Platte J-F-23HNB (449663)	<b>Work Order:</b>	2011131
<b>Sample ID:</b>	North Platte J-F-23HNB (449663)	<b>Lab ID:</b>	2011131-1
<b>Legal Location:</b>		<b>Matrix:</b>	WATER
<b>Collection Date:</b>	11/5/2020 08:30	<b>Percent Moisture:</b>	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
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**Explanation of Qualifiers****Radiochemistry:**

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

**Inorganics:**

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).

U or ND - Indicates that the compound was analyzed for but not detected.

E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

M - Duplicate injection precision was not met.

N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

\* - Duplicate analysis (relative percent difference) not within control limits.

S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

**Organics:**

U or ND - Indicates that the compound was analyzed for but not detected.

B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.

E - Analyte concentration exceeds the upper level of the calibration range.

J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).

A - A tentatively identified compound is a suspected aldol-condensation product.

X - The analyte was diluted below an accurate quantitation level.

\* - The spike recovery is equal to or outside the control criteria used.

+ - The relative percent difference (RPD) equals or exceeds the control criteria.

G - A pattern resembling gasoline was detected in this sample.

D - A pattern resembling diesel was detected in this sample.

M - A pattern resembling motor oil was detected in this sample.

C - A pattern resembling crude oil was detected in this sample.

4 - A pattern resembling JP-4 was detected in this sample.

5 - A pattern resembling JP-5 was detected in this sample.

H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.

L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.

Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:

- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

## ALS -- Fort Collins

Client: LT Environmental, Inc.

Work Order: 2011131

Project: TE034520039 North Platte J-F-23HNB (449663)

Date: 11/29/2020 11:0

## QC BATCH REPORT

Batch ID: **HC201112-91-1** Instrument ID **MEE-1** Method: **RSK175**LCS Sample ID: **HC201112-91** Units: **UG/L** Analysis Date: **11/12/2020 06:21**Client ID: Run ID: **HC201112-91A** Prep Date: **11/12/2020** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
METHANE	152	1	142		107	76-125				25	
ETHANE	283	2	267		106	70-120				25	
PROPANE	415	1	391		106	72-120				25	

LCSD Sample ID: **HC201112-91** Units: **UG/L** Analysis Date: **11/12/2020 07:17**Client ID: Run ID: **HC201112-91A** Prep Date: **11/12/2020** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
METHANE	144	1	142		101	76-125		152	5	25	
ETHANE	270	2	267		101	70-120		283	5	25	
PROPANE	397	1	391		101	72-120		415	5	25	

MB Sample ID: **HC201112-91** Units: **UG/L** Analysis Date: **11/12/2020 06:24**Client ID: Run ID: **HC201112-91A** Prep Date: **11/12/2020** DF: **1**

Analyte	Result	ReportLimit	Qual
METHANE	ND	1	
ETHANE	ND	2	
PROPANE	ND	1	

The following samples were analyzed in this batch: 2011131-1

**Client:** LT Environmental, Inc.  
**Work Order:** 2011131  
**Project:** TE034520039 North Platte J-F-23HNB (449663)

## QC BATCH REPORT

Batch ID: **HC201118-81-1** Instrument ID **FUELS-1** Method: **SW8015M**

LCS	Sample ID: <b>HC201118-81</b>				Units: <b>MG/L</b>		Analysis Date: <b>11/23/2020 10:57</b>				
Client ID:		Run ID: <b>HC201123-81B</b>				Prep Date: <b>11/18/2020</b>			DF: <b>1</b>		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Diesel Range Organics	7.31	1.07	8.33		88	53-120				20	
Surr: O-TERPHENYL	1.73		1.67		104	69-120					

LCSD	Sample ID: HC201118-81				Units: MG/L		Analysis Date: 11/23/2020 11:19				
Client ID:	Run ID: HC201123-81B				Prep Date: 11/18/2020			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Diesel Range Organics	7.21	1.07	8.33		87	53-120		7.31	1	20	
Surr: O-TERPHENYL	1.72		1.67		103	69-120			1		

<b>MB</b>		Sample ID: <b>HC201118-81</b>		Units: <b>MG/L</b>		Analysis Date: <b>11/23/2020 10:36</b>	
Client ID:		Run ID: <b>HC201123-81B</b>		Prep Date: <b>11/18/2020</b>		DF: <b>1</b>	
Analyte		Result	ReportLimit	Qual			
Diesel Range Organics		ND	1.1				
Surr: O-TERPHENYL		3.06		92	69-120		

The following samples were analyzed in this batch:

2011131-1

Client: LT Environmental, Inc.  
 Work Order: 2011131  
 Project: TE034520039 North Platte J-F-23HNB (449663)

## QC BATCH REPORT

Batch ID: **IP201114-1-5** Instrument ID **ICPMS2** Method: **EPA200.8**

LCS	Sample ID: IM201114-1			Units: MG/L			Analysis Date: 11/18/2020 13:37				
Client ID:		Run ID: IM201118-10A5				Prep Date: 11/14/2020			DF: 10		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
CALCIUM	10.7	1	10		107	85-115				20	
MAGNESIUM	10.2	0.1	10		102	85-115				20	
POTASSIUM	5.05	1	5		101	85-115				20	
SODIUM	11	1	10		110	85-115				20	

LCSD	Sample ID: IM201114-1			Units: MG/L			Analysis Date: 11/18/2020 13:43				
Client ID:	Run ID: IM201118-10A5			Prep Date: 11/14/2020			DF: 10				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
CALCIUM	11.2	1	10		112	85-115		10.7	4	20	
MAGNESIUM	10.3	0.1	10		103	85-115		10.2	1	20	
POTASSIUM	5.74	1	5		115	85-115		5.05	13	20	
SODIUM	11.4	1	10		114	85-115		11	4	20	

MB		Sample ID: IP201114-1		Units: MG/L		Analysis Date: 11/18/2020 13:34	
Client ID:		Run ID: IM201118-10A5		Prep Date: 11/14/2020		DF: 10	
Analyte		Result	ReportLimit	Qual			
CALCIUM		ND	1				
MAGNESIUM		ND	0.1				
POTASSIUM		ND	1				
SODIUM		ND	1				

The following samples were analyzed in this batch:

2011131-1

**Client:** LT Environmental, Inc.  
**Work Order:** 2011131  
**Project:** TE034520039 North Platte J-F-23HNB (449663)

## QC BATCH REPORT

Batch ID: **VL201118-4-1** Instrument ID **HPV4** Method: **SW8260\_25**

LCS		Sample ID: VL201118-4			Units: UG/L		Analysis Date: 11/19/2020 01:09				
Client ID:		Run ID: VL201118-4A			Prep Date: 11/18/2020			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
GASOLINE RANGE ORGANICS	922	100	1000		92	75-121				20	

LCSD	Sample ID: VL201118-4			Units: UG/L			Analysis Date: 11/19/2020 01:30				
Client ID:	Run ID: VL201118-4A						Prep Date: 11/18/2020		DF: 1		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
GASOLINE RANGE ORGANICS	896	100	1000		90	75-121		922	3	20	

MB		Sample ID: VL201118-44				Units: UG/L		Analysis Date: 11/18/2020 20:06			
Client ID:		Run ID: VL201118-4A				Prep Date: 11/18/2020		DF: 1			
Analyte		Result	ReportLimit			Qual					
GASOLINE RANGE ORGANICS		ND	100								

The following samples were analyzed in this batch:

2011131-1

Client: LT Environmental, Inc.  
 Work Order: 2011131  
 Project: TE034520039 North Platte J-F-23HNB (449663)

# QC BATCH REPORT

Batch ID: **VL201118-4-2** Instrument ID **HPV4** Method: **SW8260\_25**

LCS		Sample ID: VL201118-44			Units: %REC		Analysis Date: 11/18/2020 18:48				
Client ID:		Run ID: VL201118-4A			Prep Date: 11/18/2020			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	80-120					
Surr: DIBROMOFLUOROMETHANE	25		25		100	80-120					
Surr: TOLUENE-D8	25.3		25		101	80-120					
BENZENE	11.1	1	10		111	80-120				20	
TOLUENE	11.9	1	10		119	80-120				20	
ETHYLBENZENE	11.8	1	10		118	80-120				20	
M+P-XYLENE	21.7	1	20		109	80-120				20	
O-XYLENE	10.5	1	10		105	80-120				20	

LCSD		Sample ID: VL201118-44			Units: %REC		Analysis Date: 11/18/2020 19:09				
Client ID:		Run ID: VL201118-4A			Prep Date: 11/18/2020			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Surr: 4-BROMOFLUOROBENZENE	25.1		25		100	80-120			2		
Surr: DIBROMOFLUOROMETHANE	26.3		25		105	80-120			5		
Surr: TOLUENE-D8	28.8		25		115	80-120			13		
BENZENE	11	1	10		110	80-120		11.1	1	20	
TOLUENE	13	1	10		130	80-120		11.9	9	20	*
ETHYLBENZENE	12.5	1	10		125	80-120		11.8	6	20	*
M+P-XYLENE	24.4	1	20		122	80-120		21.7	11	20	*
O-XYLENE	12.7	1	10		127	80-120		10.5	19	20	*

MB		Sample ID: VL201118-44			Units: %REC		Analysis Date: 11/18/2020 20:06		
Client ID:		Run ID: VL201118-4A			Prep Date: 11/18/2020			DF: 1	
Analyte		Result	ReportLimit					Qual	
Surr: 4-BROMOFLUOROBENZENE		25.2			101	80-120			
Surr: DIBROMOFLUOROMETHANE		23.9			96	80-120			
Surr: TOLUENE-D8		25.3			101	80-120			
BENZENE		ND	1						
TOLUENE		ND	1						
ETHYLBENZENE		ND	1						
M+P-XYLENE		ND	1						
O-XYLENE		ND	1						
TOTAL XYLENES		ND	1						

The following samples were analyzed in this batch:

2011131-1

**Client:** LT Environmental, Inc.  
**Work Order:** 2011131  
**Project:** TE034520039 North Platte J-F-23HNB (449663)

## QC BATCH REPORT

Batch ID: **AK201110-1-2** Instrument ID **NONE** Method: **SM2320B**

LCS	Sample ID: <b>AK201110-1</b>			Units: <b>MG/L</b>			Analysis Date: <b>11/10/2020</b>				
Client ID:	Run ID: <b>AK201110-1a1</b>			Prep Date: <b>11/10/2020</b>			DF: <b>1</b>				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL ALKALINITY AS CaCO3	101	5	100		101	85-115				15	

LCSD	Sample ID: AK201110-1			Units: MG/L			Analysis Date: 11/10/2020				
Client ID:	Run ID: AK201110-1a1			Prep Date: 11/10/2020			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	103	5	100		102	85-115		101	2	15	

MB		Sample ID: AK201110-1		Units: MG/L		Analysis Date: 11/10/2020	
Client ID:		Run ID: AK201110-1a1		Prep Date: 11/10/2020		DF: 1	
Analyte		Result	ReportLimit	Qual			
TOTAL ALKALINITY AS CaCO3		ND	5				
BICARBONATE AS CaCO3		ND	5				
CARBONATE AS CaCO3		ND	5				

The following samples were analyzed in this batch:

2011131-1

**Client:** LT Environmental, Inc.  
**Work Order:** 2011131  
**Project:** TE034520039 North Platte J-F-23HNB (449663)

## QC BATCH REPORT

Batch ID: **IC201110-1-1** Instrument ID **IC3** Method: **EPA300.0**

LCS	Sample ID: IC201110-1			Units: MG/L			Analysis Date: 11/10/2020 08:07				
Client ID:		Run ID: IC201110-1a1			Prep Date: 11/10/2020			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
CHLORIDE	9.96	0.2	10		100	90-110				15	
SULFATE	49.6	1	50		99	90-110				15	

LCSD	Sample ID: IC201110-1			Units: MG/L			Analysis Date: 11/10/2020 10:45				
Client ID:		Run ID: IC201110-1a1			Prep Date: 11/10/2020			DF: 1			
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
CHLORIDE	10.1	0.2	10		101	90-110		9.96	1	15	
SULFATE	50	1	50		100	90-110		49.6	1	15	

<b>MB</b>		Sample ID: <b>IC201110-1</b>		Units: <b>MG/L</b>		Analysis Date: <b>11/10/2020 08:20</b>	
Client ID:		Run ID: <b>IC201110-1a1</b>		Prep Date: <b>11/10/2020</b>		DF: <b>1</b>	
Analyte		Result	ReportLimit				
CHLORIDE		ND	0.2				
SULFATE		ND	1				

The following samples were analyzed in this batch: 2011131-1

**Client:** LT Environmental, Inc.  
**Work Order:** 2011131  
**Project:** TE034520039 North Platte J-F-23HNB (449663)

## QC BATCH REPORT

Batch ID: **TD201111-1-3** Instrument ID **Balance** Method: **SM2540C**

LCS		Sample ID: TD201111-1			Units: MG/L		Analysis Date: 11/13/2020				
Client ID:		Run ID: TD201113-1A1					Prep Date: 11/11/2020			DF: 1	
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL DISSOLVED SOLIDS	400	20	400		100	85-115				14	

LCSD		Sample ID: TD201111-1			Units: MG/L		Analysis Date: 11/13/2020				
Client ID:		Run ID: TD201113-1A1					Prep Date: 11/11/2020			DF: 1	
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL DISSOLVED SOLIDS	369	20	400		92	85-115		400	8	14	

<b>MB</b>		Sample ID: <b>TD201111-1</b>		Units: <b>MG/L</b>		Analysis Date: <b>11/13/2020</b>	
Client ID:		Run ID: <b>TD201113-1A1</b>		Prep Date: <b>11/11/2020</b>		DF: <b>1</b>	
Analyte		Result	ReportLimit				
TOTAL DISSOLVED SOLIDS		ND	20				

The following samples were analyzed in this batch:

2011131-1