



Tuesday, July 07, 2020

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

Re: ALS Workorder: 2006394
Project Name: North Platte F-J-28 HNC (455362)
Project Number: 034520031

Dear Mr. Pike:

One water sample was received from LT Environmental, Inc., on 6/22/2020. 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. OBrien
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
AIHA	214884
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
PJ-LA (DoD ELAP/ISO 170250)	95377
Louisiana (LA)	05057
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280



2006394

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 surrogate recoveries were within acceptance criteria with the following exception:

Surrogate	Sample	Direction
Dibromofluoromethane	-1	Low

The sample was re-analyzed to evaluate whether the original outlier was due to matrix effects or laboratory performance. The re-analysis also had the surrogate outside the control limits, which suggests the presence of matrix effects.

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 were 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.

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Sample Number(s) Cross-Reference Table

OrderNum: 2006394

Client Name: LT Environmental, Inc.

Client Project Name: North Platte F-J-28 HNC (455362)

Client Project Number: 034520031

Client PO Number:

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
North Platte F-J-28 HNC (455362	2006394-1		WATER	22-Jun-20	8:48



ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client Name/ID: **LTE** Workorder No: **2006394**
Project Manager: **KMO** Initials: **TM** Date: **6/22/20**

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 shipping containers intact?	<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> YES	<input type="checkbox"/> NO*
3. Are custody seals on sample 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): **5.9**
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.) 394-1-2 read initial pH of 14: added 1.0mL HNO3 (lot# 234822) for final pH of 13

13.) 393-1-3,6,7 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:  **6/23/20**

Client: LT Environmental, Inc.
Project: 034520031 North Platte F-J-28 HNC (455362)
Sample ID: North Platte F-J-28 HNC (455362)
Legal Location:
Collection Date: 6/22/2020 08:48

Date: 07-Jul-20
Work Order: 2006394
Lab ID: 2006394-1
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Alkalinity as Calcium Carbonate						
TOTAL ALKALINITY AS CaCO3	8700		100	MG/L	1	7/6/2020
BICARBONATE AS CaCO3	ND		100	MG/L	1	7/6/2020
CARBONATE AS CaCO3	740		100	MG/L	1	7/6/2020
Diesel Range Organics						
Diesel Range Organics	26		1	MG/L	1	6/26/2020 11:52
Surr: O-TERPHENYL	105		69-120	%REC	1	6/26/2020 11:52
Dissolved Gasses						
METHANE	98		1	UG/L	1	6/25/2020 17:16
ETHANE	40		2	UG/L	1	6/25/2020 17:16
PROPANE	13		1	UG/L	1	6/25/2020 17:16
GC/MS Volatiles						
BENZENE	60		1	UG/L	5	7/1/2020 19:14
TOLUENE	110		1	UG/L	5	7/1/2020 19:14
ETHYLBENZENE	19		1	UG/L	5	7/1/2020 19:14
M+P-XYLENE	72		1	UG/L	5	7/1/2020 19:14
O-XYLENE	48		1	UG/L	5	7/1/2020 19:14
TOTAL XYLENES	120		1	UG/L	1	7/1/2020 19:14
Surr: 4-BROMOFLUOROBENZENE	103		80-120	%REC	5	7/1/2020 19:14
Surr: DIBROMOFLUOROMETHANE	39	*	80-120	%REC	5	7/1/2020 19:14
Surr: TOLUENE-D8	100		80-120	%REC	5	7/1/2020 19:14
GASOLINE RANGE ORGANICS	11000		500	UG/L	5	7/1/2020 19:14
Ion Chromatography						
CHLORIDE	760		10	MG/L	50	6/25/2020 14:48
SULFATE	390		25	MG/L	25	6/25/2020 14:35
Total Recoverable Metals by 200.8						
CALCIUM	230		1	MG/L	10	6/25/2020 16:25
MAGNESIUM	0.19		0.1	MG/L	10	6/25/2020 16:25
POTASSIUM	4400		1	MG/L	10	6/25/2020 16:25
SODIUM	2600		1	MG/L	10	6/25/2020 16:25
Total Dissolved Solids						
TOTAL DISSOLVED SOLIDS	8700		1000	MG/L	1	6/30/2020

Client: LT Environmental, Inc. **Date:** 07-Jul-20
Project: 034520031 North Platte F-J-28 HNC (455362) **Work Order:** 2006394
Sample ID: North Platte F-J-28 HNC (455362) **Lab ID:** 2006394-1
Legal Location: **Matrix:** WATER
Collection Date: 6/22/2020 08:48 **Percent Moisture:**

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

Radiochemistry:

- "Report Limit" is the MDC
 U or ND - Result is less than the sample specific MDC.
 Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
 Y2 - Chemical Yield outside default limits.
 W - DER is greater than Warning Limit of 1.42
 * - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
 # - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
 G - Sample density differs by more than 15% of LCS density.
 D - DER is greater than Control Limit
 M - Requested MDC not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
 L - LCS Recovery below lower control limit.
 H - LCS Recovery above upper control limit.
 P - LCS, Matrix Spike Recovery within control limits.
 N - Matrix Spike Recovery outside control limits
 NC - Not Calculated for duplicate results less than 5 times MDC
 B - Analyte concentration greater than MDC.
 B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
 U or ND - Indicates that the compound was analyzed for but not detected.
 E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
 M - Duplicate injection precision was not met.
 N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
 Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
 * - Duplicate analysis (relative percent difference) not within control limits.
 S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
 B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
 E - Analyte concentration exceeds the upper level of the calibration range.
 J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
 A - A tentatively identified compound is a suspected aldol-condensation product.
 X - The analyte was diluted below an accurate quantitation level.
 * - The spike recovery is equal to or outside the control criteria used.
 + - The relative percent difference (RPD) equals or exceeds the control criteria.
 G - A pattern resembling gasoline was detected in this sample.
 D - A pattern resembling diesel was detected in this sample.
 M - A pattern resembling motor oil was detected in this sample.
 C - A pattern resembling crude oil was detected in this sample.
 4 - A pattern resembling JP-4 was detected in this sample.
 5 - A pattern resembling JP-5 was detected in this sample.
 H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
 L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
 Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
 - gasoline
 - JP-8
 - diesel
 - mineral spirits
 - motor oil
 - Stoddard solvent
 - bunker C

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Date: 7/7/2020 2:30:4

Client: LT Environmental, Inc.
 Work Order: 2006394
 Project: 034520031 North Platte F-J-28 HNC (455362)

QC BATCH REPORT

Batch ID: **HC200625-81-1** Instrument ID **FUELS-1** Method: **SW8015M**

LCS Sample ID: **HC200625-81** Units: **MG/L** Analysis Date: **6/26/2020 17:32**
 Client ID: Run ID: **HC200625-81A** Prep Date: **6/25/2020** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Diesel Range Organics	8.35	1.07	8.33		100	53-120				20	
Surr: O-TERPHENYL	1.7		1.67		102	69-120					

LCSD Sample ID: **HC200625-81** Units: **MG/L** Analysis Date: **6/26/2020 18:14**
 Client ID: Run ID: **HC200625-81A** Prep Date: **6/25/2020** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Diesel Range Organics	8.39	1.07	8.33		101	53-120		8.35	0	20	
Surr: O-TERPHENYL	1.71		1.67		103	69-120			1		

MB Sample ID: **HC200625-81** Units: **MG/L** Analysis Date: **6/26/2020 10:27**
 Client ID: Run ID: **HC200625-81A** Prep Date: **6/25/2020** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Diesel Range Organics	ND	1.1									
Surr: O-TERPHENYL	1.59				95	69-120					

The following samples were analyzed in this batch:

Client: LT Environmental, Inc.
 Work Order: 2006394
 Project: 034520031 North Platte F-J-28 HNC (455362)

QC BATCH REPORT

Batch ID: **HC200625-91-1** Instrument ID **MEE-1** Method: **RSK175**

LCS		Sample ID: HC200625-91			Units: UG/L		Analysis Date: 6/25/2020 15:04				
Client ID:		Run ID: HC200625-91A			Prep Date: 6/25/2020		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
METHANE	128	1	142		90	76-125				25	
ETHANE	247	2	267		93	70-120				25	
PROPANE	361	1	391		92	72-120				25	

LCSD		Sample ID: HC200625-91			Units: UG/L		Analysis Date: 6/25/2020 17:09				
Client ID:		Run ID: HC200625-91A			Prep Date: 6/25/2020		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
METHANE	128	1	142		90	76-125		128	0	25	
ETHANE	246	2	267		92	70-120		247	0	25	
PROPANE	361	1	391		92	72-120		361	0	25	

MB		Sample ID: HC200625-91			Units: UG/L		Analysis Date: 6/25/2020 15:39					
Client ID:		Run ID: HC200625-91A			Prep Date: 6/25/2020		DF: 1					
Analyte	Result	ReportLimit										Qual
METHANE	ND	1										
ETHANE	ND	2										
PROPANE	ND	1										

The following samples were analyzed in this batch:

Client: LT Environmental, Inc.
 Work Order: 2006394
 Project: 034520031 North Platte F-J-28 HNC (455362)

QC BATCH REPORT

Batch ID: **IP200625-1-1** Instrument ID **ICPMS2** Method: **EPA200.8**

LCS		Sample ID: IM200625-1			Units: MG/L		Analysis Date: 6/25/2020 15:29				
Client ID:		Run ID: IM200625-20A10			Prep Date: 6/25/2020		DF: 10				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
CALCIUM	11.1	1	10		111	85-115				20	
MAGNESIUM	10	0.1	10		100	85-115				20	
POTASSIUM	4.85	1	5		97	85-115				20	
SODIUM	9.94	1	10		99	85-115				20	

LCSD		Sample ID: IM200625-1			Units: MG/L		Analysis Date: 6/25/2020 15:35				
Client ID:		Run ID: IM200625-20A10			Prep Date: 6/25/2020		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		11.1	4	20	
MAGNESIUM	9.98	0.1	10		100	85-115		10	1	20	
POTASSIUM	4.92	1	5		98	85-115		4.85	1	20	
SODIUM	9.94	1	10		99	85-115		9.94	0	20	

MB		Sample ID: IP200625-1			Units: MG/L		Analysis Date: 6/25/2020 15:26					
Client ID:		Run ID: IM200625-20A10			Prep Date: 6/25/2020		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:

Client: LT Environmental, Inc.
Work Order: 2006394
Project: 034520031 North Platte F-J-28 HNC (455362)

QC BATCH REPORT

Batch ID: **VL200701-3A-1** Instrument ID **HPV3** Method: **SW8260_25**

LCS Sample ID: **VL200701-33A** Units: **UG/L** Analysis Date: **7/1/2020 18:14**
 Client ID: Run ID: **VL200701-3A3** Prep Date: **7/1/2020** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
GASOLINE RANGE ORGANICS	1080	100	1000		108	75-121				20	

LCSD Sample ID: **VL200701-33A** Units: **UG/L** Analysis Date: **7/1/2020 18:34**
 Client ID: Run ID: **VL200701-3A3** Prep Date: **7/1/2020** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
GASOLINE RANGE ORGANICS	1050	100	1000		105	75-121		1080	3	20	

MB Sample ID: **VL200701-3A** Units: **UG/L** Analysis Date: **7/1/2020 13:29**
 Client ID: Run ID: **VL200701-3A3** Prep Date: **7/1/2020** DF: **1**

Analyte	Result	ReportLimit										Qual
GASOLINE RANGE ORGANICS	ND	100										

The following samples were analyzed in this batch:

Client: LT Environmental, Inc.
 Work Order: 2006394
 Project: 034520031 North Platte F-J-28 HNC (455362)

QC BATCH REPORT

Batch ID: VL200701-3A-2 Instrument ID: HPV3 Method: SW8260_25

LCS		Sample ID: VL200701-3A			Units: %REC		Analysis Date: 7/1/2020 12:19				
Client ID:		Run ID: VL200701-3A3			Prep Date: 7/1/2020		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Surr: 4-BROMOFLUOROBENZENE	26		25		104	80-120					
Surr: DIBROMOFLUOROMETHANE	25.1		25		100	80-120					
Surr: TOLUENE-D8	24.8		25		99	80-120					
BENZENE	9.73	1	10		97	80-120				20	
TOLUENE	9.38	1	10		94	80-120				20	
ETHYLBENZENE	9.08	1	10		91	80-120				20	
M+P-XYLENE	19.2	1	20		96	80-120				20	
O-XYLENE	9.32	1	10		93	80-120				20	

LCSD		Sample ID: VL200701-3A			Units: %REC		Analysis Date: 7/1/2020 13:09				
Client ID:		Run ID: VL200701-3A3			Prep Date: 7/1/2020		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Surr: 4-BROMOFLUOROBENZENE	26.1		25		104	80-120			0		
Surr: DIBROMOFLUOROMETHANE	24.7		25		99	80-120			2		
Surr: TOLUENE-D8	25.2		25		101	80-120			2		
BENZENE	9.73	1	10		97	80-120		9.73	0	20	
TOLUENE	9.46	1	10		95	80-120		9.38	1	20	
ETHYLBENZENE	9.43	1	10		94	80-120		9.08	4	20	
M+P-XYLENE	19.6	1	20		98	80-120		19.2	2	20	
O-XYLENE	9.7	1	10		97	80-120		9.32	4	20	

MB		Sample ID: VL200701-3A			Units: %REC		Analysis Date: 7/1/2020 13:29				
Client ID:		Run ID: VL200701-3A3			Prep Date: 7/1/2020		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
Surr: 4-BROMOFLUOROBENZENE	25.8				103	80-120					
Surr: DIBROMOFLUOROMETHANE	25.2				101	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:

Client: LT Environmental, Inc.
Work Order: 2006394
Project: 034520031 North Platte F-J-28 HNC (455362)

QC BATCH REPORT

Batch ID: **AK200706-1-1** Instrument ID **NONE** Method: **SM2320B**

LCS		Sample ID: AK200706-1			Units: MG/L		Analysis Date: 7/6/2020				
Client ID:		Run ID: AK200706-1a1			Prep Date: 7/6/2020		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	98.5	5	100		98	85-115				15	

LCSD		Sample ID: AK200706-1			Units: MG/L		Analysis Date: 7/6/2020				
Client ID:		Run ID: AK200706-1a1			Prep Date: 7/6/2020		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	100	5	100		100	85-115		98.5	2	15	

MB		Sample ID: AK200706-1			Units: MG/L		Analysis Date: 7/6/2020				
Client ID:		Run ID: AK200706-1a1			Prep Date: 7/6/2020		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: 2006394-1

Client: LT Environmental, Inc.
Work Order: 2006394
Project: 034520031 North Platte F-J-28 HNC (455362)

QC BATCH REPORT

Batch ID: **IC200623-1-1** Instrument ID **IC3** Method: **EPA300.0**

LCS		Sample ID: IC200623-1			Units: MG/L		Analysis Date: 6/23/2020 16:15				
Client ID:		Run ID: IC200623-1a1			Prep Date: 6/23/2020		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
CHLORIDE	10.2	0.2	10		102	90-110				15	
SULFATE	50.9	1	50		102	90-110				15	

LCSD		Sample ID: IC200623-1			Units: MG/L		Analysis Date: 6/23/2020 18:54				
Client ID:		Run ID: IC200623-1a1			Prep Date: 6/23/2020		DF: 1				
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
CHLORIDE	10.2	0.2	10		102	90-110		10.2	0	15	
SULFATE	50.8	1	50		102	90-110		50.9	0	15	

MB		Sample ID: IC200623-1			Units: MG/L		Analysis Date: 6/23/2020 16:29					
Client ID:		Run ID: IC200623-1a1			Prep Date: 6/23/2020		DF: 1					
Analyte	Result	ReportLimit										Qual
CHLORIDE	ND	0.2										
SULFATE	ND	1										

The following samples were analyzed in this batch: 2006394-1

Client: LT Environmental, Inc.
Work Order: 2006394
Project: 034520031 North Platte F-J-28 HNC (455362)

QC BATCH REPORT

Batch ID: **TD200629-1-1** Instrument ID **Balance** Method: **SM2540C**

LCS Sample ID: **TD200629-1** Units: **MG/L** Analysis Date: **6/30/2020**
 Client ID: Run ID: **TD200630-1A1** Prep Date: **6/29/2020** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
TOTAL DISSOLVED SOLIDS	406	20	400		102	85-115				14	

MB Sample ID: **TD200629-1** Units: **MG/L** Analysis Date: **6/30/2020**
 Client ID: Run ID: **TD200630-1A1** Prep Date: **6/29/2020** DF: **1**

Analyte	Result	ReportLimit										Qual
TOTAL DISSOLVED SOLIDS	ND	20										

The following samples were analyzed in this batch: