

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax 894-2109



FOR OGCC USE ONLY

#8096

RECEIVED
11/21/2013

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☒ Site/Facility Closure ☐ Other (describe): _____

OGCC Employee: _____

☒ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No: 2147066

GENERAL INFORMATION

OGCC Operator Number: 100322 Name of Operator: Noble Energy, Inc. Address: 1625 Broadway, Suite 2200 City: Denver State: CO Zip: 80202		Contact Name and Telephone Name: Asher Weinberg No: (303) 228-4000 Fax: _____	
API/Facility No: 05-045-14894 Facility Name: SGV 7N Pad Well Name: M Dutton Location (QtrQtr, Sec, Twp, Rng, Meridian): SWSW, 7, 8S, 95W, 6TH		County: Garfield Facility Number: 334127 Well Number: 7-24C Latitude: 39.373135 Longitude: -108.044009	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): _____ Site Conditions: Is location within a sensitive area (according to Rule 901e)? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N If yes, attach evaluation.		Produced Water Non-irrigated rangeland	
Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): _____ Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____ Potential receptors (water wells within 1/4 mi, surface waters, etc.): _____ to groundwater is estimated to be between 40-60' below ground surface.		Ildefonso stony loam, 25-45 percent slopes A surface water is located 116' north. A water well is located 2,995' west. Depth _____	
Description of Impact (if previously provided, refer to that form or document):			
Impacted Media (check): <input checked="" type="checkbox"/> Soils <input type="checkbox"/> Vegetation <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface water	Extent of Impact: Excavation 38' N-S x 5' E-W x 5' deep		
How Determined: Soil samples were submitted for laboratory analysis			

REMEDIALATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document): See attached
Describe how source is to be removed: See attached
Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.: See attached

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2

OGCC

Employee:

REMEDIATION WORKPLAN (CONT.)

Tracking Number: _____
Name of Operator: Noble Energy
OGCC Operator No: 100322
Well Name & No: _____
Facility Name & No.: SGV 7N Pad (334127)

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):
See attached

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.
See attached

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.
Is further site investigation required? ☐ Y ☒ N If yes, describe:
See attached

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):
See attached

IMPLEMENTATION SCHEDULE

Date Site Investigation Began:	<u>12/7/2012</u>	Date Site Investigation Completed:	<u>4/30/2013</u>	Remediation Plan Submitted:	<u>11/11/2013</u>
Remediation Start Date:	<u>12/7/2012</u>	Anticipated Completion Date:	<u>Spring 2013</u>	Actual Completion Date:	<u>4/30/2013</u>

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Asher Weinberg

Signed: _____

Title: Sr Env Specialist

Date: 11/21/2013

OGCC Approved: _____ Title: _____ Date: _____

**SGV 7N Pad (Facility #334127)
Form 27 (Site Investigation and Remediation Workplan)
Narrative Attachment
Document Date – 11/21/2013**

This Form 27 (Site Investigation and Remediation Workplan) was prepared for the purpose of requesting No Further Action (NFA) for a release at the SGV 7N Pad (Facility #334127) in Noble Energy's (Noble) Piceance area of operations. This document presents analytical evidence that impacts have been remediated and closure has been achieved. A site location map is included as an attachment to this form.

REMEDIATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

A Form 19 was submitted on 11/30/2012.

Describe how source is to be removed:

Soil surrounding the release point was excavated. After excavation activities were completed, confirmation soil samples were collected and submitted for laboratory analysis electrical conductivity (EC), pH, sodium adsorption ratio (SAR), and total petroleum hydrocarbons (TPH). This reduced list of analytes was approved by the COGCC via email on 11/26/12. A topographic site location map is provided as Figure 1 and a site map is provided as Figure 2.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

Soil was excavated and landfarmed within a lined bermed containment on site. Once analytical reports indicated that removed soil was compliant with COGCC Table 910-1 concentration levels, it was used to backfill the excavation.

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Groundwater was not encountered during remedial activities. Based on state records, groundwater is believed to be approximately 40 to 60 feet below ground surface (bgs).

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

The excavation was backfilled to match original grade. The site is an active oil and gas location.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing. Is further site investigation required? If yes, describe:

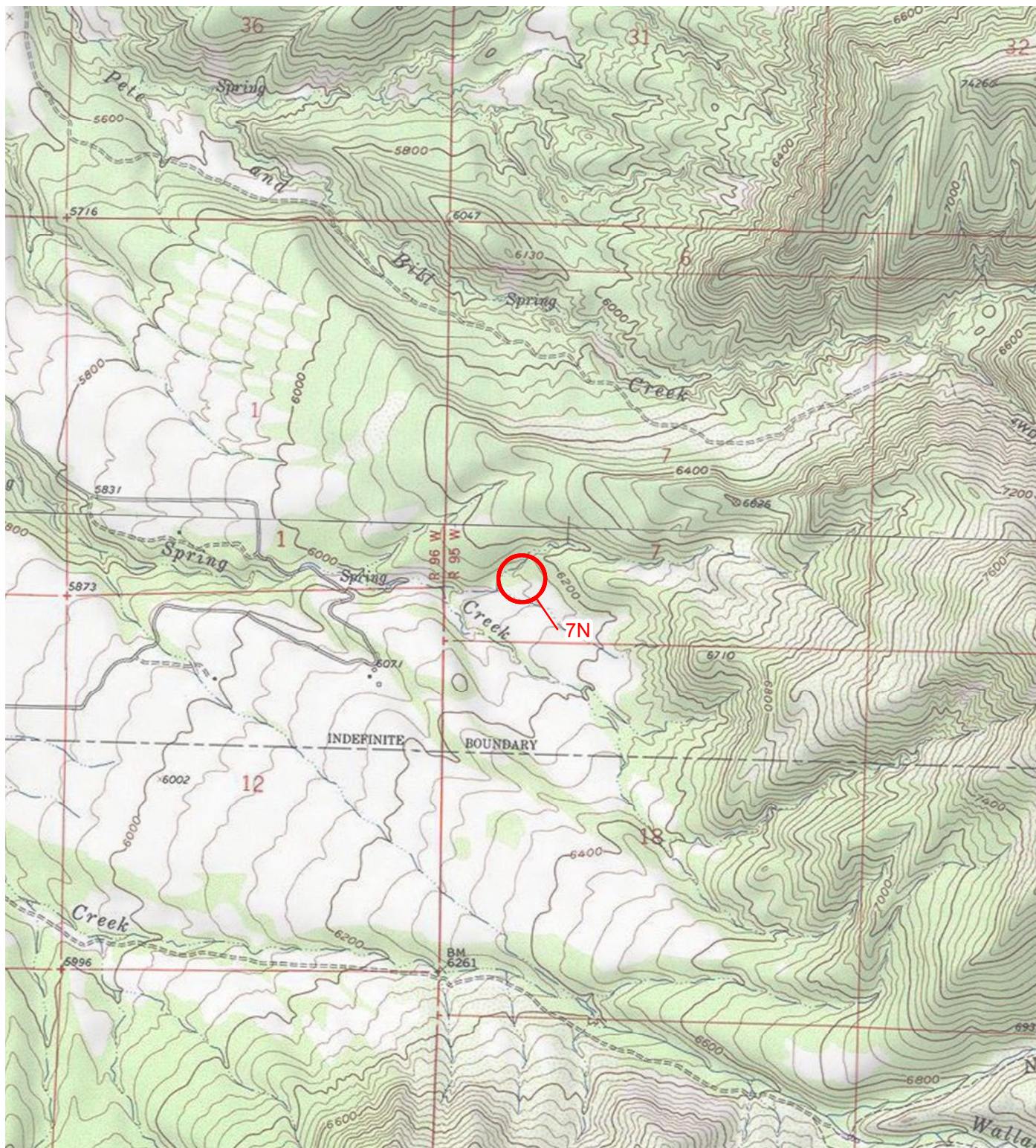
On 12/7/2012, confirmation soil samples were collected from two sidewalls and the bottom of the excavated area (N01@3.5', S01@3.5', and B01@5.5'). Soil samples were submitted for laboratory analysis of EC, pH, SAR, and TPH. Laboratory analytical results indicated soil samples N01@3.5', S01@3.5', and B01@5.5' were in compliance with COGCC Table 910-1 concentration levels for TPH and pH. Each of the soil samples (except B01@5.5') had exceedances of either EC or SAR. However, the samples were collected at depths between 3.5 feet and 5.5 feet bgs and Frequently Asked Question Number 32 on the COGCC website explains that the COGCC will apply the Table 910-1 concentration levels for EC, pH, and SAR only to soils that are within 3 feet of the ground surface. As such, the COGCC requires that materials with elevated EC, pH, or SAR concentrations be buried under a minimum of 3 feet of cover and the impacted soil is located at least 3.5 feet bgs. Sample locations are depicted on Figure 2 and laboratory analytical results are provided in Table 1. Laboratory analytical reports are included as an attachment.

A soil stockpile sample (C01) was collected on 12/31/2012 from the soil removed while uncovering the failed dump line. Soil sample C01 was submitted for laboratory analysis of EC, pH, SAR, and TPH. Laboratory analytical results indicated that soil sample C01 was in compliance with COGCC Table 910-1 concentration levels of pH and TPH. C01 exceeded the COGCC Table 910-1 levels for EC and SAR. The soil stockpile represented by C01 was re-sampled on 4/30/2013 and was submitted for laboratory analysis of EC and SAR. Laboratory analytical results indicated that soil sample C01 was in compliance with COGCC Table 910-1 concentration levels of EC and SAR.

Based on these recent analytical results, Noble is requesting a NFA designation for this release. If the information provided is satisfactory, please provide a letter of No Further Action and closure documentation for this project.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

Once analytical reports indicated that removed soil was compliant with COGCC Table 910-1 concentration levels, it was used to backfill the excavation.



LEGEND

○ SITE LOCATION

IMAGE COURTESY OF ESRI/BING MAPS

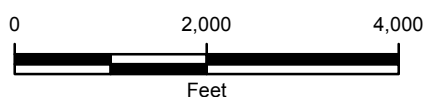


FIGURE 1
SITE LOCATION MAP
7N
GARFIELD COUNTY, COLORADO

NOBLE ENERGY, INC.





LEGEND

- SOIL SAMPLE
- COMPOSITE SAMPLE
- ▲ BACKGROUND SOIL SAMPLE
- EXCAVATION EXTENT
- ||||| STOCKPILE

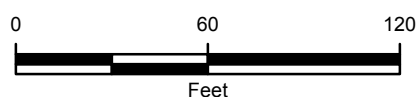


IMAGE COURTESY OF ESRI/BING MAPS

FIGURE 2
SITE MAP
7N
GARFIELD COUNTY, COLORADO

NOBLE ENERGY, INC.



TABLE 1

SOIL ANALYTICAL RESULTS

SGV 7N

GARFIELD COUNTY, COLORADO

NOBLE ENERGY

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	B01 @ 5.5'	N01 @ 3.5'	S01 @ 3.5'
Sample Date			12/7/2012	12/7/2012	12/7/2012
Sample Type			Confirmation	Confirmation	Confirmation
Arsenic	0.39	mg/kg	NA	NA	NA
Barium	15,000	mg/kg	NA	NA	NA
Cadmium	70	mg/kg	NA	NA	NA
Chromium (III)	120,000	mg/kg	NA	NA	NA
Chromium (VI)	23	mg/kg	NA	NA	NA
Copper	3,100	mg/kg	NA	NA	NA
Lead	400	mg/kg	NA	NA	NA
Mercury	23	mg/kg	NA	NA	NA
Nickel	1,600	mg/kg	NA	NA	NA
Selenium	390	mg/kg	NA	NA	NA
Silver	390	mg/kg	NA	NA	NA
Zinc	23,000	mg/kg	NA	NA	NA
EC	4.0	mmhos/cm	7.12	9.04	10.1
pH	6 - 9	SU	8.04	7.9	8.25
SAR	12	unitless	NA	6.82	14.1
TPH-GRO		mg/kg	<0.050	<0.050	38
TPH-DRO		mg/kg	<1.7	<1.7	38
TPH	500	mg/kg	<1.750	<1.750	76
Benzene	0.17	mg/kg	NA	NA	NA
Toluene	85	mg/kg	NA	NA	NA
Ethylbenzene	100	mg/kg	NA	NA	NA
Total Xylenes	175	mg/kg	NA	NA	NA
Acenaphthene	1000	mg/kg	NA	NA	NA
Anthracene	1000	mg/kg	NA	NA	NA
Benzo(A)anthracene	0.22	mg/kg	NA	NA	NA
Benzo(B)fluoranthene	0.22	mg/kg	NA	NA	NA
Benzo(K)fluoranthene	2.2	mg/kg	NA	NA	NA
Benzo(A)pyrene	0.022	mg/kg	NA	NA	NA
Chrysene	22	mg/kg	NA	NA	NA
Dibenzo(A,H)anthracene	0.022	mg/kg	NA	NA	NA
Fluoranthene	1000	mg/kg	NA	NA	NA
Fluorene	1000	mg/kg	NA	NA	NA
Indeno(1,2,3,C,D)pyrene	0.22	mg/kg	NA	NA	NA
Naphthalene	23	mg/kg	NA	NA	NA
Pyrene	1000	mg/kg	NA	NA	NA

NOTES:

< - less than the stated reporting limit

BOLD - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC- electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

NA - not analyzed

SU - standard unit

TPH-GRO - total petroleum hydrocarbons-gasoline range organics

TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO and TPH-DRO

TABLE 1

SOIL ANALYTICAL RESULTS

SGV 7N

GARFIELD COUNTY, COLORADO

NOBLE ENERGY

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	C01	C01
Sample Date			12/31/2012	4/30/2013
Sample Type			Stockpile	Stockpile
Arsenic	0.39	mg/kg	NA	NA
Barium	15,000	mg/kg	NA	NA
Cadmium	70	mg/kg	NA	NA
Chromium (III)	120,000	mg/kg	NA	NA
Chromium (VI)	23	mg/kg	NA	NA
Copper	3,100	mg/kg	NA	NA
Lead	400	mg/kg	NA	NA
Mercury	23	mg/kg	NA	NA
Nickel	1,600	mg/kg	NA	NA
Selenium	390	mg/kg	NA	NA
Silver	390	mg/kg	NA	NA
Zinc	23,000	mg/kg	NA	NA
EC	4.0	mmhos/cm	8.39	3.67
pH	6 - 9	SU	8.31	NA
SAR	12	unitless	14.8	2.10
TPH-GRO		mg/kg	0.89	NA
TPH-DRO		mg/kg	4.1	NA
TPH	500	mg/kg	4.99	NA
Benzene	0.17	mg/kg	NA	NA
Toluene	85	mg/kg	NA	NA
Ethylbenzene	100	mg/kg	NA	NA
Total Xylenes	175	mg/kg	NA	NA
Acenaphthene	1000	mg/kg	NA	NA
Anthracene	1000	mg/kg	NA	NA
Benzo(A)anthracene	0.22	mg/kg	NA	NA
Benzo(B)fluoranthene	0.22	mg/kg	NA	NA
Benzo(K)fluoranthene	2.2	mg/kg	NA	NA
Benzo(A)pyrene	0.022	mg/kg	NA	NA
Chrysene	22	mg/kg	NA	NA
Dibenzo(A,H)anthracene	0.022	mg/kg	NA	NA
Fluoranthene	1000	mg/kg	NA	NA
Fluorene	1000	mg/kg	NA	NA
Indeno(1,2,3,C,D)pyrene	0.22	mg/kg	NA	NA
Naphthalene	23	mg/kg	NA	NA
Pyrene	1000	mg/kg	NA	NA

NOTES:

< - less than the stated reporting limit

BOLD - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC- electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

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TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO and TPH-DRO



TABLE 1

SOIL ANALYTICAL RESULTS

SGV 7N

GARFIELD COUNTY, COLORADO

NOBLE ENERGY

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	BG-01	BG-02
Sample Date			12/7/2012	12/7/2012
Sample Type			Background	Background
Arsenic	0.39	mg/kg	NA	NA
Barium	15,000	mg/kg	NA	NA
Cadmium	70	mg/kg	NA	NA
Chromium (III)	120,000	mg/kg	NA	NA
Chromium (VI)	23	mg/kg	NA	NA
Copper	3,100	mg/kg	NA	NA
Lead	400	mg/kg	NA	NA
Mercury	23	mg/kg	NA	NA
Nickel	1,600	mg/kg	NA	NA
Selenium	390	mg/kg	NA	NA
Silver	390	mg/kg	NA	NA
Zinc	23,000	mg/kg	NA	NA
EC	4.0	mmhos/cm	4.12	2.47
pH	6 - 9	SU	8.26	7.43
SAR	12	unitless	2.84	0.589
TPH-GRO		mg/kg	NA	NA
TPH-DRO		mg/kg	NA	NA
TPH	500	mg/kg	NA	NA
Benzene	0.17	mg/kg	NA	NA
Toluene	85	mg/kg	NA	NA
Ethylbenzene	100	mg/kg	NA	NA
Total Xylenes	175	mg/kg	NA	NA
Acenaphthene	1000	mg/kg	NA	NA
Anthracene	1000	mg/kg	NA	NA
Benzo(A)anthracene	0.22	mg/kg	NA	NA
Benzo(B)fluoranthene	0.22	mg/kg	NA	NA
Benzo(K)fluoranthene	2.2	mg/kg	NA	NA
Benzo(A)pyrene	0.022	mg/kg	NA	NA
Chrysene	22	mg/kg	NA	NA
Dibenzo(A,H)anthracene	0.022	mg/kg	NA	NA
Fluoranthene	1000	mg/kg	NA	NA
Fluorene	1000	mg/kg	NA	NA
Indeno(1,2,3,C,D)pyrene	0.22	mg/kg	NA	NA
Naphthalene	23	mg/kg	NA	NA
Pyrene	1000	mg/kg	NA	NA

NOTES:

< - less than the stated reporting limit

BOLD - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC- electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

NA - not analyzed

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TPH-GRO - total petroleum hydrocarbons-gasoline range organics

TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO and TPH-DRO



28-Dec-2012

Jake Janicek
LT Environmental, Inc.
820 Megan Avenue, Unit B
Rifle, Colorado 81650

Tel: (970) 285-9985
Fax:

Re: 7N

Work Order: **1212284**

Dear Jake,

ALS Environmental received 7 samples on 08-Dec-2012 09:30 AM for the analyses presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

The total number of pages in this revised report is ZZ.

Regards,

A handwritten signature in black ink that reads "Patricia L. Lynch".

Electronically approved by: Bernadette A. Fini

Patricia L. Lynch
Project Manager



Certificate No: T104704231-09A-TX

ADDRESS 10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: LT Environmental, Inc.**Project:** 7N**Work Order:** 1212284**Case Narrative**

Report revised on December 28, 2012 per clients email received on December 28, 2012 change sample ID's " E01 @3.5" to " N01@3.5" and "W01 @3.5" to "S01@3.5".

Batch R139674, Gasoline Range Organics - SW8015C, Sample 1212284-03A: Surrogate failure for 1212284-03A; confirmed by reanalysis at dilution.

ALS Environmental

Date: 28-Dec-12

Client: LT Environmental, Inc.
Project: 7N
Sample ID: B01@5.5'
Collection Date: 12/7/2012 02:27 PM

Work Order: 1212284
Lab ID: 1212284-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO - 8015C						
TPH (Diesel Range)	U		SW8015M	1.7 mg/Kg	1	Prep Date: 12/13/2012 Analyst: KMB 12/13/2012 10:42 PM
Surr: 2-Fluorobiphenyl	63.5		60-135	%REC	1	12/13/2012 10:42 PM
GASOLINE RANGE ORGANICS - SW8015C						
Gasoline Range Organics	U		SW8015	0.050 mg/Kg	1	Analyst: KKP 12/10/2012 05:12 PM
Surr: 4-Bromofluorobenzene	95.0		70-130	%REC	1	12/10/2012 05:12 PM
LA29B ELECTRICAL CONDUCTIVITY						
Electrical Conductivity @ saturation	7.12		LADNR-29B EC	0.0100 mmhos/cm @25°C	1	Analyst: VAN 12/14/2012 03:50 PM
Electrical Conductivity, 1:1 aqueous	4.47		0.0100	mmhos/cm @25°C	1	12/14/2012 03:50 PM
Saturation % as decimal	0.627			mmhos/cm @25°C	1	12/14/2012 03:50 PM
LA29B SATURATION POINT						
Saturation Point	0.627		LADNR-29B SP	0.100 % Saturation as Decimal	1	Analyst: KAH 12/14/2012 03:50 PM
PH - SOIL - SW9045D						
pH	8.04		SW9045B	0.100 pH Units	1	Analyst: KL 12/11/2012 01:00 PM

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

ALS Environmental

Date: 28-Dec-12

Client: LT Environmental, Inc.
Project: 7N
Sample ID: N01@3.5'
Collection Date: 12/7/2012 02:34 PM

Work Order: 1212284
Lab ID: 1212284-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO - 8015C						
TPH (Diesel Range)	U		SW8015M	1.7 mg/Kg	1	Prep Date: 12/13/2012 Analyst: KMB 12/13/2012 11:05 PM
Surr: 2-Fluorobiphenyl	70.9		60-135	%REC	1	12/13/2012 11:05 PM
GASOLINE RANGE ORGANICS - SW8015C						
Gasoline Range Organics	U		SW8015	0.050 mg/Kg	1	Analyst: KKP 12/10/2012 05:31 PM
Surr: 4-Bromofluorobenzene	91.8		70-130	%REC	1	12/10/2012 05:31 PM
LA29B SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	6.82		LA29B SAR	0.0100 meq/meq	1	Prep Date: 12/19/2012 Analyst: ALR 12/19/2012
LA 29B - 1:1 SOLUBLE CATIONS FOR SAR						
Calcium	267		LA29B-6020	5.00 mg/L	10	Prep Date: 12/19/2012 Analyst: SKS 12/20/2012 07:30 PM
Magnesium	217			5.00 mg/L	10	12/20/2012 07:30 PM
Sodium	619			5.00 mg/L	10	12/20/2012 07:30 PM
LA29B ELECTRICAL CONDUCTIVITY						
Electrical Conductivity @ saturation	9.04		LADNR-29B EC	0.0100 mmhos/cm @25°C	1	Analyst: VAN 12/14/2012 03:50 PM
Electrical Conductivity, 1:1 aqueous	5.82			0.0100 mmhos/cm @25°C	1	12/14/2012 03:50 PM
Saturation % as decimal	0.644			mmhos/cm @25°C	1	12/14/2012 03:50 PM
LA29B SATURATION POINT						
Saturation Point	0.644		LADNR-29B SP	0.100 % Saturation as Decimal	1	Analyst: KAH 12/14/2012 03:50 PM
PH - SOIL - SW9045D						
pH	7.90		SW9045B	0.100 pH Units	1	Analyst: KL 12/11/2012 01:00 PM

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

ALS Environmental

Date: 28-Dec-12

Client: LT Environmental, Inc.
Project: 7N
Sample ID: S01@3.5'
Collection Date: 12/7/2012 02:41 PM

Work Order: 1212284
Lab ID: 1212284-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO - 8015C						
TPH (Diesel Range)	38		SW8015M	1.7 mg/Kg	1	Prep Date: 12/13/2012 Analyst: KMB 12/13/2012 11:28 PM
Surr: 2-Fluorobiphenyl	91.2		60-135	%REC	1	12/13/2012 11:28 PM
GASOLINE RANGE ORGANICS - SW8015C						
Gasoline Range Organics	38		SW8015	0.25 mg/Kg	5	Analyst: KKP 12/11/2012 06:06 PM
Surr: 4-Bromofluorobenzene	243	S	70-130	%REC	5	12/11/2012 06:06 PM
LA29B SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	14.1		LA29B SAR	0.0100 meq/meq	1	Prep Date: 12/19/2012 Analyst: ALR 12/19/2012
LA 29B - 1:1 SOLUBLE CATIONS FOR SAR						
Calcium	156		LA29B-6020	5.00 mg/L	10	Prep Date: 12/19/2012 Analyst: SKS 12/20/2012 07:32 PM
Magnesium	126			5.00 mg/L	10	12/20/2012 07:32 PM
Sodium	977			5.00 mg/L	10	12/20/2012 07:32 PM
LA29B ELECTRICAL CONDUCTIVITY						
Electrical Conductivity @ saturation	10.1		LADNR-29B EC	0.0100 mmhos/cm @25°C	1	Analyst: VAN 12/14/2012 03:50 PM
Electrical Conductivity, 1:1 aqueous	6.70			0.0100 mmhos/cm @25°C	1	12/14/2012 03:50 PM
Saturation % as decimal	0.666			mmhos/cm @25°C	1	12/14/2012 03:50 PM
LA29B SATURATION POINT						
Saturation Point	0.666		LADNR-29B SP	0.100 % Saturation as Decimal	1	Analyst: KAH 12/14/2012 03:50 PM
PH - SOIL - SW9045D						
pH	8.25		SW9045B	0.100 pH Units	1	Analyst: KL 12/11/2012 01:00 PM

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

ALS Environmental

Date: 28-Dec-12

Client: LT Environmental, Inc.
Project: 7N
Sample ID: BG-01
Collection Date: 12/7/2012 03:31 PM

Work Order: 1212284
Lab ID: 1212284-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LA29B SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	2.84		LA29B SAR 0.0100	meq/meq	Prep Date: 12/13/2012 1	Analyst: ALR 12/19/2012
LA 29B - 1:1 SOLUBLE CATIONS FOR SAR						
Calcium	148		LA29B-6020 5.00	mg/L	Prep Date: 12/13/2012 10	Analyst: ALR 12/17/2012 06:25 PM
Magnesium	21.9		5.00	mg/L	10	12/17/2012 06:25 PM
Sodium	140		5.00	mg/L	10	12/17/2012 06:25 PM
LA29B ELECTRICAL CONDUCTIVITY						
Electrical Conductivity @ saturation	4.12		LADNR-29B EC 0.0100	mmhos/cm @25°C	1	Analyst: VAN 12/14/2012 03:50 PM
Electrical Conductivity, 1:1 aqueous	1.38		0.0100	mmhos/cm @25°C	1	12/14/2012 03:50 PM
Saturation % as decimal	0.335			mmhos/cm @25°C	1	12/14/2012 03:50 PM
LA29B SATURATION POINT						
Saturation Point	0.335		LADNR-29B SP 0.100	% Saturation as Decimal	1	Analyst: KAH 12/14/2012 03:50 PM
PH - SOIL - SW9045D						
pH	8.26		SW9045B 0.100	pH Units	1	Analyst: KL 12/12/2012 02:15 PM

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

ALS Environmental

Date: 28-Dec-12

Client: LT Environmental, Inc.
Project: 7N
Sample ID: BG02
Collection Date: 12/7/2012 03:36 PM

Work Order: 1212284
Lab ID: 1212284-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LA29B SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.589		LA29B SAR 0.0100	meq/meq	Prep Date: 12/13/2012 1	Analyst: ALR 12/19/2012
LA 29B - 1:1 SOLUBLE CATIONS FOR SAR						
Calcium	174		LA29B-6020 4.99	mg/L	Prep Date: 12/13/2012 10	Analyst: ALR 12/17/2012 06:30 PM
Magnesium	28.6		4.99	mg/L	10	12/17/2012 06:30 PM
Sodium	31.8		4.99	mg/L	10	12/17/2012 06:30 PM
LA29B ELECTRICAL CONDUCTIVITY						
Electrical Conductivity @ saturation	2.47		LADNR-29B EC 0.0100	mmhos/cm @25°C	1	Analyst: VAN 12/14/2012 03:50 PM
Electrical Conductivity, 1:1 aqueous	1.12		0.0100	mmhos/cm @25°C	1	12/14/2012 03:50 PM
Saturation % as decimal	0.453			mmhos/cm @25°C	1	12/14/2012 03:50 PM
LA29B SATURATION POINT						
Saturation Point	0.453		LADNR-29B SP 0.100	% Saturation as Decimal	1	Analyst: KAH 12/14/2012 03:50 PM
PH - SOIL - SW9045D						
pH	7.43		SW9045B 0.100	pH Units	1	Analyst: KL 12/12/2012 02:15 PM

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

ALS Environmental

Date: 28-Dec-12

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **66501a** Instrument ID **FID-7** Method: **SW8015M**

MBLK	Sample ID: FBLKS1-121213-66501a				Units: mg/Kg		Analysis Date: 12/13/2012 09:57 PM			
Client ID:	Run ID: FID-7_121213A				SeqNo: 3054885		Prep Date: 12/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	U	1.7								
<i>Surr: 2-Fluorobiphenyl</i>	2.632	0.10	3.33	0	79	60-135	0			

LCS	Sample ID: FLCSS1-121213-66501a				Units: mg/Kg		Analysis Date: 12/13/2012 10:19 PM			
Client ID:	Run ID: FID-7_121213A				SeqNo: 3054886		Prep Date: 12/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	36.11	1.7	33.33	0	108	70-130	0			
<i>Surr: 2-Fluorobiphenyl</i>	3.426	0.10	3.33	0	103	60-135	0			

MS	Sample ID: 1212295-01AMS				Units: mg/Kg		Analysis Date: 12/14/2012 12:12 A			
Client ID:	Run ID: FID-7_121213A				SeqNo: 3054891		Prep Date: 12/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	46.1	1.7	33.3	5.55	122	70-130	0			
<i>Surr: 2-Fluorobiphenyl</i>	3.41	0.10	3.327	0	103	60-135	0			

MSD	Sample ID: 1212295-01AMSD				Units: mg/Kg		Analysis Date: 12/14/2012 12:35 A			
Client ID:	Run ID: FID-7_121213A				SeqNo: 3054892		Prep Date: 12/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	45.26	1.7	33.31	5.55	119	70-130	46.1	1.83	30	
<i>Surr: 2-Fluorobiphenyl</i>	2.959	0.10	3.328	0	88.9	60-135	3.41	14.2	30	

The following samples were analyzed in this batch:

1212284-01C	1212284-02C	1212284-03C
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc.

Work Order: 1212284

Project: 7N

QC BATCH REPORT

Batch ID: R139577

Instrument ID FID-9

Method: SW8015

MBLK Sample ID: GBLKS-121210-R139577 Units: mg/Kg Analysis Date: 12/10/2012 12:33 PM

Client ID: Run ID: FID-9_121210A SeqNo: 3047277 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	U	0.050								
Surr: 4-Bromofluorobenzene	0.09105	0.0050	0.1	0	91.1	70-130	0			

LCS Sample ID: GLCSS-121210-R139577 Units: mg/Kg Analysis Date: 12/10/2012 11:56 A

Client ID: Run ID: FID-9_121210A SeqNo: 3047275 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.9853	0.050	1	0	98.5	70-130	0			
Surr: 4-Bromofluorobenzene	0.1009	0.0050	0.1	0	101	70-130	0			

LCSD Sample ID: GLCSDS-121210-R139577 Units: mg/Kg Analysis Date: 12/10/2012 12:15 PM

Client ID: Run ID: FID-9_121210A SeqNo: 3047276 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.066	0.050	1	0	107	70-130	0.9853	7.86	30	
Surr: 4-Bromofluorobenzene	0.1003	0.0050	0.1	0	100	70-130	0.1009	0.626	30	

MS Sample ID: 1212232-03AMS Units: mg/Kg Analysis Date: 12/10/2012 02:41 PM

Client ID: Run ID: FID-9_121210A SeqNo: 3047279 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.964	0.050	1	0	96.4	70-130	0			
Surr: 4-Bromofluorobenzene	0.09359	0.0050	0.1	0	93.6	70-130	0			

MSD Sample ID: 1212232-03AMSD Units: mg/Kg Analysis Date: 12/10/2012 03:00 PM

Client ID: Run ID: FID-9_121210A SeqNo: 3047280 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.014	0.050	1	0	101	70-130	0.964	5.04	30	
Surr: 4-Bromofluorobenzene	0.09395	0.0050	0.1	0	94	70-130	0.09359	0.385	30	

The following samples were analyzed in this batch:

1212284-01A 1212284-02A

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

Client: LT Environmental, Inc.
 Work Order: 1212284
 Project: 7N

QC BATCH REPORT

Batch ID: **R139674** Instrument ID **FID-9** Method: **SW8015**

MBLK	Sample ID: GBLKS-121211-R139674				Units: mg/Kg		Analysis Date: 12/11/2012 11:23 A			
Client ID:	Run ID: FID-9_121211C				SeqNo: 3049498		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	U	0.050								
Surr: 4-Bromofluorobenzene	0.08454	0.0050	0.1	0	84.5	70-130	0			

LCS	Sample ID: GLCSS-121211-R139674				Units: mg/Kg		Analysis Date: 12/11/2012 10:45 A			
Client ID:	Run ID: FID-9_121211C				SeqNo: 3049496		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.928	0.050	1	0	92.8	70-130	0			
Surr: 4-Bromofluorobenzene	0.08828	0.0050	0.1	0	88.3	70-130	0			

LCSD	Sample ID: GLCSDS-121211-R139674				Units: mg/Kg		Analysis Date: 12/11/2012 11:04 A			
Client ID:	Run ID: FID-9_121211C				SeqNo: 3049497		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.9966	0.050	1	0	99.7	70-130	0.928	7.12	30	
Surr: 4-Bromofluorobenzene	0.09073	0.0050	0.1	0	90.7	70-130	0.08828	2.73	30	

MS	Sample ID: 1212224-10ZMS				Units: mg/Kg		Analysis Date: 12/11/2012 04:45 PM			
Client ID:	Run ID: FID-9_121211C				SeqNo: 3049503		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.9624	0.050	0.99	0	97.2	70-130	0			
Surr: 4-Bromofluorobenzene	0.08799	0.0050	0.099	0	88.9	70-130	0			

MSD	Sample ID: 1212224-10ZMSD				Units: mg/Kg		Analysis Date: 12/11/2012 05:04 PM			
Client ID:	Run ID: FID-9_121211C				SeqNo: 3049505		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.027	0.050	1	0	103	70-130	0.9624	6.5	30	
Surr: 4-Bromofluorobenzene	0.08796	0.0050	0.1	0	88	70-130	0.08799	0.0332	30	

The following samples were analyzed in this batch:

1212284-03A

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

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **66514** Instrument ID **ICP7500** Method: **La29B-6020**

MBLK Sample ID: **BLK-121412-SAR-66514** Units: **mg/L** Analysis Date: **12/17/2012 06:15 PM**

Client ID: Run ID: **ICP7500_121217A** SeqNo: **3056156** Prep Date: **12/13/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.50								
Magnesium	U	0.50								
Sodium	U	0.50								

LCS Sample ID: **LCS-121412-SAR-66514** Units: **mg/L** Analysis Date: **12/17/2012 06:20 PM**

Client ID: Run ID: **ICP7500_121217A** SeqNo: **3056157** Prep Date: **12/13/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	10.28	0.50	10	0	103	80-120	0			
Magnesium	10.55	0.50	10	0	106	80-120	0			
Sodium	10.76	0.50	10	0	108	80-120	0			

DUP Sample ID: **1212393-02DDUP** Units: **mg/L** Analysis Date: **12/17/2012 07:40 PM**

Client ID: Run ID: **ICP7500_121217A** SeqNo: **3056173** Prep Date: **12/13/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	6.751	5.0	0	0	0		6.691	0.892	30	
Magnesium	3.964	2.0	0	0	0		4.364	9.6	30	
Sodium	239.3	5.0	0	0	0		235.8	1.47	30	

The following samples were analyzed in this batch:

1212284-04A 1212284-05A

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

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **66514A** Instrument ID **MISC-Metals** Method: **La29B SAR**

DUP Sample ID: **1212393-02DDUP** Units: **meq/meq** Analysis Date: **12/19/2012**

Client ID: Run ID: **MISC-METALS_121219** SeqNo: **3058503** Prep Date: **12/13/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	18.06	0.010	0	0	0		17.45	3.44	30	

The following samples were analyzed in this batch:

1212284-04A 1212284-05A

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

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **66674** Instrument ID **ICPMS05** Method: **La29B-6020**

LCS Sample ID: **LCS-121912-SAR-66674** Units: **mg/L** Analysis Date: **12/21/2012 01:04 PM**

Client ID: Run ID: **ICPMS05_121221A** SeqNo: **3063064** Prep Date: **12/19/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	10.17	0.50	10	0	102	80-120	0			
Magnesium	10.37	0.50	10	0	104	80-120	0			
Sodium	10.7	0.50	10	0	107	80-120	0			

DUP Sample ID: **1212284-03CDUP** Units: **mg/L** Analysis Date: **12/20/2012 07:34 PM**

Client ID: **S01@3.5'** Run ID: **ICPMS05_121220A** SeqNo: **3062439** Prep Date: **12/19/2012** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	158.9	5.0	0	0	0		155.8	1.94	30	
Magnesium	127.7	5.0	0	0	0		126.2	1.23	30	
Sodium	1009	5.0	0	0	0		977.5	3.18	30	

The following samples were analyzed in this batch:

1212284-02C 1212284-03C

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

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **66674A** Instrument ID **MISC-Metals** Method: **La29B SAR**

DUP Sample ID: **1212284-03CDUP** Units: **meq/meq** Analysis Date: **12/19/2012**
Client ID: **S01 @3.5'** Run ID: **MISC-METALS_121219** SeqNo: **3063123** Prep Date: **12/19/2012** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	14.46	0.010	0	0	0		14.11	2.45	30	

The following samples were analyzed in this batch:

1212284-02C	1212284-03C
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **R139587** Instrument ID **WetChem** Method: **SW9045B (Dissolve)**

LCS Sample ID: **WLCSS1-121211-R139587** Units: **pH Units** Analysis Date: **12/11/2012 01:00 PM**

Client ID: Run ID: **WETCHEM_121211A** SeqNo: **3047452** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.02	0.10	6	0	100	90-110	0			

DUP Sample ID: **1212233-01ADUP** Units: **pH Units** Analysis Date: **12/11/2012 01:00 PM**

Client ID: Run ID: **WETCHEM_121211A** SeqNo: **3047473** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.67	0.10	0	0	0	0-0	7.65	0.261	20	

The following samples were analyzed in this batch:

1212284-01B	1212284-02B	1212284-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **R139732** Instrument ID **WetChem** Method: **SW9045B (Dissolve)**

LCS Sample ID: **WLCSS1-121212-R139732** Units: **pH Units** Analysis Date: **12/12/2012 02:15 PM**

Client ID: Run ID: **WETCHEM_121212I** SeqNo: **3050431** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.02	0.10	6	0	100	90-110	0			

DUP Sample ID: **1212284-04ADUP** Units: **pH Units** Analysis Date: **12/12/2012 02:15 PM**

Client ID: **BG-01** Run ID: **WETCHEM_121212I** SeqNo: **3050435** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.28	0.10	0	0	0	0-0	8.26	0.242	20	

The following samples were analyzed in this batch:

1212284-04A	1212284-05A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **R139929** Instrument ID **Balance1** Method: **LaDNR-29B SP (Dissolve)**

DUP Sample ID: **1212284-04ADUP** Units: **% Saturation as D** Analysis Date: **12/14/2012 03:50 PM**

Client ID: **BG-01** Run ID: **BALANCE1_121214D** SeqNo: **3055049** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Saturation Point	0.323	0.10	0	0	0		0.335	3.65	30	

The following samples were analyzed in this batch:

1212284-01C	1212284-02C	1212284-03C
1212284-04A	1212284-05A	

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

Client: LT Environmental, Inc.
Work Order: 1212284
Project: 7N

QC BATCH REPORT

Batch ID: **R139958** Instrument ID **Balance1** Method: **LaDNR-29B EC (Dissolve)**

MBLK Sample ID: **WBLKW-121512-R139958** Units: **mmhos/cm @25°** Analysis Date: **12/14/2012 03:50 PM**

Client ID: Run ID: **BALANCE1_121214F** SeqNo: **3055684** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ saturation	U	0.010								
Electrical Conductivity, 1:1 aqueous	U	0.010								
Saturation % as decimal	U	0								

LCS Sample ID: **WLCSW-121512-R139958** Units: **mmhos/cm @25°** Analysis Date: **12/14/2012 03:50 PM**

Client ID: Run ID: **BALANCE1_121214F** SeqNo: **3055685** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ saturation	2	0.010	2	0	100	90-110	0			
Electrical Conductivity, 1:1 aqueous	2	0.010	2	0	100	90-110	0			

DUP Sample ID: **1212284-04ADUP** Units: **mmhos/cm @25°** Analysis Date: **12/14/2012 03:50 PM**

Client ID: **BG-01** Run ID: **BALANCE1_121214F** SeqNo: **3055701** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ saturation	4.277	0.010	0	0	0		4.122	3.69	20	
Electrical Conductivity, 1:1 aqueous	1.38	0.010	0	0	0		1.38	0	20	
Saturation % as decimal	0.323	0	0	0	0		0.335	3.65		

The following samples were analyzed in this batch:

1212284-01C	1212284-02C	1212284-03C
1212284-04A	1212284-05A	

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

ALS Environmental

Date: 28-Dec-12

Client: LT Environmental, Inc.
Project: 7N
WorkOrder: 1212284

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not 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 detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
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

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
% Saturation as	
Decimal	
meq/meq	
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
mmhos/cm @25°C	
pH Units	

Sample Receipt Checklist

Client Name: **LT E - RIFLE, CO**

Date/Time Received: **08-Dec-12 09:30**

Work Order: **1212284**

Received by: **RDH**

Checklist completed by Rishel D. Naran 10-Dec-12
eSignature Date

Reviewed by: Patricia L. Lynch 11-Dec-12
eSignature Date

Matrices: **SOIL**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.6C U/C</u> <u>005</u>		
Cooler(s)/Kit(s):	<u>4103</u>		
Date/Time sample(s) sent to storage:	<u>12/10/12 09:07</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

Customer Information				Project Information				ALS Project Manager:																				
Purchase Order	Work Order	Company Name	Send Report To	Project Name	Project Number	Bill To Company	Invoice Attn	City/State/Zip	Phone	Fax	e-Mail Address	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold	
LT Environmental	Jacob Janicek	820 Megan Ave, Unit B	Rifle CO 81650	770-778-2314	7N	008312060	Noble Energy	Asher Weinberg	1625 Broadway Suite 2200	Denver CO 80202	720-587-2198																	
e-Mail Address				e-Mail Address				A Weinberg@nobleenergyinc.com																				
1	Bol @ 5.5'	12-7-12	1427	SO	—	3		X	X	X																		
2	EOI @ 3.5'	12-7-12	1434	SO	—	3		X	X	X																		
3	WOI @ 3.5'	12-7-12	1441	SO	—	3		X	X	X																		
4	B601	12-7-12	1531	SO	—	1		X	X	X																		
5	B602	12-7-12	1536	SO	—	1		X	X	X																		
6	COI	12-7-12	1507	SO	—	4																						
e-Mail Address				e-Mail Address				A Weinberg@nobleenergyinc.com																				
Sample Description				Sample Description				A Weinberg@nobleenergyinc.com																				
No.				No.				A Weinberg@nobleenergyinc.com																				
1				1				A Weinberg@nobleenergyinc.com																				
2				2				A Weinberg@nobleenergyinc.com																				
3				3				A Weinberg@nobleenergyinc.com																				
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49																												

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

1. Any changes must be made in writing once samples and COC form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.

3. The Chain of Custody is a legal document. All information must be completed accurately.

1212284

From: (970) 424-4749
Lab Hub, LLC

Origin ID: RILA



J12201209200325

127 E First Street

PARACHUTE, CO 81635

Ship Date: 07DEC12
Act/Wgt: 54.0 LB
CAD: 103923490/INET3300

Dims: 25 X 14 X 15 IN

Delivery Address Bar Code



SHIP TO: (281) 530-5656

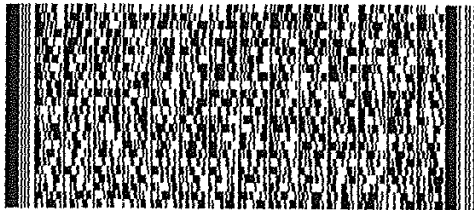
BILL RECIPIENT

Sample Receiving
ALS Environmental - Texas
10450 STANCLIFF RD
STE 210
HOUSTON, TX 77099

Ref # 1001-120712-2
Invoice #
PO #
Dept #

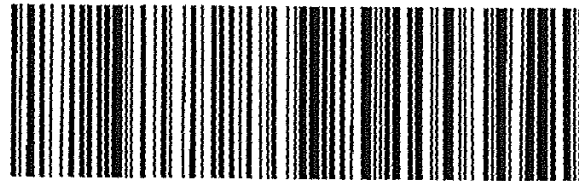
SATURDAY ### A1
PRIORITY OVERNIGHT

TRK# 7942 5285 6695
0201



X0 SGRA

77099
TX-US
IAH



515G1B2B3/AA44

Lab Hub LLC

Date: 12-0

Time: 16

Custod: seal

PNH
12/12/12
12/12/12



10-Jan-2013

Jake Janicek
LT Environmental, Inc.
820 Megan Avenue, Unit B
Rifle, Colorado 81650

Tel: (970) 285-9985
Fax:

Re: 7N

Work Order: **1301083**

Dear Jake,

ALS Environmental received 2 samples on 03-Jan-2013 09:35 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. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 15.

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

Sincerely,

A handwritten signature in cursive script that reads "Patricia L. Lynch".

Electronically approved by: Luke F. Hernandez

Patricia L. Lynch
Project Manager



Certificate No: T104704231-09A-TX

ADDRESS 10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

DOV#J UR X S#K VD /#R U S#H Sdu#h i#hch#DOV#J ur xs##D q#DOV#Dp Jbhg#F rp sdq |

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: LT Environmental, Inc.
Project: 7N
Work Order: 1301083

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>
1301083-01	C01	Soil		12/31/2012 08:45	1/3/2013 09:35	<input type="checkbox"/>
1301083-02	Trip Blank	Water		12/31/2012	1/3/2013 09:35	<input type="checkbox"/>

ALS Environmental

Date: 10-Jan-13

Client: LT Environmental, Inc.

Project: 7N

Work Order: 1301083

Case Narrative

No exceptions.

ALS Environmental

Date: 10-Jan-13

Client: LT Environmental, Inc.
Project: 7N
Sample ID: C01
Collection Date: 12/31/2012 08:45 AM

Work Order: 1301083
Lab ID: 1301083-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO - 8015C			SW8015M		Prep Date: 1/4/2013	Analyst: KMB
TPH (Diesel Range)	4.1		1.7	mg/Kg	1	1/4/2013 03:14 PM
Surr: 2-Fluorobiphenyl	62.6		60-135	%REC	1	1/4/2013 03:14 PM
GASOLINE RANGE ORGANICS - SW8015C			SW8015			Analyst: KKP
Gasoline Range Organics	0.89		0.050	mg/Kg	1	1/7/2013 06:48 PM
Surr: 4-Bromofluorobenzene	125		70-130	%REC	1	1/7/2013 06:48 PM
LA29B SODIUM ADSORPTION RATIO			LA29B SAR		Prep Date: 1/8/2013	Analyst: ALR
Sodium Adsorption Ratio	14.8		0.0100	meq/meq	1	1/10/2013
LA 29B - 1:1 SOLUBLE CATIONS FOR SAR			LA29B-6020		Prep Date: 1/8/2013	Analyst: SKS
Calcium	154		5.00	mg/L	10	1/9/2013 06:31 PM
Magnesium	118		5.00	mg/L	10	1/9/2013 06:31 PM
Sodium	1,000		5.00	mg/L	10	1/9/2013 06:31 PM
LA29B ELECTRICAL CONDUCTIVITY			LADNR-29B EC			Analyst: KL
Electrical Conductivity @ saturation	8.39		0.0100	mmhos/cm @25°C	1	1/8/2013 03:00 PM
Electrical Conductivity, 1:1 aqueous	6.22		0.0100	mmhos/cm @25°C	1	1/8/2013 03:00 PM
Saturation % as decimal	0.742			mmhos/cm @25°C	1	1/8/2013 03:00 PM
LA29B SATURATION POINT			LADNR-29B SP			Analyst: KAH
Saturation Point	0.742		0.100	% Saturation as Decimal	1	1/7/2013 12:50 PM
PH - SOIL - SW9045D			SW9045B			Analyst: KL
pH	8.31		0.100	pH Units	1	1/5/2013 11:00 AM

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

ALS Environmental

Date: 10-Jan-13

Client: LT Environmental, Inc.
Work Order: 1301083
Project: 7N

QC BATCH REPORT

Batch ID: **66951** Instrument ID **FID-7** Method: **SW8015M**

MBLK	Sample ID: FBLKS1-130104-66951				Units: mg/Kg		Analysis Date: 1/4/2013 02:29 PM			
Client ID:	Run ID: FID-7_130104A				SeqNo: 3075648		Prep Date: 1/4/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	U	1.7								
<i>Surr: 2-Fluorobiphenyl</i>	2.167	0.10	3.33	0	65.1	60-135	0			

LCS	Sample ID: FLCSS1-130104-66951				Units: mg/Kg		Analysis Date: 1/4/2013 02:51 PM			
Client ID:	Run ID: FID-7_130104A				SeqNo: 3075649		Prep Date: 1/4/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	38.89	1.7	33.33	0	117	70-130	0			
<i>Surr: 2-Fluorobiphenyl</i>	3.211	0.10	3.33	0	96.4	60-135	0			

MS	Sample ID: 1301083-01BMS				Units: mg/Kg		Analysis Date: 1/4/2013 02:51 PM			
Client ID: C01	Run ID: FID-7_130104A				SeqNo: 3075651		Prep Date: 1/4/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	37.7	1.7	33.21	4.138	101	70-130	0			
<i>Surr: 2-Fluorobiphenyl</i>	2.679	0.10	3.318	0	80.7	60-135	0			

MSD	Sample ID: 1301083-01BMSD				Units: mg/Kg		Analysis Date: 1/4/2013 03:14 PM			
Client ID: C01	Run ID: FID-7_130104A				SeqNo: 3075652		Prep Date: 1/4/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	34.49	1.7	33.2	4.138	91.4	70-130	37.7	8.89	30	
<i>Surr: 2-Fluorobiphenyl</i>	2.247	0.10	3.317	0	67.7	60-135	2.679	17.5	30	

The following samples were analyzed in this batch:

1301083-01B

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

QC Page: 1 of 7

Client: LT Environmental, Inc.
Work Order: 1301083
Project: 7N

QC BATCH REPORT

Batch ID: **R140876** Instrument ID **FID-9** Method: **SW8015**

MBLK	Sample ID: GBLKS-130107-R140876				Units: mg/Kg		Analysis Date: 1/7/2013 06:10 PM			
Client ID:	Run ID: FID-9_130107A				SeqNo: 3076249		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	U	0.050								
<i>Surr: 4-Bromofluorobenzene</i>	0.1112	0.0050	0.1	0	111	70-130	0			

LCS	Sample ID: GLCSS-130107-R140876				Units: mg/Kg		Analysis Date: 1/7/2013 05:51 PM			
Client ID:	Run ID: FID-9_130107A				SeqNo: 3076248		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.05	0.050	1	0	105	70-130	0			
<i>Surr: 4-Bromofluorobenzene</i>	0.1178	0.0050	0.1	0	118	70-130	0			

MS	Sample ID: 1212959-01ZMS				Units: mg/Kg		Analysis Date: 1/7/2013 07:07 PM			
Client ID:	Run ID: FID-9_130107A				SeqNo: 3076251		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.019	0.050	1	0	102	70-130	0			
<i>Surr: 4-Bromofluorobenzene</i>	0.111	0.0050	0.1	0	111	70-130	0			

MSD	Sample ID: 1212959-01ZMSD				Units: mg/Kg		Analysis Date: 1/7/2013 07:26 PM			
Client ID:	Run ID: FID-9_130107A				SeqNo: 3076252		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.061	0.050	1	0	106	70-130	1.019	3.98	30	
<i>Surr: 4-Bromofluorobenzene</i>	0.1113	0.0050	0.1	0	111	70-130	0.111	0.31	30	

The following samples were analyzed in this batch:

1301083-01A

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

Client: LT Environmental, Inc.
Work Order: 1301083
Project: 7N

QC BATCH REPORT

Batch ID: **67019** Instrument ID **ICPMS05** Method: **La29B-6020**

MBLK Sample ID: **BLK-010913-SAR-67019** Units: **mg/L** Analysis Date: **1/9/2013 06:27 PM**

Client ID: Run ID: **ICPMS05_130109A** SeqNo: **3078872** Prep Date: **1/8/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.50								
Magnesium	U	0.50								
Sodium	U	0.50								

LCS Sample ID: **LCS-010913-SAR-67019** Units: **mg/L** Analysis Date: **1/9/2013 06:29 PM**

Client ID: Run ID: **ICPMS05_130109A** SeqNo: **3078873** Prep Date: **1/8/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	10.48	0.50	10	0	105	80-120	0			
Magnesium	10.32	0.50	10	0	103	80-120	0			
Sodium	10	0.50	10	0	100	80-120	0			

DUP Sample ID: **1301083-01CDUP** Units: **mg/L** Analysis Date: **1/9/2013 06:34 PM**

Client ID: **C01** Run ID: **ICPMS05_130109A** SeqNo: **3078875** Prep Date: **1/8/2013** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	153.9	5.0	0	0	0		154.1	0.0835	30	
Magnesium	118.8	5.0	0	0	0		117.8	0.835	30	
Sodium	986.1	5.0	0	0	0		1002	1.62	30	

The following samples were analyzed in this batch:

1301083-01C

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

Client: LT Environmental, Inc.
Work Order: 1301083
Project: 7N

QC BATCH REPORT

Batch ID: **67019A** Instrument ID **MISC-Metals** Method: **La29B SAR**

DUP Sample ID: **1301083-01CDUP** Units: **meq/meq** Analysis Date: **1/10/2013**
Client ID: **C01** Run ID: **MISC-METALS_130110** SeqNo: **3079389** Prep Date: **1/8/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	14.51	0.010	0	0	0		0			

The following samples were analyzed in this batch:

1301083-01C

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

Client: LT Environmental, Inc.
Work Order: 1301083
Project: 7N

QC BATCH REPORT

Batch ID: **R140821** Instrument ID **WetChem** Method: **SW9045B (Dissolve)**

LCS		Sample ID: WLCSS1-130105-R140821				Units: pH Units		Analysis Date: 1/5/2013 11:00 AM		
Client ID:		Run ID: WETCHEM_130105C				SeqNo: 3075173		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.05	0.10	6	0	101	90-110	0			

DUP		Sample ID: 1301117-02ADUP				Units: pH Units		Analysis Date: 1/5/2013 11:00 AM		
Client ID:		Run ID: WETCHEM_130105C				SeqNo: 3075185		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	2.2	0.10	0	0	0	0-0	2.18	0.913	20	

The following samples were analyzed in this batch:

1301083-01C

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

Client: LT Environmental, Inc.
Work Order: 1301083
Project: 7N

QC BATCH REPORT

Batch ID: **R140874** Instrument ID **Balance1** Method: **LaDNR-29B SP (Dissolve)**

DUP Sample ID: **1301083-01CDUP** Units: % Saturation as D Analysis Date: **1/7/2013 12:50 PM**

Client ID: **C01** Run ID: **BALANCE1_130107B** SeqNo: **3076209** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Saturation Point	0.748	0.10	0	0	0		0.742	0.805	30	

The following samples were analyzed in this batch:

1301083-01C

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

Client: LT Environmental, Inc.
 Work Order: 1301083
 Project: 7N

QC BATCH REPORT

Batch ID: **R140909** Instrument ID **Balance1** Method: **LaDNR-29B EC (Dissolve)**

MBLK Sample ID: **WBLKW1-010813-R140909** Units: **mmhos/cm @25°** Analysis Date: **1/8/2013 03:00 PM**

Client ID: Run ID: **BALANCE1_130108D** SeqNo: **3076830** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ saturation	U	0.010								
Electrical Conductivity, 1:1 aqueous	U	0.010								
Saturation % as decimal	U	0								

LCS Sample ID: **WLCSW1-010813-R140909** Units: **mmhos/cm @25°** Analysis Date: **1/8/2013 03:00 PM**

Client ID: Run ID: **BALANCE1_130108D** SeqNo: **3076831** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ saturation	1.48	0.010	1.412	0	105	90-110	0			
Electrical Conductivity, 1:1 aqueous	1.48	0.010	1.412	0	105	90-110	0			

DUP Sample ID: **1301083-01CDUP** Units: **mmhos/cm @25°** Analysis Date: **1/8/2013 03:00 PM**

Client ID: **C01** Run ID: **BALANCE1_130108D** SeqNo: **3076833** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ saturation	8.355	0.010	0	0	0		8.388	0.394	20	
Electrical Conductivity, 1:1 aqueous	6.25	0.010	0	0	0		6.22	0.481	20	
Saturation % as decimal	0.748	0	0	0	0		0.742	0.805		

The following samples were analyzed in this batch:

1301083-01C

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

Client: LT Environmental, Inc.
Project: 7N
WorkOrder: 1301083

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not 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 detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
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

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
% Saturation as	
Decimal	
meq/meq	
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
mmhos/cm @25°C	
pH Units	

Sample Receipt Checklist

Client Name: **LT E - RIFLE, CO**

Date/Time Received: **03-Jan-13 09:35**

Work Order: **1301083**

Received by: **PMG**

Checklist completed by Johanna B. Allen
eSignature

03-Jan-13
Date

Reviewed by: Patricia L. Lynch
eSignature

11-Jan-13
Date

Matrices: soil/water

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>0.6 C/uc</u> <u>005</u>		
Cooler(s)/Kit(s):	<u>Medium Blue</u>		
Date/Time sample(s) sent to storage:	<u>1/3/12 17:10</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<u>-</u>		
Login Notes:	<u>Contingency for BTEX if TPH > 500 mg/kg ; SAR if EC > 4 mmhos/cm</u>		

Client Contacted:

Date Contacted:

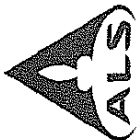
Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



Chain of Custody Form

Page 1 of 1

COC ID: 38456

Environmental

- ☐ Cincinnati, OH
+1 513 733 5336
- ☐ Everett, WA
+1 425 356 2600
- ☐ Fort Collins, CO
+1 970 490 1511

LT E - RIFLE, CO: LT Environmental, Inc.

Project 7N



Customer Information				Project Information				Parameter/Method Request for Analysis																
Purchase Order	Work Order	Company Name	Send Report To	Address	City/State/Zip	Phone	Fax	e-Mail Address	Date	Time	Matrix	Pres.	#Bottles	A	B	C	D	E	F	G	H	I	J	Hold
		LT Environmental	Jacob Sanicek	820 Megan Ave Unit B	Rifle CO 81650	970-285-9785		j.sanicek@ltenv.com	12-31-12	0845	Soil	—	4	X	X	X								
Notes: This is a re-sample that ALS is paying for. Der Bruce Schlatter																								
QC Package: (Check Box Below)																								
Level II: Standard QC																								
Level III: Std QC + Raw Data																								
Level IV: SW846 CLP-Like																								
Other:																								
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035																								

Sampler(s): Please Print & Sign		Shipment Method:		Required Turnaround Time:		Results Due Date:	
Jacob Sanicek		Lab Hub		<input type="checkbox"/> STD 10 Wk Days <input checked="" type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> Other		RUSH	
Requisitioned by:	Jacob Sanicek	Date:	12-31-12	Time:	1130	Notes: This is a re-sample that ALS is paying for. Der Bruce Schlatter	
Requisitioned by:	Jacob Sanicek	Date:	12-31-12	Time:	1130	QC Package: (Check Box Below)	
Logged by (Laboratory):	Jacob Sanicek	Date:	1/2/13	Time:	1130	Level II: Standard QC	
Logged by (Laboratory):	Jacob Sanicek	Date:	1/2/13	Time:	1130	Level III: Std QC + Raw Data	
Logged by (Laboratory):	Jacob Sanicek	Date:	1/2/13	Time:	1130	Level IV: SW846 CLP-Like	
Logged by (Laboratory):	Jacob Sanicek	Date:	1/2/13	Time:	1130	Other:	

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Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

From: (970) 424-4749
Colby Koerner
Lab Hub, LLC
562 huntington point lane
Clifton, CO 81520

Origin ID: GJTA



Ship Date: 02JAN13
ActWgt: 30.0 LB
CAD: 103923490/NET3300

Dims: 19 X 14 X 11 IN

SHIP TO: (281) 530-5656
Sample Receiving
ALS Environmental - Texas
10450 STANCLIFF RD
STE 210
HOUSTON, TX 77099

BILL RECIPIENT

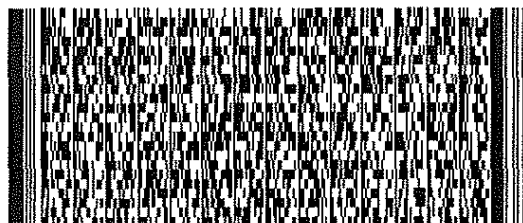
Delivery Address Bar Code



Ref # 1001-010213-2
Invoice #
PO #
Dept #

THU - 03 JAN A1
STANDARD OVERNIGHT

TRK# 7944 2866 2939
0201

**XH SGRA**

77099
TX-US
IAH



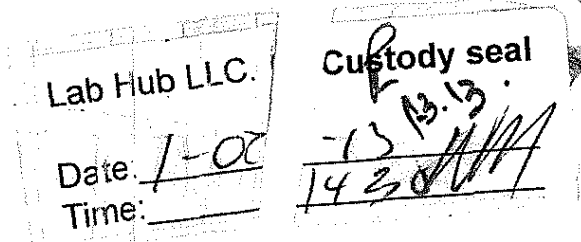
515G1DD8A/AA44

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the bottom portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy or a scanned image of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions at fedex.com. FedEx will not be responsible for any claim in excess of \$500,000 for loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value on the label. Limitations found in the current FedEx Service Guide apply. Recovery for loss, damage, delay, non-delivery, misdelivery, or misinformation is limited to the greater of \$500 or the actual declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

This label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions at fedex.com. FedEx will not be responsible for any claim in excess of \$500,000 for loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value on the label. Limitations found in the current FedEx Service Guide apply. Recovery for loss, damage, delay, non-delivery, misdelivery, or misinformation is limited to the greater of \$500 or the actual declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.





14-May-2013

Rob Fishburn
LT Environmental, Inc.
820 Megan Avenue, Unit B
Rifle, Colorado 81650

Tel: (970) 285-9985

Fax:

Re: 7N 008312060

Work Order: **1305155**

Revision: **1**

Dear Rob,

ALS Environmental received 1 sample on 02-May-2013 09:20 AM for the analyses presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

The total number of pages in this revised report is 13.

Regards,

A handwritten signature in cursive script, reading "Bernadette Fini".

Electronically approved by: Luke F. Hernandez

Bernadette A. Fini
Project Manager



Certificate No: T104704231-12-10

ADDRESS 10450 Standliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

DOV#T UR X S#K VD /#R U S#Sduw#e i#k h#DOV#T urxs##D q#DOV#O p l#hg#F rp s dq |

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: LT Environmental, Inc.
Project: 7N 008312060
Work Order: 1305155

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>
1305155-01	CO1	Soil		4/30/2013 13:25	5/2/2013 09:20	<input type="checkbox"/>

ALS Environmental

Date: 14-May-13

Client: LT Environmental, Inc.

Project: 7N 008312060

Work Order: 1305155

Case Narrative

Per client email received on May 14, 2013 sample ID was changed to CO1.

Revision: 1

CN Page 1 of 1

ALS Environmental

Date: 14-May-13

Client: LT Environmental, Inc.

Project: 7N 008312060

Sample ID: CO1

Collection Date: 4/30/2013 01:25 PM

Work Order: 1305155

Lab ID: 1305155-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LA29B SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	2.10		LA29B SAR		Prep Date: 5/8/2013	Analyst: JCJ
			0.0100	meq/meq	1	5/9/2013
LA 29B - 1:1 SOLUBLE CATIONS FOR SAR						
Calcium	10.0		LA29B-6020		Prep Date: 5/8/2013	Analyst: ALR
			0.499	mg/L	1	5/9/2013 04:25 PM
Magnesium	7.55		0.499	mg/L	1	5/9/2013 04:25 PM
Sodium	36.1		0.499	mg/L	1	5/9/2013 04:25 PM
LA29B ELECTRICAL CONDUCTIVITY						
Electrical Conductivity @ saturation	3.67		LADNR-29B EC			Analyst: VAN
			0.0100	mmhos/cm @25°C	1	5/8/2013 05:00 PM
Electrical Conductivity, 1:1 aqueous	2.44		0.0100	mmhos/cm @25°C	1	5/8/2013 05:00 PM
Saturation % as decimal	0.664			mmhos/cm @25°C	1	5/8/2013 05:00 PM
LA29B SATURATION POINT (AS FRACTION)						
Saturation Point	0.664		LADNR-29B SP			Analyst: KAH
			0.100	SP as fraction	1	5/7/2013 10:50 AM
MOISTURE						
Percent Moisture	17.1		SW3550			Analyst: KAH
			0.0100	wt%	1	5/7/2013 03:30 PM

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

Revision: 1

AR Page 1 of 1

ALS Environmental

Date: 14-May-13

Client: LT Environmental, Inc.
Work Order: 1305155
Project: 7N 008312060

QC BATCH REPORT

Batch ID: **69750** Instrument ID **ICP7500** Method: **La29B-6020**

MBLK	Sample ID: BLK-SAR-050913-69750				Units: mg/L		Analysis Date: 5/9/2013 03:55 PM			
Client ID:	Run ID: ICP7500_130509A				SeqNo: 3210048		Prep Date: 5/8/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	ND	0.50								
Magnesium	ND	0.50								
Sodium	ND	0.50								

LCS	Sample ID: LCS-SAR-050913-69750				Units: mg/L		Analysis Date: 5/9/2013 04:00 PM			
Client ID:	Run ID: ICP7500_130509A				SeqNo: 3210049		Prep Date: 5/8/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	9.686	0.50	10	0	96.9	80-120	0			
Magnesium	9.957	0.50	10	0	99.6	80-120	0			
Sodium	10.14	0.50	10	0	101	80-120	0			

DUP	Sample ID: 1305157-04ADUP				Units: mg/L		Analysis Date: 5/9/2013 04:33 PM			
Client ID:	Run ID: ICPMS04_130509A				SeqNo: 3210061		Prep Date: 5/8/2013		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	590.8	5.0	0	0	0		591.6	0.145	30	
Magnesium	94.43	5.0	0	0	0		93.72	0.755	30	
Sodium	1115	5.0	0	0	0		1100	1.35	30	

The following samples were analyzed in this batch:

1305155-01A

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

Revision: 1

QC Page: 1 of 5

Client: LT Environmental, Inc.
Work Order: 1305155
Project: 7N 008312060

QC BATCH REPORT

Batch ID: **69750A** Instrument ID **MISC-Metals** Method: **La29B SAR**

DUP Sample ID: **1305157-04ADUP** Units: **meq/meq** Analysis Date: **5/9/2013**
Client ID: Run ID: **MISC-METALS_130509** SeqNo: **3210075** Prep Date: **5/8/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	11.2	0.010	0	0	0		11.1	0.897	30	

The following samples were analyzed in this batch:

1305155-01A

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

Revision: 1

QC Page: 2 of 5

Client: LT Environmental, Inc.
Work Order: 1305155
Project: 7N 008312060

QC BATCH REPORT

Batch ID: **R147036** Instrument ID **Balance1** Method: **SW3550** **(Dissolve)**

DUP Sample ID: **1305157-04ADUP** Units: **wt%** Analysis Date: **5/7/2013 03:30 PM**

Client ID: Run ID: **BALANCE1_130507C** SeqNo: **3208468** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	15.72	0.010	0	0	0	0-0	15.8	0.456	20	

The following samples were analyzed in this batch:

1305155-01A

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

Revision: 1

QC Page: 3 of 5

Client: LT Environmental, Inc.
Work Order: 1305155
Project: 7N 008312060

QC BATCH REPORT

Batch ID: **R147060** Instrument ID **Balance1** Method: **LaDNR-29B SP (Dissolve)**

DUP	Sample ID: 1305151-02ADUP				Units: SP as fraction			Analysis Date: 5/7/2013 10:50 AM		
Client ID:	Run ID: BALANCE1_130507D				SeqNo: 3208822		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Saturation Point	0.31	0.10	0	0	0		0.315	1.6	30	

DUP	Sample ID: 1305157-04ADUP				Units: SP as fraction			Analysis Date: 5/7/2013 10:50 AM		
Client ID:	Run ID: BALANCE1_130507D				SeqNo: 3208823		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Saturation Point	0.47	0.10	0	0	0		0.48	2.11	30	

The following samples were analyzed in this batch:

1305155-01A

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

Revision: 1

QC Page: 4 of 5

Client: LT Environmental, Inc.
 Work Order: 1305155
 Project: 7N 008312060

QC BATCH REPORT

Batch ID: **R147061** Instrument ID **BALANCE1** Method: **LaDNR-29B EC (Dissolve)**

MBLK	Sample ID: WBLKW1-050813-R147061				Units: mmhos/cm @25°		Analysis Date: 5/8/2013 05:00 PM			
Client ID:	Run ID: BALANCE1_130508B				SeqNo: 3208840		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity, 1:1 aqueous	ND	0.010								

LCS	Sample ID: WLCSW1-050813-R147061				Units: mmhos/cm @25°		Analysis Date: 5/8/2013 05:00 PM			
Client ID:	Run ID: BALANCE1_130508B				SeqNo: 3208841		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity, 1:1 aqueous	1.4	0.010	1.412		0	99.2	90-110	0		

DUP	Sample ID: 1305151-02ADUP				Units: mmhos/cm @25°		Analysis Date: 5/8/2013 05:00 PM			
Client ID:	Run ID: BALANCE1_130508B				SeqNo: 3208859		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ saturation	2.623	0.010	0	0	0		2.571	2	20	
Electrical Conductivity, 1:1 aqueous	0.812	0.010	0	0	0		0.809	0.37	20	
Saturation % as decimal	0.31	0	0	0	0		0.315	1.6		

DUP	Sample ID: 1305157-04ADUP				Units: mmhos/cm @25°		Analysis Date: 5/8/2013 05:00 PM			
Client ID:	Run ID: BALANCE1_130508B				SeqNo: 3208860		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ saturation	14.67	0.010	0	0	0		14.2	3.26	20	
Electrical Conductivity, 1:1 aqueous	6.89	0.010	0	0	0		6.82	1.02	20	
Saturation % as decimal	0.47	0	0	0	0		0.48	2.11		

The following samples were analyzed in this batch:

1305155-01A

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

Revision: 1

QC Page: 5 of 5

Client: LT Environmental, Inc.
Project: 7N 008312060
WorkOrder: 1305155

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not 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 detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
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

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
meq/meq	
mg/L	Milligrams per Liter
mmhos/cm @25°C	
SP as fraction	
wt%	

Sample Receipt Checklist

Client Name: **LT E - RIFLE, CO**

Date/Time Received: **02-May-13 09:20**

Work Order: **1305155**

Received by: **RDH**

Checklist completed by Rishel D. Naran
eSignature

03-May-13
Date

Reviewed by: John M. Cady
eSignature

03-May-13
Date

Matrices: **SOIL**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.4C/3.4C/U</u> <u>IR1</u>		
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>5/2/13 08:26</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u></u>		
Login Notes:	<u></u>		

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

Revision: 1

Page 1 of 1

COCID: 40832

[illegible]

1305155

LT E - RIFLE, CO: LT Environmental, Inc.

Project: 7N 008312060



Environmental						ALS Project Manager:											
Customer Information			Project Information														
Purchase Order		Project Name	7N			A											
Work Order		Project Number	008312060			B											
Company Name	LT Environmental	Bill To Company	Noble Energy			C											
Send Report To	Rob Fishburn & Sara Janicki	Invoice Attn.	Ken Domas			D											
Address	820 Megan Ave Unit B	Address	1125 Broadway Suite 2200			E											
City/State/Zip	Denver CO 80202	City/State/Zip	Denver CO 80202			F											
Phone	970-285-9985	Phone	710-587-2150			G											
Fax		Fax				H											
e-Mail Address	rfishburn@ltenv.com; sjanicki@ltenv.com	e-Mail Address	ldomas@nobleenergyinc.com			I											
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	CS-Q1	4/30/13	1325	SOL	NA	1	X										
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Shipper(s): Please Print & Sign		Date: 4/30/13		Time: 1420		Received by: [Signature]		Date: 4/30/13		Time: 1500		Received by (Laboratory): [Signature]		Date: 4/30/13		Time: 1500		Checked by (Laboratory): [Signature]	
Logistics: [Signature]		Date: 4/30/13		Time: 1420		Received by: [Signature]		Date: 4/30/13		Time: 1500		Received by (Laboratory): [Signature]		Date: 4/30/13		Time: 1500		Checked by (Laboratory): [Signature]	

QC Package: (Check Box Below)		Level II: Standard QC		Level III: Std QC + Raw Data		Level IV: SW846 CLP-Like		Other:	
Cooler Temp.		5 Wk Days		2 Wk Days		24 Hour		Results Due Date:	
Required Turnaround Time:		STD 10 Wk Days		5 Wk Days		2 Wk Days		Other	
Notes:		Received by: [Signature]		Date: 4/30/13		Time: 1420		Received by (Laboratory): [Signature]	
Logistics Key: 1-HCL 2-HND3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035		Date: 4/30/13		Time: 1420		Received by: [Signature]		Date: 4/30/13	

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

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From: (970) 424-4749
Colby Koerner
Lab Hub, LLC
562 huntington point lane
Clifton, CO 81520

Origin ID: GJTA



Ship Date: 30APR13
Act/Vgt: 55.0 LB
CAD: 103923490/INET3370

Dims: 25 X 14 X 15 IN

Delivery Address Bar Code



Ref # 1001-043013-6
Invoice #
PO #
Dept #

1305155

SHIP TO: (281) 530-5656
Sample Receiving
ALS Environmental - Texas
10450 STANCLIFF RD
STE 210
HOUSTON, TX 77099

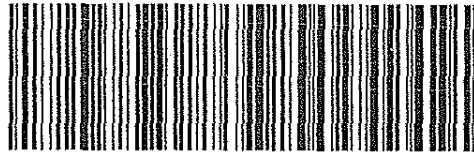
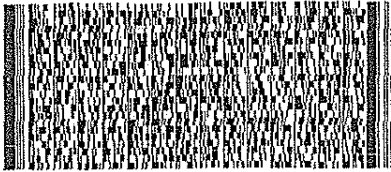
BILL RECIPIENT

WED - 01 MAY 3:00P
STANDARD OVERNIGHT

TRK# 7996 5181 4592
0201

XH SGRA

77099
TX-US
IAH



518G168802346

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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