

1625 Broadway
Suite 2200
Denver, CO 80202
Tel: 303.228-4000
Fax: 303.228-4280
www.nobleenergyinc.com



October 29, 2012

Mr. Rick Allison
Department Of Natural Resources
Oil & Gas Conservation Commission
1120 Lincoln St., Suite 801
Denver CO 80203-2136

RE: Form 27 and Site Assessment Report
Miller I South CaCl Release
API 05-123-23064 (closest well to discharge Gemini B29-15)
Facility#425661
SENW Sec. 29, T5N R64W
Weld County, Colorado

Dear Mr. Allison:

Please find attached a Form 27 and Site Assessment Report for the Miller I South CaCl release location.

Noble Energy Inc. would like to claim business confidentiality protection for the information submitted in this letter, the supporting materials attached and all previous and subsequent correspondence related to this matter. Please contact the Noble Energy Environmental Department at (720)587-2026 if you have any questions or require additional information.

Sincerely,

A handwritten signature in blue ink that reads 'Jacob Evans'.

Jacob Evans
Senior Environmental Specialist

Attachments

State of Colorado
Oil and Gas Conservation Commission



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

FOR OGCC USE ONLY

Received
10/29/2012

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.

OGCC Employee:

☒ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No: **2223090**

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

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

OGCC Operator Number: 100322

Name of Operator: Noble Energy, Inc.

Address: 1625 Broadway, Suite 2200

City: Denver State: CO Zip: 80232

Contact Name and Telephone:

Jacob Evans

No: 720-587-2026

Fax: 303-228-4286

API Number: Closest well to discharge area: 05-123-23064

County: Weld

Facility Name: Miller South #1 Spread Field

Facility Number: 425661

Well Name: Gemini

Well Number: B29-15

40.372885

-104.575792

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SENW Sec. 29 T5N R64W 6PM

Latitude: 40.371997 Longitude: -104.579194

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Calcium-chloride-enriched water

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☒ Y ☐ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Drilling mud spread field

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Valent sand 0-3% slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Water well 1,200 feet west, wetlands 50 feet north, and buildings 660 feet northeast.

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):

- ☐ Soils
☐ Vegetation
☒ Groundwater
☐ Surface Water

Extent of Impact:

no soil impact

5,000 square feet of chloride impacted groundwater

How Determined:

Site assessment

REMEDIAL WORKPLAN

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

The containment pond in the northeast corner of the spreadfield was large enough to hold all of the water. A super sucker removed all of the water and transported it to a Conquest Water Disposal Well for proper disposal. See Form 19 (Document #2223090).

Describe how source is to be removed:

Due to the small size, stability of the areas with elevated chloride concentrations, and lack of potential receptors within one-quarter of a mile, remediation will occur via monitored natural attenuation (MNA).

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.:

Natural, physical, chemical, and biological degradation, which occur during MNA, require sufficient site conditions, which are available at this Site. The potential impact has been defined in every direction and presents no risk to public health or the environment.

FORM
27
Rev 6/99

Page 2

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203
(303)894-2100 Fax: (303)894-2109



REMEDIATION WORKPLAN (Cont.)

Page 2

Tracking Number: 2223090
Name of Operator: Noble Energy, Inc.
OGCC Operator No: 100322
Received Date: 10/29/2012
Well Name & No: Gemini B29-15
Facility Name & No: Miller South #1 Spread Field 425661

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):
Groundwater monitoring wells were installed. All monitoring wells with chloride impact exceeding COGCC standards (SB04R, SB07R, SB08R, SB13, and SB33), one upgradient (SB18), and two downgradient (SB21 and SB23) monitoring wells of the observed impact are included in the monitoring plan. Semi-annual groundwater sampling will be conducted for one year, and groundwater samples will be analyzed for chloride.

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.

Not applicable.

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:

Groundwater sampling will continue for one year to ensure MNA is effective..

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

This will not be necessary with MNA.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 3/8/2012 Date Site Investigation Completed: TBD Date Remediation Plan Submitted: 10/26/12
Remediation Start Date: 3/8/2012 Anticipated Completion Date: TBD Actual Completion Date: TBD

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

Print Name: Jacob Evans

Signed: Jacob Evans

Title: Senior Environmental Specialist

Date: 10/29/12

OGCC Approved: Richard Allison

Title: Location Specialist

Date: 11/21/2012

See Attached Conditions of Approval Doc# 2614122



ENVIRONMENTAL SITE ASSESSMENT OCTOBER 2012

MILLER SOUTH #1 SPREAD FIELD COGCC TRACKING #2223090

LT Environmental, Inc. (LTE), under the direction of Noble Energy, Inc. (Noble), conducted an environmental assessment at the Miller South #1 Spread Field (Site). The purpose of the environmental assessment was to define the extent of impacted soil and groundwater following the release of calcium-chloride-enriched water into the liquid containment pond in the northeast corner of the spread field. This is the second site assessment conducted for the calcium chloride release. The first site assessment was conducted in March 2012 and is described in an earlier correspondence (*Environmental Site Assessment, March 2012*). The second assessment was conducted to include organic analysis and further define the Site conditions, at the request of the Colorado Oil and Gas Conservation Commission (COGCC).

LTE advanced a total of 24 soil borings on September 10 and 11, 2012. Soil borings (Background 01, Background 02, SB01R through SB08R, and SB10 through SB23) were installed using a direct-push drill rig operated by ACI Services of Denver, Colorado. A site map with soil boring locations is provided as Figure 1. Soil boring logs are provided as Attachment 1.

Twenty-four soil samples were collected from 3 feet to 5 feet below ground surface (bgs) on September 10 and 11, 2012, and then submitted to Summit Scientific (Summit) of Golden, Colorado, for analysis of total petroleum hydrocarbons (TPH)-diesel range organics (DRO) by Method 8015, TPH-gasoline range organics (GRO), benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (EPA) Method 8260B, electrical conductivity (EC) by Standard Method 2510B, pH by EPA 9045B, and soil adsorption ratio (SAR) by EPA 6020/USDA60 6 (2, 3A) and calculation.

Twenty-four groundwater samples were collected on September 11 and 12, 2012, from the soil boring locations and then submitted to Summit for analysis of BTEX by EPA Method 8260B, chloride and sulfate by EPA Method 300.0, and total dissolved solids (TDS) with a laboratory TDS meter. During sampling depth to groundwater ranged from 4.24 feet below top of casing (btoc) in soil boring SB01R to 17.40 feet btoc in soil boring Background02. The groundwater flow direction is to the northeast and north with an average gradient of approximately 0.004 feet per foot (ft/ft). A relative groundwater elevation map is presented as Figure 2.

Soil analytical results, presented in Table 1, indicate all TPH-GRO, TPH-DRO, BTEX, EC, pH, and SAR concentrations are in compliance with COGCC Table 910-1 Concentration Levels. No hydrocarbons (TPH-GRO, TPH-DRO, or BTEX) were detected in the soil samples.

Groundwater analytical results are illustrated on Figures 2, 3, and 4 and presented in Table 2. Laboratory analytical reports are included as Attachment 2. No BTEX compounds were

detected in any groundwater samples collected, and all samples are in compliance with applicable standards for BTEX.

The COGCC Table 910-1 groundwater standards for chloride, sulfate, and TDS are based on 1.25 times the background concentration (Background01 and Background02). It is apparent from the analytical results that natural site variability exists for these constituents in the groundwater. As seen by the data collected at the Site, the natural variations of constituent concentrations fluctuate much more than 25%. It is likely that chloride, sulfate, and TDS, which occur naturally in groundwater and the subsurface, have large scale regional effects and subsequent variations due to the high levels of unregulated agricultural activities throughout the area. Other industrial, residential, and non oil and gas related activities also can affect inorganic groundwater impact. Due to the composition of the release (calcium-chloride-enriched water), chloride is the best indicator to determine the extent of impact. However, all waters contain varying concentrations of chloride depending on the mineral content of the earth and regional activities in a given area. In addition to naturally occurring chloride, chloride can occur in surface water as a result of several sources including road salting, agricultural runoff, and mineral accumulation due to water evaporation precipitating chloride and other constituents.

The relative surface water elevation in the pond, located adjacent to the northeast, is approximately seven feet above the adjacent groundwater elevation, indicating that any communication between the groundwater and the pond would cause transport of water and dissolved inorganic constituents from the pond into the groundwater and not vice versa. Since the chloride impacted groundwater distribution does not display typical concentration dispersion, as the highest concentrations of chloride reside for downgradient of the release location, the pond and site history involving agricultural activities are highly suspect as likely sources of elevated chloride concentrations in the groundwater. Due to the small size, stability of the areas with elevated chloride concentrations, and lack of potential receptors within one-quarter of a mile of the pond and monitoring wells, monitored natural attenuation (MNA) is a feasible remediation technology for the Site. Natural, physical, chemical, and biological degradation, which occur during MNA, require sufficient site conditions, which are available at this Site. The potential impact has been defined in every direction and presents no risk to public health or the environment.

FIGURES



IMAGE COURTESY OF ESRI/BING MAPS

LEGEND

- ✕ MONITORING WELL
- ↑ ESTIMATED GROUNDWATER FLOW DIRECTION
- SURFICIAL RELEASE EXTENT
- SPREAD FIELD BOUNDARY

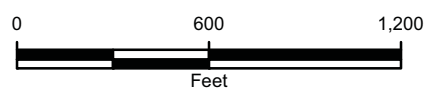


FIGURE 1
SITE MAP
 MILLER SOUTH #1 SPREAD FIELD
 WELD COUNTY, COLORADO

NOBLE ENERGY, INC.



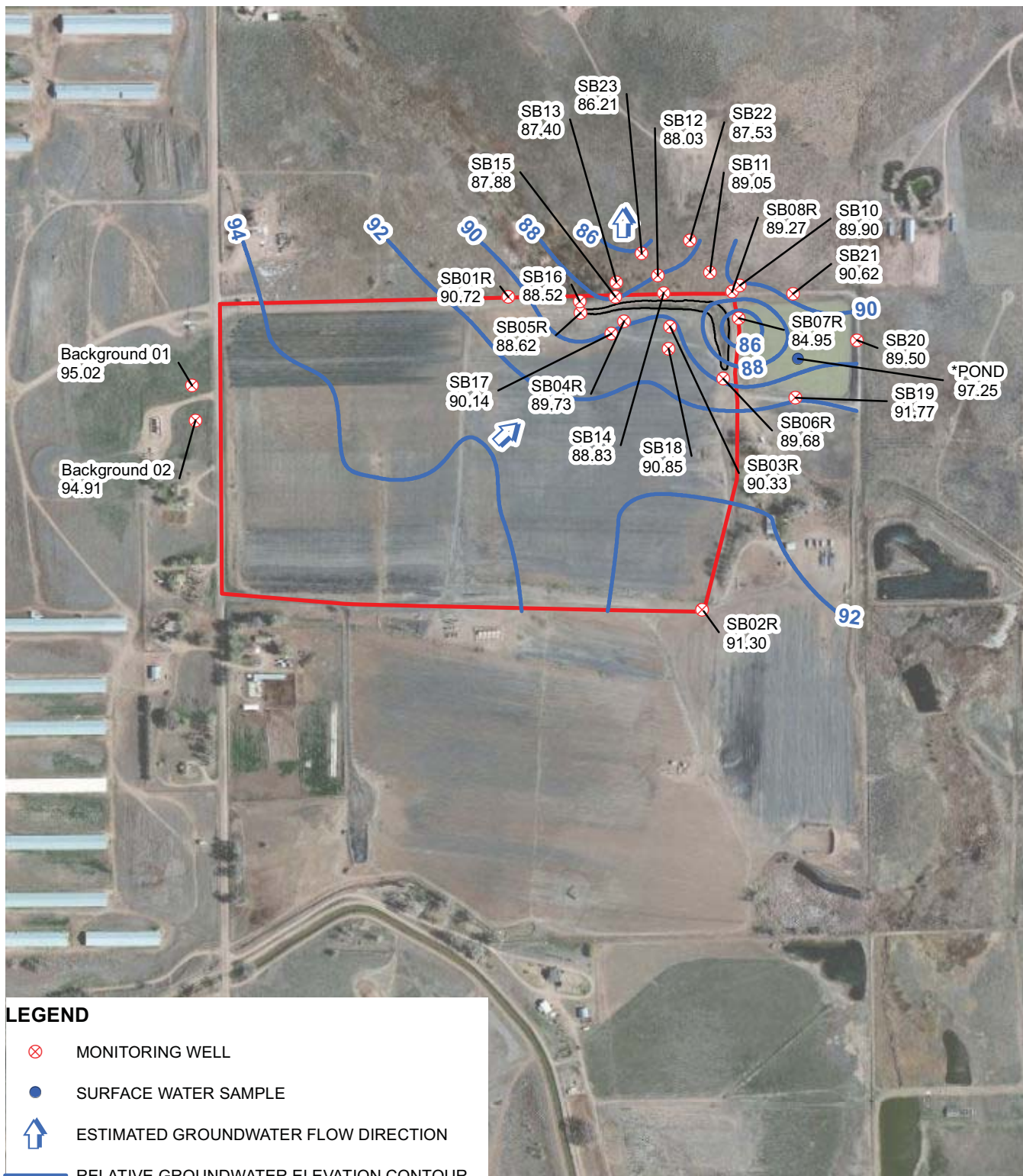


IMAGE COURTESY OF ESRI/BING MAPS

LEGEND



MONITORING WELL



SURFACE WATER SAMPLE



ESTIMATED GROUNDWATER FLOW DIRECTION



RELATIVE GROUNDWATER ELEVATION CONTOUR

CONTOUR INTERVAL = 2 FEET

GRADIENT = 0.004 FEET/FOOT



SURFICIAL RELEASE EXTENT



SPREAD FIELD BOUNDARY

SURFACE WATER SAMPLE, *POND 97.25
WAS NOT USED TO GENERATE CONTOURS.

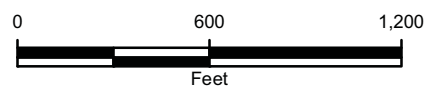
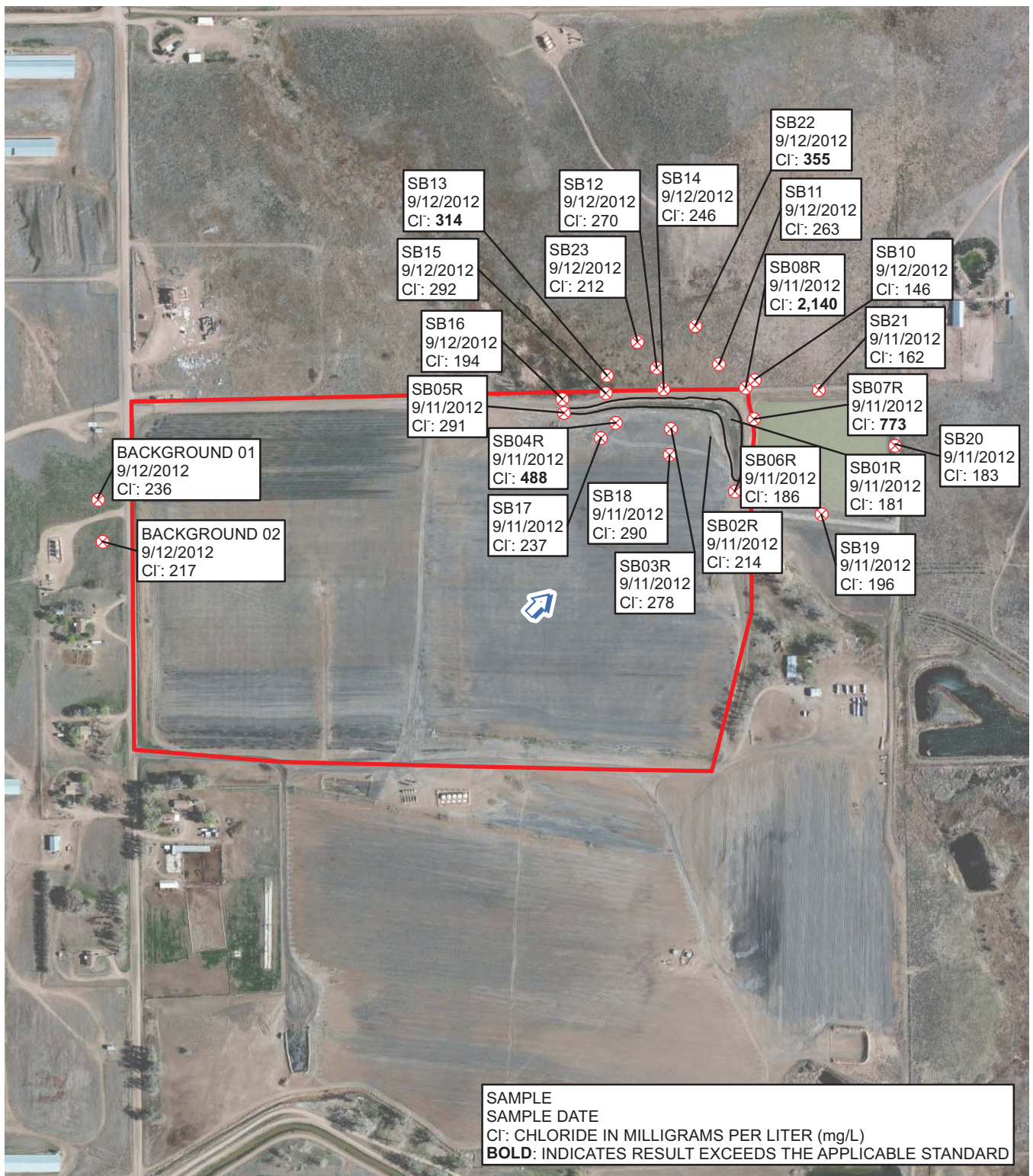


FIGURE 2
GROUNDWATER ELEVATION MAP
MILLER SOUTH #1 SPREAD FIELD
WELD COUNTY, COLORADO

NOBLE ENERGY, INC.





LEGEND

- MONITORING WELL
- ESTIMATED GROUNDWATER FLOW DIRECTION
- SURFICIAL RELEASE EXTENT
- SPREAD FIELD BOUNDARY

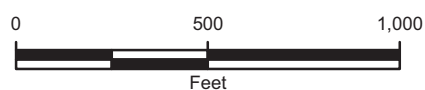
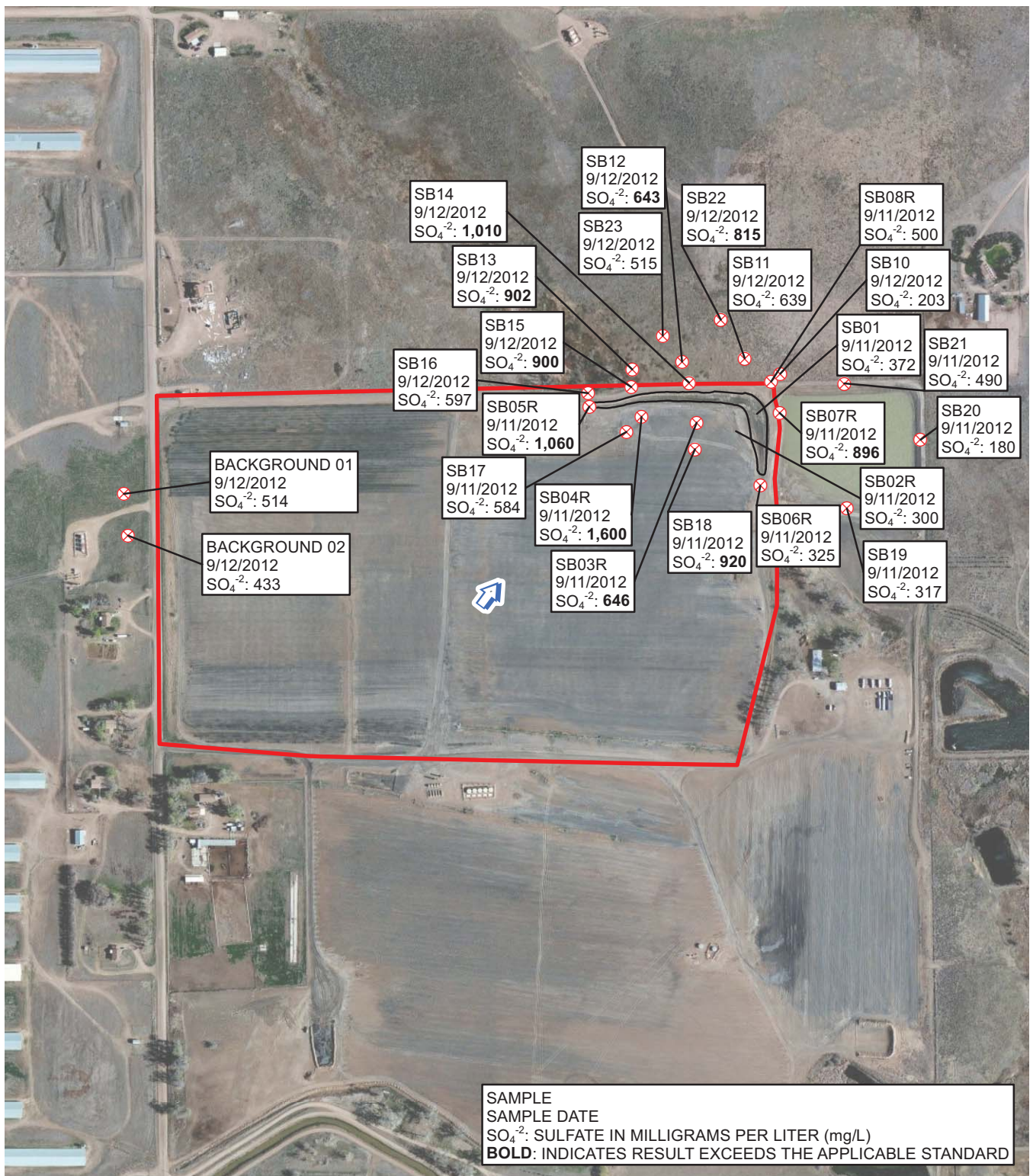


FIGURE 3
 CHLORIDE GROUNDWATER ANALYTICAL RESULTS
 MILLER SOUTH #1 SPREAD FIELD
 WELD COUNTY, COLORADO

NOBLE ENERGY, INC.





LEGEND

- MONITORING WELL
- ESTIMATED GROUNDWATER FLOW DIRECTION
- SURFICIAL RELEASE EXTENT
- SPREAD FIELD BOUNDARY

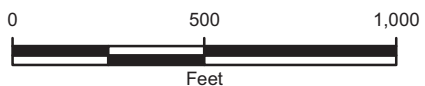


FIGURE 4
SULFATE GROUNDWATER ANALYTICAL RESULTS
MILLER SOUTH #1 SPREAD FIELD
WELD COUNTY, COLORADO

NOBLE ENERGY, INC.



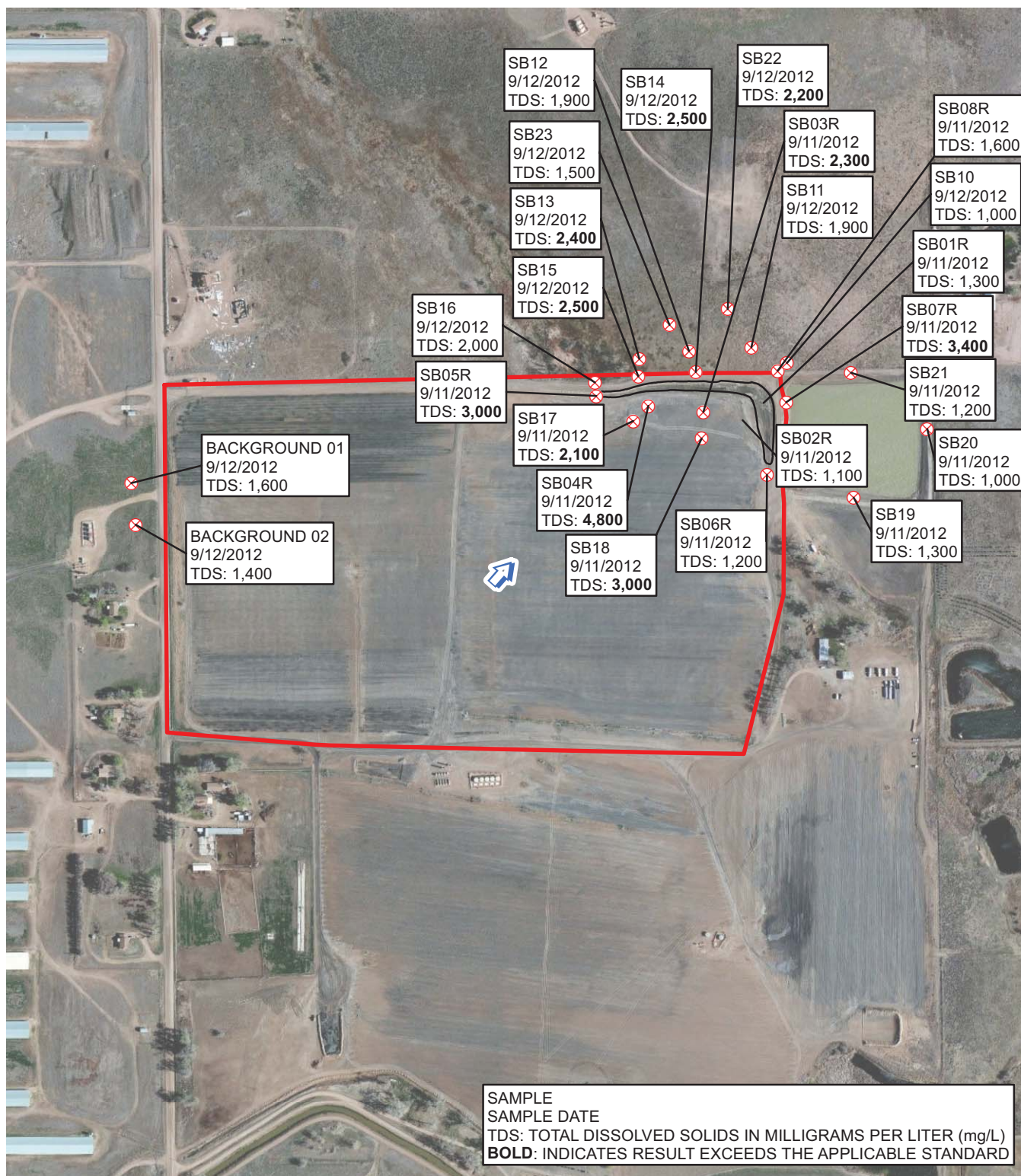


FIGURE 5
TOTAL DISSOLVED SOLIDS
GROUNDWATER ANALYTICAL RESULTS
MILLER SOUTH #1 SPREAD FIELD
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.



TABLES

TABLE 1

SOIL ANALYTICAL RESULTS
MILLER SOUTH #1 SPREAD FIELD
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.

Location	Standard	Units	Background 01	Background 02	SB01	SB01R	SB02	SB02R	SB03	SB03R	SB04	SB04R	SB05	SB05R
Depth (feet)			3-5	3-5	3-6	3-5	3-6	3-5	3-6	3-5	3-6	3-5	3-6	3-5
Sample Date			9/11/2012	9/11/2012	3/8/2012	9/10/2012	3/8/2012	9/10/2012	3/8/2012	9/10/2012	3/8/2012	9/10/2012	3/8/2012	9/10/2012
EC	4	<i>mmhos/cm</i>	0.0656	0.0368	1.49	0.220	0.912	0.336	0.761	0.522	0.563	0.440	1.97	2.36
pH	9	<i>SU</i>	7.6	7.8	8.0	8.4	8.2	7.6	8.1	7.1	8.2	8.1	7.9	8.8
SAR	12	<i>ratio</i>	0.300	0.290	2.10	3.64	4.66	1.72	4.27	3.09	1.71	3.46	5.91	10.1
TPH-DRO	-	<i>mg/kg</i>	<50	<50		<50		<50		<50		<50		<50
TPH-GRO	-	<i>mg/kg</i>	<50	<50		<50		<50		<50		<50		<50
Total TPH	500	<i>mg/kg</i>	<50.50	<50.50		<50.50		<50.50		<50.50		<50.50		<50.50
Benzene	0.17	<i>mg/kg</i>	<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050
Toluene	85	<i>mg/kg</i>	<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050
Ethylbenzene	100	<i>mg/kg</i>	<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050
Total Xylenes	175	<i>mg/kg</i>	<0.0050	<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050

NOTES:

EC - electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

SAR - sodium adsorption ratio

SU - standard unit

TPH-DRO - total petroleum hydrocarbons - diesel range organics

TPH-GRO - total petroleum hydrocarbons - gasoline range organics

Total TPH - the sum of TPH-DRO and TPH-GRO

-- no standard

< - indicates result is less than stated laboratory method reporting limit

BOLD - indicates result exceeds the applicable standard

TABLE 1

SOIL ANALYTICAL RESULTS
MILLER SOUTH #1 SPREAD FIELD
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.

Location	Standard	Units	SB06	SB06R	SB07	SB07R	SB08	SB08R	SB09	SB10	SB 10 (2)	SB11	SB11 (2)	SB12	SB12 (2)
Depth (feet)			3-6	3-5	3-6	3-5	3-6	3-5	3-6	3-7	3-5	3-7	3-5	3-6	3-5
Sample Date			3/8/2012	9/10/2012	3/8/2012	9/11/2012	3/8/2012	9/10/2012	3/8/2012	3/9/2012	9/10/2012	3/9/2012	9/11/2012	3/9/2012	9/11/2012
EC	4	<i>mmhos/cm</i>	0.568	0.0910	1.85	2.82	0.263	0.180	0.692	0.472	0.209	0.580	0.335	1.10	0.744
pH	9	<i>SU</i>	8.1	7.0	7.9	8.0	8.3	7.2	8.1	8.0	8.2	7.8	8.8	8.6	8.5
SAR	12	<i>ratio</i>	0.820	0.550	3.70	4.79	0.670	0.950	6.84	2.19	2.26	0.760	3.42	6.86	4.81
TPH-DRO	-	<i>mg/kg</i>		<50		<50		<50			<50		<50		<50
TPH-GRO	-	<i>mg/kg</i>		<50		<50		<50			<50		<50		<50
Total TPH	500	<i>mg/kg</i>		<50.50		<50.50		<50.50			<50.50		<50.50		<50.50
Benzene	0.17	<i>mg/kg</i>		<0.0050		<0.0050		<0.0050			<0.0050		<0.0050		<0.0050
Toluene	85	<i>mg/kg</i>		<0.0050		<0.0050		<0.0050			<0.0050		<0.0050		<0.0050
Ethylbenzene	100	<i>mg/kg</i>		<0.0050		<0.0050		<0.0050			<0.0050		<0.0050		<0.0050
Total Xylenes	175	<i>mg/kg</i>		<0.0050		<0.0050		<0.0050			<0.0050		<0.0050		<0.0050

NOTES:

EC - electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

SAR - sodium adsorption ratio

SU - standard unit

TPH-DRO - total petroleum hydrocarbons - diesel range organics

TPH-GRO - total petroleum hydrocarbons - gasoline range organics

Total TPH - the sum of TPH-DRO and TPH-GRO

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BOLD - indicates result exceeds the applicable standard

TABLE 1

SOIL ANALYTICAL RESULTS
MILLER SOUTH #1 SPREAD FIELD
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.

Location	Standard	Units	SB13	SB13 (2)	SB14	SB14 (2)	SB15	SB15 (2)	SB16	SB16 (2)	SB17	SB18	SB19	SB20	SB21	SB22	SB23
Depth (feet)			1-3	3-5	3-7	3-5	3-7	3-5	3-6	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5
Sample Date			3/9/2012	9/11/2012	3/9/2012	9/11/2012	3/9/2012	9/11/2012	3/9/2012	9/11/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012
EC	4	mmhos/cm	1.59	1.57	0.738	0.928	1.37	1.77	1.30	2.06	0.908	0.461	1.43	0.130	0.153	0.732	1.08
pH	9	SU	8.2	8.9	8.2	8.2	7.9	8.8	7.7	8.0	8.7	7.3	8.8	7.4	7.4	7.9	8.8
SAR	12	ratio	6.77	8.21	14.6	3.33	4.75	10.4	1.91	2.86	5.52	2.80	4.47	1.65	1.00	1.14	8.36
TPH-DRO	-	mg/kg		<50		<50		<50		<50	<50	<50	<50	<50	<50	<50	<50
TPH-GRO	-	mg/kg		<50		<50		<50		<50	<50	<50	<50	<50	<50	<50	<50
Total TPH	500	mg/kg		<50.50		<50.50		<50.50		<50.50	<50.50	<50.50	<50.50	<50.50	<50.50	<50.50	<50.50
Benzene	0.17	mg/kg		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	85	mg/kg		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	100	mg/kg		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Xylenes	175	mg/kg		<0.0050		<0.0050		<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

NOTES:

EC - electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

SAR - sodium adsorption ratio

SU - standard unit

TPH-DRO - total petroleum hydrocarbons - diesel range organics

TPH-GRO - total petroleum hydrocarbons - gasoline range organics

Total TPH - the sum of TPH-DRO and TPH-GRO

-- no standard

< - indicates result is less than stated laboratory method reporting limit

BOLD - indicates result exceeds the applicable standard

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
MILLER SOUTH #1 SPREAD FIELD
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.

Sample Location	Date Sampled	Depth to Water (feet)	Relative Groundwater Elevation (feet)	Chloride (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
Background 01	9/12/2012	15.36	95.015	236	514	1,600	<1.0	<1.0	<1.0	<1.0
Background 02	9/12/2012	17.40	94.91	217	433	1,400	<1.0	<1.0	<1.0	<1.0
SB01	3/8/2012	3.30	NM	1,260	1,070	4,600	NA	NA	NA	NA
SB01R	9/11/2012	4.24	90.72	181	372	1,300	<1.0	<1.0	<1.0	<1.0
SB02	3/8/2012	6.46	NM	220	584	1,700	NA	NA	NA	NA
SB02R	9/11/2012	8.03	91.30	214	300	1,100	<1.0	<1.0	<1.0	<1.0
SB03	3/8/2012	6.22	NM	348	1,070	3,100	NA	NA	NA	NA
SB03R	9/11/2012	7.50	90.33	278	646	2,300	<1.0	<1.0	<1.0	<1.0
SB04	3/8/2012	7.08	NM	296	1,220	3,100	NA	NA	NA	NA
SB04R	9/11/2012	7.94	89.73	488	1,600	4,800	<1.0	<1.0	<1.0	<1.0
SB05	3/8/2012	7.94	NM	208	896	2,400	NA	NA	NA	NA
SB05R	9/11/2012	6.51	88.62	291	1,060	3,000	<1.0	<1.0	<1.0	<1.0
SB06	3/8/2012	7.82	NM	147	280	890	NA	NA	NA	NA
SB06R	9/11/2012	7.45	89.68	186	325	1,200	<1.0	<1.0	<1.0	<1.0
SB07	3/8/2012	6.93	NM	1,020	1,620	4,700	NA	NA	NA	NA
SB07R	9/11/2012	9.68	84.95	773	896	3,400	<1.0	<1.0	<1.0	<1.0
SB08	3/8/2012	9.73	NM	182	395	1,100	NA	NA	NA	NA
SB08R	9/11/2012	11.77	89.27	2,140	500	1,600	<1.0	<1.0	<1.0	<1.0
SB09 (background)	3/8/2012	8.09	NM	270	573	2,000	NA	NA	NA	NA
SB10	3/9/2012	9.64	NM	157	414	1,100	NA	NA	NA	NA
	9/12/2012	10.39	89.90	146	203	1,000	<1.0	<1.0	<1.0	<1.0
SB11	3/9/2012	8.58	NM	267	717	1,900	NA	NA	NA	NA
	9/12/2012	9.78	89.05	263	639	1,900	<1.0	<1.0	<1.0	<1.0
SB12	3/9/2012	6.16	NM	300	1,230	2,500	NA	NA	NA	NA
	9/12/2012	8.70	88.03	270	643	1,900	<1.0	<1.0	<1.0	<1.0
SB13	3/9/2012	5.61	NM	439	1,210	2,900	NA	NA	NA	NA
	9/12/2012	7.43	87.40	314	902	2,400	<1.0	<1.0	<1.0	<1.0
SB14	3/9/2012	6.15	NM	125	991	1,900	NA	NA	NA	NA
	9/12/2012	8.32	88.83	246	1,010	2,500	<1.0	<1.0	<1.0	<1.0
SB15	3/9/2012	10.97	NM	No Sample - Dry						
	9/12/2012	7.89	87.88	292	900	2,500	<1.0	<1.0	<1.0	<1.0

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
MILLER SOUTH #1 SPREAD FIELD
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.

Sample Location	Date Sampled	Depth to Water (feet)	Relative Groundwater Elevation (feet)	Chloride (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
SB16	3/9/2012	7.36	NM	297	730	2,200	NA	NA	NA	NA
	9/12/2012	9.15	88.52	194	597	2,000	<1.0	<1.0	<1.0	<1.0
SB17	9/11/2012	5.55	90.14	237	584	2,100	<1.0	<1.0	<1.0	<1.0
SB18	9/11/2012	7.75	90.85	290	920	3,000	<1.0	<1.0	<1.0	<1.0
SB19	9/11/2012	8.56	91.77	196	317	1,300	<1.0	<1.0	<1.0	<1.0
SB20	9/11/2012	10.33	89.50	183	180	1,000	<1.0	<1.0	<1.0	<1.0
SB21	9/11/2012	10.17	90.62	162	490	1,200	<1.0	<1.0	<1.0	<1.0
SB22	9/12/2012	11.14	87.53	355	815	2,200	<1.0	<1.0	<1.0	<1.0
SB23	9/12/2012	11.25	86.21	212	515	1,500	<1.0	<1.0	<1.0	<1.0
COGCC Table 910-1				295	642.5	2,000	5	560	700	1,400

NOTES:

mg/L - milligrams per liter

NA - Not analyzed

< - indicates result is less than the stated laboratory reporting limit

COGCC - Colorado Oil and Gas Conservation Commission

BOLD - indicates result exceeds the applicable standard

Chloride, sulfate, and total dissolved solids standard is <1.25 x background concentrations

ATTACHMENT 1
SOIL BORING LOGS

Location Map:

N ↑



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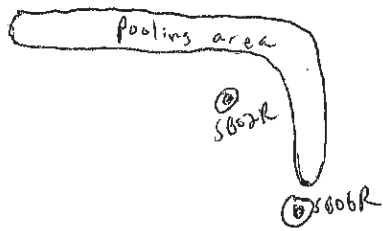
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB06 R	Project:	Miller South # 1
Date:	9-10-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Elevation:	N/A	Drilling Method:	Direct Push
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
		Grout:	NA
Casing Type:	PVC	Diameter:	1"
		Length:	5'
		Hole Diameter:	2.25"
		Depth to Liquid:	N/A
Screen Type:	PVC	Slot:	0.010"
		Diameter:	1"
		Length:	10'
		Total Depth:	13'
		Depth to Water:	6'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3'-5'	0		SM	0-2 silty sand loose	X
					2	0-5	SP	3-5 poorly graded sand loose	X
					4				
					6		SW	5-10 well graded sand loose	
		0.00	None		8	5-10			
					10		SW	10-14 SAA	
		0.00	None		12	10-15	CL	14-15 soft clay pliable	
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

N↑



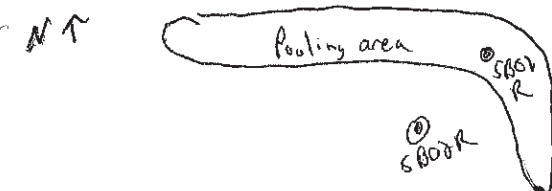
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SBO2R	Project:	Miller South # 1
Date:	9-10-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Elevation:	N/A	Drilling Method:	Direct Push
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
		Grout:	NA
Casing Type:	PVC	Diameter:	1"
		Length:	5'
		Hole Diameter:	2.25"
		Depth to Liquid:	N/A
Screen Type:	PVC	Slot:	0.010"
		Diameter:	1"
		Length:	10'
		Total Depth:	13'
		Depth to Water:	6'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.02	None	3-5'	0		SP	1-5 loose poorly graded sand	X
					2	1-5			
					4				
					6		SW	6-10 loose well graded sand	
					8	6-10			
		0.00	None		10		SW	10-15 SAA	
					12				
		0.06	None		14	10-15	CL	13-15 soft clay w/ fines	
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:



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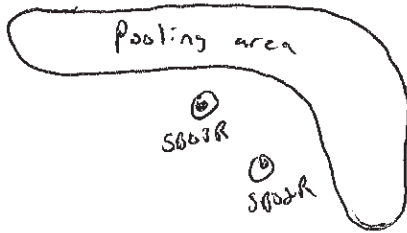
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB01R	Project:	Miller South # 1
Date:	9-10-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Drilling Method:	Direct Push	Sampling Method:	Continuous
Seal:	Bentonite	Grout:	NA
Diameter:	Length:	Hole Diameter:	Depth to Liquid:
1"	5'	2.25"	N/A
Diameter:	Length:	Total Depth:	Depth to Water:
1"	10'	13'	5'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	2-5	SW	2-5 well graded sand loose	
					2				
					4				
					6		SW	5-7 SAA	
		0.00	None		8	5-10	SP	7-8 loose poorly graded sand	
					10				
					12	11-15	CL	8-10 soft clay w/ fines	
		0.00	None		14		SW	11-12 loose well graded sand	
					16		CL	12-13 soft clay w/ fines	
					18		ML	13-15 clayey silt not pliable	
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

N ↑



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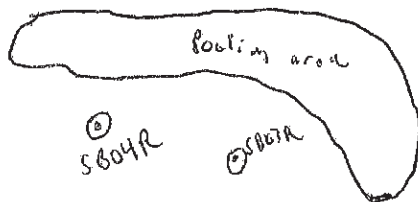
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB03R		Project: Miller South # 1	
Date: 9-10-2012		Project Number: NEP0901	
Logged By: Jacob Evans		Drilled By: ACI	
Drilling Method: Direct Push		Sampling Method: Continuous	
Seal: Bentonite		Grout: NA	
Diameter: 1"	Length: 5'	Hole Diameter: 2.25"	Depth to Liquid: N/A
Diameter: 1"	Length: 10'	Total Depth: 13'	Depth to Water: 6'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	CL	1-3 silty clay pliable	X
					2		SW	3-5 well graded sand loose	X
					4				
					6		SW	5-9 SAA	
		0.00	None		8	5-10	CL	9-10 sandy clay pliable	
					10				
					12	11-15	SW	11-12 well graded sand loose	
		0.00	None		14		CL	12-14 soft clay w/ fines	
					16		SC	14-15 clayey sand not pliable	
					18			poorly graded	
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

NT



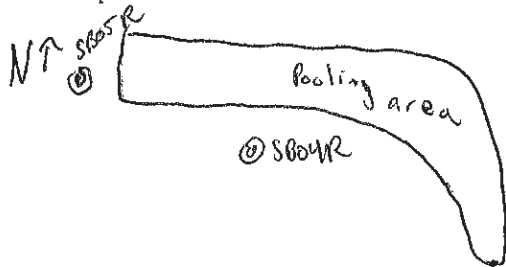
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB04R	Project: Miller South # 1
Date: 9-10-12	Project Number: NEP0901
Logged By: Jacob Evans	Drilled By: ACI
Drilling Method: Direct Push	Sampling Method: Continuous
Gravel Pack: 10-20 Silica Sand	Seal: Bentonite
Casing Type: PVC	Grout: NA
Diameter: 1"	Length: 5'
Screen Type: PVC	Hole Diameter: 2.25"
Slot: 0.010"	Depth to Liquid: N/A
Diameter: 1"	Length: 10'
Total Depth: 13'	Depth to Water: 6'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0		SC	1-3 clayey sand well graded	
					2	1-5		flittle	
		0.00	None	3-5	4		SW	3-5 loose well graded sand	
					6				
					8	6-10	SW	6-8 SAA	
		0.00	None		10		CL	8-10 medium clay	
					12				
					14	11-15	SW	11-12 well graded sand	
		0.00	None		16		CL	12-15 medium clay	
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:



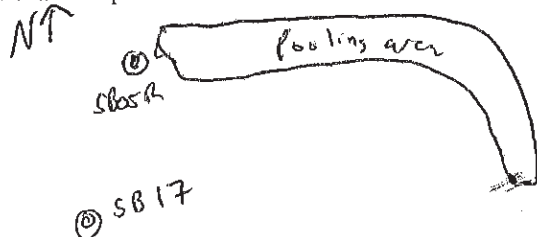
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SBO5R	Project:	Miller South # 1
Date:	9-10-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Elevation:	N/A	Drilling Method:	Direct Push
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
Casing Type:	PVC	Grout:	NA
Screen Type:	PVC	Diameter:	1"
Slot:	0.010"	Length:	5'
		Hole Diameter:	2.25"
		Depth to Liquid:	N/A
		Total Depth:	13'
		Depth to Water:	6'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	SP	1-5 loose poorly graded sand	X
					2				
					4				
					6		SP	6-7 S44	
		0.00	None		8	6-10	CL	7-10 Silty clay pliable	
					10				
					12	11-15	CL	11-15 medium sandy clay	
		0.00	None		14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:



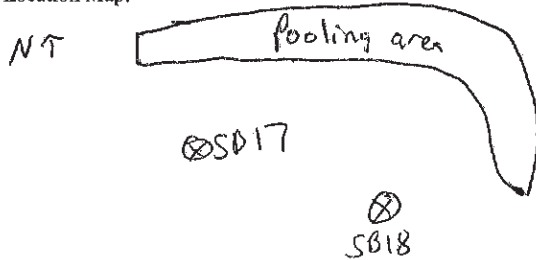
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB17	Project: Miller South # 1
Date: 9-10-12	Project Number: NEP0901
Logged By: Jacob Evans	Drilled By: ACI
Drilling Method: Direct Push	Sampling Method: Continuous
Seal: Bentonite	Grout: NA
Casing Type: PVC	Diameter: 1" Length: 5'
Screen Type: PVC	Slot: 0.010" Diameter: 1" Length: 10'
	Hole Diameter: 2.25" Depth to Liquid: N/A
	Total Depth: 13' Depth to Water: 6'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0		CL	1-3 silty clay pliable	X
					2	1-5	SW	4-5 well graded sand	X
		0.00	None	3-5	4		SW		
					6		SW	5-9 SAA	
					8	5-10	CL	9-10 soft clay w/ fines	
		0.00	None		10		SW	10-12 well graded sand	
					12	10-15	CL	12-15 medium clay	
		0.00	None		14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:



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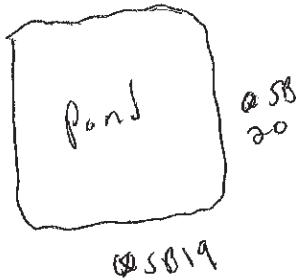
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB18	Project:	Miller South # 1
Date:	9-10-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Drilling Method:	Direct Push	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
Casing Type:	PVC	Diameter:	1"
Screen Type:	PVC	Slot:	0.010"
		Length:	5'
		Hole Diameter:	2.25"
		Depth to Liquid:	N/A
		Total Depth:	13'
		Depth to Water:	6'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0		CL	1-3 Silty clay	
		0.02	None	3-5	2	1-5	SP	3-5 poorly sorted sand	
					4				
					6		SP	8-10 SAA	
					8	8-10			
		0.02	None		10				
					12		CL	12-15 medium clay w/ fines	
					14	12-15			
		0.02	None		16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

NT



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

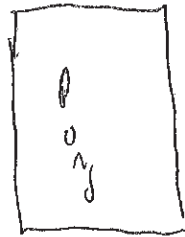
Boring/Well Number: SB 19	Project: Miller South # 1
Date: 9-10-12	Project Number: NEP0901
Logged By: Jacob Evans	Drilled By: ACI
Drilling Method: Direct Push	Sampling Method: Continuous
Seal: Bentonite	Grout: NA
Elevation: N/A	Detector: PID
Gravel Pack: 10-20 Silica Sand	
Casing Type: PVC	Diameter: 1" Length: 8'
Screen Type: PVC	Slot: 0.010" Diameter: 1" Length: 15'
	Hole Diameter: 2.25" Depth to Liquid: N/A
	Total Depth: 20' Depth to Water: 10'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0		SP	1-3 poorly graded sand loose	X
					2		CL	3-5 sandy clay pliable soft	X
		0.00	None	3-5	4	1-5			
					6		SP	6-8 poorly graded sand	
					8	6-10			
			None		10		SW	8-10 well graded sand	
	wet	0.00			12		SW	11-13 SAA	
		0.00	None		14	11-15	SC	13-15 clayey sand pliable	
					16		SW	15-16 well graded sand	
		0.00	None		18	15-20	ML	16-20 clayey silt pliable	
					20				
					22				
					24				
					26				
					28				
					30				

* Well set on top of road at higher elevation

Location Map:

NTR



SB19



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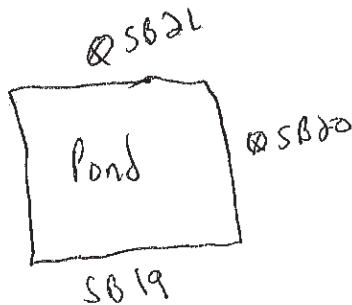
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB20		Project: Miller South # 1	
Date: 9-10-12		Project Number: NEP0901	
Logged By: Jacob Evans		Drilled By: ACI	
Drilling Method: Direct Push		Sampling Method: Continuous	
Seal: Bentonite		Grout: NA	
Diameter: 1"	Length: 8'	Hole Diameter: 2.25"	Depth to Liquid: N/A
Diameter: 1"	Length: 15'	Total Depth: 20'	Depth to Water: 8'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0		CL	1-3 silty clay hard	
					2	1-5	SP	3-5 poorly graded sand loose	
					4				
					6		SW	6-10 well graded sand	
					8	6-10			
					10		SW	11-14 SAA	
					12	11-15	ML	14-15 clayey silt	
					14				
					16		SC	15-17 clayey sand	
					18	15-20	CL	17-20 sandy clay	
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

NA



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB21	Project: Miller South # 1
Date: 9-10-12	Project Number: NEP0901
Logged By: Jacob Evans	Drilled By: ACI
Drilling Method: Direct Push	Sampling Method: Continuous
Gravel Pack: 10-20 Silica Sand	Seal: Bentonite
Casing Type: PVC	Grout: NA
Diameter: 1"	Length: 8'
Hole Diameter: 2.25"	Depth to Liquid: N/A
Screen Type: PVC	Slot: 0.010"
Diameter: 1"	Length: 15'
Total Depth: 20'	Depth to Water: 8'

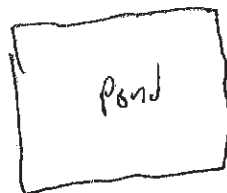
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	SP	1-5 poor graded sand	X
		0.00	None		2				X
		0.00	None		4				
		0.00	None		6		SP	6-10 SAA	
		0.00	None		8	6-10			
		0.00	None		10				
		0.00	None		12		SC	10-14 clayey sand	
		0.00	None		14	12-15	CL	14-15 medium clay	
		0.00	None		16				
		0.00	None		18	15-20	CL	15-20 SAA	
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

N7

JB08R

SB 21



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	JB08R	Project:	Miller South # 1
Date:	9-10-18	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Drilling Method:	Direct Push	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
Casing Type:	PVC	Diameter:	1"
Screen Type:	PVC	Slot:	0.010"
		Length:	8'
		Hole Diameter:	2.25"
		Depth to Liquid:	N/A
		Total Depth:	20'
		Depth to Water:	7'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				
					2	1-5	SP	1-5 loose poorly graded sand	
		0.00	None	3-5	4				
					6		SP	5-10 SAA	
					8	5-10			
		0.00	None		10				
					12	10-15	SP	10-15 SAA	
		0.00	None		14				
					16				
					18	15-20	CL	15-20 medium clay	
		0.00	None		20				
					22				
					24				
					26				
					28				
					30				

Location Map:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB 10 (2)		Project:	Miller South I									
Date:	9-10-12		Project Number:	NEP0901									
Logged By:	Jacob Evans		Drilled By:	ACI									
Elevation:	N/A	Detector:	PID		Drilling Method:	Direct Push		Sampling Method:	Continuous				
Gravel Pack:	N/A		Seal:	N/A		Grout:	N/A						
Casing Type:	N/A		Diameter:	N/A	Length:	N/A	Hole Diameter:	2.25"		Depth to Liquid:	N/A		
Screen Type:	N/A		Slot:	N/A		Diameter:	N/A	Length:	N/A	Total Depth:	5'	Depth to Water:	N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	0-5	Sl	0-5 poor gravel sand	N/A
					2				
					4				
					6				
					8				
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

NA B⁵⁹₂₃ Q 5022



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LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB22	Project:	Miller South # 1
Date:	9-10-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Elevation:	N/A	Drilling Method:	Direct Push
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
Casing Type:	PVC	Sampling Method:	Continuous
Screen Type:	PVC	GROUT:	NA
Slot:	0.010"	Hole Diameter:	2.25"
Diameter:	1"	Length:	5'
Depth to Liquid:			N/A
Total Depth:	15'	Depth to Water:	8'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	SW	1-4 loose well graded sand	
					2				
					4		ML	4-5 clayey silt	
					6				
		0.00	None		8	5-10	SW	5-9 loose well graded sand	
					10		ML	9-10 clayey silt	
					12				
		0.00	None		14	10-15	ML	10-15 clayey silt loose	
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

NT

SB23

SB22



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Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB23	Project:	Miller South # 1
Date:	9-10-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Elevation:	N/A	Drilling Method:	Direct Push
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
Casing Type:	PVC	Grout:	NA
Diameter:	1"	Length:	5'
Hole Diameter:	2.25"	Depth to Liquid:	N/A
Screen Type:	PVC	Slot:	0.010"
Diameter:	1"	Length:	10'
Total Depth:	15'	Depth to Water:	7'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	75	0		SP	1-5 loose poorly graded sand	X
					2	1-5			X
					4				
					6		SC	5-7 clayey sand	
		0.00	None		8	5-10			
					10		CL	7-10 silty clay	
					12				
		0.00	None		14	10-15	CL	10-13 SAA	
					16		CL	13-14.5 medium clay	
					18			14.5-15 Redrock Sandstone	
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

⊗ SB 13

⊗ SB 12

Grass

NT



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB13 (2)

Project: Miller South I

Date: 9-11-12

Project Number: NEP0901

Logged By: Jacob Evans

Drilled By: ACI

Elevation: N/A

Detector: PID

Drilling Method: Direct Push

Sampling Method: Continuous

Gravel Pack: N/A

Seal: N/A

Grout: N/A

Casing Type: N/A

Diameter: N/A Length: N/A

Hole Diameter: 2.25"

Depth to Liquid: N/A

Screen Type: N/A Slot: N/A

Diameter: N/A Length: N/A

Total Depth: 5'

Depth to Water: N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	SP	1-5 poor graded sand	NA
					2				
					4				
					6				
					8				
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

SB13(2)

SB12(2)

NT



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB12(2)	Project:	Miller South I
Date:	9-11-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Elevation:	N/A	Drilling Method:	Direct Push
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	N/A	Seal:	N/A
Casing Type:	N/A	Hole Diameter:	2.25"
Screen Type:	N/A	Length:	N/A
Slot:	N/A	Length:	N/A
Diameter:	N/A	Total Depth:	5'
Depth to Liquid:	N/A	Depth to Water:	N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	SP	Poorly graded sand 1-5	N/A
					2				
					4				
					6				
					8				
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB 11(2)

Project: Miller South I

Date: 9-11-12

Project Number: NEP0901

Logged By: Jacob Evans

Drilled By: ACI

Elevation:

N/A

Detector:

PID

Drilling Method:

Direct Push

Sampling Method:

Continuous

Gravel Pack:

N/A

Seal:

N/A

Grout:

N/A

Casing Type:

N/A

Diameter:

N/A

Length:

N/A

Hole Diameter:

2.25"

Depth to Liquid:

N/A

Screen Type:

N/A

Slot:

N/A

Diameter:

N/A

Length:

N/A

Total Depth:

5'

Depth to Water:

N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.0	None	3-5	0	1-5	SP	1-5 poorly graded sand	NA
					2				
					4				
					6				
					8				
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

SB 16 (a) SB 15 (a)

LSE Rd



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB 16 (2)	Project:	Miller South I
Date:	9-11-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Elevation:	N/A	Drilling Method:	Direct Push
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	N/A	Seal:	N/A
Casing Type:	N/A	Hole Diameter:	2.25"
Screen Type:	N/A	Length:	N/A
Slot:	N/A	Total Depth:	5'
Diameter:	N/A	Depth to Liquid:	N/A
Length:	N/A	Depth to Water:	N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	SP	1-5 poor graded sand	NA
					2				
					4				
					6				
					8				
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

SB156J SB14(2)
LSC RD

NA



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB14 (2)	Project:	Miller South I
Date:	9-11-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Drilling Method:	Direct Push	Sampling Method:	Continuous
Gravel Pack:	N/A	Seal:	N/A
Casing Type:	N/A	Diameter:	N/A
Screen Type:	N/A	Slot:	N/A
		Diameter:	N/A
		Length:	N/A
		Hole Diameter:	2.25"
		Depth to Liquid:	N/A
		Total Depth:	5'
		Depth to Water:	NA

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	SP	1-5 poor graded sand	NA
					2				
					4				
					6				
					8				
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

N↑

⊗ SB15(2) ⊗ SB14

Lsc RD



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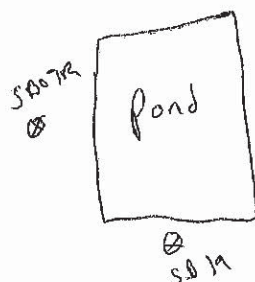
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB15(2)	Project:	Miller South I
Date:	9-11-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Drilling Method:	Direct Push	Sampling Method:	Continuous
Gravel Pack:	N/A	Seal:	N/A
Casing Type:	N/A	Diameter:	N/A
Screen Type:	N/A	Slot:	N/A
		Length:	N/A
		Hole Diameter:	2.25"
		Depth to Liquid:	N/A
		Total Depth:	5'
		Depth to Water:	N/A

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0	1-5	SM	1-5 silty sand	NA
					2				
					4				
					6				
					8				
					10				
					12				
					14				
					16				
					18				
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

NT



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: S807R		Project: Miller South I	
Date: 9-11-12		Project Number: NEP0901	
Logged By: Jacob Evans		Drilled By: ACI	
Drilling Method: Direct Push		Sampling Method: Continuous	
Seal: Bentonite		Grout: NA	
Diameter: 1"	Length: 5'	Hole Diameter: 2.25"	Depth to Liquid: N/A
Diameter: 1"	Length: 15'	Total Depth: 20'	Depth to Water: 15'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0		SW	1-3 well graded sand	X
					2	1-5	CL	3-5 silty clay medium	X
					4				
		0.00	None		6		SP	5-10 poorly graded sand	
					8	5-10			
					10				
		0.00	None		12	10-15	SW	10-12 well graded sand	
					14		CL	12-15 medium silty clay	
	wet				16		SC	15-20 clayey sand not, plastic	
		0.00	None		18	15-20			
					20				
					22				
					24				
					26				
					28				
					30				

Location Map:

NT



⊗ Background 1

(Grass)

⊗ Background 2



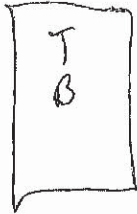
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	Background 2	Project:	Miller South I
Date:	9-11-12	Project Number:	NEP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Elevation:	N/A	Drilling Method:	Direct Push
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
Casing Type:	PVC	Grout:	NA
Screen Type:	PVC	Diameter:	1"
Slot:	0.010"	Length:	10'
		Hole Diameter:	2.25"
		Depth to Liquid:	N/A
		Total Depth:	25'
		Depth to Water:	15'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0		SP	1-5 poor graded sand	
		0.00	None	3-5	2	1-5			
					4				
		0.00	None		6		SP	6-10 SAA	
					8	6-10			
		0.00	None		10		SP	10-15 SAA	
					12	10-15			
		0.00	None		14				
		0.00	None		16		CL	15-20 silty clay medium	
					18	15-20			
		0.00	None		20				
					22	20-25	CL	20-25 SAA	
					24				
					26				
					28				
					30				

Location Map:



Background 01

Grass

Background 02



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	Background 01	Project:	Miller South I CACI
Date:	9-11-11	Project Number:	NSP0901
Logged By:	Jacob Evans	Drilled By:	ACI
Drilling Method:	Direct Push	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Bentonite
Casing Type:	PVC	Grout:	NA
Screen Type:	PVC	Hole Diameter:	2.25"
Slot:	0.010"	Length:	5'
Diameter:	1"	Depth to Liquid:	N/A
Length:	15'	Total Depth:	20'
		Depth to Water:	13'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		0.00	None	3-5	0		SP	1-5 loose poor graded sand	
		0.00	None		2	1-5	SP		
		0.00	None		4				
		0.00	None		6		SP	6-10 SAA	
		0.00	None		8	6-10			
		0.00	None		10				
		0.00	None		12		SC	10-15 clayey sand not pliable	
		0.00	None		14	10-15			
		0.00	None		16		SC	15-17 SAA	
		0.00	None		18	15-20	SP	17-20 tight sand poor grade	
					20			refusal @ 20'	
					22				
					24				
					26				
					28				
					30				

ATTACHMENT 2

LABORATORY ANALYTICAL REPORTS

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

September 19, 2012

Rob Rebel

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: NEP - Miller South #1 CACL

Enclosed are the results of analyses for samples received by Summit Scientific on 09/12/12 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph J Egry IV". The signature is stylized with a large, sweeping "J" and "E".

Joseph J Egry IV

Laboratory Director



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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB10	R209070-01	Water	09/12/12 12:15	09/12/12 16:45
SB11	R209070-02	Water	09/12/12 12:30	09/12/12 16:45
SB12	R209070-03	Water	09/12/12 12:45	09/12/12 16:45
SB13	R209070-04	Water	09/12/12 13:00	09/12/12 16:45
SB14	R209070-05	Water	09/12/12 11:00	09/12/12 16:45
SB15	R209070-06	Water	09/12/12 10:40	09/12/12 16:45
SB16	R209070-07	Water	09/12/12 10:15	09/12/12 16:45
SB22	R209070-08	Water	09/12/12 13:15	09/12/12 16:45
SB23	R209070-09	Water	09/12/12 13:30	09/12/12 16:45
Background 01	R209070-10	Water	09/12/12 14:30	09/12/12 16:45
Background 02	R209070-11	Water	09/12/12 14:45	09/12/12 16:45

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

Summit Scientific

S₂

741 Corporate Circle Suite 1 • Golden, Colorado 80401
303-277-9510 • 303-277-9531 Fax

Client: LT Environmental, Inc.

Address: 4600 West 60th Avenue

City/State/Zip: Arvada, CO 80003

Phone: (303) 633-9788

Sample Name: M BAK

Project Manager: Daniel Bower

E-Mail: dbower@summit-sc.com

Phone: (303) 433-1432

Sample Name: M BAK

Project Manager: Rob Rebel

E-Mail: rrebel@summit-sc.com

Phone: (303) 433-1432

Sample Name: M BAK

Page 1 of 2

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix				Analyze For:	Special Instructions	
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)			
5810	9/12/12	12:15	4			X								
5811		12:30												
5812		12:45												
5813		13:00												
5814		11:00												
5815		10:40												
5816		10:15												
5822		13:55												
5823		13:30												
Backward C1		14:30												
Relinquished by: M Bower 9/12/12 16:45														Notes:
Relinquished by: M Bower 9/12/12 16:45														Turn Around Time (Check): Same Day <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input checked="" type="checkbox"/> 72 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/>
Relinquished by: M Bower 9/12/12 16:45														Sample Integrity: Temperature-Upon Receipt: 41.5 Impact: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

www.summit-sc.com

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

209070.2

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303-277-9310 ♦ 303-277-9531 Fax

Page 2 of 2

Client: LT Environmental, Inc.

Address: 4600 West 60th Avenue

City/State/Zip: Arvada, CO 80003

Phone: (303) 433-9788

Sampler Name: M. B. 100

Project Manager.

E-Mail: dberns@itemv.com

Project Name: Willow

Project Number: NEP090

~~Daniel Burns~~ Kyo Kebab

dburns@itemv.com

Miller South 1 (F)

WEP0901

[illegible]

www.s2scientific.com

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Regel IV



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB10
R209070-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/12/12 12:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 09/12/12 12:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		84.7 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		97.2 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.5 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: 09/12/12 12:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	146	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: 09/12/12 12:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	203	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: 09/12/12 12:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1000	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB11
R209070-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		88.9 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		95.3 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.2 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	263	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	639	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1900	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB12
R209070-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		88.9 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		95.3 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.6 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	270	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	643	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1900	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB13
R209070-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		89.2 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	314	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	902	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	2400	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB14
R209070-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		86.5 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		95.9 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.7 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	246	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	1010	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	2500	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB15
R209070-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		86.1 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	292	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	900	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	2500	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB16
R209070-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		84.4 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		96.3 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	194	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	597	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	2000	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB22
R209070-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.7 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		97.0 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.9 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	355	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	815	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	2200	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

SB23
R209070-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		92.3 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		97.1 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.9 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	212	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	515	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1500	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

Background 01
R209070-10 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/12/12 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 09/12/12 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		92.7 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		98.8 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: 09/12/12 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	236	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: 09/12/12 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	514	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: 09/12/12 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1600	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

Background 02
R209070-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/12/12 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091415	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/12/12 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		90.6 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		97.6 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.4 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/12/12 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	217	10.0	mg/L	10	2091708	09/17/12	09/19/12	EPA 300.0	

Date Sampled: **09/12/12 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	433	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/12/12 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1400	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091415 - EPA 5030 Water MS

Blank (2091415-BLK1)

Prepared: 09/14/12 Analyzed: 09/16/12

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.4		"	13.2	101	49.7-150				
Surrogate: Toluene-d8	12.5		"	13.3	93.9	51-150				
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3	94.7	50.1-150				

LCS (2091415-BS1)

Prepared: 09/14/12 Analyzed: 09/16/12

Benzene	29.2	1.0	ug/l	33.3	87.5	51-132				
Toluene	31.0	1.0	"	33.3	93.0	51-138				
Ethylbenzene	36.8	1.0	"	33.3	110	58-146				
m,p-Xylene	72.9	2.0	"	66.7	109	57-144				
o-Xylene	37.5	1.0	"	33.3	112	53-146				
Surrogate: 1,2-Dichloroethane-d4	12.5		"	13.2	94.2	49.7-150				
Surrogate: Toluene-d8	12.5		"	13.3	94.1	51-150				
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3	92.7	50.1-150				

LCS Dup (2091415-BSD1)

Prepared: 09/14/12 Analyzed: 09/16/12

Benzene	31.1	1.0	ug/l	33.3	93.2	51-132	6.24	17		
Toluene	31.9	1.0	"	33.3	95.6	51-138	2.70	17		
Ethylbenzene	37.6	1.0	"	33.3	113	58-146	2.15	16		
m,p-Xylene	74.9	2.0	"	66.7	112	57-144	2.68	16		
o-Xylene	38.4	1.0	"	33.3	115	53-146	2.40	15		
Surrogate: 1,2-Dichloroethane-d4	13.2		"	13.2	100	49.7-150				
Surrogate: Toluene-d8	12.7		"	13.3	95.2	51-150				
Surrogate: 4-Bromofluorobenzene	12.3		"	13.3	92.1	50.1-150				

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091415 - EPA 5030 Water MS

Matrix Spike (2091415-MS1)		Source: R209070-01			Prepared: 09/14/12		Analyzed: 09/16/12			
Benzene	30.7	1.0	ug/l	33.3	ND	92.1	34-141			
Toluene	33.4	1.0	"	33.3	ND	100	27-151			
Ethylbenzene	37.4	1.0	"	33.3	ND	112	29-160			
m,p-Xylene	73.8	2.0	"	66.7	ND	111	20-166			
o-Xylene	37.8	1.0	"	33.3	ND	113	33-159			
Surrogate: 1,2-Dichloroethane-d4	12.7		"	13.2		95.9	49.7-150			
Surrogate: Toluene-d8	13.3		"	13.3		99.7	51-150			
Surrogate: 4-Bromofluorobenzene	12.3		"	13.3		92.1	50.1-150			
Matrix Spike Dup (2091415-MSD1)		Source: R209070-01			Prepared: 09/14/12		Analyzed: 09/16/12			
Benzene	31.4	1.0	ug/l	33.3	ND	94.2	34-141	2.29	32	
Toluene	34.0	1.0	"	33.3	ND	102	27-151	1.87	25	
Ethylbenzene	38.2	1.0	"	33.3	ND	114	29-160	1.98	50	
m,p-Xylene	75.6	2.0	"	66.7	ND	113	20-166	2.41	36	
o-Xylene	38.3	1.0	"	33.3	ND	115	33-159	1.55	26	
Surrogate: 1,2-Dichloroethane-d4	12.4		"	13.2		93.6	49.7-150			
Surrogate: Toluene-d8	13.1		"	13.3		98.6	51-150			
Surrogate: 4-Bromofluorobenzene	12.2		"	13.3		91.7	50.1-150			

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

Anions by EPA Method 300.0 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091708 - General Preparation

Blank (2091708-BLK1)

Prepared: 09/17/12 Analyzed: 09/19/12

Sulfate	ND	1.00	mg/L
Chloride	ND	1.00	"

LCS (2091708-BS1)

Prepared: 09/17/12 Analyzed: 09/19/12

Sulfate	9.38	1.00	mg/L	10.0	93.8	90-110
Chloride	10.1	1.00	"	10.0	101	90-110

LCS Dup (2091708-BSD1)

Prepared: 09/17/12 Analyzed: 09/19/12

Sulfate	9.35	1.00	mg/L	10.0	93.5	90-110	0.395	10
Chloride	10.1	1.00	"	10.0	101	90-110	0.278	10

Matrix Spike (2091708-MS1)

Source: R209070-03

Prepared: 09/17/12 Analyzed: 09/19/12

Sulfate	599	10.0	mg/L	10.0	643	NR	80-120		QM-4X
Chloride	253	10.0	"	10.0	270	NR	80-120		QM-4X

Matrix Spike Dup (2091708-MSD1)

Source: R209070-03

Prepared: 09/17/12 Analyzed: 09/19/12

Chloride	254	10.0	mg/L	10.0	270	NR	80-120	0.252	20	QM-4X
Sulfate	594	10.0	"	10.0	643	NR	80-120	0.876	20	QM-4X

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091408 - General Preparation

Blank (2091408-BLK1)

Prepared: 09/14/12 Analyzed: 09/17/12

Total Dissolved Solids ND 1.0 mg/L

Blank (2091408-BLK2)

Prepared: 09/14/12 Analyzed: 09/17/12

Total Dissolved Solids ND 1.0 mg/L

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/19/12 14:20

Notes and Definitions

QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

September 18, 2012

Steve Kahn

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: NEP - Miller South #1 CACL

Enclosed are the results of analyses for samples received by Summit Scientific on 09/11/12 17:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph J. Egry IV". The signature is fluid and cursive, with a distinct "IV" at the end.

Joseph J Egry IV For Ben Shrewsbury
President / Laboratory Director



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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Background 01	R209065-01	Soil	09/11/12 09:00	09/11/12 17:05
Background 02	R209065-02	Soil	09/11/12 09:20	09/11/12 17:05
SB07R	R209065-03	Soil	09/11/12 09:40	09/11/12 17:05
SB15(2)	R209065-04	Soil	09/11/12 10:00	09/11/12 17:05
SB14(2)	R209065-05	Soil	09/11/12 10:20	09/11/12 17:05
SB16(2)	R209065-06	Soil	09/11/12 10:40	09/11/12 17:05
SB11(2)	R209065-07	Soil	09/11/12 11:00	09/11/12 17:05
SB12(2)	R209065-08	Soil	09/11/12 11:20	09/11/12 17:05
SB13(2)	R209065-09	Soil	09/11/12 11:40	09/11/12 17:05

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Summit Scientific
R209065

S₂
741 Corporate Circle Suite I • Golden, Colorado 80401
303-277-9510 • 303-277-9531 Fax

Page { of

Client: LT Environmental, Inc.

Address: 4600 West 60th Avenue

City/State/Zip: Arvada, CO 80003

Phone: (303) 433-9788

Source: *Journal of the American Medical Association*, 1997, 277:1001-1005.

Supplier Name:

Project Manager:
Steve Kahn


E-Mail: skahn@itemw


Project Name: Miller So


Project Number: A15-00000


10/2/2011

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative	Matrix	Analyze For:	Special Instructions
Backhoe 01	9-11-12	900	1	HCl	Alr - Canister Serial #	As, Ba, Cd, Cr, Cr III, Pb, Hg, Ni, Se, Ag, Zn, S, Ar, PH EC	
Backhoe 02		910	1	HNO ₃	Soil		
5007R		940	1	None	Groundwater		
5015(2)		1000	1	HCl	Other (Specify)	As, Ba, Cd, Cr, Cr III, Pb, Hg, Ni, Se, Ag, Zn, S, Ar, PH EC	
5014(2)		1040	1	HNO ₃	Other (Specify)	As, Ba, Cd, Cr, Cr III, Pb, Hg, Ni, Se, Ag, Zn, S, Ar, PH EC	
5016(2)		1040	1	HNO ₃	Other (Specify)	As, Ba, Cd, Cr, Cr III, Pb, Hg, Ni, Se, Ag, Zn, S, Ar, PH EC	
5011(2)		1100	1	HNO ₃	Other (Specify)	As, Ba, Cd, Cr, Cr III, Pb, Hg, Ni, Se, Ag, Zn, S, Ar, PH EC	
5012(2)		1100	1	HNO ₃	Other (Specify)	As, Ba, Cd, Cr, Cr III, Pb, Hg, Ni, Se, Ag, Zn, S, Ar, PH EC	
5013(2)		1140	1	HNO ₃	Other (Specify)	As, Ba, Cd, Cr, Cr III, Pb, Hg, Ni, Se, Ag, Zn, S, Ar, PH EC	

Requisitioned by:  Date: Time: 9-11-12 5pm

Requisitioned by:  Date: Time: 9-11-12 5pm

Received by:  Date: Time: 9-11-12 4:30pm

Received by:  Date: Time: 9-11-12 4:30pm

Turn Around Time (Check):

Same Day ☐ 72 Hours ☒

24 Hours ☐ Standard ☒

48 Hours ☐

Sample Integrity: 5.9

Temperature Upon Receipt: 5.9

Inact: Yes ☒ No ☐

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Legal Eagle IV



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Background 01
R209065-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 09/11/12 09:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: 09/11/12 09:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		78.2 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/11/12 09:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 09/11/12 09:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		95.2 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		99.9 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 09:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0656	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Background 01
R209065-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 09:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.6		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/11/12 09:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	5.93	2.50	mg/kg	1	2091206	09/12/12	09/12/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	5.46	1.00	"	"	"	"	"	"	
Sodium	ND	5.00	"	"	"	"	"	"	

Date Sampled: 09/11/12 09:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.300		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Background 02
R209065-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 09/11/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: 09/11/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		76.0 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/11/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 09/11/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.2 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		98.8 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0368	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Background 02
R209065-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.8		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/11/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	10.6	2.50	mg/kg	1	2091206	09/12/12	09/12/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	7.60	1.00	"	"	"	"	"	"	
Sodium	ND	5.00	"	"	"	"	"	"	

Date Sampled: 09/11/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.290		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB07R
R209065-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 09/11/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: 09/11/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		79.8 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/11/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 09/11/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		99.1 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.3 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.82	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB07R
R209065-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.0		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/11/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	788	2.50	mg/kg	1	2091206	09/12/12	09/12/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	112	1.00	"	"	"	"	"	"	
Sodium	543	5.00	"	"	"	"	"	"	

Date Sampled: 09/11/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.79		units	"	2091413	09/14/12	09/14/12	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB15(2)
R209065-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/11/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: **09/11/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		83.9 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/11/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		98.2 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		100 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.1 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/11/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.77	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB15(2)
R209065-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.8		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/11/12 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	93.4	2.50	mg/kg	1	2091206	09/12/12	09/12/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	60.7	1.00	"	"	"	"	"	"	
Sodium	528	5.00	"	"	"	"	"	"	

Date Sampled: 09/11/12 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.4		units	"	2091413	09/14/12	09/14/12	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB14(2)
R209065-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/11/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: **09/11/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		85.4 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/11/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		98.5 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		99.9 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.8 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/11/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.928	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB14(2)
R209065-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.2		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/11/12 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	127	2.50	mg/kg	1	2091206	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	46.8	1.00	"	"	"	"	"	"	
Sodium	173	5.00	"	"	"	"	"	"	

Date Sampled: 09/11/12 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.33		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB16(2)
R209065-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/11/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: **09/11/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		84.7 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/11/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		100 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		100 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.6 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/11/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.06	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB16(2)
R209065-06 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/11/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.0		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: **09/11/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	528	2.50	mg/kg	1	2091206	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	121	1.00	"	"	"	"	"	"	
Sodium	280	5.00	"	"	"	"	"	"	

Date Sampled: **09/11/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.86		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB11(2)
R209065-07 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 09/11/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: 09/11/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		84.9 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/11/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 09/11/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		99.1 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		99.2 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.7 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.335	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB11(2)
R209065-07 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.8		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/11/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	21.7	2.50	mg/kg	1	2091206	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	12.3	1.00	"	"	"	"	"	"	
Sodium	80.4	5.00	"	"	"	"	"	"	

Date Sampled: 09/11/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.42		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB12(2)
R209065-08 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 09/11/12 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: 09/11/12 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		69.2 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/11/12 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 09/11/12 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		95.1 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		97.6 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.8 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.744	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB12(2)
R209065-08 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.5		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/11/12 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	68.3	2.50	mg/kg	1	2091206	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	52.1	1.00	"	"	"	"	"	"	
Sodium	217	5.00	"	"	"	"	"	"	

Date Sampled: 09/11/12 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.81		units	"	2091413	09/14/12	09/14/12	"	

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4600 West 60th Avenue
Arvada CO, 80003

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB13(2)
R209065-09 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/11/12 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091406	09/14/12	09/15/12	8015 Full Carbon Chain	

Date Sampled: **09/11/12 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		81.1 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091405	09/14/12	09/15/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/11/12 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		96.2 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		100 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.3 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/11/12 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.57	0.00100	mmhos/cm	1	2091308	09/13/12	09/17/12	SM 2510B	

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4600 West 60th Avenue
Arvada CO, 80003

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

SB13(2)
R209065-09 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/11/12 11:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.9		pH Units	1	2091306	09/13/12	09/17/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/11/12 11:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	56.9	2.50	mg/kg	1	2091206	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	53.0	1.00	"	"	"	"	"	"	
Sodium	358	5.00	"	"	"	"	"	"	

Date Sampled: 09/11/12 11:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	8.21		units	"	2091413	09/14/12	09/14/12	"	

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Arvada CO, 80003

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091406 - EPA 3550A

Blank (2091406-BLK1)

Prepared & Analyzed: 09/14/12

C10-C28 (DRO) ND 50 mg/kg

LCS (2091406-BS1)

Prepared & Analyzed: 09/14/12

C10-C28 (DRO) 431 50 mg/kg 501 86.0 73-134

LCS Dup (2091406-BSD1)

Prepared & Analyzed: 09/14/12

C10-C28 (DRO) 429 50 mg/kg 501 85.5 73-134 0.547 11

Matrix Spike (2091406-MS1)

Source: R209076-05

Prepared & Analyzed: 09/14/12

C10-C28 (DRO) 451 50 mg/kg 502 48.6 80.1 50-148

Matrix Spike Dup (2091406-MSD1)

Source: R209076-05

Prepared & Analyzed: 09/14/12

C10-C28 (DRO) 436 50 mg/kg 501 48.6 77.3 50-148 3.41 13

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Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091405 - EPA 5030 Soil MS

Blank (2091405-BLK1)

Prepared & Analyzed: 09/14/12

Benzene	ND	0.0050	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0414		"	0.0397	104	30-150				
Surrogate: Toluene-d8	0.0389		"	0.0400	97.3	30-150				
Surrogate: 4-Bromofluorobenzene	0.0393		"	0.0400	98.2	30-150				

LCS (2091405-BS1)

Prepared & Analyzed: 09/14/12

Benzene	0.0941	0.0050	mg/kg	0.100	94.1	58-130				
Toluene	0.0974	0.0050	"	0.100	97.4	61-134				
Ethylbenzene	0.114	0.0050	"	0.100	114	74-139				
m,p-Xylene	0.224	0.010	"	0.200	112	73-137				
o-Xylene	0.116	0.0050	"	0.100	116	73-141				
Surrogate: 1,2-Dichloroethane-d4	0.0377		"	0.0397	94.9	30-150				
Surrogate: Toluene-d8	0.0382		"	0.0400	95.6	30-150				
Surrogate: 4-Bromofluorobenzene	0.0383		"	0.0400	95.8	30-150				

LCS Dup (2091405-BSD1)

Prepared & Analyzed: 09/14/12

Benzene	0.0886	0.0050	mg/kg	0.100	88.6	58-130	6.08	13		
Toluene	0.0948	0.0050	"	0.100	94.8	61-134	2.65	16		
Ethylbenzene	0.112	0.0050	"	0.100	112	74-139	1.70	12		
m,p-Xylene	0.222	0.010	"	0.200	111	73-137	1.03	14		
o-Xylene	0.114	0.0050	"	0.100	114	73-141	0.965	12		
Surrogate: 1,2-Dichloroethane-d4	0.0362		"	0.0397	91.3	30-150				
Surrogate: Toluene-d8	0.0375		"	0.0400	93.8	30-150				
Surrogate: 4-Bromofluorobenzene	0.0381		"	0.0400	95.2	30-150				

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091405 - EPA 5030 Soil MS

Matrix Spike (2091405-MS1)		Source: R209076-05			Prepared & Analyzed: 09/14/12					
Benzene	0.0878	0.0050	mg/kg	0.100	ND	87.8	30-131			
Toluene	0.0938	0.0050	"	0.100	ND	93.8	30-134			
Ethylbenzene	0.110	0.0050	"	0.100	ND	110	22-153			
m,p-Xylene	0.220	0.010	"	0.200	0.00623	107	10-159			
o-Xylene	0.113	0.0050	"	0.100	ND	113	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0394		"	0.0397		99.1	30-150			
Surrogate: Toluene-d8	0.0376		"	0.0400		94.1	30-150			
Surrogate: 4-Bromofluorobenzene	0.0372		"	0.0400		93.1	30-150			
Matrix Spike Dup (2091405-MSD1)		Source: R209076-05			Prepared & Analyzed: 09/14/12					
Benzene	0.0979	0.0050	mg/kg	0.0996	ND	98.3	30-131	10.9	34	
Toluene	0.0997	0.0050	"	0.0996	ND	100	30-134	6.19	30	
Ethylbenzene	0.115	0.0050	"	0.0996	ND	115	22-153	4.20	24	
m,p-Xylene	0.229	0.010	"	0.199	0.00623	112	10-159	3.92	68	
o-Xylene	0.118	0.0050	"	0.0996	ND	118	31-151	4.09	38	
Surrogate: 1,2-Dichloroethane-d4	0.0429		"	0.0395		109	30-150			
Surrogate: Toluene-d8	0.0379		"	0.0398		95.0	30-150			
Surrogate: 4-Bromofluorobenzene	0.0390		"	0.0398		97.9	30-150			

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091306 - General Preparation

Duplicate (2091306-DUP1)		Source: R209071-06		Prepared: 09/13/12 Analyzed: 09/17/12	
pH	8.2	pH Units	8.3	0.969	4.95

Batch 2091308 - General Preparation

Duplicate (2091308-DUP1)		Source: R209071-06		Prepared: 09/13/12 Analyzed: 09/17/12	
Specific Conductance (EC)	2.53	0.00100	mmhos/cm	2.42	4.56 15.5

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091206 - General Preparation

Blank (2091206-BLK1)

Prepared & Analyzed: 09/12/12

Calcium	ND	2.50	mg/kg
Magnesium	ND	1.00	"
Sodium	ND	5.00	"

LCS (2091206-BS1)

Prepared & Analyzed: 09/12/12

Calcium	415	2.50	mg/kg	400	104	70-130
Magnesium	210	1.00	"	200	105	70-130
Sodium	822	5.00	"	800	103	70-130

LCS Dup (2091206-BSD1)

Prepared & Analyzed: 09/12/12

Calcium	434	2.50	mg/kg	400	109	70-130	4.36	25
Magnesium	212	1.00	"	200	106	70-130	1.08	25
Sodium	839	5.00	"	800	105	70-130	2.02	25

Matrix Spike (2091206-MS1)

Source: R209064-01

Prepared & Analyzed: 09/12/12

Calcium	417	2.50	mg/kg	356	36.2	107	70-130
Magnesium	203	1.00	"	178	14.6	106	70-130
Sodium	810	5.00	"	712	79.5	103	70-130

Matrix Spike Dup (2091206-MSD1)

Source: R209064-01

Prepared & Analyzed: 09/12/12

Calcium	414	2.50	mg/kg	356	36.2	106	70-130	0.659	25
Magnesium	201	1.00	"	178	14.6	105	70-130	0.619	25
Sodium	807	5.00	"	712	79.5	102	70-130	0.270	25

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/18/12 09:25

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

A handwritten signature in black ink, appearing to read 'Angel A. Reyes IV'.

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

September 17, 2012

Rob Rebel

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: NEP - Miller South #1 CACL

Enclosed are the results of analyses for samples received by Summit Scientific on 09/11/12 17:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph J Egry IV". The signature is stylized with a large, sweeping "J" and "E".

Joseph J Egry IV

Laboratory Director



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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB01R	R209063-01	Water	09/11/12 09:50	09/11/12 17:05
SB02R	R209063-02	Water	09/11/12 09:30	09/11/12 17:05
SB03R	R209063-03	Water	09/11/12 10:15	09/11/12 17:05
SB04R	R209063-04	Water	09/11/12 11:15	09/11/12 17:05
SB05R	R209063-05	Water	09/11/12 11:40	09/11/12 17:05
SB06R	R209063-06	Water	09/11/12 12:20	09/11/12 17:05
SB07R	R209063-07	Water	09/11/12 14:20	09/11/12 17:05
SB08R	R209063-08	Water	09/11/12 14:00	09/11/12 17:05
SB17	R209063-09	Water	09/11/12 12:00	09/11/12 17:05
SB18	R209063-10	Water	09/11/12 10:45	09/11/12 17:05
SB19	R209063-11	Water	09/11/12 13:00	09/11/12 17:05
SB20	R209063-12	Water	09/11/12 13:20	09/11/12 17:05
SB21	R209063-13	Water	09/11/12 13:40	09/11/12 17:05

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

R209063.1

Summit Scientific

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303-277-9310 • 303-277-9531 Fax

Page 1 of 2

Client: LT Environmental, Inc.
Address: 4600 West 60th Avenue
City/State/Zip: Arvada, CO 80003
Phone: (303) 433-9788
Fax: (303) 433-1432
Project Manager: Rob Rebel
E-Mail: rob@summit-sc.com
Project Name: Miller South #1 CACL
Project Number: NEP0901
Sample Name: M. Bruce

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative	Matrix	Analyze For:	Special Instructions
S601R	9/11/12	950	4	HCl	Soil	Table 910.1 metals SAR Chlorides Sulfates, TDS	
S602R		950		HCl	Soil		
S603R		1015		HCl	Soil		
S604R		1115		HCl	Soil		
S605R		1440		HCl	Soil		
S606R		1720		HCl	Soil		
S607R		1420		HCl	Soil		
S608R		1400		HCl	Soil		
S617		1200		HCl	Soil		
S618		1045		HCl	Soil		
Requisitioned by: <u>MBR</u>	Date Time: <u>9/11/12 1615</u>	Received by: <u>[Signature]</u>	Date Time: <u>9/11/12 1745</u>	Turn Around Time (Check): Same Day <input type="checkbox"/> 72 Hours <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/>	Notes: <u>MB</u>		
Requisitioned by:	Date Time:	Received by:	Date Time:	Sample Integrity: Temperature Sign Receipt: <u>57</u> Intact: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			

www.summit-sc.com

[Signature]

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

R209063.2

Summit Scientific

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303-277-9310 ♦ 303-277-9531 Fax

Page 2 of 2

Client: LT Environmental, Inc.

Address: 4600 West 60th Avenue

City/State/Zip: Arvada, CO 80003

phone: (303) 433-9788

Sampler Name: 112010

Project Manager:

E-Mail:

Project Name:

Project Number:

[illegible]

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Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Legal Eagle IV



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB01R
R209063-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/11/12 09:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 09/11/12 09:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		87.0 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		101 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.6 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: 09/11/12 09:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	181	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: 09/11/12 09:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	372	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: 09/11/12 09:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1300	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB02R
R209063-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		85.1 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		98.1 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	214	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	300	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1100	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB03R
R209063-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		85.5 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		97.2 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	278	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	646	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	2300	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB04R
R209063-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		88.0 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		94.6 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	488	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	1600	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	4800	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB05R
R209063-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/11/12 11:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 09/11/12 11:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		91.8 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		96.9 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.9 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: 09/11/12 11:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	291	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: 09/11/12 11:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	1060	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: 09/11/12 11:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	3000	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB06R
R209063-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		88.9 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		98.0 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	186	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	325	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1200	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB07R
R209063-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		88.9 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		95.2 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.1 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	773	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	896	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 14:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	3400	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB08R
R209063-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		87.7 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		95.3 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.4 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	2140	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	500	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1600	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB17
R209063-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		78.7 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		88.2 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.3 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	237	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	584	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	2100	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB18
R209063-10 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		90.2 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		97.3 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.0 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	290	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	920	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	3000	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB19
R209063-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/11/12 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 09/11/12 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		91.8 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		92.2 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.8 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: 09/11/12 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	196	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: 09/11/12 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	317	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: 09/11/12 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1300	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB20
R209063-12 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		87.7 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		99.5 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	183	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	180	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1000	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

SB21
R209063-13 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/11/12 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	2091214	09/12/12	09/13/12	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/11/12 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		88.3 %	49.7-150		"	"	"	"	
Surrogate: Toluene-d8		104 %	51-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.6 %	50.1-150		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/11/12 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	162	10.0	mg/L	10	2091201	09/12/12	09/13/12	EPA 300.0	

Date Sampled: **09/11/12 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sulfate	490	10.0	"	"	"	"	"	"	

Miscellaneous Physical/Conventional Chemistry Parameters

Date Sampled: **09/11/12 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1200	1.0	mg/L	1	2091408	09/14/12	09/17/12	TDS Meter	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091214 - EPA 5030 Water MS

Blank (2091214-BLK1)

Prepared: 09/12/12 Analyzed: 09/13/12

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.1		"	13.2		98.8	49.7-150			
Surrogate: Toluene-d8	13.0		"	13.3		97.4	51-150			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	50.1-150			

LCS (2091214-BS1)

Prepared: 09/12/12 Analyzed: 09/13/12

Benzene	47.0	1.0	ug/l	50.0		94.0	51-132			
Toluene	46.1	1.0	"	50.0		92.3	51-138			
Ethylbenzene	47.0	1.0	"	50.0		94.0	58-146			
m,p-Xylene	93.0	2.0	"	100		93.0	57-144			
o-Xylene	47.2	1.0	"	50.0		94.4	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.6		"	13.2		103	49.7-150			
Surrogate: Toluene-d8	13.3		"	13.3		100	51-150			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.9	50.1-150			

LCS Dup (2091214-BSD1)

Prepared: 09/12/12 Analyzed: 09/13/12

Benzene	47.2	1.0	ug/l	50.0		94.4	51-132	0.425	17	
Toluene	47.4	1.0	"	50.0		94.8	51-138	2.69	17	
Ethylbenzene	49.2	1.0	"	50.0		98.3	58-146	4.43	16	
m,p-Xylene	96.0	2.0	"	100		96.0	57-144	3.24	16	
o-Xylene	49.2	1.0	"	50.0		98.4	53-146	4.15	15	
Surrogate: 1,2-Dichloroethane-d4	13.3		"	13.2		100	49.7-150			
Surrogate: Toluene-d8	12.9		"	13.3		96.5	51-150			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.7	50.1-150			

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091214 - EPA 5030 Water MS

Matrix Spike (2091214-MS1)		Source: R209042-01			Prepared: 09/12/12		Analyzed: 09/13/12			
Benzene	46.5	1.0	ug/l	50.0	ND	93.1	34-141			
Toluene	49.1	1.0	"	50.0	ND	98.1	27-151			
Ethylbenzene	48.1	1.0	"	50.0	ND	96.2	29-160			
m,p-Xylene	95.3	2.0	"	100	ND	95.3	20-166			
o-Xylene	47.5	1.0	"	50.0	ND	95.0	33-159			
Surrogate: 1,2-Dichloroethane-d4	13.1		"	13.2		99.3	49.7-150			
Surrogate: Toluene-d8	14.1		"	13.3		106	51-150			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.4	50.1-150			
Matrix Spike Dup (2091214-MSD1)		Source: R209042-01			Prepared: 09/12/12		Analyzed: 09/13/12			
Benzene	46.9	1.0	ug/l	50.0	ND	93.8	34-141	0.749	32	
Toluene	46.3	1.0	"	50.0	ND	92.7	27-151	5.70	25	
Ethylbenzene	47.6	1.0	"	50.0	ND	95.2	29-160	1.04	50	
m,p-Xylene	94.2	2.0	"	100	ND	94.2	20-166	1.09	36	
o-Xylene	48.5	1.0	"	50.0	ND	97.0	33-159	2.08	26	
Surrogate: 1,2-Dichloroethane-d4	13.1		"	13.2		99.1	49.7-150			
Surrogate: Toluene-d8	13.2		"	13.3		99.0	51-150			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.1	50.1-150			

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

Anions by EPA Method 300.0 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091201 - General Preparation

Blank (2091201-BLK1)

Prepared: 09/12/12 Analyzed: 09/13/12

Chloride	ND	1.00	mg/L
Sulfate	ND	1.00	"

LCS (2091201-BS1)

Prepared: 09/12/12 Analyzed: 09/13/12

Sulfate	10.8	1.11	mg/L	11.1	97.6	90-110
Chloride	11.3	1.11	"	11.1	102	90-110

LCS Dup (2091201-BSD1)

Prepared: 09/12/12 Analyzed: 09/13/12

Chloride	11.3	1.11	mg/L	11.1	101	90-110	0.551	10
Sulfate	10.8	1.11	"	11.1	97.3	90-110	0.400	10

Matrix Spike (2091201-MS1)

Source: R209061-01

Prepared: 09/12/12 Analyzed: 09/13/12

Chloride	200	11.1	mg/L	11.1	188	107	80-120	
Sulfate	596	11.1	"	11.1	581	131	80-120	QM-4X

Matrix Spike Dup (2091201-MSD1)

Source: R209061-01

Prepared: 09/12/12 Analyzed: 09/13/12

Sulfate	588	11.1	mg/L	11.1	581	61.1	80-120	1.31	20	QM-4X
Chloride	197	11.1	"	11.1	188	84.7	80-120	1.25	20	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091408 - General Preparation

Blank (2091408-BLK1)

Prepared: 09/14/12 Analyzed: 09/17/12

Total Dissolved Solids ND 1.0 mg/L

Blank (2091408-BLK2)

Prepared: 09/14/12 Analyzed: 09/17/12

Total Dissolved Solids ND 1.0 mg/L

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Rob Rebel

Reported:
09/17/12 13:22

Notes and Definitions

QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

September 14, 2012

Steve Kahn

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: NEP - Miller South #1 CACL

Enclosed are the results of analyses for samples received by Summit Scientific on 09/10/12 16:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph J. Egry IV". The signature is fluid and cursive, with a distinct "IV" at the end.

Joseph J Egry IV For Ben Shrewsbury
President / Laboratory Director



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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB23	R209050-01	Soil	09/10/12 09:00	09/10/12 16:55
SB22	R209050-02	Soil	09/10/12 09:20	09/10/12 16:55
SB10 (2)	R209050-03	Soil	09/10/12 09:40	09/10/12 16:55
SB08R	R209050-04	Soil	09/10/12 10:00	09/10/12 16:55
SB21	R209050-05	Soil	09/10/12 10:20	09/10/12 16:55
SB20	R209050-06	Soil	09/10/12 10:40	09/10/12 16:55
SB19	R209050-07	Soil	09/10/12 11:00	09/10/12 16:55
SB18	R209050-08	Soil	09/10/12 11:30	09/10/12 16:55
SB17	R209050-09	Soil	09/10/12 12:00	09/10/12 16:55
SB05R	R209050-10	Soil	09/10/12 12:30	09/10/12 16:55
SB04R	R209050-11	Soil	09/10/12 13:00	09/10/12 16:55
SB03R	R209050-12	Soil	09/10/12 13:30	09/10/12 16:55
SB01R	R209050-13	Soil	09/10/12 14:00	09/10/12 16:55
SB02R	R209050-14	Soil	09/10/12 14:30	09/10/12 16:55
SB06R	R209050-15	Soil	09/10/12 15:00	09/10/12 16:55

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

Summit Scientific

S₂
741 Corporate Circle Suite 1 • Golden, Colorado 80401
303-277-9310 • 303-277-9531 Fax

Client: UT Environmental, Inc.	Project Manager: Steve Kahn
Address: 4600 West 60th Avenue	E-Mail: steve@utenv.com
City/State/Zip: Aurora, CO 80003	Project Name: Miller South #1 CACL
Phone: (303) 433-9788	Project Number: NEA 0901
Fax: (303) 433-1432	Sampler Name: 7 S.c.1

Page | of 2

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative	Matrix	Analyze For:	Special Instructions
5623	9-10-11	0600	1	HCl	Air - Canister Serial #	As, Ba, Cd, Cr, Cr III, Pb, Se, Ag, Zn, SAR, pH EC	
5622		0600	1	HNO ₃	Other (Specify)	BTEX	
5610(2)		0900	1	None	Other (Specify)	GRO/DRO	
5608R		1000	1	HCl	Groundwater	PAH SIM	
5621		1000	1	HNO ₃	Soil	Cr VI, Cu, Pb, Hg, Ni	
5620		1040	1	HCl	Other (Specify)	As, Ba, Cd, Cr, Cr III, Pb, Se, Ag, Zn, SAR, pH EC	
5619		1100	1	HNO ₃	Other (Specify)	BTEX	
5618		1130	1	HCl	Other (Specify)	GRO/DRO	
5617		1200	1	HNO ₃	Other (Specify)	PAH SIM	
5655R		1230	1	HCl	Other (Specify)	Cr VI, Cu, Pb, Hg, Ni	

Relinquished by: *[Signature]* Date Time: 9-10-11 5pm

Relinquished by: *[Signature]* Date Time: 9-10-11 5pm

Received by: *[Signature]* Date Time: 9/10 16:35

Received by: *[Signature]* Date Time: 9/10 16:35

Turn Around Time (Check)

Same Day ☐ 72 Hours ☒ Standard

24 Hours ☐ 48 Hours ☐

Notes:

Sample Integrity: 5.0

Temperature Upon Receipt: 5.0

Intact: Yes ☒ No ☐

Received in Lab by: *[Signature]* Date Time: 9-10-11 5pm

Relinquished by: *[Signature]* Date Time: 9-10-11 5pm

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Regd. Agent IV



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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB23
R209050-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		109 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/13/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.5 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		96.3 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.2 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.08	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

Summit Scientific

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB23
R209050-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.8		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: **09/10/12 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	33.9	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	26.7	1.00	"	"	"	"	"	"	
Sodium	268	5.00	"	"	"	"	"	"	

Date Sampled: **09/10/12 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	8.36		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB22
R209050-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.4 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/13/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		98.1 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.2 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.732	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB22
R209050-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.9		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	32.8	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	19.4	1.00	"	"	"	"	"	"	
Sodium	33.4	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 09:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.14		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB10 (2)
R209050-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		104 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/13/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		98.4 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		91.6 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.6 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.209	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB10 (2)
R209050-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.2		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	39.9	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	15.3	1.00	"	"	"	"	"	"	
Sodium	66.3	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 09:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.26		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB08R
R209050-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		108 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/13/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		104 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		96.5 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.4 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.180	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB08R
R209050-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.2		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: **09/10/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	21.5	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	16.3	1.00	"	"	"	"	"	"	
Sodium	24.1	5.00	"	"	"	"	"	"	

Date Sampled: **09/10/12 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.950		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB21
R209050-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		106 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/13/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		97.6 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.0 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.153	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB21
R209050-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.4		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	72.9	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	25.7	1.00	"	"	"	"	"	"	
Sodium	39.1	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.00		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB20
R209050-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		109 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/13/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		97.0 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.4 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.130	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB20
R209050-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.4		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: **09/10/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	28.4	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	16.1	1.00	"	"	"	"	"	"	
Sodium	44.5	5.00	"	"	"	"	"	"	

Date Sampled: **09/10/12 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.65		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB19
R209050-07 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		103 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/13/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		99.2 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.3 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.43	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB19
R209050-07 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.8		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	507	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	55.0	1.00	"	"	"	"	"	"	
Sodium	397	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.47		units	"	2091413	09/14/12	09/14/12	"	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB18
R209050-08 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 09/10/12 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: 09/10/12 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		104 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 09/10/12 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/14/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 09/10/12 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.9 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		98.6 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.2 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.461	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB18
R209050-08 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.3		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	134	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	49.1	1.00	"	"	"	"	"	"	
Sodium	149	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.80		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB17
R209050-09 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		104 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/14/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		98.5 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		98.4 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.0 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.908	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB17
R209050-09 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.7		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	125	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	53.8	1.00	"	"	"	"	"	"	
Sodium	293	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	5.52		units	"	2091413	09/14/12	09/14/12	"	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB05R
R209050-10 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		105 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/14/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.6 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		98.5 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.3 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.36	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB05R
R209050-10 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 12:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.8		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 12:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	90.5	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	63.4	1.00	"	"	"	"	"	"	
Sodium	510	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 12:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.1		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB04R
R209050-11 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		104 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/14/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.3 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		99.0 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.1 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.440	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB04R
R209050-11 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.1		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: **09/10/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	109	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	33.6	1.00	"	"	"	"	"	"	
Sodium	161	5.00	"	"	"	"	"	"	

Date Sampled: **09/10/12 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.46		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB03R
R209050-12 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		108 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/14/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.0 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		98.0 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.4 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.522	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB03R
R209050-12 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 13:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.1		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 13:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	32.7	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	13.7	1.00	"	"	"	"	"	"	
Sodium	83.3	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 13:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.09		units	"	2091413	09/14/12	09/14/12	"	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB01R
R209050-13 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		101 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/14/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		98.0 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		99.4 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.6 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.220	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

Summit Scientific

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB01R
R209050-13 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.4		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: **09/10/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	31.2	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	16.4	1.00	"	"	"	"	"	"	
Sodium	101	5.00	"	"	"	"	"	"	

Date Sampled: **09/10/12 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.64		units	"	2091413	09/14/12	09/14/12	"	

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

Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB02R
R209050-14 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		110 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/14/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		99.6 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		98.5 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.4 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.336	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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SB02R
R209050-14 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 09/10/12 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.6		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: 09/10/12 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	98.4	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	40.3	1.00	"	"	"	"	"	"	
Sodium	80.2	5.00	"	"	"	"	"	"	

Date Sampled: 09/10/12 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.72		units	"	2091413	09/14/12	09/14/12	"	

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Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB06R
R209050-15 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/10/12 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	2091304	09/13/12	09/14/12	8015 Full Carbon Chain	

Date Sampled: **09/10/12 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/10/12 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	2091303	09/13/12	09/14/12	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/10/12 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		96.8 %	30-150		"	"	"	"	
Surrogate: Toluene-d8		99.7 %	30-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0910	0.00100	mmhos/cm	1	2091307	09/13/12	09/14/12	SM 2510B	

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Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

SB06R
R209050-15 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/10/12 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.0		pH Units	1	2091305	09/13/12	09/14/12	EPA 9045B	

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis

Date Sampled: **09/10/12 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	23.5	2.50	mg/kg	1	2091205	09/12/12	09/13/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	13.2	1.00	"	"	"	"	"	"	
Sodium	13.4	5.00	"	"	"	"	"	"	

Date Sampled: **09/10/12 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.550		units	"	2091413	09/14/12	09/14/12	"	

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Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091304 - EPA 3550A

Blank (2091304-BLK1)

Prepared & Analyzed: 09/13/12

C10-C28 (DRO) ND 50 mg/kg

LCS (2091304-BS1)

Prepared & Analyzed: 09/13/12

C10-C28 (DRO) 429 50 mg/kg 501 85.7 73-134

LCS Dup (2091304-BSD1)

Prepared & Analyzed: 09/13/12

C10-C28 (DRO) 422 50 mg/kg 501 84.3 73-134 1.67 11

Matrix Spike (2091304-MS1)

Source: R209050-01

Prepared: 09/13/12 Analyzed: 09/14/12

C10-C28 (DRO) 433 50 mg/kg 490 46.6 78.8 50-148

Matrix Spike Dup (2091304-MSD1)

Source: R209050-01

Prepared: 09/13/12 Analyzed: 09/14/12

C10-C28 (DRO) 407 50 mg/kg 488 46.6 73.7 50-148 6.22 13

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4600 West 60th Avenue
Arvada CO, 80003

Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091303 - EPA 5030 Soil MS

Blank (2091303-BLK1)

Prepared & Analyzed: 09/13/12

Benzene	ND	0.0050	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0368		"	0.0397		92.7	30-150			
Surrogate: Toluene-d8	0.0401		"	0.0400		100	30-150			
Surrogate: 4-Bromofluorobenzene	0.0393		"	0.0400		98.2	30-150			

LCS (2091303-BS1)

Prepared & Analyzed: 09/13/12

Benzene	0.106	0.0050	mg/kg	0.100		106	58-130			
Toluene	0.110	0.0050	"	0.100		110	61-134			
Ethylbenzene	0.119	0.0050	"	0.100		119	74-139			
m,p-Xylene	0.235	0.010	"	0.200		118	73-137			
o-Xylene	0.114	0.0050	"	0.100		114	73-141			
Surrogate: 1,2-Dichloroethane-d4	0.0350		"	0.0397		88.2	30-150			
Surrogate: Toluene-d8	0.0393		"	0.0400		98.2	30-150			
Surrogate: 4-Bromofluorobenzene	0.0387		"	0.0400		96.8	30-150			

LCS Dup (2091303-BSD1)

Prepared & Analyzed: 09/13/12

Benzene	0.116	0.0050	mg/kg	0.100		116	58-130	8.35	13	
Toluene	0.121	0.0050	"	0.100		121	61-134	9.58	16	
Ethylbenzene	0.127	0.0050	"	0.100		127	74-139	6.96	12	
m,p-Xylene	0.251	0.010	"	0.200		126	73-137	6.67	14	
o-Xylene	0.123	0.0050	"	0.100		123	73-141	7.81	12	
Surrogate: 1,2-Dichloroethane-d4	0.0363		"	0.0397		91.4	30-150			
Surrogate: Toluene-d8	0.0400		"	0.0400		100	30-150			
Surrogate: 4-Bromofluorobenzene	0.0391		"	0.0400		97.8	30-150			

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Project: NEP - Miller South #1 CACL
Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091303 - EPA 5030 Soil MS

Matrix Spike (2091303-MS1)		Source: R209050-01			Prepared & Analyzed: 09/13/12					
Benzene	0.109	0.0050	mg/kg	0.0996	ND	109	30-131			
Toluene	0.113	0.0050	"	0.0996	ND	113	30-134			
Ethylbenzene	0.118	0.0050	"	0.0996	ND	119	22-153			
m,p-Xylene	0.233	0.010	"	0.199	ND	117	10-159			
o-Xylene	0.115	0.0050	"	0.0996	ND	116	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0379		"	0.0395		96.0	30-150			
Surrogate: Toluene-d8	0.0397		"	0.0398		99.5	30-150			
Surrogate: 4-Bromofluorobenzene	0.0393		"	0.0398		98.6	30-150			

Matrix Spike Dup (2091303-MSD1)		Source: R209050-01			Prepared & Analyzed: 09/13/12					
Benzene	0.110	0.0050	mg/kg	0.0994	ND	110	30-131	0.704	34	
Toluene	0.114	0.0050	"	0.0994	ND	115	30-134	1.12	30	
Ethylbenzene	0.118	0.0050	"	0.0994	ND	118	22-153	0.629	24	
m,p-Xylene	0.233	0.010	"	0.199	ND	117	10-159	0.00623	68	
o-Xylene	0.115	0.0050	"	0.0994	ND	115	31-151	0.589	38	
Surrogate: 1,2-Dichloroethane-d4	0.0373		"	0.0395		94.6	30-150			
Surrogate: Toluene-d8	0.0388		"	0.0398		97.6	30-150			
Surrogate: 4-Bromofluorobenzene	0.0383		"	0.0398		96.4	30-150			

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Project: NEP - Miller South #1 CACL

Project Number: NEP 0901
Project Manager: Steve Kahn

Reported:
09/14/12 16:45

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091305 - General Preparation

Duplicate (2091305-DUP1)		Source: R209050-01		Prepared: 09/13/12		Analyzed: 09/14/12	
pH	8.7	pH Units	8.8	1.14	4.95		

Batch 2091307 - General Preparation

Duplicate (2091307-DUP1)		Source: R209050-01		Prepared: 09/13/12 Analyzed: 09/14/12	
Specific Conductance (EC)	1.06	0.00100	mmhos/cm	1.08	1.91 15.5

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Project: NEP - Miller South #1 CACL
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Reported:
09/14/12 16:45

Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2091205 - General Preparation

Blank (2091205-BLK1)

Prepared: 09/12/12 Analyzed: 09/13/12

Calcium	ND	2.50	mg/kg
Magnesium	ND	1.00	"
Sodium	ND	5.00	"

LCS (2091205-BS1)

Prepared: 09/12/12 Analyzed: 09/13/12

Calcium	410	2.50	mg/kg	400	102	70-130
Magnesium	202	1.00	"	200	101	70-130
Sodium	719	5.00	"	800	89.8	70-130

LCS Dup (2091205-BSD1)

Prepared: 09/12/12 Analyzed: 09/13/12

Calcium	406	2.50	mg/kg	400	101	70-130	0.979	25
Magnesium	194	1.00	"	200	96.8	70-130	4.19	25
Sodium	688	5.00	"	800	86.0	70-130	4.37	25

Matrix Spike (2091205-MS1)

Source: R209050-01

Prepared: 09/12/12 Analyzed: 09/13/12

Calcium	398	2.50	mg/kg	358	33.9	102	70-130
Magnesium	212	1.00	"	179	26.7	103	70-130
Sodium	925	5.00	"	716	268	91.6	70-130

Matrix Spike Dup (2091205-MSD1)

Source: R209050-01

Prepared: 09/12/12 Analyzed: 09/13/12

Calcium	385	2.50	mg/kg	350	33.9	100	70-130	3.33	25
Magnesium	198	1.00	"	175	26.7	97.9	70-130	6.87	25
Sodium	849	5.00	"	699	268	82.9	70-130	8.60	25

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09/14/12 16:45

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

A handwritten signature in black ink, appearing to read 'Angel A. Reyes IV'.