



August 30, 2016

Mr. Jacob Evans
Senior Environmental Specialist
Noble Energy, Inc.
2115 117th Avenue
Greeley, Colorado 80634

**RE: Environmental Assessment Results and No Further Action Request
Bacon 3 Tank Battery
Weld County, Colorado
COGCC Spill Tracking #400930328**

Dear Mr. Evans:

LT Environmental, Inc. (LTE), under the direction of Noble Energy, Inc. (Noble), conducted an environmental assessment at the Bacon 3 Tank Battery (Site). On November 4, 2015, while dismantling the production equipment at the Site, historical petroleum hydrocarbon impacts were discovered. The purpose of the assessment was to identify the potential horizontal and vertical extent of impact to soil and/or groundwater. The Site is located approximately 0.3 miles south of County Road 52 and 0.5 miles east of County Road 43 in Weld County, Colorado. The legal site description is southeast quarter of the northwest quarter of Section 34, Township 5 North, and Range 65 West, 6th Principal Meridian. The Site Location Map is provided as Figure 1.

Soil Boring Advancement

LTE advanced a total of seven soil borings (SB01 through SB07) on June 15, 2016. The soil borings were completed using a direct-push rig operated by Site Services Drilling, LLC of Golden, Colorado. The soil borings were completed as monitoring wells at the time of drilling in the event that the environmental assessment results indicated the need for continued groundwater monitoring. A site map with soil boring locations is provided as Figure 2.

The soil borings were logged by an LTE geologist, and the soil was characterized by visual inspection of the collected soil samples. The total depths of the soil borings were 10 feet below ground surface (bgs). Depth to groundwater observed in the soil borings ranged from 3 feet to 4.5 feet bgs. Soil identified at the Site was predominantly clayey sand ranging from ground surface to approximately 4 feet bgs and sand from approximately 4 feet to 10 feet bgs. The Soil Boring/Monitoring Well Completion Diagrams are included as Attachment 1.

Soil Sampling

One soil sample was collected from each soil boring for laboratory analysis. The soil samples were collected from the interval above the water table where the highest photo-ionization detector (PID) reading was observed or where the most prominent visible soil staining was present. If PID



readings and visual observation indicated negligible or no petroleum hydrocarbon impact was present, the soil sample was collected within one foot above the static water level.

Seven soil samples were submitted with a completed chain of custody form to Summit Scientific of Golden, Colorado, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX), naphthalene, and total petroleum hydrocarbons (TPH) as gasoline range organics (GRO) by United States Environmental Protection Agency (EPA) Method 8260B and TPH as diesel range organics (DRO) by EPA Method 8015.

Groundwater Monitoring Well Installation

Soil borings SB01 through SB07 were completed as monitoring wells and constructed of 1-inch diameter polyvinyl chloride (PVC) casing extending from the surface stickups to a depth of 9 feet bgs. The lower section of each well consists of 5 feet of 0.010-inch factory-slotted PVC well screen. Each annulus was filled with silica sand from the bottom of each well to approximately one foot above the screen to act as a filter pack for the monitoring well. Bentonite chips were placed from the top of the silica sand to the ground surface at each soil boring and hydrated to provide a seal against surface contamination and precipitation infiltration. Soil Boring/Well Completion Diagrams are provided as Attachment 1.

Groundwater Sampling

Based on the soil analytical results on July 1, 2016, a groundwater sample was collected from the monitoring well representative of the contamination source area (SB01) to assess any potential hydrocarbon impact to groundwater. Prior to developing and sampling, depth to static groundwater was measured and recorded for calculating a well-specific target purge volume. The depth to static groundwater at monitoring well SB01 was 6.07 feet below top of casing. Following well development and purging, a sample was collected and then submitted with a completed chain of custody form to Origins Laboratory, Inc. of Denver, Colorado, for analysis of BTEX by EPA Method 8260C.

Soil Analytical Results

The Colorado Oil and Gas Conservation Commission (COGCC) Table 910-1 standards for BTEX in soil are 0.17 milligrams per kilogram (mg/kg), 85 mg/kg, 100 mg/kg, and 175 mg/kg, respectively, and 500 mg/kg for TPH.

Soil analytical results indicated that all samples are in compliance with applicable COGCC Table 910-1 concentration levels. The soil analytical results are presented on Figure 3 and summarized in Table 1. The laboratory soil analytical report is included as Attachment 2.



Groundwater Analytical Results

The Colorado Department of Public Health and Environment-Water Quality Control Commission has established Regulation 41-The Basic Standards for Ground Water (WQCC Reg 41) for BTEX at 5.0 micrograms per liter ($\mu\text{g/L}$), 560 $\mu\text{g/L}$, 700 $\mu\text{g/L}$, and 1,400 $\mu\text{g/L}$, respectively.

Laboratory analytical results of the groundwater sample collected from monitoring well SB01 indicated that concentrations of BTEX are in compliance with applicable WQCC Reg 41 standards. Groundwater analytical results are presented on Figure 4 and summarized in Table 2. The laboratory groundwater analytical report is included in Attachment 2.

Summary and Conclusions

The site assessment did not identify petroleum hydrocarbon impact at the Site in excess of applicable standards. All soil samples collected from the seven soil borings and the groundwater sample collected from the monitoring well representative of the contamination source area were in compliance with applicable standards and below the laboratory detection limit. As a result, Noble respectfully requests that the COGCC grant a No Further Action status for the Bacon 3 Tank Battery.

LTE believes that it has performed the services summarized in this report in a manner consistent with the level of care and skill ordinarily exercised by members of the environmental profession practicing at the same time and under similar conditions in the area of the project.

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read 'Chris Roy', written in a cursive style.

Chris Roy
Client Manager

Attachments

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Soil Analytical Results
Figure 4	Groundwater Analytical Results
Table 1	Soil Analytical Results
Table 2	Groundwater Analytical Results
Attachment 1	Soil Boring/Monitoring Well Completion Diagrams
Attachment 2	Laboratory Analytical Reports

FIGURES



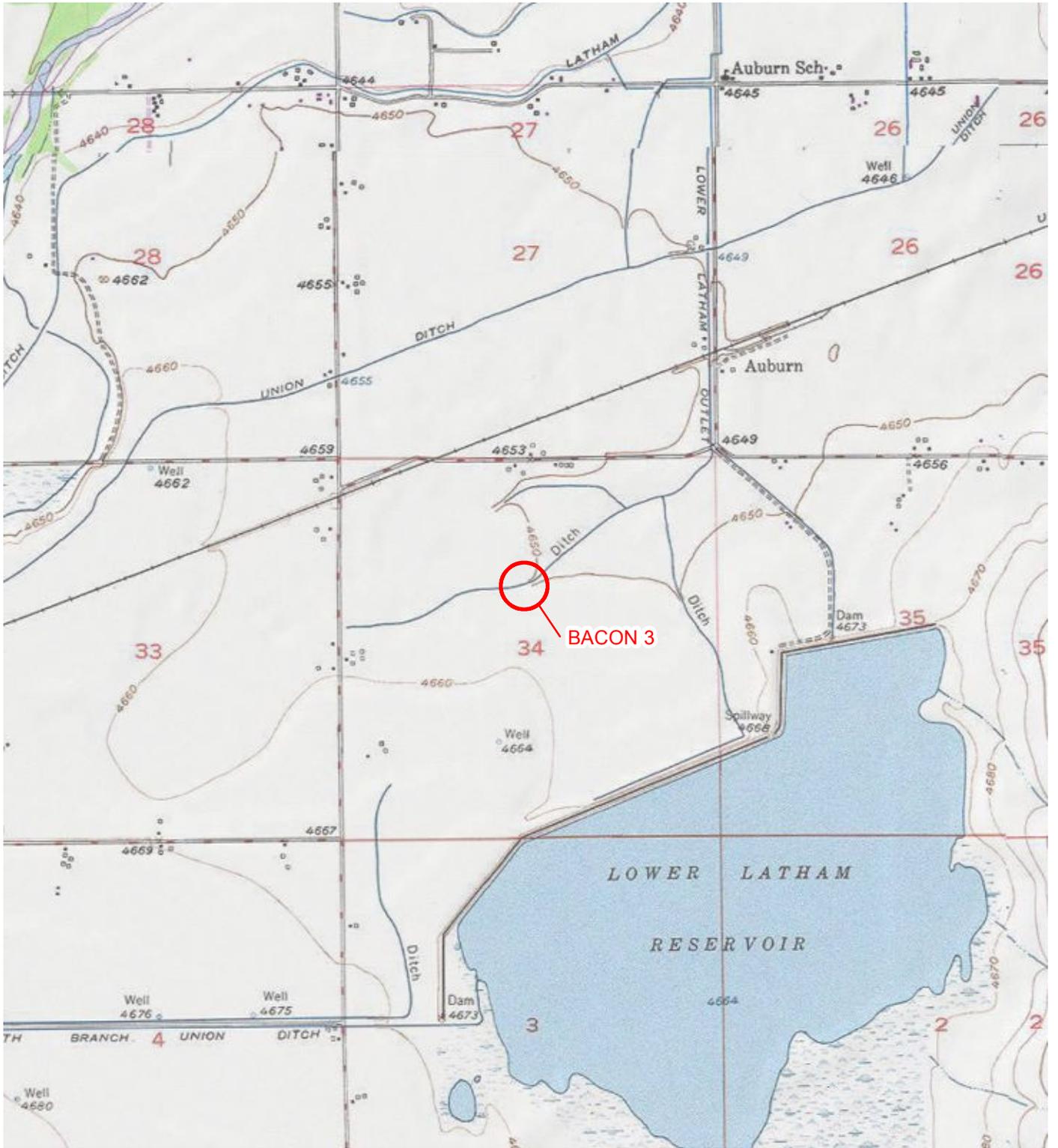


IMAGE COURTESY OF ESRI/USGS

LEGEND

 SITE LOCATION

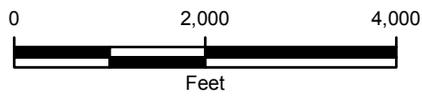


FIGURE 1
SITE LOCATION MAP
BACON 3
SENW SEC 34-T5N-R65W
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.





IMAGE COURTESY OF ESRI

LEGEND

● SOIL BORING

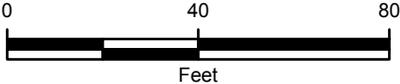
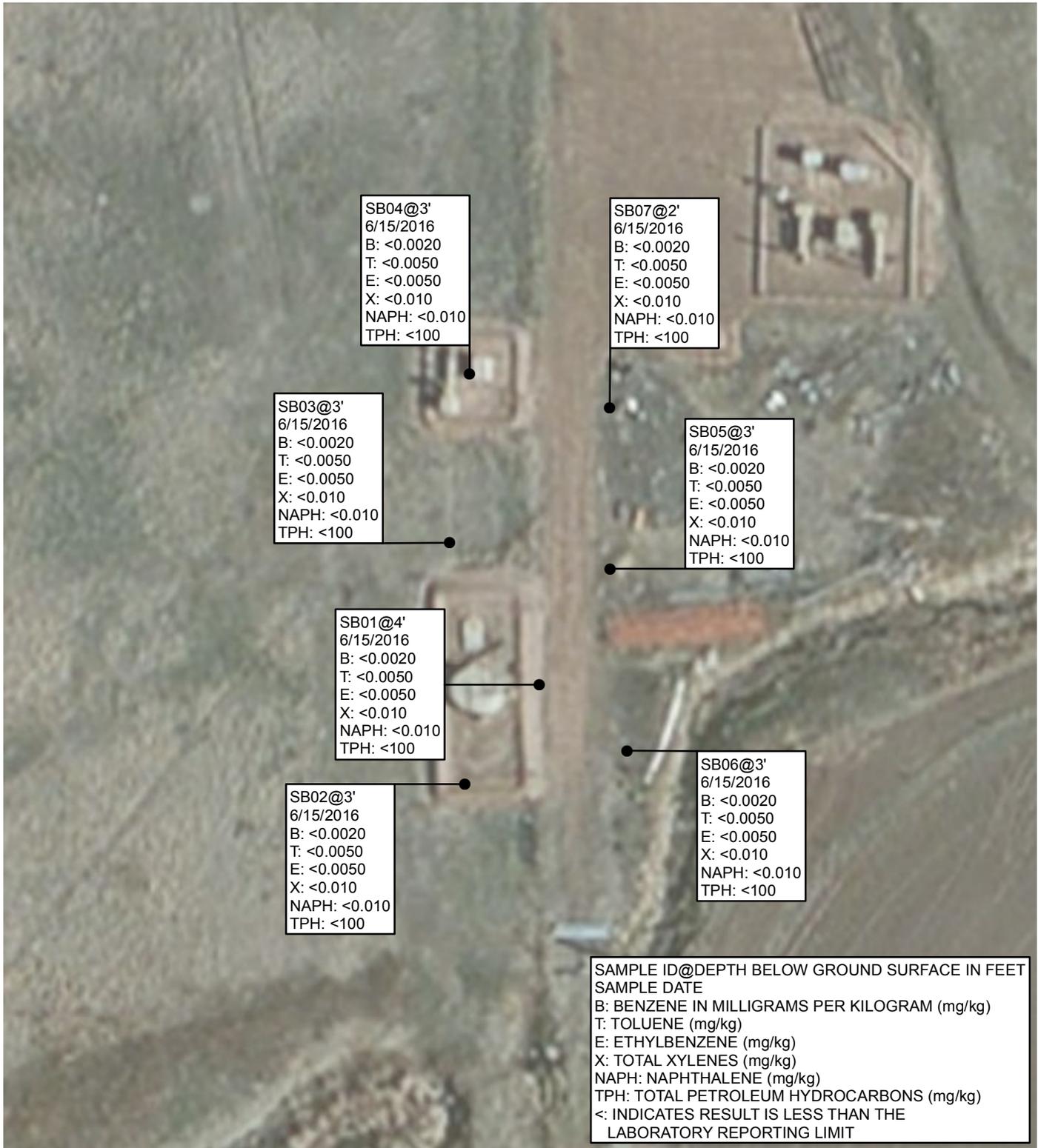


FIGURE 2
SITE MAP
BACON 3
SENW SEC 34-T5N-R65W
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.





LEGEND

● SOIL BORING

IMAGE COURTESY OF ESRI

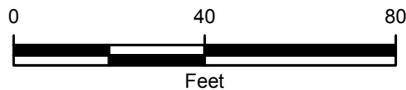


FIGURE 3
SOIL ANALYTICAL RESULTS
BACON 3
SENW SEC 34-T5N-R65W
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.





SAMPLE ID
 SAMPLE DATE
 B: BENZENE IN MICROGRAMS PER LITER (µg/L)
 T: TOLUENE (µg/L)
 E: ETHYLBENZENE (µg/L)
 X: TOTAL XYLENES (µg/L)
 <: INDICATES RESULT IS LESS THAN THE
 LABORATORY REPORTING LIMIT
 NS: NOT SAMPLED

LEGEND

● SOIL BORING

IMAGE COURTESY OF ESRI

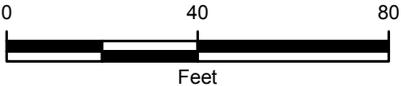


FIGURE 4
GROUNDWATER ANALYTICAL RESULTS
BACON 3
SENW SEC 34-T5N-R65W
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.



TABLES



**TABLE 1
SOIL BORING ANALYTICAL RESULTS**

**BACON 3 TANK BATTERY
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.**

Soil Sample	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)
SB01@4'	6/15/2016	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50	<100
SB02@3'	6/15/2016	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50	<100
SB03@3'	6/15/2016	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50	<100
SB04@3'	6/15/2016	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50	<100
SB05@3'	6/15/2016	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50	<100
SB06@3'	6/15/2016	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50	<100
SB07@2'	6/15/2016	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50	<100
COGCC Table 910-1 Standard		0.17	85	100	175	23	--	--	500

NOTES:

COGCC - Colorado Oil and Gas Conservation Commission

DRO - diesel range organics analyzed by EPA Method 8015

GRO - gasoline range organics analyzed by EPA Method 8260B

mg/kg - milligrams per kilogram

TPH - total petroleum hydrocarbons is the sum of GRO and DRO

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

-- - not applicable

Benzene, toluene, ethylbenzene, total xylenes, and naphthalene analyzed by EPA Method 8260B

TABLE 2
GROUNDWATER ANALYTICAL RESULTS

BACON 3 TANK BATTERY
WELD COUNTY, COLORADO
NOBLE ENERGY, INC.

Monitoring Well	Date	Depth to Water (feet btoc)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
SB01	7/1/2016	6.07	<1.00	<1.00	<1.00	<1.00
CDPHE WQCC Reg 41			5.0	560	700	1,400

NOTES:

btoc - below top of casing

µg/L - micrograms per liter

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

Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260C

CDPHE WQCC Reg 41 - Colorado Department of Public Health and Environment-Water Quality Control Commission
Regulation 41- The Basic Standards for Ground Water

ATTACHMENT 1
SOIL BORING/MONITORING WELL COMPLETION DIAGRAMS





Compliance • Engineering • Remediation
LT Environmental, Inc.
 4600 W. 60th Avenue
 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

PROJECT NAME: Bacon 3 Tank Battery
PROJECT NO: 008315065 **LOGGED BY:** Dan Hosler
BORING/WELL ID: SB01 **SAMPLE METHOD:** Continuous
COMPLETION DATE: 06/15/2016 **DRILL METHOD:** Direct Push
TD (ft bgs): 10' **DRILLED BY:** Site Services Drilling
DTW (ft bgs): 4.5' **DETECTOR:** UltraRAE 3000
SCREEN SLOT: 0.01" **FILTER PACK:** 10-20 silica sand
CASING LENGTH: 4' **ANNULUS SEAL:** Bentonite chips
SCREEN LENGTH: 5' **SURFACE SEAL:** None

HOLE DIAMETER: 2.25"
WELL DIAMETER: 1"
CASING TYPE: PVC
SCREEN TYPE: PVC

PID (ppm)	Staining	Moisture Content	Sample ID	Recovery (ft/ft)	Depth (ft)	USCS	USCS Graphic	Lithology Description	Well Construction
0.00		Dry			0	SC		SC: CLAYEY SAND - 0.0' - 4.5' - brown, fine grained, dry, no odor, no staining	
887.3	Wet		SB01 @4'		5	SW		SW: SAND - 4.5' - 7.0' - brown, fine to medium grained, wet, hydrocarbon staining and odor at 4.5' to 5.5' bgs	
40.60		Wet			5/5	SP		SP: SAND - 7.0' - 10.0' - brown, fine grained, wet, no odor, no staining	
9.70					10				



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LT Environmental, Inc.
 4600 W. 60th Avenue
 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

PROJECT NAME: Bacon 3 Tank Battery
PROJECT NO: 008315065 **LOGGED BY:** Dan Hosler
BORING/WELL ID: SB02 **SAMPLE METHOD:** Continuous
COMPLETION DATE: 06/15/2016 **DRILL METHOD:** Direct Push
TD (ft bgs): 10' **DRILLED BY:** Site Services Drilling
DTW (ft bgs): 4' **DETECTOR:** UltraRAE 3000
SCREEN SLOT: 0.01" **FILTER PACK:** 10-20 silica sand
CASING LENGTH: 4' **ANNULUS SEAL:** Bentonite chips
SCREEN LENGTH: 5' **SURFACE SEAL:** None

HOLE DIAMETER: 2.25"
WELL DIAMETER: 1"
CASING TYPE: PVC
SCREEN TYPE: PVC

PID (ppm)	Staining	Moisture Content	Sample ID	Recovery (ft/ft)	Depth (ft)	USCS	USCS Graphic	Lithology Description	Well Construction
		Dry			0	SC		SC: CLAYEY SAND - 0.0' - 4.0' - brown, fine grained, dry, no odor, no staining	
0.00		Wet	SB02 @3'	1/5	5	SW		SW: SAND - 4.0' - 7.0' - brown, fine to medium grained, wet, no odor, no staining	
0.00		Wet		5/5	10	SP		SP: SAND - 7.0' - 10.0' - brown, fine grained, wet, no odor, no staining	



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LT Environmental, Inc.
 4600 W. 60th Avenue
 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

HOLE DIAMETER: 2.25"
WELL DIAMETER: 1"
CASING TYPE: PVC
SCREEN TYPE: PVC

PROJECT NAME: Bacon 3 Tank Battery
PROJECT NO: 008315065 **LOGGED BY:** Dan Hosler
BORING/WELL ID: SB03 **SAMPLE METHOD:** Continuous
COMPLETION DATE: 06/15/2016 **DRILL METHOD:** Direct Push
TD (ft bgs): 10' **DRILLED BY:** Site Services Drilling
DTW (ft bgs): 4' **DETECTOR:** UltraRAE 3000
SCREEN SLOT: 0.01" **FILTER PACK:** 10-20 silica sand
CASING LENGTH: 5' **ANNULUS SEAL:** Bentonite chips
SCREEN LENGTH: 5' **SURFACE SEAL:** None

PID (ppm)	Staining	Moisture Content	Sample ID	Recovery (ft/ft)	Depth (ft)	USCS	USCS Graphic	Lithology Description	Well Construction
		Dry			0	SC		SC: CLAYEY SAND - 0.0' - 4.0' - brown, fine grained, dry, no odor, no staining	
0.00				5/5					
0.00	Wet		SB03 @3'			SW		SW: SAND - 4.0' - 7.0' - brown, fine to medium grained, wet, hydrocarbon stain and odor at 4' to 6' bgs	
233.0					5				
	Wet			5/5		SP		SP: SAND - 7.0' - 10.0' - brown, fine grained, wet, no odor, no staining	
1.10					10				



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 4600 W. 60th Avenue
 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

PROJECT NAME: Bacon 3 Tank Battery
PROJECT NO: 008315065 **LOGGED BY:** Dan Hosler
BORING/WELL ID: SB04 **SAMPLE METHOD:** Continuous
COMPLETION DATE: 06/15/2016 **DRILL METHOD:** Direct Push
TD (ft bgs): 10' **DRILLED BY:** Site Services Drilling
DTW (ft bgs): 4' **DETECTOR:** UltraRAE 3000
SCREEN SLOT: 0.01" **FILTER PACK:** 10-20 silica sand
CASING LENGTH: 4' **ANNULUS SEAL:** Bentonite chips
SCREEN LENGTH: 5' **SURFACE SEAL:** None

HOLE DIAMETER: 2.25"
WELL DIAMETER: 1"
CASING TYPE: PVC
SCREEN TYPE: PVC

PID (ppm)	Staining	Moisture Content	Sample ID	Recovery (ft/ft)	Depth (ft)	USCS	USCS Graphic	Lithology Description	Well Construction
0.00		Dry			0			SC: SAND- 0.0' - 3.0'- fine grained, clayey, brown, dry, no odor, no staining	
0.00		Wet	SB04 @3'	1/5	3			SW: SAND- 3.0' - 10.0'- brown, fine to medium grained, moist, wet at 4' bgs, hydrocarbon stain and odor at 5'-5.5' bgs	
80.7	Red				5				
0.00				5/5	10				



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LT Environmental, Inc.
 4600 W. 60th Avenue
 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

HOLE DIAMETER: 2.25"
WELL DIAMETER: 1"
CASING TYPE: PVC
SCREEN TYPE: PVC

PROJECT NAME: Bacon 3 Tank Battery
PROJECT NO: 008315065 **LOGGED BY:** Dan Hosler
BORING/WELL ID: SB05 **SAMPLE METHOD:** Continuous
COMPLETION DATE: 06/15/2016 **DRILL METHOD:** Direct Push
TD (ft bgs): 10' **DRILLED BY:** Site Services Drilling
DTW (ft bgs): 4' **DETECTOR:** UltraRAE 3000
SCREEN SLOT: 0.01" **FILTER PACK:** 10-20 silica sand
CASING LENGTH: 5' **ANNULUS SEAL:** Bentonite chips
SCREEN LENGTH: 5' **SURFACE SEAL:** None

PID (ppm)	Staining	Moisture Content	Sample ID	Recovery (ft/ft)	Depth (ft)	USCS	USCS Graphic	Lithology Description	Well Construction
0.00		Dry			0	SC		SC: CLAYEY SAND - 0.0' - 4.0' - brown, fine grained, dry, no odor, slight hydrocarbon staining at 3' to 4' bgs	
0.00		Wet	SB05 @3'	5/5	0.00	SW		SW: SAND - 4.0' - 7.0' - brown, fine to medium grained, wet, hydrocarbon staining and odor at 4' to 6' bgs	
249.9		Wet		5/5	249.9	SP		SP: SAND - 7.0' - 10.0' - brown, fine grained, wet, no odor, no staining	
0.00					10				



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LT Environmental, Inc.
 4600 W. 60th Avenue
 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

HOLE DIAMETER: 2.25"
WELL DIAMETER: 1"
CASING TYPE: PVC
SCREEN TYPE: PVC

PROJECT NAME: Bacon 3 Tank Battery
PROJECT NO: 008315065 **LOGGED BY:** Dan Hosler
BORING/WELL ID: SB06 **SAMPLE METHOD:** Continuous
COMPLETION DATE: 06/15/2016 **DRILL METHOD:** Direct Push
TD (ft bgs): 10' **DRILLED BY:** Site Services Drilling
DTW (ft bgs): 4' **DETECTOR:** UltraRAE 3000
SCREEN SLOT: 0.01" **FILTER PACK:** 10-20 silica sand
CASING LENGTH: 4' **ANNULUS SEAL:** Bentonite chips
SCREEN LENGTH: 5' **SURFACE SEAL:** None

PID (ppm)	Staining	Moisture Content	Sample ID	Recovery (ft/ft)	Depth (ft)	USCS	USCS Graphic	Lithology Description	Well Construction
0.00		Dry		5/5	0	SC		SC: CLAYEY SAND - 0.0' - 4.0' - brown, fine grained, dry, no odor, no staining	
0.00		Wet	SB06 @3'		5	SW		SW: SAND - 4.0' - 8.0' - brown, fine to medium grained, wet, no odor, no staining	
0.00		Wet		5/5	10	SP		SP: SAND - 8.0' - 10.0' - brown, fine grained, wet, no odor, no staining	



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LT Environmental, Inc.
 4600 W. 60th Avenue
 Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

PROJECT NAME: Bacon 3 Tank Battery
PROJECT NO: 008315065 **LOGGED BY:** Dan Hosler
BORING/WELL ID: SB07 **SAMPLE METHOD:** Continuous
COMPLETION DATE: 06/15/2016 **DRILL METHOD:** Direct Push
TD (ft bgs): 10' **DRILLED BY:** Site Services Drilling
DTW (ft bgs): 3' **DETECTOR:** UltraRAE 3000
SCREEN SLOT: 0.01" **FILTER PACK:** 10-20 silica sand
CASING LENGTH: 4' **ANNULUS SEAL:** Bentonite chips
SCREEN LENGTH: 5' **SURFACE SEAL:** None

HOLE DIAMETER: 2.25"
WELL DIAMETER: 1"
CASING TYPE: PVC
SCREEN TYPE: PVC

PID (ppm)	Staining	Moisture Content	Sample ID	Recovery (ft/ft)	Depth (ft)	USCS	USCS Graphic	Lithology Description	Well Construction
		Dry			0	SC		SC: CLAYEY SAND - 0.0' - 3.0' - brown, fine grained, dry, no odor, no staining	
		Wet	SB07 @2'		0.00	SW		SW: SAND - 3.0' - 10.0' - brown, fine to medium grained, wet, no odor, slight hydrocarbon staining at 5' to 6' bgs	
					0.00				
					0.00				
					0.00				
					10				

ATTACHMENT 2
LABORATORY ANALYTICAL REPORTS



Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

June 21, 2016

Chris Roy
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003
RE: NEP - Bacon 3

Enclosed are the results of analyses for samples received by Summit Scientific on 06/15/16 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury
President



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

Project: NEP - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB01@4'	1606165-01	Soil	06/15/16 12:00	06/15/16 16:00
SB02@3'	1606165-02	Soil	06/15/16 12:30	06/15/16 16:00
SB03@3'	1606165-03	Soil	06/15/16 13:00	06/15/16 16:00
SB04@3'	1606165-04	Soil	06/15/16 13:30	06/15/16 16:00
SB05@3'	1606165-05	Soil	06/15/16 14:00	06/15/16 16:00
SB06@3'	1606165-06	Soil	06/15/16 14:30	06/15/16 16:00
SB07@2'	1606165-07	Soil	06/15/16 15:00	06/15/16 16:00

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

Summit Scientific

1606165

S₂

741 Corporate Circle, Suite J • Golden, Colorado 80401
303-277-9310 • 303-374-5933

Client: LTE Project Manager: Chris Roy Page 1 of 1
Address: _____ E-Mail: croyle@ltenv.com
City/State/Zip: _____
Phone: 303-433-9788 Fax: _____ Project Name: 008315065 g
Sampler Name: D/Baler Project Number: Bacon 3

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions
					HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air-Canister #	Other (Specify)	RTK	CAO DRO	Depth	
1	SB0104'	6/15/16	1200	1						X			X	X	X	
2	SB0203'		1230	1												
3	SB0303'		1300	1												
4	SB0403'		1330	1												
5	SB0503'		1400	1												
6	SB0603'		1430	1												
7	SB0702'		1500	1												
8																
9																
10																
Relinquished by: <u>[Signature]</u>		Date/Time: <u>6/15/16 1600</u>	Received by: <u>[Signature]</u>		Date/Time: <u>6/15/16 1600</u>	Turn Around Time (Check)			Notes:							
						Same Day <input type="checkbox"/>			72 hours <input type="checkbox"/>			on ice				
						24 hours <input type="checkbox"/>			Standard <input checked="" type="checkbox"/>							
						48 hours <input type="checkbox"/>										
Relinquished by: <u>[Signature]</u>		Date/Time: <u>6/15/16 1730</u>	Received by: <u>[Signature]</u>		Date/Time: <u>6/15/16 17:30</u>	Sample Integrity:			Temperature Upon Receipt: <u>28.5C</u>							
						Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No										

www.s2scientific.com

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

Sample Receipt Checklist

S2 Work Order: 1606165
Client: LTE Client Project ID: Bacon 3
Shipped Via: p/u (UPS, FedEx, Hand Delivered, Pick-up, etc.) Airbill #: _____
Matrix (check all that apply): Air Soil/Solid Water Other: _____ (Describe)

Cooler ID					
Temp (°C)	<u>28.5</u>				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C ⁽¹⁾ ?				
NOTE: If samples are delivered the same day of sampling, this requirement is waived provided that there is evidence that cooling has begun.			✓	
Were all samples received intact ⁽¹⁾ ?	✓			
Was adequate sample volume provided ⁽¹⁾ ?	✓			
If custody seals are present, are they intact ⁽¹⁾ ?			✓	
Are short holding time analytes or samples with HT's due within 48 hours present?			✓	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	✓			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	✓			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	✓			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			✓	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?			✓	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			✓	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?			✓	
Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

Nakita
Custodian Printed Name

MA
Signature or Initials of Custodian

6/15/16 17:30
Date/Time



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

Project: NEP - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

SB01@4'
1606165-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/15/16 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1606171	06/16/16	06/16/16	8015M	

Date Sampled: **06/15/16 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		113 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/15/16 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	1606170	06/16/16	06/17/16	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **06/15/16 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		94.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

SB02@3'
1606165-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/15/16 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1606171	06/16/16	06/16/16	8015M	

Date Sampled: **06/15/16 12:30**

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: **06/15/16 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	1606170	06/16/16	06/17/16	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **06/15/16 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

Summit Scientific

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

Project: NEP - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

SB03@3'
1606165-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/15/16 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1606171	06/16/16	06/16/16	8015M	

Date Sampled: **06/15/16 13:00**

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

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/15/16 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	1606170	06/16/16	06/17/16	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **06/15/16 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		114 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	21-167		"	"	"	"	

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

SB04@3'
1606165-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/15/16 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1606171	06/16/16	06/16/16	8015M	

Date Sampled: **06/15/16 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		105 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/15/16 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	1606170	06/16/16	06/17/16	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **06/15/16 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

SB05@3'
1606165-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/15/16 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1606171	06/16/16	06/16/16	8015M	

Date Sampled: **06/15/16 14:00**

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

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/15/16 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	1606170	06/16/16	06/17/16	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **06/15/16 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		116 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

SB06@3'
1606165-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/15/16 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1606171	06/16/16	06/16/16	8015M	

Date Sampled: **06/15/16 14:30**

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

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/15/16 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	1606170	06/16/16	06/17/16	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **06/15/16 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	21-167		"	"	"	"	

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

SB07@2'
1606165-07 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/15/16 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1606171	06/16/16	06/17/16	8015M	

Date Sampled: **06/15/16 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		105 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/15/16 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Naphthalene	ND	0.010	mg/kg	1	1606170	06/16/16	06/17/16	EPA 8260B	
Benzene	ND	0.0020	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **06/15/16 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		114 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1606171 - EPA 3550A

Blank (1606171-BLK1)

Prepared & Analyzed: 06/16/16

C10-C28 (DRO)	ND	50	mg/kg								
<i>Surrogate: o-Terphenyl</i>	14.0		"	12.5		112	30-150				

LCS (1606171-BS1)

Prepared & Analyzed: 06/16/16

C10-C28 (DRO)	570	50	mg/kg	499		114	73-134				
<i>Surrogate: o-Terphenyl</i>	14.6		"	12.5		117	30-150				

Matrix Spike (1606171-MS1)

Source: 1606165-01

Prepared & Analyzed: 06/16/16

C10-C28 (DRO)	565	50	mg/kg	491	25.2	110	50-148				
<i>Surrogate: o-Terphenyl</i>	14.2		"	12.3		115	30-150				

Matrix Spike Dup (1606171-MSD1)

Source: 1606165-01

Prepared & Analyzed: 06/16/16

C10-C28 (DRO)	551	50	mg/kg	492	25.2	107	50-148	2.53	13		
<i>Surrogate: o-Terphenyl</i>	15.1		"	12.3		123	30-150				

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

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

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

Batch 1606170 - EPA 5030 Soil MS

Blank (1606170-BLK1)

Prepared: 06/16/16 Analyzed: 06/17/16

Naphthalene	ND	0.010	mg/kg							
Benzene	ND	0.0020	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0404</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0388</i>		<i>"</i>	<i>0.0400</i>		<i>96.9</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0408</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>21-167</i>			

LCS (1606170-BS1)

Prepared: 06/16/16 Analyzed: 06/17/16

Naphthalene	ND	0.010	mg/kg				66-138			
Benzene	0.110	0.0020	"	0.100		110	58-130			
Toluene	0.121	0.0050	"	0.100		121	61-134			
Ethylbenzene	0.129	0.0050	"	0.0992		130	74-139			
m,p-Xylene	0.250	0.010	"	0.200		125	73-137			
o-Xylene	0.117	0.0050	"	0.0980		119	73-141			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0403</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0424</i>		<i>"</i>	<i>0.0400</i>		<i>106</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0398</i>		<i>"</i>	<i>0.0400</i>		<i>99.4</i>	<i>21-167</i>			

Matrix Spike (1606170-MS1)

Source: 1606165-01

Prepared: 06/16/16 Analyzed: 06/17/16

Naphthalene	ND	0.010	mg/kg		ND		10-158			
Benzene	0.113	0.0020	"	0.0978	ND	115	30-131			
Toluene	0.125	0.0050	"	0.0978	ND	128	30-134			
Ethylbenzene	0.141	0.0050	"	0.0971	ND	145	22-153			
m,p-Xylene	0.271	0.010	"	0.195	ND	139	10-159			
o-Xylene	0.129	0.0050	"	0.0959	ND	135	31-151			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0435</i>		<i>"</i>	<i>0.0391</i>		<i>111</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0404</i>		<i>"</i>	<i>0.0391</i>		<i>103</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0391</i>		<i>"</i>	<i>0.0391</i>		<i>99.9</i>	<i>21-167</i>			

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

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

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

Batch 1606170 - EPA 5030 Soil MS

Matrix Spike Dup (1606170-MSD1)	Source: 1606165-01			Prepared: 06/16/16		Analyzed: 06/17/16				
Naphthalene	ND	0.010	mg/kg	ND	ND	10-158				42
Benzene	0.115	0.0020	"	0.0978	ND	118	30-131	1.93		34
Toluene	0.127	0.0050	"	0.0978	ND	130	30-134	1.63		30
Ethylbenzene	0.146	0.0050	"	0.0971	ND	151	22-153	3.60		24
m,p-Xylene	0.280	0.010	"	0.195	ND	144	10-159	3.54		68
o-Xylene	0.133	0.0050	"	0.0959	ND	139	31-151	3.24		38
Surrogate: 1,2-Dichloroethane-d4	0.0445		"	0.0391		114	23-173			
Surrogate: Toluene-d8	0.0389		"	0.0391		99.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0384		"	0.0391		98.1	21-167			

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 - Bacon 3

Project Number: 008315065
Project Manager: Chris Roy

Reported:
06/21/16 16:20

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

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.

July 08, 2016

LT Environmental, Inc.

Charles Greeson

4600 West 60th Avenue

Arvada CO 80003

Project Name - Noble - Bacon #3

Project Number - 008315065

Attached are your analytical results for Noble - Bacon #3 received by Origins Laboratory, Inc. July 01, 2016. This project is associated with Origins project number X607038-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



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

Charles Greeson
Project Number: 008315065
Project: Noble - Bacon #3

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB01	X607038-01	Water	July 1, 2016 10:00	07/01/2016 13:20

Origins Laboratory, Inc.



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

Charles Greeson
 Project Number: 008315065
 Project: Noble - Bacon #3

Origins Laboratory

F-012207-01-R1
 Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X667035 Client: LTE
 Client Project ID: Bacon 3
 Checklist Completed by: Jeff Smith Shipped Via: HD
 Date/time completed: 7/5/12 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
 Airbill #: NA
 Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: _____
 Cooler Number/Temperature: 1 / 13.3 °C 1 °C 1 °C (Describe) 1 °C
 Thermometer ID: TD03

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?		X		Sampled Same Day
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		X		
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)		X		
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) [Signature] Date/Time Reviewed 7/6/12

Origins Laboratory, Inc.

Jefe Pellegrini

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

Charles Greeson
 Project Number: 008315065
 Project: Noble - Bacon #3

SB01

7/1/2016 10:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X607038-01 (Water)

BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B6G0701	07/07/2016	07/07/2016	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	96.1 %	84-121			"	"	"	
Surrogate: Toluene-d8	95.9 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	100 %	84-114			"	"	"	

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 Arvada CO 80003

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 Project Number: 008315065
 Project: Noble - Bacon #3

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6G0701 - EPA 5030B (Water)

Blank (B6G0701-BLK1)

Prepared: 07/07/2016 Analyzed: 07/07/2016

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5	98.8		84-121			
Surrogate: Toluene-d8	64		"	62.5	103		85-115			
Surrogate: 4-Bromofluorobenzene	55		"	62.5	87.9		84-114			

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Charles Greeson
 Project Number: 008315065
 Project: Noble - Bacon #3

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6G0701 - EPA 5030B (Water)

LCS (B6G0701-BS1)

Prepared: 07/07/2016 Analyzed: 07/07/2016

Benzene	49.6	1.00	ug/L	50.0		99.3	73.3-129			
Toluene	52.1	1.00	"	50.0		104	76.2-123			
Ethylbenzene	43.0	1.00	"	50.0		86.0	73.6-130			
m,p-Xylene	87.6	2.00	"	100		87.6	76.1-126			
o-Xylene	43.4	1.00	"	50.0		86.8	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.3	84-121			
Surrogate: Toluene-d8	65		"	62.5		103	85-115			
Surrogate: 4-Bromofluorobenzene	56		"	62.5		90.3	84-114			

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Charles Greeson
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 Project: Noble - Bacon #3

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6G0701 - EPA 5030B (Water)

Matrix Spike (B6G0701-MS1)	Source: X607036-07			Prepared: 07/07/2016 Analyzed: 07/07/2016						
Benzene	53.1	1.00	ug/L	50.0	ND	106	74-130			
Toluene	57.5	1.00	"	50.0	0.110	115	73-131			
Ethylbenzene	49.1	1.00	"	50.0	ND	98.2	76-132			
m,p-Xylene	99.7	2.00	"	100	ND	99.7	69-139			
o-Xylene	49.2	1.00	"	50.0	ND	98.3	74-131			
Surrogate: 1,2-Dichloroethane-d4	55		"	62.5		87.5	84-121			
Surrogate: Toluene-d8	65		"	62.5		104	85-115			
Surrogate: 4-Bromofluorobenzene	57		"	62.5		90.5	84-114			

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Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6G0701 - EPA 5030B (Water)

Matrix Spike Dup (B6G0701-MSD1)	Source: X607036-07			Prepared: 07/07/2016 Analyzed: 07/07/2016						
Benzene	48.8	1.00	ug/L	50.0	ND	97.7	74-130	8.36	20	
Toluene	51.6	1.00	"	50.0	0.110	103	73-131	10.9	20	
Ethylbenzene	43.7	1.00	"	50.0	ND	87.4	76-132	11.6	20	
m,p-Xylene	89.4	2.00	"	100	ND	89.4	69-139	10.9	20	
o-Xylene	44.5	1.00	"	50.0	ND	89.0	74-131	9.89	20	
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		92.3	84-121			
Surrogate: Toluene-d8	64		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	56		"	62.5		90.0	84-114			

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Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

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