



August 30, 2016

Mr. Jacob Evans  
Senior Environmental Specialist  
Noble Energy, Inc.  
2115 117<sup>th</sup> 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, 6<sup>th</sup> 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.

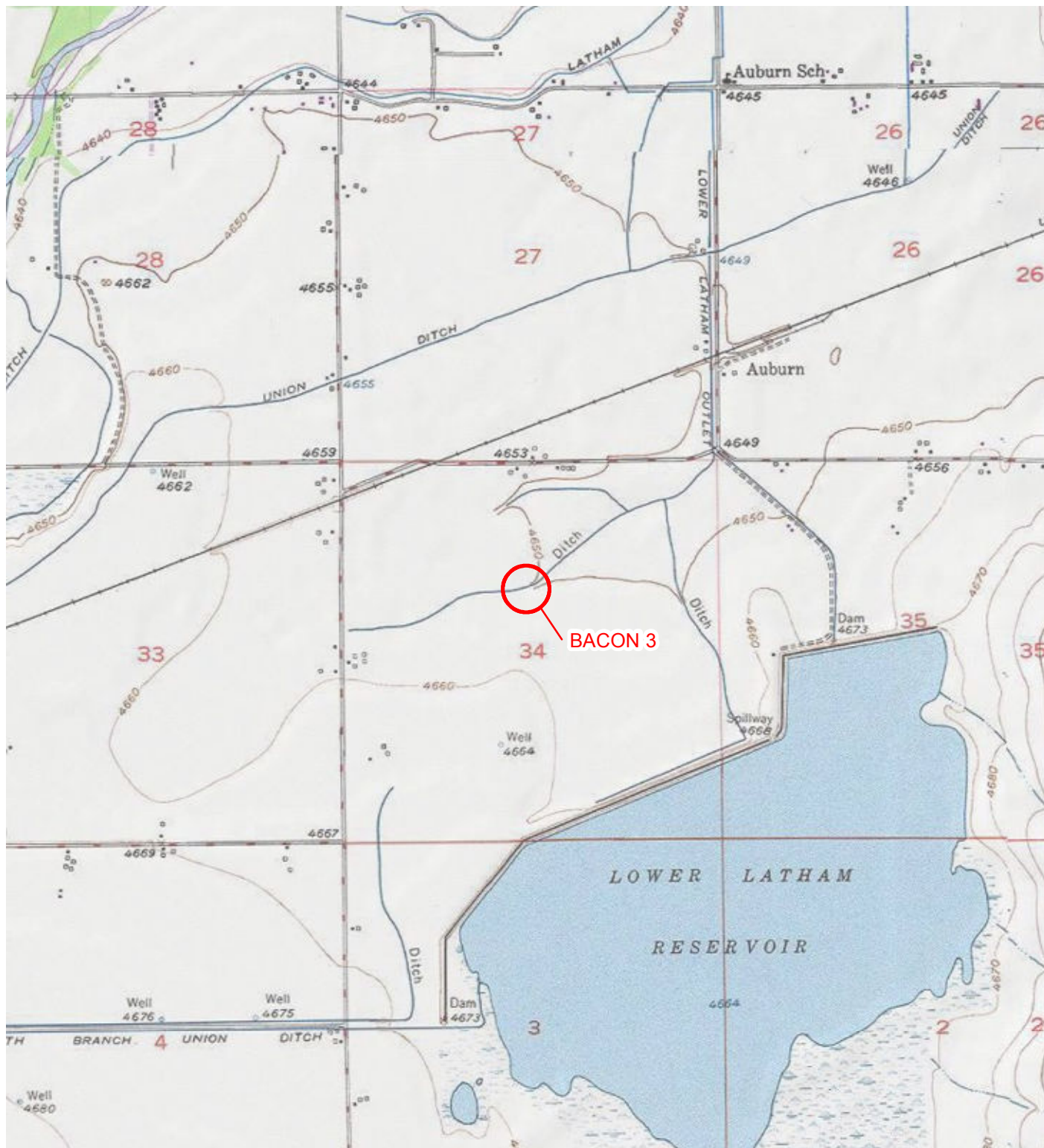
A handwritten signature in black ink, appearing to read 'Chris Roy', written in a cursive style.

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



# LEGEND

IMAGE COURTESY OF ESRI/USGS

○ SITE LOCATION

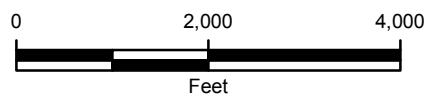


FIGURE 1  
SITE LOCATION MAP  
BACON 3  
SENW SEC 34-T5N-R65W  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.







# LEGEND

- SOIL BORING

IMAGE COURTESY OF ESRI

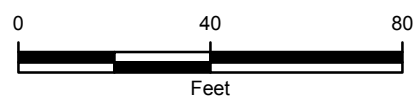
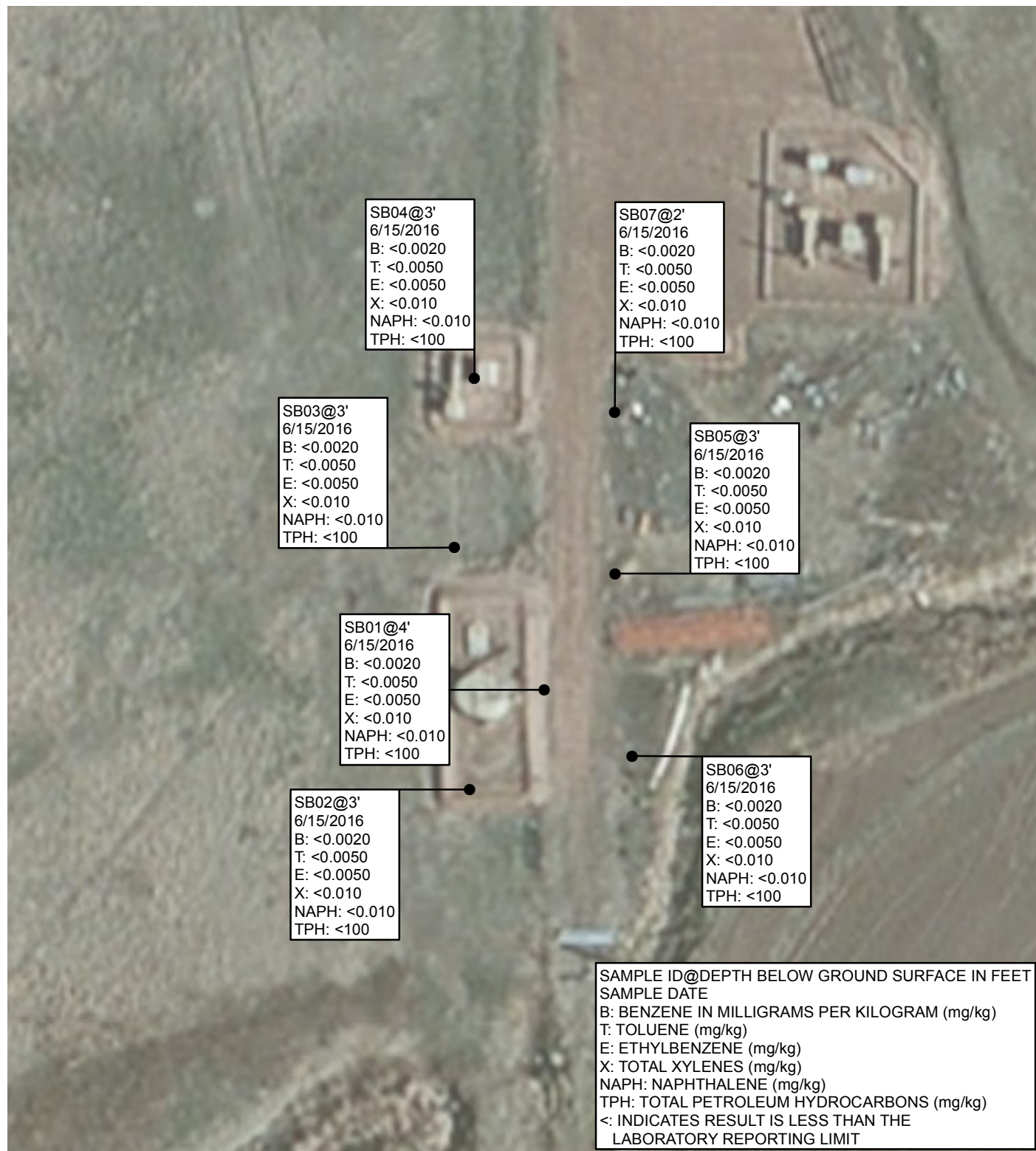


FIGURE 2  
SITE MAP  
BACON 3  
SENW SEC 34-T5N-R65W  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.

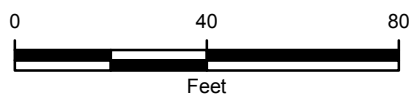




# LEGEND

● SOIL BORING

IMAGE COURTESY OF ESRI



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





# LEGEND

● SOIL BORING

IMAGE COURTESY OF ESRI

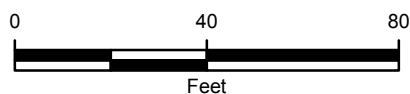


FIGURE 4  
 GROUNDWATER ANALYTICAL RESULTS  
 BACON 3  
 SENW SEC 34-T5N-R65W  
 WELD COUNTY, COLORADO  
 NOBLE ENERGY, INC.





## TABLES

**TABLE 1**  
**SOIL BORING ANALYTICAL RESULTS**

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

| Soil Sample                       | Date      | Benzene<br>(mg/kg) | Toluene<br>(mg/kg) | Ethylbenzene<br>(mg/kg) | Total Xylenes<br>(mg/kg) | Naphthalene<br>(mg/kg) | GRO<br>(mg/kg) | DRO<br>(mg/kg) | TPH<br>(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           |
| <b>COGCC Table 910-1 Standard</b> |           | <b>0.17</b>        | <b>85</b>          | <b>100</b>              | <b>175</b>               | <b>23</b>              | <b>--</b>      | <b>--</b>      | <b>500</b>     |

**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.**

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

**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

**HOLE DIAMETER:** 2.25"

**WELL DIAMETER:** 1"

**CASING TYPE:** PVC

**SCREEN TYPE:** PVC

**PROJECT NAME:** Bacon 3 Tank Battery

**PROJECT NO:** 008315065

**BORING/WELL ID:** SB01

**COMPLETION DATE:** 06/15/2016

**TD (ft bgs):** 10'

**DTW (ft bgs):** 4.5'

**SCREEN SLOT:** 0.01"

**CASING LENGTH:** 4'

**SCREEN LENGTH:** 5'

**LOGGED BY:** Dan Hosler

**SAMPLE METHOD:** Continuous

**DRILL METHOD:** Direct Push

**DRILLED BY:** Site Services Drilling

**DETECTOR:** UltraRAE 3000

**FILTER PACK:** 10-20 silica sand

**ANNULUS SEAL:** Bentonite chips

**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' - 4.5' - 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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### 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:** 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

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



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**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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### 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:** 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

| PID<br>(ppm) | Staining | Moisture<br>Content | Sample ID   | Recovery<br>(ft/ft) | Depth<br>(ft) | USCS | USCS<br>Graphic | Lithology Description                                                                                                  | Well<br>Construction |
|--------------|----------|---------------------|-------------|---------------------|---------------|------|-----------------|------------------------------------------------------------------------------------------------------------------------|----------------------|
| 0.00         |          | Dry                 |             |                     | 0             |      |                 | SC: SAND- 0.0' - 3.0'- fine grained, clayey, brown, dry, no odor, no staining                                          |                      |
| 0.00         |          |                     |             | 1/5                 |               |      |                 |                                                                                                                        |                      |
| 0.00         |          | Wet                 | SB04<br>@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         |          |                     |             |                     | 5             |      |                 |                                                                                                                        |                      |
| 0.00         |          |                     |             | 5/5                 |               |      |                 |                                                                                                                        |                      |
|              |          |                     |             |                     | 10            |      |                 |                                                                                                                        |                      |





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**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

**BORING/WELL ID:** SB05

**COMPLETION DATE:** 06/15/2016

**TD (ft bgs):** 10'

**DTW (ft bgs):** 4'

**SCREEN SLOT:** 0.01"

**CASING LENGTH:** 5'

**SCREEN LENGTH:** 5'

**LOGGED BY:** Dan Hosler

**SAMPLE METHOD:** Continuous

**DRILL METHOD:** Direct Push

**DRILLED BY:** Site Services Drilling

**DETECTOR:** UltraRAE 3000

**FILTER PACK:** 10-20 silica sand

**ANNULUS SEAL:** Bentonite chips

**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              | 5          | SP   |              | SP: SAND - 7.0' - 10.0' - brown, fine grained, wet, no odor, no staining                                       |                   |
| 0.00      |          |                  |           |                  | 10         |      |              |                                                                                                                |                   |



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### 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              | SB06 @3'  | 5/5              | 0          | SC   |              | SC: CLAYEY SAND - 0.0' - 4.0' - brown, fine grained, dry, no odor, no staining    |                   |
| 0.00      |          | Wet              |           |                  |            | SW   |              | SW: SAND - 4.0' - 8.0' - brown, fine to medium grained, wet, no odor, no staining |                   |
| 0.00      |          | Wet              |           | 5/5              |            | SP   |              | SP: SAND - 8.0' - 10.0' - brown, fine grained, wet, no odor, no staining          |                   |
|           |          |                  |           |                  | 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:** 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

| 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                                     |                   |
| 0.00      |          |                  | SB07 @2'  |                  |            |      |              |                                                                                                                    |                   |
|           |          | Wet              |           |                  |            | 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      |          |                  |           |                  |            |      |              |                                                                                                                    |                   |
|           |          |                  |           |                  | 5          |      |              |                                                                                                                    |                   |
| 0.00      |          |                  |           |                  |            |      |              |                                                                                                                    |                   |
|           |          |                  |           |                  |            |      |              |                                                                                                                    |                   |
| 0.00      |          |                  |           |                  |            |      |              |                                                                                                                    |                   |
|           |          |                  |           |                  |            |      |              |                                                                                                                    |                   |
| 0.00      |          |                  |           |                  |            |      |              |                                                                                                                    |                   |
|           |          |                  |           |                  | 10         |      |              |                                                                                                                    |                   |

**ATTACHMENT 2**  
**LABORATORY ANALYTICAL REPORTS**





# Summit Scientific

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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,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

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

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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

Summit Scientific  
S<sub>2</sub>

1606165

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/E/L Project Number: Bacon 3

| ID                                  | Sample Description   | Date Sampled                   | Time Sampled                    | # of containers | Preservative                   |                                                                                |      |                 | Matrix      |        |                | Analysis Requested |     |         |       | Special Instructions |
|-------------------------------------|----------------------|--------------------------------|---------------------------------|-----------------|--------------------------------|--------------------------------------------------------------------------------|------|-----------------|-------------|--------|----------------|--------------------|-----|---------|-------|----------------------|
|                                     |                      |                                |                                 |                 | HCl                            | HNO <sub>3</sub>                                                               | None | Other (Specify) | Groundwater | Soil   | Air-Canister # | Other (Specify)    | RTK | CAD DRO | Depth |                      |
| 1                                   | S <sub>B</sub> 0104' | 6/15/16                        | 1200                            | 1               |                                |                                                                                |      |                 |             | X      |                |                    | X   | X       |       |                      |
| 2                                   | S <sub>B</sub> 0203' |                                | 1230                            | 1               |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| 3                                   | S <sub>B</sub> 0303' |                                | 1300                            | 1               |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| 4                                   | S <sub>B</sub> 0403' |                                | 1330                            | 1               |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| 5                                   | S <sub>B</sub> 0503' |                                | 1400                            | 1               |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| 6                                   | S <sub>B</sub> 0603' |                                | 1430                            | 1               |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| 7                                   | S <sub>B</sub> 0702' |                                | 1500                            | 1               |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| 8                                   |                      |                                |                                 |                 |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| 9                                   |                      |                                |                                 |                 |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| 10                                  |                      |                                |                                 |                 |                                |                                                                                |      |                 |             |        |                |                    |     |         |       |                      |
| Relinquished by: <u>[Signature]</u> |                      | Date/Time: <u>6/15/16 1400</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"/>            |      |                 |             |        |                |                    |     |         |       |                      |
|                                     |                      |                                |                                 |                 |                                | 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 1730</u> | Sample Integrity:                                                              |      |                 |             |        |                |                    |     |         |       |                      |
|                                     |                      |                                |                                 |                 |                                | Temperature Upon Receipt: <u>28.5°C</u>                                        |      |                 |             |        |                |                    |     |         |       |                      |
|                                     |                      |                                |                                 |                 |                                | Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    |      |                 |             |        |                |                    |     |         |       |                      |

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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

### 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 <sup>(1)</sup> ?                                                    |                                     |    | <input checked="" type="checkbox"/> |                   |
| 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 <sup>(1)</sup> ?                                                                                           | <input checked="" type="checkbox"/> |    |                                     |                   |
| Was adequate sample volume provided <sup>(1)</sup> ?                                                                                        | <input checked="" type="checkbox"/> |    |                                     |                   |
| If custody seals are present, are they intact <sup>(1)</sup> ?                                                                              |                                     |    | <input checked="" type="checkbox"/> |                   |
| Are short holding time analytes or samples with HTs due within 48 hours present?                                                            |                                     |    | <input checked="" type="checkbox"/> |                   |
| Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?                                                         | <input checked="" type="checkbox"/> |    |                                     |                   |
| Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?                                                     | <input checked="" type="checkbox"/> |    |                                     |                   |
| Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?                                                                       | <input checked="" type="checkbox"/> |    |                                     |                   |
| Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?                                                   | <input checked="" type="checkbox"/> |    |                                     |                   |
| For volatiles in water – is there headspace present? If yes, contact client and note in narrative.                                          |                                     |    | <input checked="" type="checkbox"/> |                   |
| Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ?                                                        |                                     |    | <input checked="" type="checkbox"/> |                   |
| 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 <sup>(1)</sup> ?                                                                    |                                     |    | <input checked="" type="checkbox"/> |                   |
| Record the pH in Comments.                                                                                                                  |                                     |    |                                     |                   |
| If dissolved metals are requested, were samples field filtered?                                                                             |                                     |    | <input checked="" type="checkbox"/> |                   |
| Additional Comments (if any):                                                                                                               |                                     |    |                                     |                   |

<sup>(1)</sup> 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 1730  
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: o-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 |          | "     | "        | "        | "      |       |

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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

**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: o-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 |          | "     | "        | "        | "      |       |

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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: o-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 |          | "     | "        | "        | "      |       |

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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: o-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 |          | "     | "        | "        | "      |       |

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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

**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: o-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 |          | "     | "        | "        | "      |       |

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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

**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: o-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: o-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 | Reporting |       |       | Spike | Source |      | %REC   |     | RPD   |       |
|---------|-----------|-------|-------|-------|--------|------|--------|-----|-------|-------|
|         | Result    | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

**Batch 1606171 - EPA 3550A**

**Blank (1606171-BLK1)**

Prepared & Analyzed: 06/16/16

|                        |      |    |       |      |  |     |        |  |  |  |
|------------------------|------|----|-------|------|--|-----|--------|--|--|--|
| C10-C28 (DRO)          | ND   | 50 | mg/kg |      |  |     |        |  |  |  |
| Surrogate: o-Terphenyl | 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 |  |  |  |
| Surrogate: o-Terphenyl | 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 |  |  |  |
| Surrogate: o-Terphenyl | 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 |  |
| Surrogate: o-Terphenyl | 15.1 |    | "     | 12.3 |      | 123 | 30-150 |      |    |  |

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

**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 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     | "     |        |  |      |        |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0404 |        | "     | 0.0400 |  | 101  | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0388 |        | "     | 0.0400 |  | 96.9 | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0408 |        | "     | 0.0400 |  | 102  | 21-167 |  |  |  |

**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 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0403 |        | "     | 0.0400 |  | 101  | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0424 |        | "     | 0.0400 |  | 106  | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0398 |        | "     | 0.0400 |  | 99.4 | 21-167 |  |  |  |

**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 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0435 |        | "     | 0.0391 |    | 111  | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0404 |        | "     | 0.0391 |    | 103  | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0391 |        | "     | 0.0391 |    | 99.9 | 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

**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 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                 |      | 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.*

A handwritten signature in black ink, appearing to be 'MSM'.



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



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

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

www.originslaboratory.com

page 1 of 1

X607038

**ORIGINS**  
LABORATORY, INC

Client: LT Environmental, Inc.  
Address: 4600 West 60th Ave, Arvada, CO  
Telephone Number: 303-433-9788  
Email Address: Noble Remediation Team

Project Manager: Charles Greeson  
Project Name: Bacon 3  
Project Number: 008315065  
Samples Collected By: GR

Invoice: Jacob Evans

| Sample ID Description | Date Sampled | Time Sampled | # of Containers | Preservative |     |                  |       | Matrix      |      |                         | Analysis | Sample Instructions |
|-----------------------|--------------|--------------|-----------------|--------------|-----|------------------|-------|-------------|------|-------------------------|----------|---------------------|
|                       |              |              |                 | Unpreserved  | HCl | HNO <sub>3</sub> | Other | Groundwater | Soil | Air Summa<br>Canister # |          |                     |
| 5801                  | 7/1/16       | 10:00        | 3               | X            |     |                  |       | X           |      |                         | BTEX     | 1                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 2                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 3                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 4                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 5                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 6                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 7                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 8                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 9                   |
|                       |              |              |                 |              |     |                  |       |             |      |                         |          | 10                  |

| Relinquished By: | Date:  | Time: | Received By: | Date:  | Time: | Turnaround Time:                                                                                                                                                            |
|------------------|--------|-------|--------------|--------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  | 7/1/16 | 1320  |              | 7/1/16 | 1320  | Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/> |
| Relinquished By: | Date:  | Time: | Received By: | Date:  | Time: |                                                                                                                                                                             |

Date Results Needed

13-3

Origins Laboratory, Inc.

*Jefe Pellegrini*

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: X667038

Client: LTE

Client Project ID: Bacon 3

Checklist Completed by: Jeff Smith

Shipped Via: H/D  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 7/5/12

Airbill #: NA

Matrix(s) Received: (Check all that apply): Soil/Solid X Water Other:

Cooler Number/Temperature: 1 13.3 °C 1 °C 1 °C 1 °C (Describe)

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 <sup>(1)</sup> ?                                                                                                                                                                                                                                                                                                                           |          | <u>X</u> |     | <u>Sampled Same Day</u> |
| Is there ice present (document if blue ice is used)                                                                                                                                                                                                                                                                                                                                                             | <u>X</u> |          |     |                         |
| Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)                                                                                                                                                                                                                                                                                               |          | <u>X</u> |     |                         |
| Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)                                                                                                                                                                                                                                                                                |          | <u>X</u> |     |                         |
| Were all samples received intact <sup>(1)</sup> ?                                                                                                                                                                                                                                                                                                                                                               | <u>X</u> |          |     |                         |
| Was adequate sample volume provided <sup>(1)</sup> ?                                                                                                                                                                                                                                                                                                                                                            | <u>X</u> |          |     |                         |
| Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?                                                                                                                                                                                                                                                                                                                |          | <u>X</u> |     |                         |
| Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?                                                                                                                                                                                                                                                                                                                                  | <u>X</u> |          |     |                         |
| Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?                                                                                                                                                                                                                                                                                                                         | <u>X</u> |          |     |                         |
| Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?                                                                                                                                                                                                                                                                                                                                           | <u>X</u> |          |     |                         |
| Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?                                                                                                                                                                                                                                                                                                                     | <u>X</u> |          |     |                         |
| For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.                                                                                                                                                                                                                                                                                            |          | <u>X</u> |     |                         |
| Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (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 HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH) |          | <u>X</u> |     |                         |
| Additional Comments (if any):                                                                                                                                                                                                                                                                                                                                                                                   |          |          |     |                         |

<sup>(1)</sup> 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) JP

Date/Time Reviewed 7/16/12

Origins Laboratory, Inc.

*Jeff Pellegrini*

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

SB01

7/1/2016 10:00:00AM

| Analyte | Result | Reporting<br>Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|--------------------|-------|----------|-------|----------|----------|-------|
|---------|--------|--------------------|-------|----------|-------|----------|----------|-------|

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 |  |  | " | " | " |  |

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

**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 |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

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

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 |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**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 |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**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 |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**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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Jen Pellegrini For Noelle Doyle Mathis, President