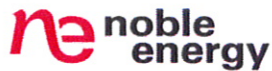


1625 Broadway, Suite 2200  
Denver, CO 80202

Tel: 303.228.4000  
Fax: 303.228.4286  
www.nobleenergyinc.com



North America Division

August 22, 2012

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

RE: Quarterly Groundwater Monitoring Report  
Blake B29-15  
Remediation #5351  
API 05-123-15414  
Sec.29, T5N R64W  
Weld County, Colorado

Dear Mr. Axelson:

Please find attached quarterly groundwater monitoring report for the Blake B29-15. Noble Energy Inc. would like to claim business confidentiality protection for the information submitted in this letter, the supporting materials attached and all previous and subsequent correspondence related to this matter. Please contact the Noble Energy Environmental Department at (303) 228-4158 if you have any questions or require additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Bruner'.

Ryan Bruner  
Environmental and Regulatory Supervisor

Attachments



July 17, 2012

Mr. Todd Cullum  
Base Construction Foreman  
Noble Energy, Inc.  
2115 117<sup>th</sup> Avenue  
Greeley, Colorado 80634

**RE: Second Quarter 2012 Remediation Summary Report  
Blake B 29-15 Tank Battery  
Weld County, Colorado  
COGCC Tracking #2606382 & Remediation #5351**

Dear Mr. Cullum:

LT Environmental, Inc. (LTE), under the direction of Noble Energy, Inc (Noble), conducted corrective actions at the Blake B 29-15 Tank Battery (Site) located approximately 0.2 miles west of the intersection of County Road (CR) 52 and CR 53 in Weld County, Colorado. A site location map is provided as Figure 1.

LTE, under the direction of Noble, has completed system design, installation, and startup of the air sparging/soil vapor extraction (AS/SVE) remediation system. Due to mitigation of the vast majority of hydrocarbon impact and successful attainment of cleanup goals for all monitoring wells on site, the system was shutdown on December 2, 2011. However, due to observed rebound in three wells during the March 2012 monitoring event, the remediation system was restarted on April 12, 2012. Noble is continuing to conduct groundwater monitoring at the Site to evaluate previously documented groundwater impact. This report describes activities conducted at the Site from April 1, 2012, through June 19, 2012, including re-initiation of the remediation system, operation and maintenance (O&M) of the remediation system, air emissions monitoring, and groundwater monitoring.

### **Remediation System Description**

The AS system is designed to introduce ambient air into the subsurface water column in order to volatilize dissolved hydrocarbons and promote aerobic microbial decomposition of petroleum constituents. The SVE system is designed to volatilize petroleum constituents adsorbed onto soil particles and to remove petroleum vapors released from the groundwater by the AS process. The AS and SVE wells are connected to a remediation equipment trailer which houses the equipment for the AS/SVE system (Figure 2).

Additional details of the remediation system were provided in the *LTE Remediation System Installation, Startup, Operation and Maintenance, and Groundwater Sampling Results*, dated November 5, 2010.

## **Remediation System Operations and Maintenance**

The remediation system operations were re-initiated on April 12, 2012. O&M activities conducted during the reporting period included:

- Completing routine weekly O&M checks to monitor and adjust system performance;
- Testing and analyzing air emissions;
- Changing the generator oil;
- Changing the generator spark plugs;
- Replacing generator oil pressure gauge;
- Adjusting generator valve overhead clearances;
- Initiating generator run timer to reduce high temperature shutdowns; and
- Troubleshooting the generator.

Table 1 provides a summary of system operations.

## **Soil Vapor Extraction Air Emissions**

An air sample was collected in a Tedlar<sup>®</sup> bag from the SVE discharge stack on April 17, 2012. The sample was delivered under strict chain-of-custody (COC) protocol to Origins Laboratory, Inc. (Origins) in Denver, Colorado, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and total petroleum hydrocarbons-gasoline range organics (TPH-GRO), by United States Environmental Protection Agency (EPA) Modified Method TO-15. Laboratory analytical results of the air sample collected on April 17, 2012, are presented in Table 2 and Attachment 1.

As of March 17, 2012, approximately 921 pounds of volatile organic compounds (VOCs) have been removed by the SVE system. Air emission calculations through April 17, 2012, are provided in Table 2.

## **Groundwater Sampling Procedures**

Eleven groundwater monitoring wells (SB01, SB02, SB03, SB05, SB08, SB10, SB11, SB12, SB15, SB16, and SB18) were sampled on June 15, 2012. Prior to sampling each monitoring well, the depth to groundwater was measured and recorded for calculating purge volumes. Each monitoring well was purged of three well casing volumes prior to collection of groundwater samples. Groundwater samples were collected from the well points by advancing disposable 3/16-inch diameter polyvinyl chloride (PVC) tubing inside the 1-inch diameter PVC well casing to below the groundwater table and utilizing a peristaltic pump to purge and sample each well.

Groundwater samples were collected in laboratory-prepared 40-milliliter vials, placed on ice in a cooler, and delivered under strict chain-of-custody (COC) protocol to eAnalytics Laboratory of Loveland, Colorado, for analysis of BTEX by EPA Method 8260C.

### **Hydrogeology**

During the groundwater monitoring event on June 15, 2012, the depths to groundwater ranged from 7.00 feet below top of casing (btoc) in SB15 to 11.09 feet btoc in SB05. The groundwater flow direction was to the north-northeast with an average hydraulic gradient of approximately 0.01 feet per foot (ft/ft). A relative groundwater elevation map is provided as Figure 3.

### **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 of 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. The June 2012 monitoring event results are illustrated on Figure 4 and summarized in Table 3. Laboratory analytical reports, laboratory quality assurance/quality control data, and COC documentation are presented in Attachment 2.

Eleven groundwater samples were collected during the second quarter 2012 monitoring event. All samples were in compliance with WQCC Reg 41 standards.

### **Summary and Conclusions**

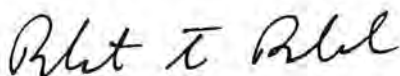
Current data indicates a decrease in BTEX concentrations to within compliance with WQCC Reg 41. The dissolved benzene plume has been reduced by 100 percent of its original pre-remediation extent as cleanup goals have now been achieved (Figure 5). The remediation system has reduced rebound benzene impact in three monitoring wells to below regulatory standards.

The next groundwater monitoring event will be conducted in September 2012 to assess remediation system performance. LTE, under the direction of Noble, recommends shutdown of the remediation system operation and initiation of static groundwater monitoring at the Site. Groundwater monitoring will continue with the goal of obtaining four consecutive quarters of groundwater results in compliance with the WQCC Reg 41.

LTE appreciates the opportunity to provide environmental services to Noble. Please call us at 303-433-9788 if you have any questions or comments regarding this report.

Sincerely,

LT ENVIRONMENTAL, INC.



Rob Rebel, P.E.  
Project Engineer



Steve Kahn, P.E.  
Principal

Attachments:

Figure 1	Site Location Map
Figure 2	AS/SVE System Layout
Figure 3	Relative Groundwater Elevation
Figure 4	Groundwater Analytical Results
Figure 5	Benzene Groundwater Analytical Results
Table 1	Remediation System Operations Summary
Table 2	Air Emissions Estimate Summary
Table 3	Groundwater Analytical Results
Attachment 1	Air Emissions Laboratory Analytical Report
Attachment 2	Groundwater Laboratory Analytical Report

## FIGURES



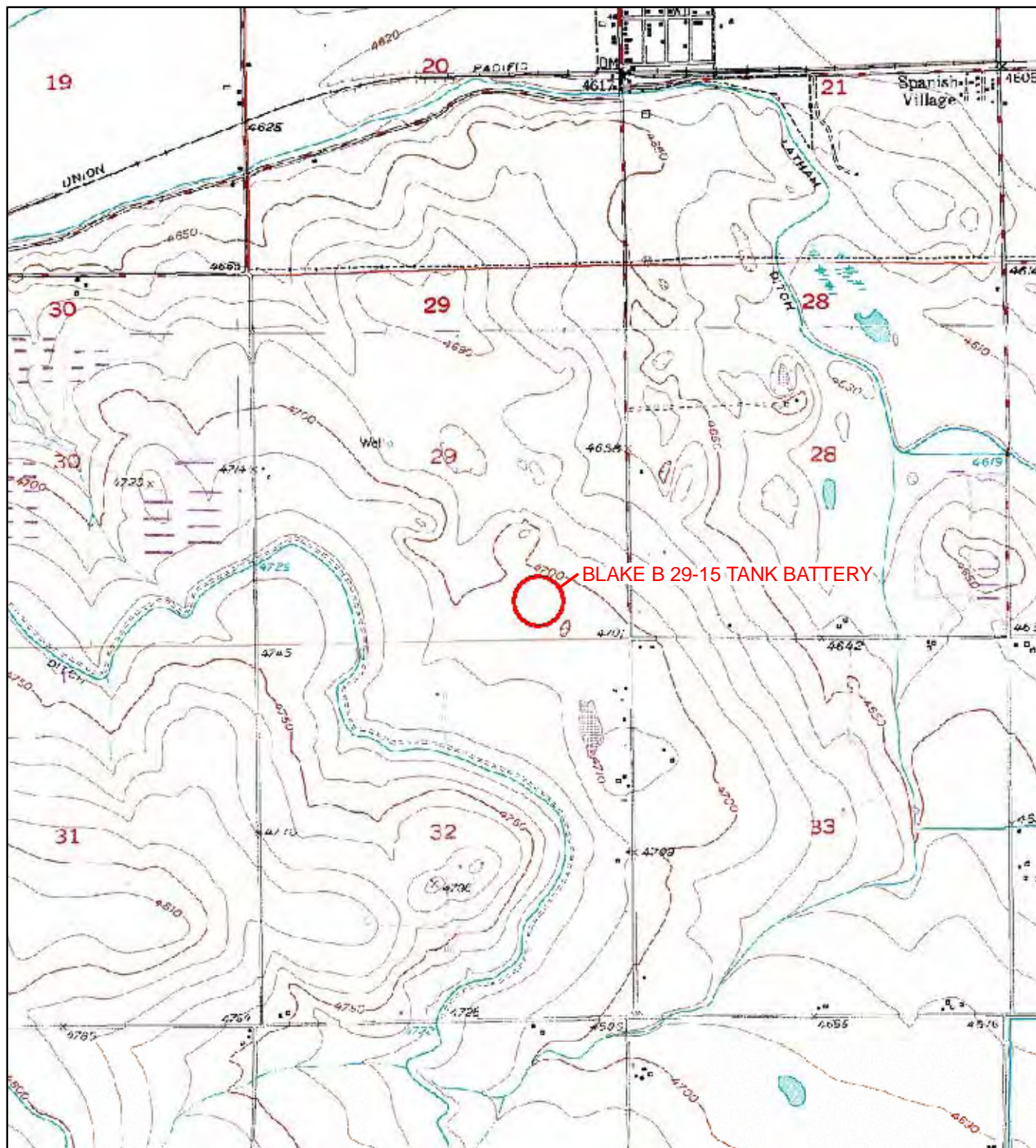


IMAGE COURTESY OF USDA/NRCS, VARIOUS DATES

# LEGEND

 SITE LOCATION

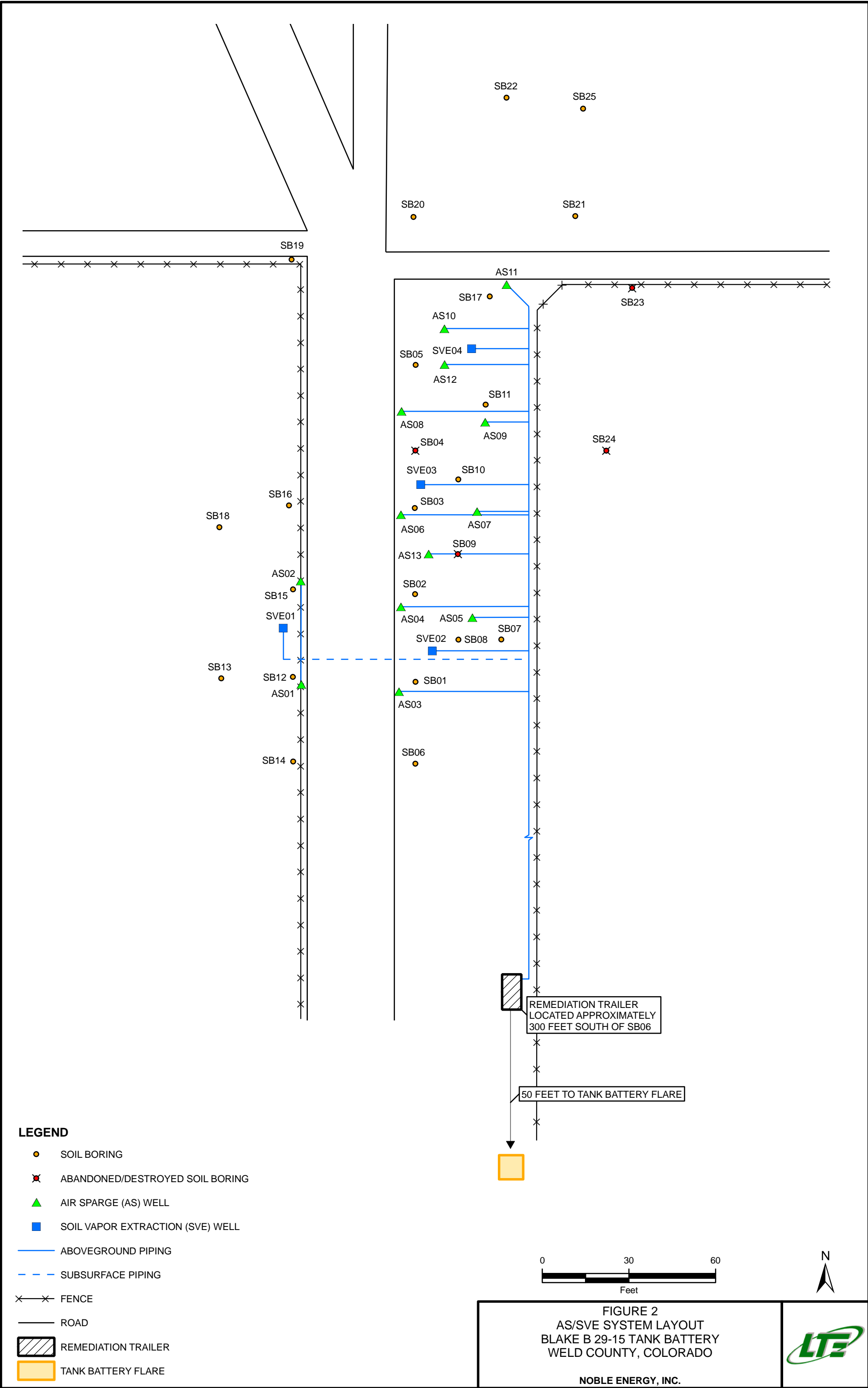
0 2,000 4,000  
Feet



FIGURE 1  
SITE LOCATION MAP  
BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO

NOBLE ENERGY, INC.







LEGEND

- SOIL BORING
- ABANDONED/DESTROYED SOIL BORING
- GROUNDWATER FLOW DIRECTION
- ROAD
- RELATIVE GROUNDWATER ELEVATION CONTOUR  
CONTOUR INTERVAL = 0.25 FEET  
HYDRAULIC GRADIENT = 0.01 FEET PER FOOT  
NM: NOT MEASURED

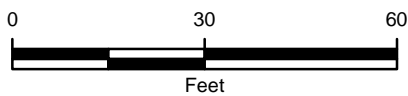


FIGURE 3  
RELATIVE GROUNDWATER ELEVATION  
JUNE 15, 2012  
BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.



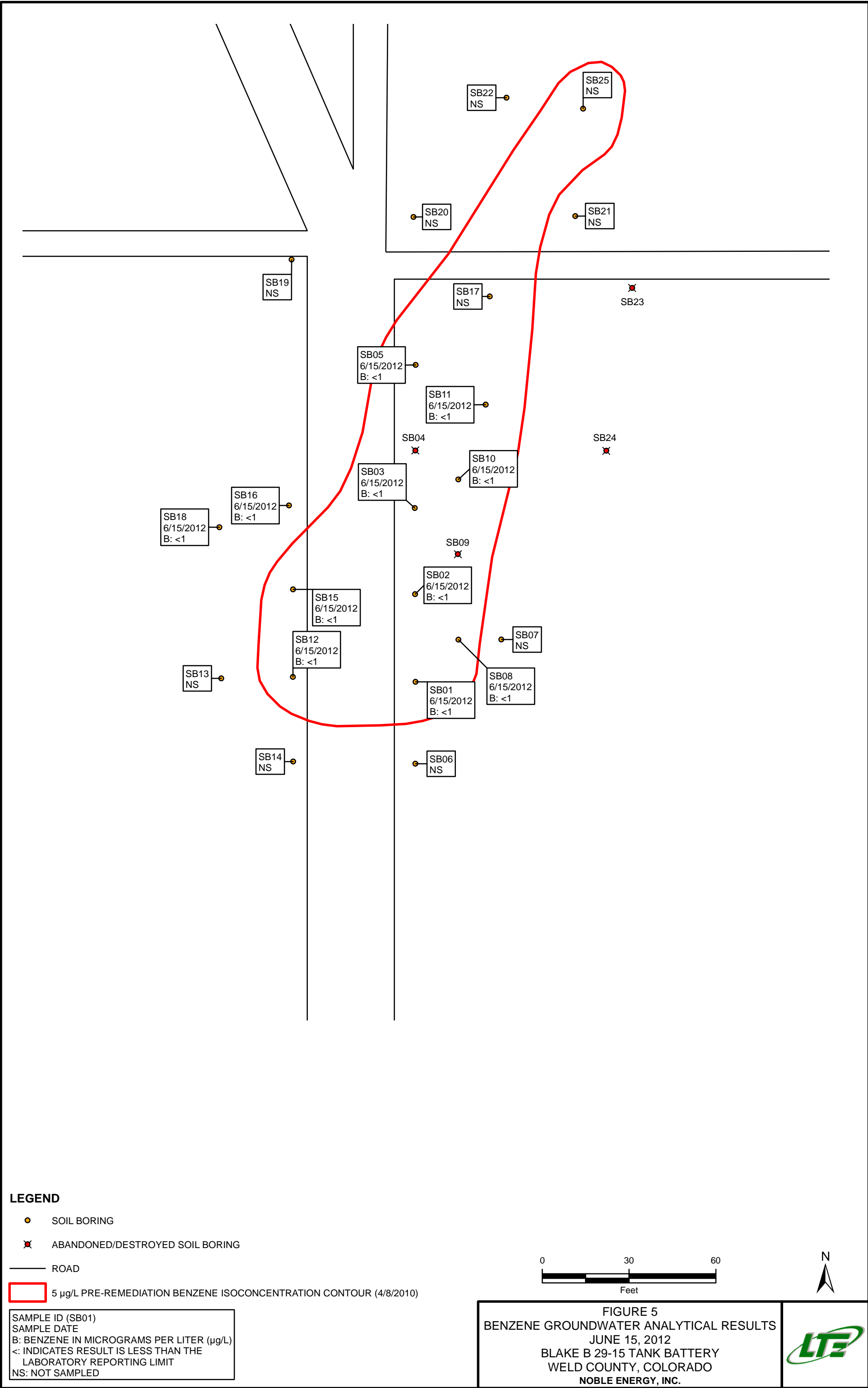
LEGEND

- SOIL BORING
- ABANDONED/DESTROYED SOIL BORING
- ROAD

SAMPLE ID (SB01)  
SAMPLE DATE  
B: BENZENE IN MICROGRAMS PER LITER (µg/L)  
T: TOLUENE (µg/L)  
E: ETHYLBENZENE (µg/L)  
X: TOTAL XYLENES (µg/L)  
<: INDICATES RESULT IS LESS THAN THE  
LABORATORY REPORTING LIMIT  
NS: NOT SAMPLED

FIGURE 4  
GROUNDWATER ANALYTICAL RESULTS  
JUNE 15, 2012  
BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.





LEGEND

- SOIL BORING
- ✕ ABANDONED/DESTROYED SOIL BORING
- ROAD
- 5 µg/L PRE-REMEDIATION BENZENE ISOCONCENTRATION CONTOUR (4/8/2010)

SAMPLE ID (SB01)  
SAMPLE DATE  
B: BENZENE IN MICROGRAMS PER LITER (µg/L)  
<: INDICATES RESULT IS LESS THAN THE  
LABORATORY REPORTING LIMIT  
NS: NOT SAMPLED

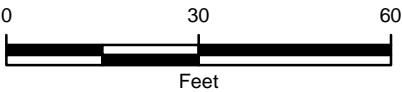


FIGURE 5  
BENZENE GROUNDWATER ANALYTICAL RESULTS  
JUNE 15, 2012  
BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.



## **TABLES**

TABLE 1

## REMEDIATION SYSTEM OPERATIONS SUMMARY

**BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.**

Date	AS Hours	SVE Hours	Generator Hours	System Status Upon Arrival (On/Off)	Notes
8/10/2010	47.8	51.8	57.6	On	Startup on 8/9/10
8/19/2010	92.4	96.4	102.3	Off	Off due to Noble separator repair
8/23/2010	144.4	148.5	199.4	Off	AS off - high pressure, SVE off - high fluid level
8/25/2010	152.7	156.8	207.6	Off	System off with no alarms (loose generator wire)
9/8/2010	437.9	442.0	493.1	On	
9/20/2010	680.0	684.2	735.7	Off	High LEL alarm
9/27/2010	809.2	813.4	903.0	Off	Breaker tripped, reset and restarted
10/5/2010	NM	NM	NM	Off	Repaired generator wires
10/15/2010	909.1	913.3	999.7	On	
10/22/2010	1,073.5	1,077.6	1,162.3	On	
11/8/2011	1,485.5	1,429.2	1,573.6	On	
11/22/2010	1,816.9	1,760.4	1,902.6	On	Generator emission testing
12/17/2010	2,416.5	2,359.7	2,510.7	On	
12/30/2010	2,726.5	2,644.7	2,821.0	On	SVE off - high fluid level
1/12/2011	3,034.8	2,759.6	3,131.6	On	
1/17/2011	3,157.6	2,882.4	3,254.4	On	
1/25/2011	3,346.8	3,071.5	3,426.9	On	
2/2/2011	3,536.0	3,260.8	3,632.9	On	
2/10/2011	3,726.2	3,451.0	3,823.0	On	
2/17/2011	3,897.4	3,573.8	3,994.0	On	SVE off - high fluid level
2/25/2011	4,086.3	3,762.8	4,183.1	On	
3/3/2011	4,229.9	3,906.3	4,326.3	On	
3/11/2011	4,421.2	4,097.6	4,517.9	On	
3/17/2011	4,564.6	4,236.0	4,661.7	On	
3/22/2011	4,683.8	4,346.1	4,781.0	On	SVE off - high fluid level
3/24/2011	4,729.6	4,391.9	4,826.8	On	
4/1/2011	4,923.3	4,500.3	5,020.7	On	SVE off - high fluid level
4/7/2011	5,065.9	4,642.9	5,163.2	On	
4/8/2011	5,086.3	4,663.3	5,183.9	On	Replaced leaking gas line
4/13/2011	5,206.9	4,702.6	5,304.4	On	SVE off - high fluid level
4/19/2011	5,349.0	4,738.1	5,446.4	On	SVE off - high fluid level
4/25/2011	5,495.0	4,828.6	5,592.5	On	SVE off - high fluid level
4/29/2011	5,588.7	4,908.6	5,686.3	On	
5/2/2011	5,019.7	4,939.8	5,717.9	Off	
5/13/2011	5,622.3	4,942.2	5,720.8	Off	
5/19/2011	5,762.9	5,082.8	5,861.4	On	
5/20/2011	5,788.6	5,108.5	5,887.1	On	
5/25/2011	5,838.6	5,227.9	6,006.4	On	AS off - high temperature alarm
5/27/2011	5,884.0	5,273.3	6,052.0	On	
6/1/2011	5,984.5	5,397.8	6,176.5	On	AS off - high temperature alarm
6/3/2011	6,007.5	5,420.8	6,199.5	Off	High engine temperature
6/9/2011	6,056.8	5,470.1	6,248.8	Off	High engine temperature
6/17/2011	6,107.9	5,521.1	6,299.9	Off	High engine temperature
6/21/2011	6,130.8	5,544.1	6,322.9	Off	High engine temperature
6/23/2011	6,172.2	5,585.5	6,364.3	On	
6/28/2011	6,177.2	5,590.6	6,369.5	Off	High engine temperature - begin generator cycling
7/6/2011	6,302.8	5,716.6	6,495.9	On	
7/12/2011	6,590.0	5,988.9	NM	On	
7/19/2011	6,501.3	5,900.7	6,694.6	Off	High engine temperature
7/21/2011	6,536.8	5,937.0	6,731.3	On	Installed AS12 and AS13
7/28/2011	6,590.0	5,988.9	6,784.4	On	
8/2/2011	6,643.6	6,042.6	6,838.2	Off	High engine temperature
8/12/2011	NM	NM	NM	On	
8/16/2011	6,864.9	6,261.2	7,060.0	Off	

TABLE 1

## REMEDIATION SYSTEM OPERATION SUMMARY

**BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY INC.**

Date	AS Hours	SVE Hours	Generator Hours	System Status Upon Arrival (On/Off)	Notes
8/23/2011	6,926.1	6,263.0	7,171.9	Off	
8/25/2011	6,926.5	6,263.9	7,203.7	On	
8/30/2011	6,927.2	6,265.6	7,282.6	On	
9/6/2011	6,944.4	6,283.2	7,393.3	On	
9/14/2011	6,991.0	6,329.9	7,439.8	Off	Gas supply off
9/22/2011	7,181.3	6,520.1	7,630.1	On	
9/30/2011	7,208.6	6,547.4	NM	Off	High engine temperature
10/5/2011	7,232.1	6,570.8	7,680.9	Off	High engine temperature
10/10/2011	7,352.0	6,690.8	7,800.9	On	
10/21/2011	7,614.2	6,953.0	8,063.0	On	
10/25/2011	7,710.2	7,048.9	8,159.2	On	
11/3/2011	7,926.5	7,265.2	8,375.5	On	
11/11/2011	8,119.4	7,314.4	8,523.5	On	
11/14/2011	8,192.6	7,314.6	8,641.5	On	
11/23/2011	8,287.2	7,408.6	8,736.2	Off	
12/2/2011	8,501.5	7,622.7	8,950.6	On	
4/12/2012	8,501.8	7,623.0	8,951.3	Off	Restarted system; replaced oil pressure gauge; changed generator oil
4/17/2012	8,622.4	7,743.6	9,071.8	On	Stack sample taken; cleaned crankcase breather
4/25/2012	NM	NM	NM	On	Rewired melted wires; completed oil reservoir install
5/3/2012	8,769.0	7,890.8	9,426.3	Off	Tripped breaker
5/9/2012	8,796.7	7,918.5	9,568.4	Off	Tripped breaker
5/17/2012	8,991.1	8,113.0	9,763.0	On	
5/24/2012	9,182.7	8,304.5	9,954.5	On	Changed spark plugs
5/31/2012	9,325.4	8,447.3	10,044.0	On	Changed oil; cleaned crankcase breather; greased SVE; oil cooler gasket leaking - left system off
6/6/2012	9,325.9	8,447.8	10,044.0	Off	Replaced oil cooler gasket
6/13/2012	NM	NM	NM	Off	Tripped breaker
6/19/2012	9,401.7	8,523.7	10,263.7	Off	High engine temperature
Operational % Since Startup*	74%	66%	77%		
Operational % in Quarter*	55%	55%	80%		

**NOTES:**

AS - air sparging

SVE - soil vapor extraction

LEL - lower explosive level

NM - not measured

% - percent

\* During June to September 2011 and June 2012, generator timer was initiated to prevent high temperature alarms during peak daily temperatures. Maximum runtime potential during this period was approximately 75%.

TABLE 2

## AIR EMISSIONS ESTIMATE SUMMARY

**BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.**

Sample Information and Lab Analysis								
Date	Total Flow (cf)	Delta Flow (cf)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TVPH (µg/L)	PID (ppm)
8/25/2010	1,881,600	1,881,600	7.2	14	1	19	1800	268
9/8/2010	5,132,880	3,251,280	6.1	12	0.71	12.3	1300	288
10/22/2010	11,616,000	6,483,120	3.4	4.2	0.2	7.8	650	102
11/10/2010	15,438,720	3,822,720	1.1	1.1	0.043	2.14	530	57.2
3/11/2011	31,171,920	15,733,200	0.052	0.098	0.023	0.67	78	18.0
6/30/2011	42,825,840	11,653,920	0.005	0.012	0.0052	0.166	22	3.8
8/2/2011	44,977,440	2,151,600	0.0029	0.0098	0.0031	0.061	31	5.0
11/3/2011	51,946,260	6,968,820	0.334	0.340	0.239	0.343	21.4	0.5
4/17/2012	54,529,620	2,583,360	0.0917	0.392	0.132	1.0	133	0.0

Emission Calculations						
Date	Flow Rate (cfm)	Benzene (lb/hr)	Toluene (lb/hr)	Ethylbenzene (lb/hr)	Total Xylenes (lb/hr)	TVPH (lb/hr)
8/25/2010	200	0.0054	0.0105	0.0007	0.0142	1.3464
9/8/2010	190	0.0043	0.0085	0.0005	0.0087	0.9238
10/22/2010	170	0.0022	0.0027	0.0001	0.0050	0.4133
11/10/2010	160	0.0007	0.0007	0.0000	0.0013	0.3172
3/11/2011	100	0.0000	0.0000	0.0000	0.0003	0.0292
6/30/2011	120	0.0000	0.0000	0.0000	0.0001	0.0099
8/2/2011	110	0.0000	0.0000	0.0000	0.0000	0.0128
11/3/2011	95	0.0001	0.0001	0.0001	0.0001	0.0076
4/17/2012	90	0.0000	0.0001	0.0000	0.0003	0.0448

Pounds Emitted Over Total Operating Time								
Date	Total Operational Hours	Delta Hours	Benzene (lbs)	Toluene (lbs)	Ethylbenzene (lbs)	Total Xylenes (lbs)	TVPH (lbs)	TVPH (tons)
8/25/2010	157	105.0	0.6	1.1	0.1	1.5	141	0.07
9/8/2010	442	285.2	1.2	2.4	0.1	2.5	263	0.13
10/22/2010	1,078	635.6	1.4	1.7	0.1	3.2	263	0.13
11/10/2010	1,476	398.2	0.3	0.3	0.0	0.5	126	0.06
3/11/2011	4,098	2,622.2	0.1	0.1	0.0	0.7	76	0.04
6/30/2011	5,717	1,618.6	0.0	0.0	0.0	0.1	16	0.01
8/2/2011	6,043	326.0	0.0	0.0	0.0	0.0	4	0.00
11/3/2011	7,265	1,222.6	0.1	0.1	0.1	0.1	9	0.00
4/17/2012	7,744	478.4	0.0	0.1	0.0	0.2	21	0.01
		<b>Sum</b>	<b>3.7</b>	<b>5.8</b>	<b>0.5</b>	<b>8.7</b>	<b>921</b>	<b>0.46</b>

**NOTES:**

cf - cubic feet

µg/L- micrograms per liter

TVPH - total volatile petroleum hydrocarbons

PID - photo-ionization detector

ppm - parts per million

cfm - cubic feet per minute

lb/hr - pounds per hour

lbs - pounds

Italicized values are reported as one half the detection limit for a non-detect result.

System startup occurred on 8/10/10 with startup hours of 51.8 hrs.



TABLE 3

## GROUNDWATER ANALYTICAL RESULTS

**BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.**

Well ID	Date	Depth to Water (feet btoc)	Relative Groundwater Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
SB01	4/8/2010	9.65	86.16	<b>5,400</b>	<b>9,840</b>	660	<b>6,950</b>
	9/21/2010	7.10	88.71	<b>31.2</b>	12.7	<1.00	60.22
	12/8/2010	8.76	87.05	<b>10.7</b>	4.47	3.25	68.7
	3/15/2011	8.69	87.12	<1.00	<1.00	<1.00	<3.00
	6/20/2011	8.20	87.61	1.4	<1.0	19.8	268
	9/21/2011	8.85	86.96	<1.0	<1.0	11.7	47.6
	12/12/2011	8.63	87.18	<1.0	<1.0	11.1	27
	3/19/2012	8.67	87.14	<1.0	<1.0	<1.0	<1.0
	6/15/2012	9.00	86.81	<1	<1	<1	<1
SB02	4/8/2010	11.00	85.35	<b>9,900</b>	<b>14,000</b>	650	<b>7,590</b>
	9/21/2010	9.85	86.50	<b>19.8</b>	74.1	<10.0	195
	12/8/2010	9.63	86.72	<1.00	1.51	4.08	48.0
	3/15/2011	8.24	88.11	<1.00	<1.00	<1.00	<3.00
	6/20/2011	9.04	87.31	<1.0	<1.0	<1.0	<3.0
	9/21/2011	9.54	86.81	<1.0	<1.0	<1.0	<3.0
	12/12/2011	9.53	86.82	<1.0	<1.0	<1.0	<3.0
	3/19/2012	9.52	86.83	<b>26.1</b>	<1.0	<1.0	<1.0
	6/15/2012	9.83	86.52	<1	<1	<1	<1
SB03	4/8/2010	10.40	85.31	<b>4,440</b>	<b>6,180</b>	520	<b>5,840</b>
	9/21/2010	9.10	86.61	<b>192</b>	193	<1.00	1,145
	12/8/2010	9.23	86.48	3.16	1.34	9.99	90.6
	3/15/2011	9.06	86.65	<1.00	<1.00	<1.00	<3.00
	6/20/2011	8.71	87.00	<1.0	<1.0	<1.0	<3.0
	9/21/2011	9.35	86.36	<1.0	<1.0	<1.0	<3.0
	12/12/2011	9.22	86.49	<1.0	<1.0	<1.0	<3.0
	3/19/2012	9.22	86.49	<b>38.9</b>	<1.0	<1.0	<1.0
	6/15/2012	9.48	86.23	<1	<1	<1	<1
SB04	4/8/2010	10.05	84.35	<b>247</b>	155	33.2	381
	9/21/2010	8.50	85.90	<1.00	2.14	<1.00	<3.00
	12/8/2010	7.96	86.44	<1.00	<1.00	<1.00	1.52
	3/15/2011	7.02	87.38	<1.00	<1.00	<1.00	<3.00
	6/20/2011	9.61	84.79	<1.0	<1.0	<1.0	<3.0
	9/21/2011	10.20	84.20	<1.0	<1.0	1.2	9.1
	12/12/2011	--	--	Not Sampled - Destroyed			
SB05	4/8/2010	10.25	86.62	<b>809</b>	<5.00	81.8	139
	9/21/2010	10.40	86.47	<1.00	<1.00	<1.00	<3.00
	12/8/2010	10.72	86.15	<1.00	<1.00	<1.00	<1.00
	3/15/2011	10.37	86.50	<1.00	<1.00	<1.00	<3.00
	6/20/2011	10.34	86.53	<b>244</b>	<1.0	<1.0	<3.0
	6/28/2011	--	--	<b>307</b>	<1.0	<1.0	<3.0
	9/21/2011	10.85	86.02	<1.0	<1.0	<1.0	<3.0
	12/12/2011	10.80	86.07	<1.0	<1.0	<1.0	<3.0
	3/19/2012	10.84	86.03	<b>9.06</b>	<1.0	<1.0	<1.0
	6/15/2012	11.09	85.78	<1	<1	<1	<1
SB06	4/8/2010	9.25	87.92	1.74	11.2	<1.00	13
	9/21/2010	9.55	87.62	<1.00	1.69	<1.00	<3.00
	12/8/2010	9.85	87.32	<1.00	<1.00	<1.00	<1.00
	3/15/2011	9.91	87.26	<1.00	<1.00	<1.00	<3.00
SB07	4/8/2010	7.95	87.38	2.47	11.9	<1.00	12
	9/21/2010	8.25	87.08	<1.00	1.58	<1.00	<3.00
	12/8/2010	8.46	86.87	<1.00	1.45	<1.00	<1.00
	3/15/2011	8.58	86.75	<1.00	<1.00	<1.00	<3.00

TABLE 3

## GROUNDWATER ANALYTICAL RESULTS

**BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.**

Well ID	Date	Depth to Water (feet btoc)	Relative Groundwater Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
SB08	4/8/2010	9.95	86.02	<b>968</b>	<b>2,670</b>	122	<b>2,030</b>
	9/21/2010	8.20	87.77	<b>143</b>	490	9.11	587
	12/8/2010	9.07	86.90	<1.00	<1.00	<1.00	<1.00
	3/15/2011	9.11	86.86	<1.00	<1.00	<1.00	<3.00
	6/20/2011	8.54	87.43	<1.0	<1.0	<1.0	<3.0
	9/21/2011	9.13	86.84	<1.0	<1.0	<1.0	<3.0
	12/12/2011	9.01	86.96	<1.0	<1.0	<1.0	<3.0
	3/19/2012	8.99	86.98	<1.0	<1.0	<1.0	<1.0
	6/15/2012	9.30	86.67	<1	<1	<1	<1
SB09	4/8/2010	8.35	87.18	<b>262</b>	<b>956</b>	80.2	1,060
	9/21/2010	8.90	86.63	<b>706</b>	<b>1,110</b>	31.3	1,342
	12/8/2010	9.03	86.50	Not Sampled Due to Trace Amount of Free Product			
	3/15/2011	8.04	87.49	<b>48.8</b>	21.8	5.27	283
	6/20/2011	8.37	87.16	<b>33.2</b>	<1.0	<1.0	130
	9/21/2011	--	--	Not Sampled - Destroyed			
SB10	4/8/2010	9.52	86.91	<b>574</b>	<b>645</b>	118	1,280
	9/21/2010	9.80	86.63	<b>501</b>	352	<10.0	692
	12/8/2010	10.02	86.41	<b>42.5</b>	28.8	16.6	732
	3/15/2011	9.03	87.40	<1.00	<1.00	<1.00	4.66
	6/20/2011	9.59	86.84	<1.0	<1.0	<1.0	<3.0
	9/21/2011	10.15	86.28	<1.0	<1.0	<1.0	<3.0
	12/12/2011	10.05	86.38	<1.0	<1.0	<1.0	<3.0
	3/19/2012	10.08	86.35	<1.0	<1.0	<1.0	<1.0
	6/15/2012	10.32	86.11	<1	<1	<1	<1
SB11	4/8/2010	9.60	86.61	<b>191</b>	<1.00	28.5	43.0
	9/21/2010	9.82	86.39	<1.00	<1.00	<1.00	<3.00
	12/8/2010	9.33	86.88	<1.00	<1.00	<1.00	<1.00
	3/15/2011	8.47	87.74	<1.00	<1.00	<1.00	<3.00
	6/20/2011	9.68	86.53	<1.0	<1.0	<1.0	<3.0
	9/21/2011	10.20	86.01	<1.0	<1.0	<1.0	<3.0
	12/12/2011	10.12	86.09	<1.0	<1.0	<1.0	<3.0
	3/19/2012	10.18	86.03	<1.0	<1.0	<1.0	<1.0
	6/15/2012	10.40	85.81	<1	<1	<1	<1
SB12	4/8/2010	9.75	86.65	<b>1,930</b>	<b>3,040</b>	190	<b>2,570</b>
	9/21/2010	8.85	87.55	<1.00	<1.00	<1.00	<3.00
	12/8/2010	8.00	88.40	<1.00	<1.00	<1.00	<1.00
	3/15/2011	7.23	89.17	<1.00	<1.00	<1.00	<3.00
	6/20/2011	8.65	87.75	<1.0	<1.0	<1.0	<3.0
	9/21/2011	9.14	87.26	<1.0	<1.0	<1.0	<3.0
	12/12/2011	9.08	87.32	<1.0	<1.0	<1.0	<3.0
	3/19/2012	9.07	87.33	<1.0	<1.0	<1.0	<1.0
	6/15/2012	9.45	86.95	<1	<1	<1	<1
SB13	4/8/2010	8.30	87.94	<1.00	2.48	<1.00	6.01
	9/21/2010	8.60	87.64	<1.00	1.84	<1.00	<3.00
	12/8/2010	8.89	87.35	<1.00	<1.00	<1.00	<1.00
	3/15/2011	9.04	87.20	<1.00	<1.00	<1.00	<3.00
SB14	4/8/2010	8.90	88.08	<1.00	<1.00	<1.00	<1.00
	9/21/2010	9.10	87.88	<1.00	1.60	<1.00	<3.00
	12/8/2010	9.50	87.48	<1.00	1.22	<1.00	<1.00
	3/15/2011	9.58	87.40	<1.00	<1.00	<1.00	<3.00

TABLE 3

## GROUNDWATER ANALYTICAL RESULTS

**BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.**

Well ID	Date	Depth to Water (feet btoc)	Relative Groundwater Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
SB15	4/8/2010	10.10	85.98	<b>2,730</b>	<b>2,340</b>	189	<b>2,560</b>
	9/21/2010	8.80	87.28	<1.00	<1.00	<1.00	3.66
	12/8/2010	8.50	87.58	<1.00	1.16	<1.00	3.28
	3/15/2011	9.16	86.92	<1.00	<1.00	<1.00	<3.00
	6/20/2011	8.59	87.49	<1.0	<1.0	<1.0	<3.0
	9/21/2011	9.12	86.96	<1.0	<1.0	<1.0	<3.0
	12/12/2011	9.05	87.03	<1.0	<1.0	<1.0	<3.0
	3/19/2012	9.06	87.02	<1.0	<1.0	<1.0	<1.0
	6/15/2012	7.00	NM - damaged	<1	<1	<1	<1
SB16	4/8/2010	9.25	87.25	<1.00	<1.00	<1.00	<1.00
	9/21/2010	9.40	87.10	<b>5.52</b>	3.50	<1.00	9.37
	12/8/2010	9.78	86.72	<b>16.8</b>	9.88	<1.00	28.9
	3/15/2011	9.86	86.64	<b>5.79</b>	5.70	<1.00	21.1
	6/20/2011	9.35	87.15	<1.0	<1.0	<1.0	<3.0
	9/21/2011	9.85	86.65	<1.0	1.4	<1.0	12.2
	12/12/2011	9.78	86.72	<1.0	<1.0	<1.0	<3.0
	3/19/2012	9.78	86.72	<1.0	<1.0	<1.0	<1.0
	6/15/2012	10.10	86.40	<1	<1	<1	<1
SB17	4/8/2010	10.70	86.25	<b>223</b>	<1.00	22.8	<1.00
	9/21/2010	10.85	86.10	<1.00	<1.00	<1.00	<3.00
	12/8/2010	11.12	85.83	<1.00	<1.00	<1.00	<1.00
	3/15/2011	11.21	85.74	<1.00	<1.00	<1.00	<3.00
SB18	4/22/2010	8.75	87.46	<1.00	<1.00	<1.00	<1.00
	9/21/2010	8.95	87.26	<1.00	2.88	<1.00	<3.00
	12/8/2010	9.27	86.94	<1.00	1.15	<1.00	<1.00
	3/15/2011	9.48	86.73	<1.00	<1.00	<1.00	<3.00
	6/20/2011	8.85	87.36	<1.0	<1.0	<1.0	<3.0
	9/21/2011	9.30	86.91	<1.0	<1.0	<1.0	<3.0
	12/12/2011	9.25	86.96	<1.0	<1.0	<1.0	<3.0
	3/19/2012	9.28	86.93	<1.0	<1.0	<1.0	<1.0
	6/15/2012	9.40	86.81	<1	<1	<1	<1
SB19	4/22/2010	10.60	86.70	<1.00	<1.00	<1.00	<1.00
	9/21/2010	10.72	86.58	<1.00	<1.00	<1.00	<3.00
	12/8/2010	11.23	86.07	<1.00	<1.00	<1.00	<1.00
	3/15/2011	11.46	85.84	<1.00	<1.00	<1.00	<3.00
SB20	4/22/2010	8.90	NM	<1.00	<1.00	<1.00	<1.00
	9/21/2010	Could Not Find - Well Destroyed					
SB21	4/22/2010	9.25	85.89	<1.00	<1.00	<1.00	<1.00
	9/21/2010	8.95	86.19	<1.00	1.06	<1.00	<3.00
	12/8/2010	9.64	85.50	<1.00	1.00	<1.00	<1.00
	3/15/2011	9.92	85.22	<1.00	<1.00	<1.00	<3.00
SB22	4/22/2010	10.80	85.57	<1.00	<1.00	<1.00	<1.00
	9/21/2010	10.55	85.82	<1.00	<1.00	<1.00	<3.00
	12/8/2010	11.12	85.25	<1.00	<1.00	<1.00	<1.00

TABLE 3

## GROUNDWATER ANALYTICAL RESULTS

**BLAKE B 29-15 TANK BATTERY  
WELD COUNTY, COLORADO  
NOBLE ENERGY, INC.**

Well ID	Date	Depth to Water (feet btoc)	Relative Groundwater Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
SB23	4/22/2010	6.95	NM	<1.00	<1.00	<1.00	<1.00
	5/12/2010	Well Abandoned Per Landowner					
SB24	4/22/2010	5.60	NM	<1.00	<1.00	<1.00	<1.00
	5/12/2010	Well Abandoned Per Landowner					
SB25	4/22/2010	10.45	85.52	<b>30.5</b>	<1.00	<1.00	<1.00
	9/21/2010	10.20	85.77	<1.00	3.66	<1.00	<3.00
	12/8/2010	10.86	85.11	<1.00	<1.00	<1.00	<1.00
<b>CDPHE WQCC Reg 41</b>				<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>

**NOTES:**

btoc - below top of casing

µg/L - micrograms per liter

NM - not measured

&lt; - indicates result is less than the stated laboratory reporting limit

**BOLD** - indicates result exceeds the applicable standard

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

CDPHE WQCC Reg 41 - Colorado Department of Public Health and Environmental-Water Quality Control

Commission Regulation 41 covering The Basic Standards for Ground Water

**ATTACHMENT 1**

**AIR EMISSIONS LABORATORY ANALYTICAL REPORT**



April 20, 2012

LT Environmental, Inc.

Rob Rebel

4600 West 60th Avenue

Arvada CO 80003

---

Project Name - Noble - Blake B 29-15

Project Number - [none]

Attached are you analytical results for Noble - Blake B 29-15 received by Origins Laboratory, Inc. April 17, 2012. This project is associated with Origins project number X204112-01.

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.

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

Rob Rebel

Project Number: [none]

Project: Noble - Blake B 29-15

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stack - 01	X204112-01	Air	April 17, 2012 13:35	04/17/2012 15:20

Origins Laboratory, Inc.



Noelle E Doyle, President

*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

Rob Rebel  
Project Number: [none]  
Project: Noble - Blake B 29-15

www.originslaboratory.com

page 1 of 1

204112

ORIGINS  
LABORATORY, INC

Client: LTE  
Address:  
Telephone Number:  
Email Address:  
Project Manager: Rob Rebel  
Project Name: Blake B29-15  
Project Number: 101011  
Samples Collected By: L. H. H. H.

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 #	Other	Date	
Stack 01	4/17/12	1355	1	X					X			TPH BTEX X	1
													2
													3
													4
													5
													6
													7
													8
													9
													10

Relinquished By: [Signature] Date: 4/17/12 Time: 1520  
Relinquished By: [Signature] Date: 4/17/12 Time: 15:20

Turnaround Time: Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☒ Standard

Date Results Needed

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

Origins Laboratory, Inc.

Noelle E Doyle

Noelle E Doyle, President

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

Rob Rebel  
Project Number: [none]  
Project: Noble - Blake B 29-15

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: X204112

Client: LTE

Client Project ID: Blake B 29-15

Checklist Completed by: Jesse Smith

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

Date/time completed: 1/12/12

Airbill #: \_\_\_\_\_

Matrix(s) Received: (Check all that apply): \_\_\_\_\_ Soil/Solid \_\_\_\_\_ Water ☒ Other: Asp

Cooler Number/Temperature: \_\_\_\_\_ / 26.6 °C \_\_\_\_\_ / \_\_\_\_\_ °C \_\_\_\_\_ / \_\_\_\_\_ °C \_\_\_\_\_ / \_\_\_\_\_ °C (Describe)

Thermometer ID: T031

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> ?			<input checked="" type="checkbox"/>	
Is there ice present (document if blue ice is used)			<input checked="" type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) 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 with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
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)			<input checked="" type="checkbox"/>	
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)

Date/Time Reviewed 1-20-12 17:09

Origins Laboratory, Inc.

Noelle E Doyle, President

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

Rob Rebel  
Project Number: [none]  
Project: Noble - Blake B 29-15

Stack - 01  
4/17/2012 1:35:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.  
X204112-01 (Air)

## GBTEX by TO-15M GC/MS

Gasoline Range Hydrocarbons	133000	15400	ug/m <sup>3</sup> Air	15.4	2D16006	04/17/2012	04/18/2012
Benzene	91.7	47.7	"	1.54	"	"	04/18/2012
Toluene	392	82.7	"	"	"	"	"
Ethylbenzene	132	64.5	"	"	"	"	"
Xylenes, total	1000	253	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	93.8 %	70-130	"	"	04/18/2012
Surrogate: Toluene-d8	102 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	99.0 %	70-130	"	"	"

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.

Noelle E Doyle, President

LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

Rob Rebel

Project Number: [none]

Project: Noble - Blake B 29-15

## Volatile Organic Compounds by EPA Method 8260B in Air - Quality Control

### Origins Laboratory, Inc.

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

#### Batch 2D16006 - Default Prep - Air

##### Blank (2D16006-BLK1)

Prepared: 04/17/2012 Analyzed: 04/18/2012

Gasoline Range Hydrocarbons	ND	1000	ug/m <sup>3</sup> Air
Benzene	ND	31.0	"
Toluene	ND	53.7	"
Ethylbenzene	ND	41.9	"
Xylenes, total	ND	164	"

Surrogate: 1,2-Dichloroethane-d4	1520	"	1680	90.4	70-130
Surrogate: Toluene-d8	1650	"	1640	101	70-130
Surrogate: 4-Bromofluorobenzene	2750	"	2860	96.1	70-130

##### LCS (2D16006-BS1)

Prepared: 04/17/2012 Analyzed: 04/18/2012

Benzene	349	31.0	ug/m <sup>3</sup> Air	319	109	70-130
Toluene	412	53.7	"	377	109	70-130
Ethylbenzene	420	41.9	"	434	96.6	70-130
m,p-Xylene	1100	73.4	"	1130	97.0	70-130
o-Xylene	429	60.6	"	434	98.8	70-130

Surrogate: 1,2-Dichloroethane-d4	1510	"	1680	89.9	70-130
Surrogate: Toluene-d8	1670	"	1640	102	70-130
Surrogate: 4-Bromofluorobenzene	2770	"	2860	96.9	70-130

##### LCS Dup (2D16006-BSD1)

Prepared: 04/17/2012 Analyzed: 04/18/2012

Benzene	345	31.0	ug/m <sup>3</sup> Air	319	108	70-130	1.34	20
Toluene	412	53.7	"	377	109	70-130	0.0641	20
Ethylbenzene	427	41.9	"	434	98.4	70-130	1.85	20
m,p-Xylene	1120	73.4	"	1130	98.7	70-130	1.78	20
o-Xylene	430	60.6	"	434	99.1	70-130	0.232	20

Surrogate: 1,2-Dichloroethane-d4	1510	"	1680	89.9	70-130
Surrogate: Toluene-d8	1660	"	1640	101	70-130
Surrogate: 4-Bromofluorobenzene	2800	"	2860	97.9	70-130

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.

Noelle E Doyle, President

LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

Rob Rebel

Project Number: [none]

Project: Noble - Blake B 29-15

Volatile Organic Compounds by EPA Method 8260B in Air - Quality Control  
Origins Laboratory, Inc.

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

Batch 2D16006 - Default Prep - Air

Origins Laboratory, Inc.



Noelle E Doyle, President

*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

Rob Rebel

Project Number: [none]

Project: Noble - Blake B 29-15

### Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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.*

Noelle E Doyle, President

**ATTACHMENT 2**

**GROUNDWATER LABORATORY ANALYTICAL REPORT**



# Certificate of Analysis



June 19, 2012

Client: LT Environmental  
4600 West 60th Avenue  
Arvada, Colorado 80003

Project: Blake B29-15

Lab ID: 061503

Date Received: 06/15/12

Number of Samples Received: 11

Sample Condition: Samples arrived intact and in appropriate sample containers

Sample Temperature: Within acceptable range of 2-6° C, or as specified in EPA Method

Analysis	EPA Method	Lab ID on COC
BTEX	8260C	1 - 11

All quality control analyses associated with the requested analyses were satisfactorily passed before the samples were run. If you have any questions please give us a call, we are happy to help.

Thank you for allowing eAnalytics Laboratory to provide laboratory services for you, we truly appreciate your business.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Dieken".

Christopher Dieken  
Quality Assurance Manager  
eAnalytics Laboratory  
(970) 667-6975  
info@eAnalyticsLab.com

# Certificate of Analysis

Chain of Custody

**eANALYTICS**  
LABORATORY

June 19, 2012

Chain of Custody Form

eANALYTICS LABORATORY			1767 Rocky Mountain Avenue Loveland CO 80538   Phone: (970) 667-6975   Fax: (970) 669-0941   www.eAnalyticsLab.com														
CLIENT INFORMATION			ANALYSIS INFORMATION														
(*New Clients please fill out completely)			(Select analysis by checking box on corresponding sample line)														
Company: LT Environmental, Inc.			Other Analysis														
Project: Blake B29-15																	
Project Manager: Rob Rebel																	
Sampler: Marjorie Bruce, Michael Mariani																	
Phone/Email: (303) 433-9788 Rebel@Ltenv.com																	
Address: 4600 West 60th Avenue Arvada, CO 80003																	
Lab ID	Sample Name	Sampling Date/Time	Number of Containers	Matrix (S) Soil (W) Water (V) Vapor (O) Other	BTEX (EPA 8260)	TEPH (EPA 8015)	Vapor BTEX / TVPH (EPA TO-14)	Full VOC (EPA 8260)	Semi-Volatiles 8270 / PAH	TRPH / Oil & Grease	RCRA 8 Metals (Total / TCLP / Dissolved)	React. / Ignit. / Corrosivity / Paint Filter	pH / TSS / TDS	Metals (Specify)	PCBs / Pesticides / Herbicides	TO-15 (SIM)	
01	SB01	6/15 1255	2	✓	✓												
02	SB02	1305															
03	SB03	1315															
04	SB05	1325															
05	SB08	1335															
06	SB10	1345															
07	SB11	1355															
08	SB12	1405															
09	SB15	1415															
10	SB16	1425															
11	SB18	1435		✓	✓	✓											
Comments:																	
<div> <div> <b>Turnaround Time (Business Days)</b>  TAT begins when sample is received by eANALYTICS  <input type="radio"/> Normal (5-10 Days)  <input checked="" type="radio"/> 3 Day (1.25x)  <input type="radio"/> 2 Day (1.5x)  <input type="radio"/> 1 Day (2x)  <input type="radio"/> Same Day (3x) </div> <div> Rush analysis requires an extra charge.  If possible please inform eANALYTICS in advance for rush analysis. </div> </div>																	
<div> <div> <b>Record of Custody</b>  Relinquished by: <i>M. Mariani</i> Date: 6/15  Company: <i>LTE</i> Time: 1500  Received by: _____ Date: _____  Company: _____ Time: _____ </div> <div> Relinquished by: _____ Date: _____  Company: _____ Time: _____  Received by: <i>Todd Wilson</i> Date: 6-15-12  Company: <b>eANALYTICS</b> Time: 300 AM/PM </div> </div>																	
<div> <div> <b>Colorado OPS Project :</b> Yes / No  <b>For eANALYTICS Use</b>  <b>Samples Received Intact</b> Yes / No  <b>Received Within Temperature Range (2-6°C)</b> Yes / No  <b>Sample Preservative</b> Ice / Acid / None / Other </div> <div> <b>WO #</b> 061503 </div> </div>																	

WO # 061503

eANALYTICS: Environmental testing made Easy

Page \_\_\_\_ of \_\_\_\_



**eANALYTICS**  
LABORATORY

**June 19, 2012**

Project: Blake B29-15

Lab ID: 061503

EPA Method: 8260C      BTEX

Todd Rhea

Laboratory Manager - eAnalytics Laboratory

# Certificate of Analysis

Quality Control  
Analysis

**e**ANALYTICS  
LABORATORY

June 19, 2012

Client: LT Environmental  
4600 West 60th Avenue  
Arvada, Colorado 80003

Project: Blake B29-15

Lab ID: 061503

Matrix: WATER  
Batch ID: EA 06-17-12

EPA Method: 8260C BTEX

Sample Name	Benzene	Ethyl - Benzene	Toluene	Total Xylenes	Date Analyzed	Lab ID
Laboratory Control Sample	95	101	104	92	06/17/12	L 06-17-12
(Acceptable 70-130%)	% Rec	% Rec	% Rec	% Rec		
Calibration Verification	105	102	93	97	06/17/12	C 06-17-12
(Acceptable 80-120%)	% Rec	% Rec	% Rec	% Rec		
Reagent Blank	< 1	< 1	< 1	< 1	06/17/12	RB 06-17-12
	ug/L	ug/L	ug/L	ug/L		

*Todd Rhea*

Laboratory Manager - eAnalytics Laboratory