

**3R-340**

**Initial Spill Clean Up  
Report**

**Date  
2009**

# ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## SPILL CLEANUP REPORT

LOCATED AT:

**BURLINGTON RESOURCES  
RANDLEMAN #1 WELL SITE  
SECTION 13, TOWNSHIP 31N, RANGE 11W  
SAN JUAN COUNTY, NEW MEXICO**

FOR:

**MR. GREGG WURTZ  
CONOCOPHILLIPS  
3401 EAST 30<sup>TH</sup> STREET**

**FARMINGTON, NEW MEXICO 87401**

District Copy  
For Scanning Only  
Has NOT been processed.



**PROJECT NO. 92115-0768  
FEBRUARY 2009**



April 8, 2009

Project No. 92115-0768

Mr. Gregg Wurtz  
Burlington Resources  
3401 East 30<sup>th</sup> Street  
Farmington, New Mexico 87401

Phone (505) 326-9537  
Cell (505) 320-2653

**RE: SPILL CLEANUP REPORT AT THE RANDLEMAN #1 WELL SITE, LOCATED IN SECTION 13, TOWNSHIP 31N, RANGE 11W, SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Wurtz,

Attached please find one (1) original and two (2) copies of the *Spill Cleanup Report* at Randleman #1 well site, located in Section 13, Township 31N, Range 11W, San Juan County, New Mexico. The cleanup took place on February 26 & 27 and on March 3, 2009.

We appreciate the opportunity to be of service. If you have any questions or need additional information, please contact our office at (505) 632-0615.

Sincerely,  
**ENVIROTECH, INC.**

A handwritten signature in blue ink, appearing to read 'Scott Gonzales', written over a horizontal line.

Scott Gonzales  
Sr. Environmental Technician  
[sgonzales@envirotech-inc.com](mailto:sgonzales@envirotech-inc.com)

Enclosures: One (1) Original and Two (2) Copies of Spill Cleanup Report

CC: Ms. Gwen Frost, ConocoPhillips  
Client File 92115

**SPILL CLEANUP REPORT  
LOCATED AT RANDLEMAN #1  
SECTION 13, TOWNSHIP 31N, RANGE 11W  
SAN JUAN COUNTY, NEW MEXICO**

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## INTRODUCTION

Envirotech, Inc. of Farmington, New Mexico, was contracted by Burlington Resources to provide environmental response and cleanup services for a release of condensate at the Randleman #1 well site, located in Section 13, Township 31N, Range 11W, San Juan County, New Mexico; see *Figure 1, Vicinity Map*. Cleanup activities included removal of contaminated material, sampling and analysis, site restoration, documentation, and reporting.

## ACTIVITIES PERFORMED

On February 26, 2009, Envirotech, Inc. was contacted with a request to respond to a spill that occurred at the above-referenced location. Upon arrival onsite, a job safety meeting and a brief site assessment were conducted. Due to depth to ground water being less than 50 feet below ground surface (BGS) and due to a wash being located less than 100 feet from the site, the closure standards were determined to be 100 ppm total petroleum hydrocarbons (TPH) and 100 ppm organic vapors, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases.

The area of release was excavated to approximately 42' x 45' x 2.5 - 3' deep; see *Figure 2, Site Map*. Six (6) composite samples were collected from the excavation. One (1) composite sample was collected from each of the walls and two (2) composite samples were collected from the bottom of the excavation. One (1) bottom composite sample was collected from the east side of the excavation at 2.5 feet BGS and one (1) bottom composite sample was collected from the west side of the excavation at 3 feet BGS. The samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a Photo Ionization Detector (PID). The sample collected from the north wall was below the regulatory limit of 100 ppm TPH; however, the sample was above the regulatory limit of 100 ppm organic vapors; see *Table 1, Soil Analytical Results*. The samples collected from the bottom west side at 3 feet BGS and the samples collected from the west and east walls were below the regulatory limits of 100 ppm TPH and 100 ppm organic vapors. The samples collected from the bottom east side at 2.5 feet BGS and from the south wall were above the regulatory limits of 100 ppm TPH and 100 ppm organic vapors. Therefore, excavation continued on the north wall, the bottom on the east side, and on the south wall. Additionally, due to visual contamination, excavation continued on the bottom of the west side. Excavation extents were approximately 42' x 51' x 7' deep. A sample was collected from the north wall and analyzed in the field for organic vapors. The sample was below the regulatory limits of 100 ppm organic vapors. Additionally, a sample was collected from the bottom on the west side at seven (7) feet BGS. The sample was analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample was below the regulatory limit of 100 ppm organic vapors; however, the sample was above the regulatory limit of 100 ppm TPH; see *Table 1, Soil Analytical Results* and *Appendix B, Analytical Results*.

Envirotech, Inc. returned to the site on February 27, 2009, to continue excavation and sampling activities. Excavation continued on the south wall, the south-east wall, and on the bottom of the south-east corner to extents of 81' x 42 - 43' x 8' deep. Four (4) composite samples were collected from the excavation. One (1) composite sample was collected from the bottom on the

west side at eight (8) feet BGS, one (1) composite sample was collected from the south-east wall, one (1) composite sample was collected from the south wall, and one (1) composite sample was collected from the bottom south-east corner at eight (8) feet BGS. The samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The samples were below the regulatory limit of 100 ppm TPH. The samples collected from the bottom west side and the south wall were below the regulatory limit of 100 ppm organic vapors; however the sample collected from the south-east wall was above the regulatory limit of 100 ppm organic vapors. Therefore, excavation continued on the south-east wall for an additional two (2) feet, where an additional sample was collected and analyzed in the field for organic vapors using a PID. The sample was below the regulatory limit of 100 ppm organic vapors. The sample collected from the bottom south-east corner at eight (8) feet BGS was above the regulatory limits of 100 ppm TPH and 100 ppm organic vapors; therefore, the south-east corner was excavated to approximately 13 feet BGS, where a composite sample was collected. The sample was analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample was above the regulatory limits of 100 ppm TPH and 100 ppm organic vapors; therefore, excavation continued on the south-east corner to approximately 15 feet BGS. The sample was analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample was above the regulatory limits of 100 ppm TPH and 100 ppm organic vapors; therefore, excavation continued to approximately 20 feet BGS where a composite sample was collected. The sample was analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample was below the regulatory limits of 100 ppm TPH and 100 ppm organic vapors; therefore, additional excavation was not required; see *Table 1, Analytical Results* and *Appendix B, Analytical Results*.

Envirotech, Inc. returned on March 2, 2009, because ground water was seeping through the bottom of the south-east corner of the excavation at 20 feet BGS. Approximately 5-10 gallons had collected on the bottom of the excavated area. A Rock Springs vacuum truck was contracted by Envirotech, Inc. to collect ground water contained inside the excavation. A soil sample was then collected from the south-east corner at 20 feet BGS. The sample was analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample was above the regulatory limits of 100 ppm TPH and 100 ppm organic vapors. The water in the bottom was vacuumed out and the bottom of the south-east corner was excavated an additional five (5) to ten (10) feet BGS in an effort to vacuum more water. After additional digging, a ground water sample was collected approximately 25 – 30 feet BGS. After the water sample was collected, the excavation caved in, making it impossible to vacuum more water. Because ground water was encountered, maximum reasonable extents of excavation had been reached at 81' x 42' x 25 – 30' deep. The water sample was transported on ice under chain of custody to be analyzed in Envirotech's laboratory for VOC using USEPA Method 8260. Laboratory results showed that the ground water was impacted by the release of condensate. Results were above regulatory standards set forth by the New Mexico Water Quality Control Commission (WQCC). The sample was above the regulatory standards for benzene, xylenes, and total naphthalene; see *Table 2, Water Analytical Results* and *Appendix B, Analytical Results*.

Approximately 611 cubic yards of contaminated soil were removed from the location and transported to IEI's NMOCD-permitted landfarm remediation facility. Clean fill was obtained from the land owner and used to restore the site to pre-incident condition.

### RECOMMENDATIONS

Based on the analytical results of the groundwater impacted by the release of condensate, Envirotech, Inc. recommends that the NMOCD be contacted and groundwater monitoring wells be installed under the guidance of the NMOCD.

### SUMMARY AND CONCLUSIONS

Approximately 611 cubic yards of contaminated soil were removed from the Randleman #1 well site, located in Section 13, Township 31N, Range 11W, San Juan County, New Mexico and transported to IEI's NMOCD permitted landfarm remediation facility. Envirotech, Inc. recommends that the NMOCD be contacted and the groundwater analytical results be discussed. Envirotech, Inc. recommends that groundwater monitoring wells be installed under the guidance of the NMOCD.

### STATEMENT OF LIMITATIONS

Envirotech, Inc. has completed the removal of soil impacted by a release of condensate at the Randleman #1 well site, San Juan County, New Mexico. The work and services provided by Envirotech were under the current guidelines of the NMOCD. All observations and conclusions provided here are based on the information and current site conditions found at the time of the incident.

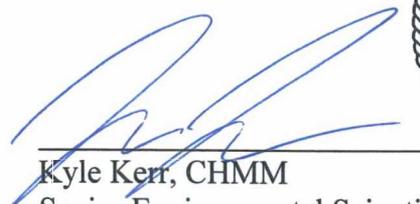
The undersigned has conducted this service at the above referenced site. This work has been conducted and reported in accordance with generally accepted professional practices in geology, engineering, environmental chemistry, and hydrogeology.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,  
**ENVIROTECH, INC.**

  
Scott Gonzales  
Sr. Environmental Technician  
[sgonzales@envirotech-inc.com](mailto:sgonzales@envirotech-inc.com)

Reviewed by:

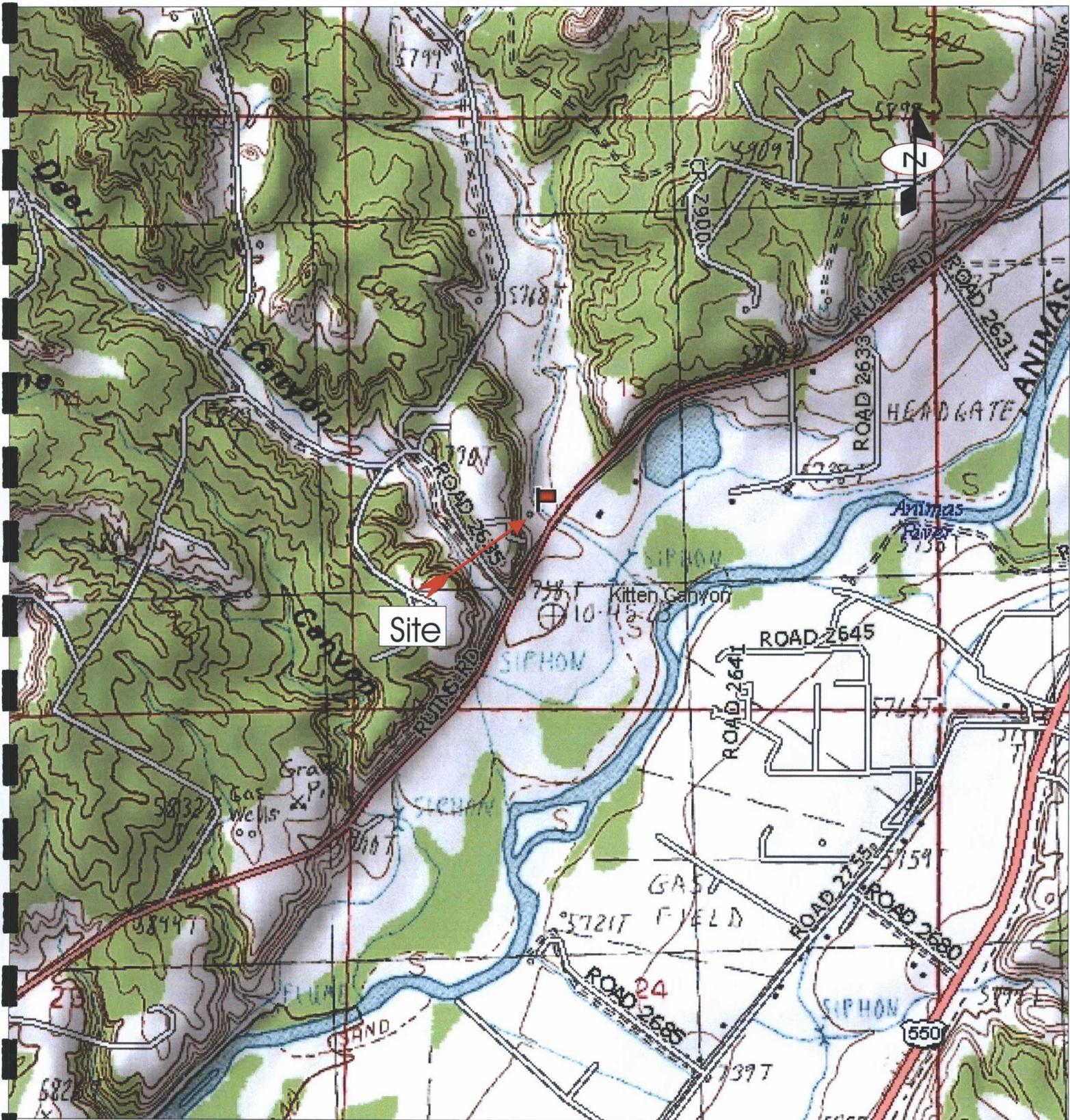
  
Kyle Kerr, CHMM  
Senior Environmental Scientist/Manager  
[kpkerr@envirotech-inc.com](mailto:kpkerr@envirotech-inc.com)



**FIGURES**

**Figure 1, Vicinity Map**

**Figure 2, Site Map**



Source: Aztec, New Mexico 7.5 Minute U.S.G.S. Topographic Quadrangle Map  
 Scale: 1:24,000 1" = 2000'

Burlington Resources  
 Randleman #1  
 Section. 13, Twp. 31N, Rng. 11W  
 San Juan County, NM

### ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS  
 4796 U.S. HIGHWAY 64  
 FARMINGTON, NEW MEXICO 87401  
 PHONE (505) 632-0615

Vicinity Map

Figure 1

PROJECT No 92115-0768 Date Drawn: 03/26/09

DRAWN BY:  
 Sherry Auckland

PROJECT MANAGER:  
 Kyle P. Kerr

45'

NORTH WALL COMPOSITE:  
8 PPM TPH, 6.8 PPM OV<sub>s</sub>

WEST WALL COMPOSITE:  
36 PPM TPH, 38.7 PPM OV<sub>s</sub>

EAST WALL COMPOSITE:  
44 PPM TPH, 74.8 PPM OV<sub>s</sub>

WEST BOTTOM AT 8' BGS:  
12 PPM TPH, 3.5 PPM OV<sub>s</sub>

EAST BOTTOM AT 2.5' BGS:  
772 PPM TPH, 641 PPM OV<sub>s</sub>

81'

SOUTH-EAST WALL COMPOSITE:  
32 PPM TPH, 53.9 PPM OV<sub>s</sub>

SOUTH-EAST CORNER BOTTOM:  
512 PPM TPH, 664 PPM OV<sub>s</sub>

SOUTH WALL COMPOSITE:  
40 PPM TPH, 64.3 PPM OV<sub>s</sub>

SEPARATOR  
PAD

GROUND WATER 25 - 30' DEEP:  
0.523 PPM BENZENE  
0.282 PPM TOLUENE  
0.391 PPM ETHYLBENZENE  
0.935 PPM XYLENES  
0.0344 PPM NAPHTHALENE

METER  
HOUSE

LEGEND



EXCAVATION



WELLHEAD

SITE MAP  
BURLINGTON RESOURCES  
RANDLEMAN #1  
SEC 13, TWP 31N, RNG 11W  
SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS	FIGURE NO. 2	REV
PROJECT NO92115-0768		

REVISIONS

NO.	DATE	BY	DESCRIPTION
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MAP	DRWN	SG	03/26/09	BASE	DRWN
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ENVIRONMENTAL SCIENTISTS & ENGINEERS  
**ENVIROTECH**

**TABLES**

**Table 1, Soil Analytical Results**

**Table 2, Water Analytical Results**

Table 1, Soil Analytical Results  
 Burlington Resources  
 Randleman #1 Well Site  
 Sec. 13, Twp. 31N, Rng. 11W  
 San Juan County, New Mexico  
 Project No. 92115-0768

Sample Description	Sample Number	Date	USEPA Method 418.1 TPH (ppm)	OVM (ppm)
NMOCD Standards	NA	NA	5000	100
North Wall Comp	1	02/26/09	8	<b>274.0</b>
North Wall Comp 2	2	02/26/09	NS	6.8
Bottom West Side Comp 1	3	02/26/09	36	51.2
Bottom West Side Comp 2	4	02/26/09	<b>104</b>	48.8
West Wall Comp	5	02/26/09	36	38.7
East Wall Comp	6	02/26/09	44	74.8
Bottom East Side Composite	7	02/26/09	<b>772</b>	<b>641.0</b>
South Wall Composite	8	02/26/09	<b>1080</b>	<b>898.0</b>
West Bottom at 8' BGS	1	02/27/09	12	3.5
South-East Wall Comp	2	02/27/09	32	<b>186.0</b>
South-East Wall Comp 2	3	02/27/09	NS	53.9
South Wall Composite	4	02/27/09	40	64.3
South-East Corner Bottom at 8'	5	02/27/09	<b>5220</b>	<b>1079.0</b>
South-East Corner Bottom at 13'	6	02/27/09	<b>7970</b>	<b>1236.0</b>
South-East Corner Bottom at 15'	7	02/27/09	<b>200</b>	<b>878.0</b>
South-East Corner Bottom at 20'	8	02/27/09	ND	21.2
Bottom Composite at 20' BGS	1	03/02/09	<b>512</b>	<b>664.0</b>

ND = Non-Detect

NS = Not Sampled

\* Values in **BOLD** above regulatory standards

Table 2, Water Analytical Results  
 Burlington Resources  
 Randleman #1 Well Site  
 Sec. 13, Twp. 31N, Rng. 11W  
 San Juan County, New Mexico  
 Project No. 92115-0768

Sample Description	Sample Number	Date	USEPA Method 8260				
			Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)	Napthalene (mg/l)
NMED Standards	NA	NA	0.010	0.750	0.750	0.620	0.0300
GW 25 - 30' Deep	1	3/2/2009	<b>0.523</b>	0.282	0.391	<b>0.935</b>	<b>0.0344</b>

\*Values in **BOLD** are above regulatory standards

**APPENDIX A**

**Site Photography**

**Burlington Resources  
Randleman #1 Well Site  
San Juan County, New Mexico  
Project No. 92115-0768**



Photo 1: Visible Staining under Aboveground Storage Tank



Photo 2: Contamination under liner

**Burlington Resources  
Randleman #1 Well Site  
San Juan County, New Mexico  
Project No. 92115-0768**



Photo 3: During Excavation



Photo 4: During Excavation

**Burlington Resources  
Randleman #1 Well Site  
San Juan County, New Mexico  
Project No. 92115-0768**

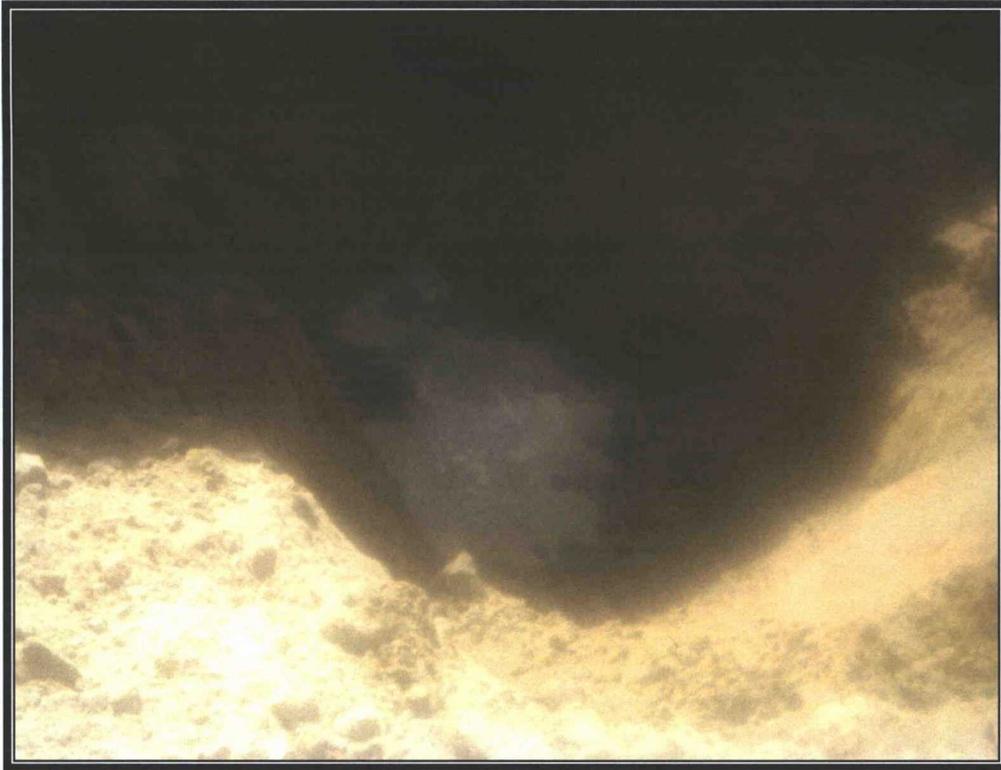


Photo 5: Groundwater impacted



Photo 6: Collecting groundwater

**Burlington Resources  
Randleman #1 Well Site  
San Juan County, New Mexico  
Project No. 92115-0768**



Photo 7: Backfilling Excavation



Photo 8: Backfilling Excavation

**APPENDIX B**

**Analytical Results**

Client:	Burlington	Project #:	92115-0768
Sample No.:	1	Date Reported:	3/18/2009
Sample ID:	north wall	Date Sampled:	2/26/2009
Sample Matrix:	Soil	Date Analyzed:	2/26/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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<b>Total Petroleum Hydrocarbons</b>	<b>8</b>	<b>5.0</b>
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ND = Parameter not detected at the stated detection limit.

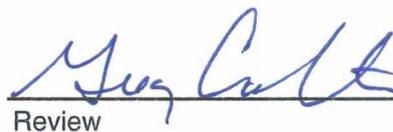
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
\_\_\_\_\_  
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Review

**Greg Crabtree**  
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Client:	Burlington	Project #:	92115-0768
Sample No.:	3	Date Reported:	3/18/2009
Sample ID:	3' bottom westside	Date Sampled:	2/26/2009
Sample Matrix:	Soil	Date Analyzed:	2/26/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>36</b>	<b>5.0</b>

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
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Review

**Greg Crabtree**  
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Printed

Client:	Burlington	Project #:	92115-0768
Sample No.:	4	Date Reported:	3/18/2009
Sample ID:	7' bottom westside	Date Sampled:	2/26/2009
Sample Matrix:	Soil	Date Analyzed:	2/26/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	104	5.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
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Review

**Greg Crabtree**  
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Client:	Burlington	Project #:	92115-0768
Sample No.:	5	Date Reported:	3/18/2009
Sample ID:	west wall comp 1st half	Date Sampled:	2/26/2009
Sample Matrix:	Soil	Date Analyzed:	2/26/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>36</b>	<b>5.0</b>

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
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**Greg Crabtree**  
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Printed

Client:	Burlington	Project #:	92115-0768
Sample No.:	6	Date Reported:	3/18/2009
Sample ID:	East wall comp	Date Sampled:	2/26/2009
Sample Matrix:	Soil	Date Analyzed:	2/26/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>44</b>	<b>5.0</b>

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
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Review

**Greg Crabtree**  
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Client:	Burlington	Project #:	92115-0768
Sample No.:	7	Date Reported:	3/18/2009
Sample ID:	3' bottom eastside	Date Sampled:	2/26/2009
Sample Matrix:	Soil	Date Analyzed:	2/26/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>772</b>	<b>5.0</b>

ND = Parameter not detected at the stated detection limit.

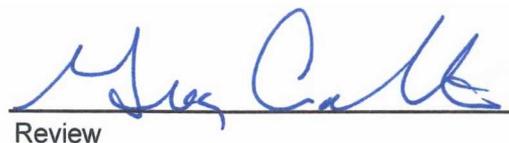
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
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\_\_\_\_\_  
Review

**Greg Crabtree**  
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Printed

Client:	Burlington	Project #:	92115-0768
Sample No.:	8	Date Reported:	3/18/2009
Sample ID:	South wall	Date Sampled:	2/26/2009
Sample Matrix:	Soil	Date Analyzed:	2/26/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>1,080</b>	<b>5.0</b>

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
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Review

**Greg Crabtree**  
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Printed



CONTINUOUS CALIBRATION  
EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Cal. Date: 26-Feb-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	198
	200	
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

  
\_\_\_\_\_  
Analyst

3-24-09  
\_\_\_\_\_  
Date

Scott Gonzales  
\_\_\_\_\_  
Print Name

  
\_\_\_\_\_  
Review

3/24/09  
\_\_\_\_\_  
Date

Greg Crabtree  
\_\_\_\_\_  
Print Name

Client:	Burlington	Project #:	92115-0768
Sample No.:	1	Date Reported:	3/18/2009
Sample ID:	Bottom @ 7'	Date Sampled:	2/27/2009
Sample Matrix:	Soil	Date Analyzed:	2/27/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>12</b>	<b>5.0</b>

ND = Parameter not detected at the stated detection limit.

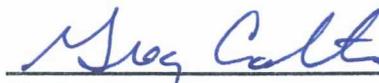
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
\_\_\_\_\_  
Printed

  
\_\_\_\_\_  
Review

**Greg Crabtree**  
\_\_\_\_\_  
Printed

Client:	Burlington	Project #:	92115-0768
Sample No.:	2	Date Reported:	3/18/2009
Sample ID:	East wall comp 2nd half	Date Sampled:	2/27/2009
Sample Matrix:	Soil	Date Analyzed:	2/27/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----------	--------------------------	--------------------------

<b>Total Petroleum Hydrocarbons</b>	<b>32</b>	<b>5.0</b>
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ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
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Printed

  
\_\_\_\_\_  
Review

**Greg Crabtree**  
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Printed

Client:	Burlington	Project #:	92115-0768
Sample No.:	4	Date Reported:	3/18/2009
Sample ID:	South wall comp	Date Sampled:	2/26/2009
Sample Matrix:	Soil	Date Analyzed:	2/26/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	40	5.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

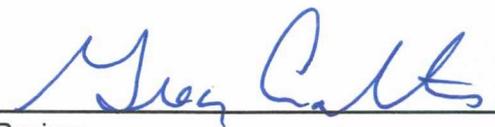
Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

Scott Gonzales

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Review

Greg Crabtree

Printed

Client:	Burlington	Project #:	92115-0768
Sample No.:	5	Date Reported:	3/18/2009
Sample ID:	Southeast corner @ 8'	Date Sampled:	2/27/2009
Sample Matrix:	Soil	Date Analyzed:	2/27/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	5,220	5.0

ND = Parameter not detected at the stated detection limit.

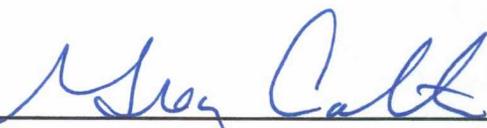
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
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Analyst

Scott Gonzales  
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Printed

  
\_\_\_\_\_  
Review

Greg Crabtree  
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Printed



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client: Burlington Project #: 92115-0768  
Sample No.: 6 Date Reported: 3/18/2009  
Sample ID: Southeast corner @ 13' Date Sampled: 2/27/2009  
Sample Matrix: Soil Date Analyzed: 2/27/2009  
Preservative: Cool Analysis Needed: TPH-418.1  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	7,970	5.0

ND = Parameter not detected at the stated detection limit.

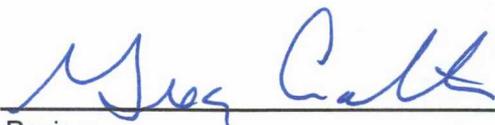
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

Scott Gonzales  
\_\_\_\_\_  
Printed

  
\_\_\_\_\_  
Review

Greg Crabtree  
\_\_\_\_\_  
Printed



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client: Burlington Project #: 92115-0768  
Sample No.: 7 Date Reported: 3/18/2009  
Sample ID: Southeast corner @ 15' Date Sampled: 2/27/2009  
Sample Matrix: Soil Date Analyzed: 2/27/2009  
Preservative: Cool Analysis Needed: TPH-418.1  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	200	5.0
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ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Randleman #1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

Scott Gonzales  
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Printed

  
\_\_\_\_\_  
Review

Greg Crabtree  
\_\_\_\_\_  
Printed

Client: Burlington Project #: 92115-0768  
Sample No.: 8 Date Reported: 3/18/2009  
Sample ID: Southeast corner @ 20' Date Sampled: 2/27/2009  
Sample Matrix: Soil Date Analyzed: 2/27/2009  
Preservative: Cool Analysis Needed: TPH-418.1  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	ND	5.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
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Analyst

Scott Gonzales  
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Printed

  
\_\_\_\_\_  
Review

Greg Crabtree  
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Printed



CONTINUOUS CALIBRATION  
EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Cal. Date: 27-Feb-09

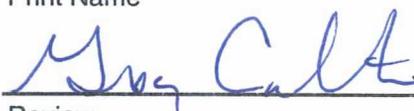
Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	199
	200	
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

  
\_\_\_\_\_  
Analyst

3-24-09  
\_\_\_\_\_  
Date

Scott Gonzales  
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Print Name

  
\_\_\_\_\_  
Review

3/24/09  
\_\_\_\_\_  
Date

Greg Crabtree  
\_\_\_\_\_  
Print Name

Client:	Burlington	Project #:	92115-0768
Sample No.:	1	Date Reported:	3/18/2009
Sample ID:	Bottom comp hole #2	Date Sampled:	3/2/2009
Sample Matrix:	Soil	Date Analyzed:	3/2/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>512</b>	<b>5.0</b>

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Randleman #1- hole #2 tested after draining contaminated water  
Excavation could not continue due to cave in dangers**  
Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
\_\_\_\_\_  
Analyst

**Scott Gonzales**  
\_\_\_\_\_  
Printed

  
\_\_\_\_\_  
Review

**Greg Crabtree**  
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Printed



CONTINUOUS CALIBRATION  
EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Cal. Date: 2-Mar-09

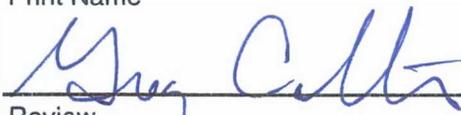
Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	200
	200	
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

  
\_\_\_\_\_  
Analyst

3-24-09  
\_\_\_\_\_  
Date

Scott Gonzales  
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Print Name

  
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Review

3/24/09  
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Date

Greg Crabtree  
\_\_\_\_\_  
Print Name



Client:	Burlington	Project #:	92115-0768
Sample ID:	GW 25 - 30' Deep	Date Reported:	03-04-09
Chain of Custody:	6437	Date Sampled:	03-02-09
Laboratory Number:	49170	Date Received:	03-02-09
Sample Matrix:	Aqueous	Date Analyzed:	03-02-09
Preservative:		Analysis Requested:	8260 VOC
Condition:	Cool and Intact		

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	523	(ug/L)	1.0	10
Toluene	282	(ug/L)	1.0	10
Ethylbenzene	391	(ug/L)	1.0	10
Xylenes, Total	935	(ug/L)	1.0	10
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	240	(ug/L)	1.0	10
1,3,5-Trimethylbenzene	272	(ug/L)	1.0	10
1,2-Dichloroethane (EDC)	ND	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	34.4	(ug/L)	1.0	1
1-Methylnaphthalene	ND	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	178	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	183	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	88.1	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1



Client: Burlington  
Sample ID: GW 25 - 30' Deep  
Laboratory Number: 49170

page 2

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	183	(ug/L)	1.0	1
4-Isopropyltoluene	83.8	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	3.0	1
n-Butylbenzene	82.5	(ug/L)	1.0	1
n-Propylbenzene	ND	(ug/L)	1.0	1
sec-Butylbenzene	82.7	(ug/L)	1.0	1
Styrene	ND	(ug/L)	1.0	1
tert-Butylbenzene	124	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	112	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	43.8	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

Surrogates:			Rec. Limits	
Dibromofluoromethane	101	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	82.2	% Recovery	74.6-123	1
Toluene-d8	93.6	% Recovery	84.2-115	1
4-Bromofluorobenzene	108	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.  
Method 8260, Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Comments: **Randelman #1.**

Analyst 

Review 



**envirotech**  
Analytical Laboratory

**QUALITY ASSURANCE / QUALITY CONTROL  
DOCUMENTATION**



Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	03-03-09
Laboratory Number:	03-03 VOA	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-03-09
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
Benzene	ND	(ug/L)	1.0	1
Toluene	ND	(ug/L)	1.0	1
Ethylbenzene	ND	(ug/L)	1.0	1
Xylenes, Total	ND	(ug/L)	1.0	1
Methyl tert-butyl ether (MTBE)	ND	(ug/L)	1.0	1
1,2,4-Trimethylbenzene	ND	(ug/L)	1.0	1
1,3,5-Trimethylbenzene	ND	(ug/L)	1.0	1
1,2-Dichloroethane (EDC)	ND	(ug/L)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/L)	1.0	1
Naphthalene	ND	(ug/L)	1.0	1
1-Methylnaphthalene	ND	(ug/L)	2.0	1
2-Methylnaphthalene	ND	(ug/L)	2.0	1
Bromobenzene	ND	(ug/L)	1.0	1
Bromochloromethane	ND	(ug/L)	1.0	1
Bromodichloromethane	ND	(ug/L)	1.0	1
Bromoform	ND	(ug/L)	1.0	1
Bromomethane	ND	(ug/L)	1.0	1
Carbon Tetrachloride	ND	(ug/L)	1.0	1
Chlorobenzene	ND	(ug/L)	1.0	1
Chloroethane	ND	(ug/L)	2.0	1
Chloroform	ND	(ug/L)	1.0	1
Chloromethane	ND	(ug/L)	1.0	1
2-Chlorotoluene	ND	(ug/L)	1.0	1
4-Chlorotoluene	ND	(ug/L)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/L)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/L)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/L)	2.0	1
Dibromochloromethane	ND	(ug/L)	1.0	1
Dibromoethane	ND	(ug/L)	2.0	1
1,2-Dichlorobenzene	ND	(ug/L)	1.0	1
1,3-Dichlorobenzene	ND	(ug/L)	1.0	1
1,4-Dichlorobenzene	ND	(ug/L)	1.0	1
Dichlorodifluoromethane	ND	(ug/L)	1.0	1
1,1-Dichloroethane	ND	(ug/L)	1.0	1
1,1-Dichloroethene	ND	(ug/L)	1.0	1
1,2-Dichloropropane	ND	(ug/L)	1.0	1
1,3-Dichloropropane	ND	(ug/L)	1.0	1
2,2-Dichloropropane	ND	(ug/L)	1.0	1



Client: QA/QC  
Sample ID: Laboratory Blank  
Laboratory Number: 03-03 VOA

Parameter	Concentration (ug/L)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/L)	1.0	1
Hexachlorobutadiene	ND	(ug/L)	1.0	1
Isopropylbenzene	ND	(ug/L)	1.0	1
4-Isopropyltoluene	ND	(ug/L)	1.0	1
Methylene Chloride	ND	(ug/L)	1.0	1
n-Butylbenzene	ND	(ug/L)	1.0	1
n-Propylbenzene	ND	(ug/L)	1.0	1
sec-Butylbenzene	ND	(ug/L)	1.0	1
Styrene	ND	(ug/L)	1.0	1
tert-Butylbenzene	ND	(ug/L)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/L)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/L)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/L)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/L)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/L)	1.0	1
Trichloroethene (TCE)	ND	(ug/L)	1.0	1
Trichlorofluoromethane	ND	(ug/L)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/L)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/L)	1.0	1
1,1,1-Trichloroethane	ND	(ug/L)	1.0	1
1,1,2-Trichloroethane	ND	(ug/L)	1.0	1
1,2,3-Trichloropropane	ND	(ug/L)	2.0	1
Vinyl Chloride	ND	(ug/L)	2.0	1

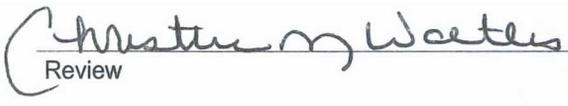
Surrogates:			Rec. Limits	
Dibromofluoromethane	107	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	118	% Recovery	74.6-123	1
Toluene-d8	104	% Recovery	84.2-115	1
4-Bromofluorobenzene	101	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.  
Method 8260, Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Comments: QA/QC for Samples 49170 and 49175.

Analyst 

Review 



Client:	QA/QC	Project #:	N/A
Sample ID:	Daily Calibration	Date Reported:	03-01-09
Laboratory Number:	02-27 QA/QC	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-27-09
Condition:	N/A	Analysis Requested:	8260 VOC

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
Benzene	100	115	115	80 - 120
Toluene	100	120	120	80 - 120
Ethylbenzene	100	112	112	80 - 120
Xylenes, Total	100	111	111	80 - 120
Methyl tert-butyl ether (MTBE)	100	105	105	80 - 120
1,2,4-Trimethylbenzene	100	108	108	80 - 120
1,3,5-Trimethylbenzene	100	105	105	80 - 120
1,2-Dichloroethane (EDC)	100	111	111	80 - 120
1,2-Dibromoethane (EDB)	100	105	105	80 - 120
Naphthalene	100	100	100	80 - 120
1-Methylnaphthalene	100	80.9	80.9	80 - 120
2-Methylnaphthalene	100	99.4	99.4	80 - 120
Bromobenzene	100	108	108	80 - 120
Bromochloromethane	100	119	119	80 - 120
Bromodichloromethane	100	114	114	80 - 120
Bromoform	100	111	111	80 - 120
Bromomethane	100	104	104	80 - 120
Carbon Tetrachloride	100	104	104	80 - 120
Chlorobenzene	100	112	112	80 - 120
Chloroethane	100	111	111	80 - 120
Chloroform	100	117	117	80 - 120
Chloromethane	100	120	120	80 - 120
2-Chlorotoluene	100	113	113	80 - 120
4-Chlorotoluene	100	106	106	80 - 120
cis-1,2-Dichloroethene	100	102	102	80 - 120
cis-1,3-Dichloropropene	100	113	113	80 - 120
1,2-Dibromo-3-chloropropane	100	104	104	80 - 120
Dibromochloromethane	100	105	105	80 - 120
Dibromoethane	100	113	113	80 - 120
1,2-Dichlorobenzene	100	96.2	96.2	80 - 120
1,3-Dichlorobenzene	100	98.5	98.5	80 - 120
1,4-Dichlorobenzene	100	98.3	98.3	80 - 120
Dichlorodifluoromethane	100	114	114	80 - 120
1,1-Dichloroethane	100	107	107	80 - 120
1,1-Dichloroethene	100	110	110	80 - 120
1,2-Dichloropropane	100	111	111	80 - 120
1,3-Dichloropropane	100	107	107	80 - 120
2,2-Dichloropropane	100	112	112	80 - 120



Client: QA/QC  
Sample ID: Daily Calibration  
Laboratory Number: 02-27 QA/QC

Parameter	Concentration (ug/L)	Result	% Recovered	% Recovery Limits
1,1-Dichloropropene	100	118	118	80 - 120
Hexachlorobutadiene	100	90.5	90.5	80 - 120
Isopropylbenzene	100	111	111	80 - 120
4-Isopropyltoluene	100	102	102	80 - 120
Methylene Chloride	100	104	104	80 - 120
n-Butylbenzene	100	100	100	80 - 120
n-Propylbenzene	100	93.9	93.9	80 - 120
sec-Butylbenzene	100	104	104	80 - 120
Styrene	100	108	108	80 - 120
tert-Butylbenzene	100	98.3	98.3	80 - 120
Tetrachloroethene (PCE)	100	116	116	80 - 120
1,1,1,2-Tetrachloroethane	100	108	108	80 - 120
1,1,2,2-Tetrachloroethane	100	99.3	99.3	80 - 120
trans-1,2-Dichloroethene	100	102	102	80 - 120
trans-1,3-Dichloropropene	100	108	108	80 - 120
Trichloroethene (TCE)	100	115	115	80 - 120
Trichlorofluoromethane	100	110	110	80 - 120
1,2,3-Trichlorobenzene	100	100	100	80 - 120
1,2,4-Trichlorobenzene	100	95.7	95.7	80 - 120
1,1,1-Trichloroethane	100	114	114	80 - 120
1,1,2-Trichloroethane	100	109	109	80 - 120
1,2,3-Trichloropropane	100	98.9	98.9	80 - 120
Vinyl Chloride	100	114	114	80 - 120

Surrogates:			Rec. Limits
Dibromofluoromethane	104	% Recovery	78.6-115
1,2-Dichloroethane-d4	120	% Recovery	74.6-123
Toluene-d8	103	% Recovery	84.2-115
4-Bromofluorobenzene	109	% Recovery	78.6-115

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.  
Method 8260, Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Comments: QA/QC for Samples 49170 and 49175.

Analyst 

Review 

Client: QA/QC  
 Sample ID: Matrix Spikes  
 Laboratory Number: 02-27-VOA - 49142  
 Sample Matrix: Aqueous  
 Preservative: N/A  
 Condition: N/A

Project #: N/A  
 Date Reported: 03-01-09  
 Date Sampled: N/A  
 Date Received: N/A  
 Date Analyzed: 02-27-09  
 Analysis Requested: 8260 VOC

Spike Analyte	Units: uG/L				Recovery Limits	Det. Limit
	Sample	Added	Result	%Recovery		
Benzene	523	100.0	531	85.3%	85.3 - 120	1.0
Toluene	282	100.0	397	104%	73 - 123	1.0
Chlorobenzene	ND	100.0	91.2	91.2%	84.7 - 119	1.0
1,1-Dichloroethene	ND	100.0	102	102%	83.4 - 122	1.0
Trichloroethene (TCE)	ND	100.0	94.1	94.1%	76.1 - 126	1.0

Spike Duplicate Analyte	Units: uG/L				Recovery Limits	Det. Limit
	Sample	Added	Result	%Recovery		
Benzene	523	100.0	566	90.8%	85.3 - 120	1.0
Toluene	282	100.0	453	119%	73 - 123	1.0
Chlorobenzene	ND	100.0	104	104%	84.7 - 119	1.0
1,1-Dichloroethene	ND	100.0	102	102%	83.4 - 122	1.0
Trichloroethene (TCE)	ND	100.0	122	122%	76.1 - 126	1.0

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.  
 Method 8260, Volatile Organic Compounds by Gas Chromatography / Mass Spectrometry, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Comments: **QA/QC for Samples 49170 and 49175.**

Analyst



Review



# CHAIN OF CUSTODY RECORD

6437

Client: <u>Burlington</u> <del>AW 25-30 deep</del>		Project Name / Location: <u>Randelman #1</u>		ANALYSIS / PARAMETERS													
Client Address:		Sampler Name: <u>Scott Gonzalez</u>		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Client Phone No.:		Client No.: <u>92115-0768</u>															

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
						HgCl <sub>2</sub>	HCl	USE															
<u>AW 25-30' deep</u>	<u>3-2-09</u>	<u>15:30</u>	<u>49170</u>	Soil Sludge Solid <u>Aqueous</u>	<u>2-VOA</u>			✓			✓											✓	✓
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
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				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature) 	Date <u>3-2-09</u>	Time <u>17:05</u>	Received by: (Signature) 	Date <u>3/2/09</u>	Time <u>17:05</u>
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

## ENVIROTECH INC.

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