

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company <b>ConocoPhillips Company</b>	Contact <b>Ashley Maxwell</b>
Address <b>3401 E. 30th St., Farmington, NM 87402</b>	Telephone No. <b>505-324-5169</b>
Facility Name <b>Newberry A 2</b>	Facility Type <b>Gas Well</b> Lease # <b>SF-078146</b>
Surface Owner <b>Federal</b>	Mineral Owner <b>Federal</b> API No. <b>3004511892</b>

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>K</b>	<b>09</b>	<b>31N</b>	<b>12W</b>	<b>1750'</b>	<b>South</b>	<b>1550'</b>	<b>West</b>	<b>San Juan County</b>

Latitude **36.9111921° N** Longitude **-108.104870° W**

**NATURE OF RELEASE**

Type of Release <b>Hydrocarbon Produced water</b>	Volume of Release <b>Hydrocarbon- 25 BBL Produced water- 5 BBL</b>	Volume Recovered <b>Hydrocarbon- 0 BBL Produced water- 0 BBL</b>
Source of Release <b>Oil Production Tank</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>5/18/2012 @ 7:00 AM</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Brandon Powell – NMOCD Mark Kelly – BLM FFO</b>	<b>RCVD NOV 16 '12 OIL CONS. DIV.</b>
By Whom? <b>Ashley Maxwell</b>	Date and Hour <b>NMOCD – 5/21/2012 @ 6:53 AM BLM FFO – 5/21/2012 @ 6:55 AM</b>	<b>DIST. 3</b>
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

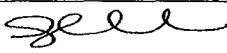
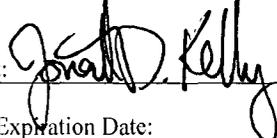
Describe Cause of Problem and Remedial Action Taken.\*

**An oil production tank developed a hole releasing 25 BBL of hydrocarbon and 5 BBL produced water. Leak was contained in the berm with zero BBL recovered. Oil production tank will be replaced.**

Describe Area Affected and Cleanup Action Taken.\*

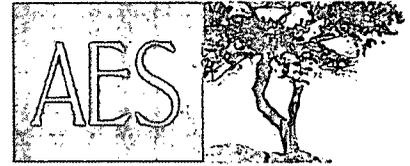
Loose contaminated soil will be removed using hydrovac. COPC will then assess the soil and determine a path forward for clean-up. Excavation was required based on NMOCD Guidelines for Remediation of Leaks, Spills and Releases. The excavation was 50'X75'X3' and 468 yds<sup>3</sup> of soil was transported to a third party land farm. Excavation and confirmation sampling occurred. Analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases; therefore no further action is needed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Ashley Maxwell</b>	Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>1/8/2014</b>	Expiration Date:
E-mail Address: <b>ashley.p.wethington@conocophillips.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>November 12, 2012</b> Phone: <b>505-324-5169</b>		

\* Attach Additional Sheets If Necessary

*njk 1400840990*



Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

624 E. Comanche  
Farmington, NM 87401  
505-564-2281

Durango, Colorado  
970-403-3274

November 1, 2012

Ashley Maxwell  
ConocoPhillips  
San Juan Business Unit  
Office 216-2  
5525 Hwy 64  
Farmington, New Mexico 87401

**RE: Initial Release Assessment and Final Excavation Report  
Newberry A #2  
San Juan County, New Mexico**

Dear Ms. Maxwell:

On June 4 and July 9, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Newberry A #2, located in San Juan County, New Mexico. The initial excavation was completed by AES on June 4, 2012. The final excavation was completed by CoP contractors while AES was on location on July 9, 2012. The release was a result of a leaking production tank and consisted of approximately 25 barrels (bbl) of petroleum hydrocarbons and 5 bbls of produced water.

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## 1.0 Site Information

### 1.1 Location

Location – NE¼ SW¼, Section 9, T31N, R12W, San Juan County, New Mexico  
Well Head Latitude/Longitude – N36.91135 and W108.10482, respectively  
Release Location Latitude/Longitude – N36.91166 and W108.10507, respectively  
Land Jurisdiction – Bureau of Land Management (BLM)  
Figure 1. Topographic Site Location Map  
Figure 2. Aerial Site Map, June 2012

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a C-144 dated July 1999 for the Newberry LS #4 well located approximately 1,200 feet southwest of the release area reported the depth to groundwater as greater than 100 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the

location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (<http://ford.nmt.edu/react/project.html>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs. An unnamed wash is located approximately 230 feet southeast of the location. Based on this information, the location was assessed a ranking score of 10 per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993).

### *1.3 Initial Assessment and Excavation Confirmation Sampling*

AES was initially contacted by Ashley Maxwell of CoP on June 4, 2012, and the same day, Tami Ross and Zachary Trujillo of AES completed the release assessment field work. The assessment included collection and field screening of soil samples from 18 soil borings (SB-1 through SB-18) near the location of the former production tank. Based on the field screening and laboratory analytical results, AES recommended excavation of the release area. Sample locations and excavation extents are shown on Figure 3.

On July 9, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of 16 confirmation soil samples (SC-1 through SC-16) from the walls and base of the excavation. The area of the final excavation was approximately 2,400 ft<sup>2</sup> and about 1 to 4 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

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## **2.0 Soil Sampling**

A total of 18 soil samples were collected during the initial assessment, and 16 composite soil samples were collected as part of excavation confirmation sampling. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Four of the soil samples collected during the initial assessment (SB-4, SB-10, SB-14, and SB-16) and six composite soil samples (SC-1, SC-2, SC-8, and SC-14 through SC-16) collected during the excavation were submitted for laboratory analysis.

### *2.1 Field Screening*

#### **2.1.1 Volatile Organic Compounds**

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

### 2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

### 2.2 Laboratory Analyses

The 10 soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8260B; and/or
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B.

### 2.3 Field Screening and Laboratory Analytical Results

On June 6, 2012, initial assessment field screening readings for VOCs via OVM ranged from 5.1 ppm in SB-17 up to 3,504 ppm in SB-10. Field TPH concentrations ranged from 567 mg/kg in SB-18 up to greater than 5,000 mg/kg in SB-7, SB-11, SB-15, and SB-16.

On July 9, 2012, final excavation field screening results for VOCs via OVM ranged from 23.7 ppm in SC-3 to 2,735 ppm in SC-15. Field TPH concentrations ranged from 37.1 mg/kg in SC-13 up to 558 mg/kg in SC-1. Results are included below in Table 1 and on Figures 3 and 4. Field screening reports are attached.

Table 1. Soil Field Screening VOCs and TPH Results  
 Newberry A #2 Release Assessment and Final Excavation, June and July 2012

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>Field TPH (mg/kg)</i>
<i>NMOCDC Action Level*</i>			<i>100</i>	<i>1,000</i>
SB-1	6/4/12	0.5	<b>2,415</b>	NA
SB-2	6/4/12	0.5	<b>2,551</b>	NA
SB-3	6/4/12	1	<b>285</b>	NA
SB-4	6/4/12	1	<b>2,739</b>	939

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>VOCs via OVM (ppm)</b>	<b>Field TPH (mg/kg)</b>
			<b>100</b>	<b>1,000</b>
	<i>NMOCOD Action Level*</i>			
SB-5	6/4/12	1	2,551	NA
SB-6	6/4/12	1	2,000	4,960
SB-7	6/4/12	1	2,130	>5,000
SB-8	6/4/12	1	47.3	NA
SB-9	6/4/12	1	22.3	1,420
SB-10	6/4/12	1	3,504	627
SB-11	6/4/12	1	2,001	>5,000
SB-12	6/4/12	1	15.4	705
SB-13	6/4/12	1	97.2	945
SB-14	6/4/12	2	1,629	3,600
SB-15	6/4/12	4.5	1,511	>5,000
SB-16	6/4/12	4.5	1,075	>5,000
SB-17	6/4/12	4.5	5.1	645
SB-18	6/4/12	0.5	24.4	567
SC-1	7/9/12	0.5 to 1	1,753	558
SC-2	7/9/12	1 to 3	185	80.9
SC-3	7/9/12	0.5 to 1	23.7	60.4
SC-4	7/9/12	1 to 3	1,915	NA
SC-5	7/9/12	1 to 3	1,665	NA
SC-6	7/9/12	1 to 6	720	NA
SC-7	7/9/12	1 to 6	2,665	NA
SC-8	7/9/12	1 to 6	1,228	180
SC-9	7/9/12	1 to 3	434	NA
SC-10	7/9/12	0.5 to 1	2,257	NA
SC-11	7/9/12	1 to 3	2,280	NA
SC-12	7/9/12	1 to 6	74.9	134
SC-13	7/9/12	1 to 6	36.7	37.1
SC-14	7/9/12	0.5 to 1	792	87.8
SC-15	7/9/12	1 to 6	2,735	NA
SC-16	7/9/12	1 to 3	2,708	NA

NA – Not Analyzed

\*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

Laboratory analyses for SB-4, SB-10, SB-14, and SB-16 were used to confirm field screening results from the initial assessment. Benzene concentrations ranged from less than 0.25 mg/kg in SB-4, SB-10, and SB-14 up to 19 mg/kg in SB-16. Total BTEX concentrations ranged from less than 1.25 mg/kg in SB-10 up to 1,170 mg/kg in SB-16. The reported TPH concentration (as GRO/DRO) in SB-16 was 13,400 mg/kg.

Laboratory analyses for SC-1, SC-2, SC-8, and SC-14 through SC-16 were used to confirm field screening results during excavation activities. Benzene concentrations ranged from below laboratory detection limits in five samples up to 0.076 mg/kg in SC-16. Total BTEX concentrations ranged from 0.67 mg/kg in SC-2 up to 14 mg/kg in SC-16. TPH concentrations (as GRO/DRO) were reported as 199 mg/kg in SC-15 and 271 mg/kg in SC-16. Results are presented in Table 2 and on Figures 3 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, BTEX and TPH  
 Newberry A #2 Release Assessment and Final Excavation, June and July 2012

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>BTEX (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>10</i>	<i>50</i>	<i>1,000</i>	
SB-4	6/4/12	1	<0.25	3.7	NA	NA
SB-10	6/4/12	1	<0.25	<1.25	NA	NA
SB-14	6/4/12	1	<0.25	49.5	NA	NA
SB-16	6/4/12	4.5	<b>19</b>	<b>1,170</b>	<b>12,000</b>	<b>1,400</b>
SC-1	7/9/12	0.5 to 1	<0.25	2.6	NA	NA
SC-2	7/9/12	1 to 3	<0.050	0.67	NA	NA
SC-8	7/9/12	1 to 6	<0.25	1.4	NA	NA
SC-14	7/9/12	0.5 to 1	<0.25	2.5	NA	NA
SC-15	7/9/12	1 to 6	<0.25	6.2	160	39
SC-16	7/9/12	1 to 3	0.076	14	230	41

NA – Not Analyzed

\*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

### 3.0 Conclusions and Recommendations

On June 4 and July 9, 2012, AES conducted an initial assessment of petroleum contaminated soils associated with a release from the production tank at the Newberry A #2, located in San Juan County, New Mexico. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the release was assigned a rank of 10. Field screening reported concentrations above the NMOCD action levels of 100 ppm VOCs in 12 of the 18 samples collected, with the highest concentration in SB-10 (3,504 ppm). Field screening of TPH exceeded the NMOCD action level of 1,000 mg/kg in SB-6, SB-7, SB-9, SB-11, SB-14, SB-15, and SB-16. TPH concentrations were greater than 5,000 mg/kg in SB-7, SB-11, SB-15, and SB-16.

Laboratory analyses collected on June 4, 2012, showed that benzene, total BTEX, and TPH concentrations were above the applicable NMOCD thresholds in SB-16 with 19 mg/kg benzene, 1,170 mg/kg BTEX, and 13,400 mg/kg TPH. Based on field screening and laboratory analytical results, excavation of the release area was recommended for the location.

On July 9, 2012, final assessment of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were above applicable NMOCD action levels in SC-1, SC-2, SC-4 through SC-11, SC-15, and SC-16, with the highest concentration reported in SC-15 with 2,735 ppm. The field TPH concentrations reported in samples SC-1 through SC-14 were below the NMOCD action level of 1,000 mg/kg. Analytical results showed that benzene and total BTEX concentrations in each sample were reported below the applicable NMOCD action levels. TPH as GRO/DRO in SC-15 and SC-16 were reported below the NMOCD action levels of 1,000 mg/kg.

Based on the final field screening and laboratory results from confirmation samples from the final excavation of petroleum contaminated soils at the Newberry A #2, benzene, total BTEX, VOCs, and TPH concentrations were below applicable NMOCD action levels. No further work is recommended.

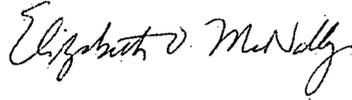
If you have any questions about this report or site conditions, please do not hesitate to contact Deborah Watson at (505) 564-2281.

Sincerely,



Heather M. Woods

Staff Geologist

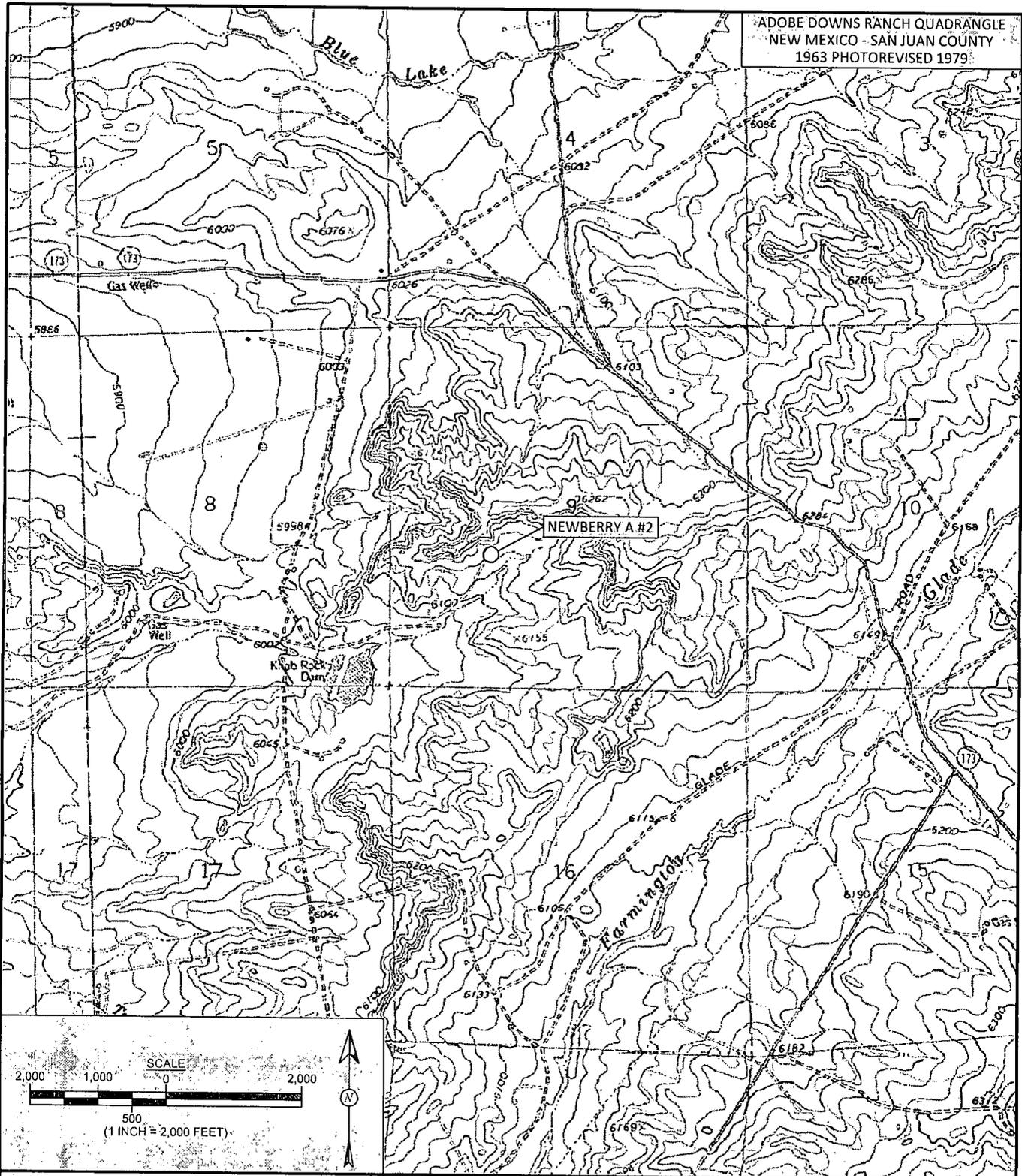


Elizabeth McNally, PE

Attachments:

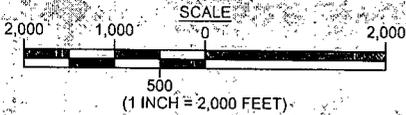
- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, June 2012
- Figure 3. Initial Assessment Soil Sample Locations and Results, June 2012
- Figure 4. Final Excavation Soil Sample Locations and Results, July 2012
- AES Field Screening Report 060412
- AES Field Screening Report 070912
- Hall Laboratory Analytical Report 1206100
- Hall Laboratory Analytical Report 1207263

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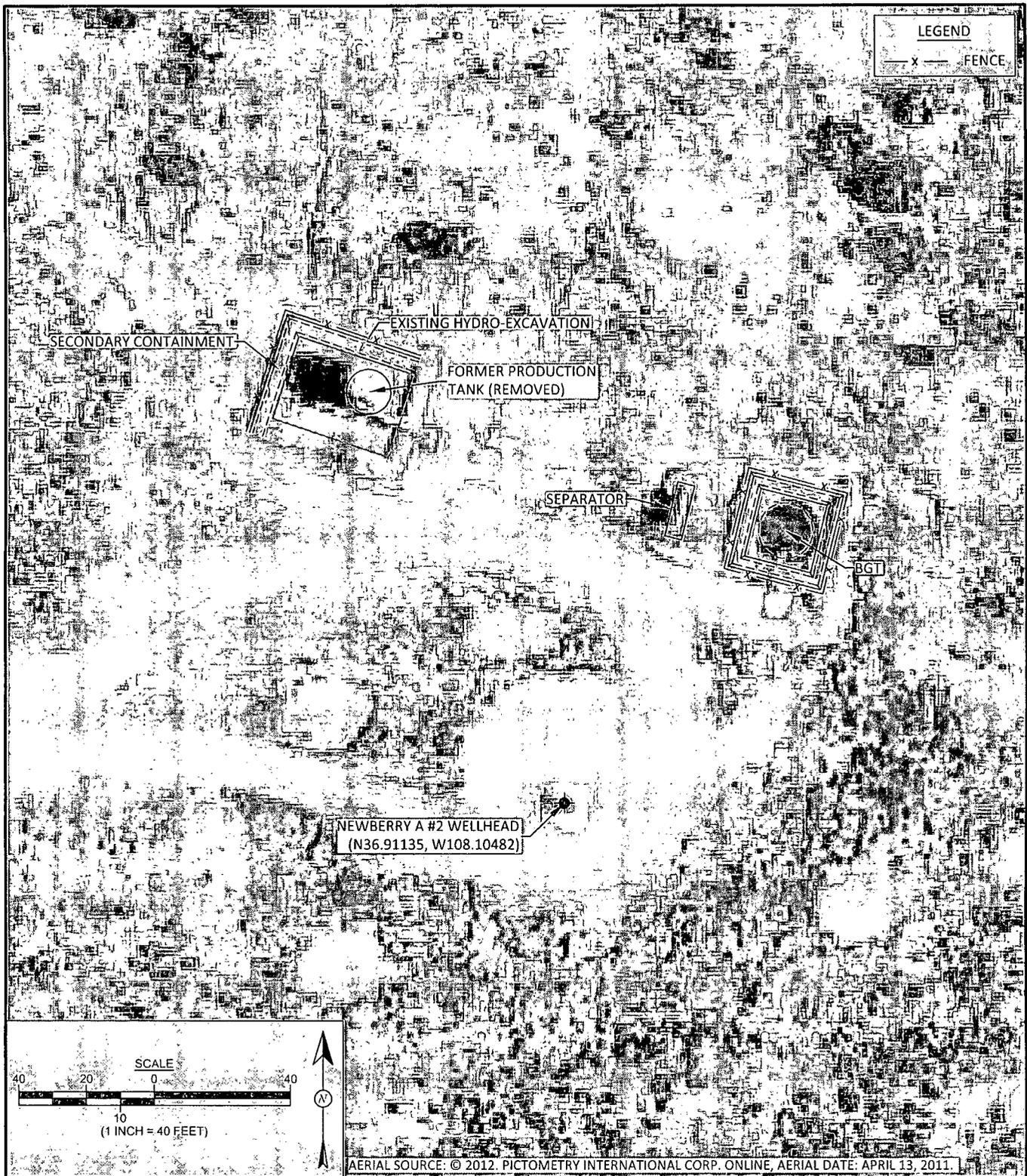
ADOBE DOWNS RANCH QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 1963 PHOTOREVISED 1979

NEWBERRY A #2



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 5, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 19, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> October 19, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 19, 2012

**FIGURE 1**  
**TOPOGRAPHIC SITE LOCATION MAP**  
 ConocoPhillips  
 NEWBERRY A #2  
 SAN JUAN COUNTY, NEW MEXICO  
 NE 1/4 SECTION 9, T31N, R12W  
 N36.91135, W108.10482



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 5, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 19, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> October 19, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 19, 2012

**FIGURE 2**

**AERIAL SITE MAP**  
 ConocoPhillips  
 NEWBERRY A #2  
 SAN JUAN COUNTY, NEW MEXICO  
 NE¼ SW¼, SECTION 9, T31N, R12W  
 N36.91135, W108.10482

**FIGURE 3**

**INITIAL ASSESSMENT SOIL SAMPLE LOCATIONS AND RESULTS**  
**JUNE 2012**  
 ConocoPhillips  
 NEWBERRY A #2  
 SAN JUAN COUNTY, NEW MEXICO  
 NE¼ SW¼, SECTION 9, T31N, R12W  
 N36.91135, W108.10482

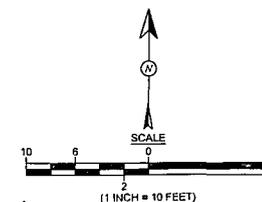


Animas Environmental Services, LLC

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**LEGEND**

- x — FENCE
- SAMPLE LOCATIONS

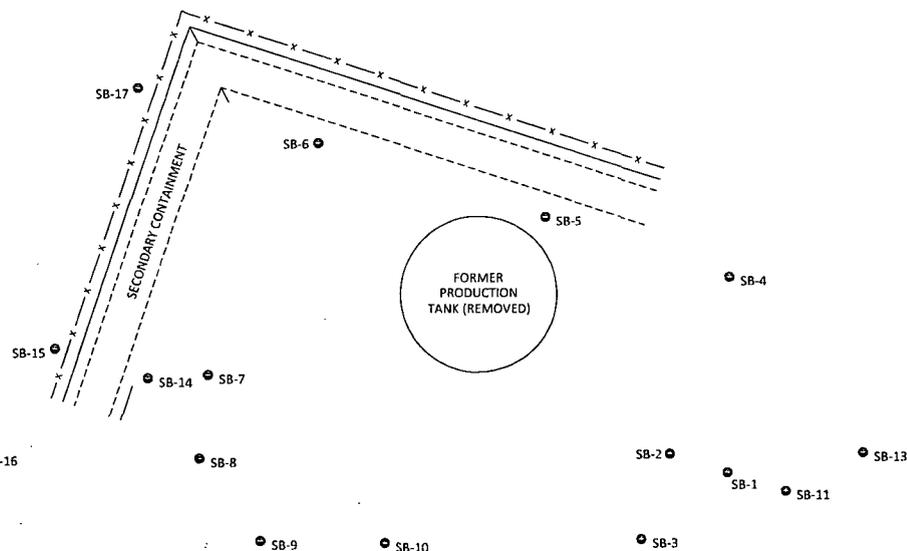


Field Screening Results					
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	
<b>NMOC ACTION LEVEL</b>			<b>100</b>	<b>5,000</b>	
SB-1	6/4/12	0.5	2,415	NA	
SB-2	6/4/12	0.5	2,551	NA	
SB-3	6/4/12	1	285	NA	
SB-4	6/4/12	1	2,739	939	
SB-5	6/4/12	1	2,551	NA	
SB-6	6/4/12	1	2,000	4,960	
SB-7	6/4/12	1	2,130	>5,000*	
SB-8	6/4/12	1	47.3	NA	
SB-9	6/4/12	1	22.3	1,420	
SB-10	6/4/12	1	3,504	627	
SB-11	6/4/12	1	2,001	>5,000*	
SB-12	6/4/12	1	15.4	705	
SB-13	6/4/12	1	97.2	945	
SB-14	6/4/12	2	1,629	3,600	
SB-15	6/4/12	4.5	1,511	>5,000*	
SB-16	6/4/12	4.5	1,075	>5,000*	
SB-17	6/4/12	4.5	5.1	645	
SB-18	6/4/12	.5	24.4	567	

NA - NOT ANALYZED  
 \*TPH DILUTION NOT RUN PER CoP

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>5,000</b>	
SB-4	6/4/12	1	<0.25	3.7	NA	NA
SB-10	6/4/12	1	<0.25	<1.3	NA	NA
SB-14	6/4/12	2	<0.25	49.5	NA	NA
SB-16	6/4/12	4.5	19	1,170	12,000	1,400

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8260B AND/OR 8015B.  
 NA - NOT ANALYZED.



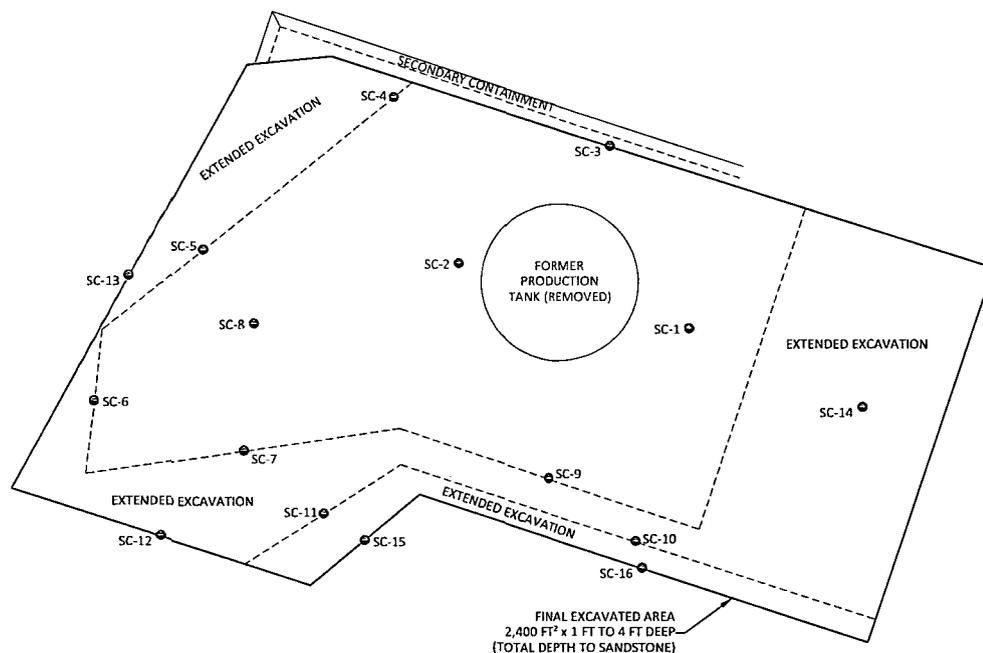
**FIGURE 4**

**FINAL EXCAVATION SOIL  
SAMPLE LOCATIONS AND RESULTS  
JULY 2012**  
ConocoPhillips  
NEWBERRY A #2  
SAN JUAN COUNTY, NEW MEXICO  
NE¼ SW¼, SECTION 9, T31N, R12W  
N36.91135, W108.10482



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lamean	<b>DATE DRAWN:</b> June 5, 2012
<b>REVISIONS BY:</b> C. Lamean	<b>DATE REVISED:</b> October 19, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> October 19, 2012
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Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>100</b>	<b>1,000</b>
SC-1	7/9/12	0.5 to 1	1,753	558
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SC-4	7/9/12	1 to 3	1,915	NA
SC-5	7/9/12	1 to 6	1,665	NA
SC-6	7/9/12	1 to 6	720	NA
SC-7	7/9/12	1 to 6	2,665	NA
SC-8	7/9/12	6	1,228	180
SC-9	7/9/12	1 to 3	434	NA
SC-10	7/9/12	1 to 3	2,257	NA
SC-11	7/9/12	1 to 6	2,280	NA
SC-12	7/9/12	1 to 6	74.9	134
SC-13	7/9/12	0.5 to 6	36.7	37.1
SC-14	7/9/12	0.5 to 1	792	87.8
SC-15	7/9/12	1 to 6	2,735	NA
SC-16	7/9/12	1 to 3	2,708	NA

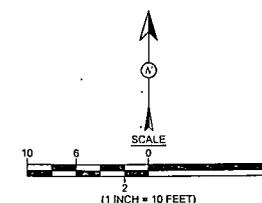
NA - NOT ANALYZED

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>1,000</b>	
SC-1	7/9/12	0.5 to 1	<0.25	2.6	NA	NA
SC-2	7/9/12	3	<0.050	0.76	NA	NA
SC-8	7/9/12	6	<0.25	1.4	NA	NA
SC-14	7/9/12	0.5 to 1	<0.25	2.5	NA	NA
SC-15	7/9/12	1 to 6	<0.25	6.2	160	39
SC-16	7/9/12	1 to 3	0.076	14	230	41

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8260B AND/OR 8015B.  
NA- NOT ANALYZED.

**LEGEND**

● SAMPLE LOCATIONS



# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: Newberry A #2

Date: 6/4/2012

Matrix: Soil

624 E. Comanche  
Farmington, NM 87401  
505-564-2231

Durango, Colorado  
970-403-3274

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 0.5'	6/4/2012	10:35	2,415	Not Analyzed for TPH.			
SB-2 @ 0.5'	6/4/2012	10:40	2,551	Not Analyzed for TPH.			
SB-3 @ 1'	6/4/2012	10:45	285	Not Analyzed for TPH.			
SB-4 @ 1'	6/4/2012	10:47	2,739	939	100	1	TCR
SB-5 @ 1'	6/4/2012	10:50	2,551	Not Analyzed for TPH.			
SB-6 @ 1'	6/4/2012	10:53	2,000	4,960	100	1	TCR
SB-7 @ 1'	6/4/2012	10:56	2,130	>5,000	100	1	TCR
SB-8 @ 1'	6/4/2012	11:00	47.3	Not Analyzed for TPH.			
SB-9 @ 1'	6/4/2012	11:05	22.3	1,420	100	1	TCR
SB-10 @ 1'	6/4/2012	11:08	3,504	627	100	1	TCR
SB-11 @ 1'	6/4/2012	11:10	2,001	>5,000	100	1	TCR
SB-12 @ 1'	6/4/2012	13:15	15.4	705	100	1	TCR
SB-13 @ 1'	6/4/2012	13:20	97.2	945	100	1	TCR
SB-14 @ 2'	6/4/2012	13:25	1,629	3,600	100	1	TCR
SB-15 @ 4.5'	6/4/2012	13:30	1,511	>5,000	100	1	TCR
SB-16 @ 4.5'	6/4/2012	14:44	1,075	>5,000	100	1	TCR
SB-17 @ 4.5'	6/4/2012	14:50	5.1	645	100	1	TCR
SB-18 @ 0.5'	6/4/2012	15:00	24.4	567	100	1	TCR

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit  
 ND Not Detected at the Reporting Limit  
 DF Dilution Factor  
 NA Not Analyzed

Analyst:

*Jami Ross*

\*Field TPH concentrations recorded may be below PQL.

# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: Newberry A #2

Date: 7/9/2012

Matrix: Soil

624 E. Comanche  
Farmington, NM 87401  
505-564-2281

Durango, Colorado  
970-403-3274

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	7/9/2012	13:00	1,753	15:10	558	20.0	1	DAW
SC-2	7/9/2012	13:03	185	15:14	80.9	20.0	1	DAW
SC-3	7/9/2012	13:05	23.7	15:18	60.4	20.0	1	DAW
SC-4	7/9/2012	13:08	1,915	Not Analyzed for TPH				
SC-5	7/9/2012	13:10	1,665	Not Analyzed for TPH				
SC-6	7/9/2012	13:14	720	Not Analyzed for TPH				
SC-7	7/9/2012	13:16	2,665	Not Analyzed for TPH				
SC-8	7/9/2012	13:18	1,228	15:23	180	20.0	1	DAW
SC-9	7/9/2012	13:20	434	Not Analyzed for TPH				
SC-10	7/9/2012	14:45	2,257	Not Analyzed for TPH				
SC-11	7/9/2012	14:48	2,280	Not Analyzed for TPH				
SC-12	7/9/2012	14:50	74.9	15:54	134	20.0	1	DAW
SC-13	7/9/2012	15:00	36.7	15:49	37.1	20.0	1	DAW
SC-14	7/9/2012	15:05	792	15:55	87.8	20.0	1	DAW
SC-15	7/9/2012	15:50	2,735	Not Analyzed for TPH				
SC-16	7/9/2012	16:00	2,708	Not Analyzed for TPH				

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit  
 ND Not Detected at the Reporting Limit  
 DF Dilution Factor  
 NA Not Analyzed

Analyst:

*Debrah Water*



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

June 06, 2012

Tami Ross

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 793-2072

FAX

RE: Newberry A #2

OrderNo.: 1206100

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/5/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1206100

Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-4 @ 1'

Project: Newberry A #2

Collection Date: 6/4/2012 10:47:00 AM

Lab ID: 1206100-001

Matrix: MEOH (SOIL)

Received Date: 6/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.25		mg/Kg	5	6/5/2012 4:01:04 PM
Toluene	0.33	0.25		mg/Kg	5	6/5/2012 4:01:04 PM
Ethylbenzene	ND	0.25		mg/Kg	5	6/5/2012 4:01:04 PM
Xylenes, Total	3.4	0.50		mg/Kg	5	6/5/2012 4:01:04 PM
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	5	6/5/2012 4:01:04 PM
Surr: 4-Bromofluorobenzene	115	70-130		%REC	5	6/5/2012 4:01:04 PM
Surr: Dibromofluoromethane	91.7	71.7-132		%REC	5	6/5/2012 4:01:04 PM
Surr: Toluene-d8	92.2	70-130		%REC	5	6/5/2012 4:01:04 PM

Qualifiers: \*X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

Analytical Report

Lab Order 1206100

Date Reported: 6/6/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-10 @ 1'

Project: Newberry A #2

Collection Date: 6/4/2012 11:08:00 AM

Lab ID: 1206100-002

Matrix: MEOH (SOIL)

Received Date: 6/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.25		mg/Kg	5	6/5/2012 4:31:03 PM
Toluene	ND	0.25		mg/Kg	5	6/5/2012 4:31:03 PM
Ethylbenzene	ND	0.25		mg/Kg	5	6/5/2012 4:31:03 PM
Xylenes, Total	ND	0.50		mg/Kg	5	6/5/2012 4:31:03 PM
Surr: 1,2-Dichloroethane-d4	87.0	70-130		%REC	5	6/5/2012 4:31:03 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	5	6/5/2012 4:31:03 PM
Surr: Dibromofluoromethane	91.5	71.7-132		%REC	5	6/5/2012 4:31:03 PM
Surr: Toluene-d8	95.0	70-130		%REC	5	6/5/2012 4:31:03 PM

Qualifiers: \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

**Analytical Report**

Lab Order 1206100

Date Reported: 6/6/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SB-14 @ 2'**Project:** Newberry A #2**Collection Date:** 6/4/2012 1:25:00 PM**Lab ID:** 1206100-003**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.25		mg/Kg	5	6/5/2012 5:01:00 PM
Toluene	10	0.25		mg/Kg	5	6/5/2012 5:01:00 PM
Ethylbenzene	2.5	0.25		mg/Kg	5	6/5/2012 5:01:00 PM
Xylenes, Total	37	0.50		mg/Kg	5	6/5/2012 5:01:00 PM
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	5	6/5/2012 5:01:00 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	5	6/5/2012 5:01:00 PM
Surr: Dibromofluoromethane	91.5	71.7-132		%REC	5	6/5/2012 5:01:00 PM
Surr: Toluene-d8	90.9	70-130		%REC	5	6/5/2012 5:01:00 PM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SB-16

Project: Newberry A #2

Collection Date: 6/4/2012 2:44:00 PM

Lab ID: 1206100-004

Matrix: MEOH (SOIL)

Received Date: 6/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	1400	99		mg/Kg	10	6/5/2012 11:54:40 AM
Surr: DNOP	0	82.1-121	S	%REC	10	6/5/2012 11:54:40 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	19	5.0		mg/Kg	100	6/5/2012 1:39:34 PM
Toluene	440	5.0		mg/Kg	100	6/5/2012 1:39:34 PM
Ethylbenzene	51	5.0		mg/Kg	100	6/5/2012 1:39:34 PM
Xylenes, Total	660	10		mg/Kg	100	6/5/2012 1:39:34 PM
Surr: 1,2-Dichloroethane-d4	86.1	70-130		%REC	100	6/5/2012 1:39:34 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	100	6/5/2012 1:39:34 PM
Surr: Dibromofluoromethane	87.4	71.7-132		%REC	100	6/5/2012 1:39:34 PM
Surr: Toluene-d8	87.3	70-130		%REC	100	6/5/2012 1:39:34 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: BDH
Gasoline Range Organics (GRO)	12000	500		mg/Kg	100	6/5/2012 1:39:34 PM
Surr: BFB	105	70-130		%REC	100	6/5/2012 1:39:34 PM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit

**QC SUMMARY REPORT**  
**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1206100

06-Jun-12

**Client:** Animas Environmental Services

**Project:** Newberry A #2

Sample ID <b>MB-2234</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>2234</b>	RunNo: <b>3194</b>								
Prep Date: <b>6/5/2012</b>	Analysis Date: <b>6/5/2012</b>	SeqNo: <b>89051</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		105	82.1	121			

Sample ID <b>LCS-2234</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>2234</b>	RunNo: <b>3194</b>								
Prep Date: <b>6/5/2012</b>	Analysis Date: <b>6/5/2012</b>	SeqNo: <b>89052</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.8	52.6	130			
Surr: DNOP	4.4		5.000		87.2	82.1	121			

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206100

06-Jun-12

**Client:** Animas Environmental Services

**Project:** Newberry A #2

Sample ID	100ng lcs		SampType:	LCS		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	LCSS		Batch ID:	R3214		RunNo:	3214				
Prep Date:			Analysis Date:	6/5/2012		SeqNo:	89725		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.0	0.050	1.000	0	100	70.7	123				
Toluene	0.94	0.050	1.000	0	94.0	80	120				
Surr: 1,2-Dichloroethane-d4	0.41		0.5000		81.1	70	130				
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.6	70	130				
Surr: Dibromofluoromethane	0.42		0.5000		83.1	71.7	132				
Surr: Toluene-d8	0.42		0.5000		84.4	70	130				

Sample ID	1206100-002ams		SampType:	MS		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	SB-10 @ 1'		Batch ID:	R3214		RunNo:	3214				
Prep Date:			Analysis Date:	6/5/2012		SeqNo:	89730		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.0	0.25	1.000	0	100	81.3	119				
Toluene	1.3	0.25	1.000	0	134	75	121			S	
Surr: 1,2-Dichloroethane-d4	2.3		2.500		90.5	70	130				
Surr: 4-Bromofluorobenzene	2.6		2.500		102	70	130				
Surr: Dibromofluoromethane	2.3		2.500		90.2	71.7	132				
Surr: Toluene-d8	2.4		2.500		94.0	70	130				

Sample ID	1206100-002amsd		SampType:	MSD		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	SB-10 @ 1'		Batch ID:	R3214		RunNo:	3214				
Prep Date:			Analysis Date:	6/5/2012		SeqNo:	89731		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.92	0.25	1.000	0	92.3	81.3	119	8.25	15.7		
Toluene	1.1	0.25	1.000	0	112	75	121	17.6	16.2	R	
Surr: 1,2-Dichloroethane-d4	2.2		2.500		87.9	70	130	0	0		
Surr: 4-Bromofluorobenzene	2.5		2.500		101	70	130	0	0		
Surr: Dibromofluoromethane	2.2		2.500		89.0	71.7	132	0	0		
Surr: Toluene-d8	2.3		2.500		91.6	70	130	0	0		

Sample ID	5mL rb		SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	PBS		Batch ID:	R3214		RunNo:	3214				
Prep Date:			Analysis Date:	6/5/2012		SeqNo:	89735		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.7	70	130				
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.6	70	130				

**Qualifiers:**

- \*/X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206100

06-Jun-12

Client: Animas Environmental Services

Project: Newberry A #2

Sample ID	5mL rb	SampType	MBLK	TestCode	EPA Method 8260B: Volatiles Short List					
Client ID	PBS	Batch ID	R3214	RunNo	3214					
Prep Date:		Analysis Date:	6/5/2012	SeqNo	89735	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.43		0.5000		86.0	71.7	132			
Surr: Toluene-d8	0.46		0.5000		91.3	70	130			

## Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206100

06-Jun-12

Client: Animas Environmental Services

Project: Newberry A #2

Sample ID: <b>5mL rb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015B Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>R3214</b>	RunNo: <b>3214</b>								
Prep Date:	Analysis Date: <b>6/5/2012</b>	SeqNo: <b>89341</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	470		500.0		93.6	70	130			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015B Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>R3214</b>	RunNo: <b>3214</b>								
Prep Date:	Analysis Date: <b>6/5/2012</b>	SeqNo: <b>89781</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.7	85	115			
Surr: BFB	560		500.0		111	70	130			

### Qualifiers:

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

**Sample Log-In Check List**

Client Name: Animas Environmental Work Order Number: 1206100  
 Received by/date: LM 06/05/12  
 Logged By: Michelle Garcia 6/5/2012 9:50:00 AM *Michelle Garcia*  
 Completed By: Michelle Garcia 6/5/2012 9:56:08 AM *Michelle Garcia*  
 Reviewed By: *[Signature]* 06/05/12

**Chain of Custody**

- 1. Were seals intact? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Coolers are present? (see 19. for cooler specific information) Yes  No  NA
- 5. Was an attempt made to cool the samples? Yes  No  NA
- 6. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 7. Sample(s) in proper container(s)? Yes  No
- 8. Sufficient sample volume for indicated test(s)? Yes  No
- 9. Are samples (except VOA and ONG) properly preserved? Yes  No
- 10. Was preservative added to bottles? Yes  No  NA
- 11. VOA vials have zero headspace? Yes  No  No VOA Vials
- 12. Were any sample containers received broken? Yes  No
- 13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
- 14. Are matrices correctly identified on Chain of Custody? Yes  No
- 15. Is it clear what analyses were requested? Yes  No
- 16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

- 17. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

18. Additional remarks:

**19. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

# Chain-of-Custody Record

Client: Animos Environmental

Mailing Address: 624 E Comanche Farmington, NM 87401

Phone #: 505 504-2281

email or Fax#: ross@animosenvironmental.com

QA/QC Package:  
 Standard       Level 4 (Full Validation)

Accreditation:  
 NELAP       Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:

Standard       Rush SAME DAY

Project Name: Newberry A #2

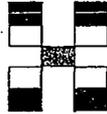
Project #:

Project Manager: Tami Ross

Sampler: TCR

Ice       Yes       No

Sample Temperature: \_\_\_\_\_



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975      Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)	
6/4/12	1047	SOIL	SB-4 @ 1'	2x 20mL 2x 2oz. jars	MeOH	-001	X												
6/4/12	1108	SOIL	SB-10 @ 1'	↓	↓	-002	X												
6/4/12	1325	SOIL	SB-14 @ 2'	↓	↓	-003	X												
6/4/12	1444	SOIL	SB-16 @	↓	↓	-004	X	X											

Date: 6/4/12 Time: 1647 Relinquished by: Tami Ross Received by: Christine Woeter Date: 6/4/12 Time: 1647

Date: 6/4/12 Time: 1747 Relinquished by: Christine Woeter Received by: [Signature] Date: 6/5/12 Time: 0950

Remarks: BILL TO CARD PHILLIPS

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

July 16, 2012

Ross Kennemer

Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 486-1776  
FAX (505) 324-2022

RE: Newberry A #2

OrderNo.: 1207263

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/10/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

Analytical Report

Lab Order 1207263

Date Reported: 7/16/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-1

Project: Newberry A #2

Collection Date: 7/9/2012 1:00:00 PM

Lab ID: 1207263-001

Matrix: MEOH (SOIL)

Received Date: 7/10/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	7/10/2012 1:05:11 PM
Toluene	0.29	0.25		mg/Kg	5	7/10/2012 1:05:11 PM
Ethylbenzene	ND	0.25		mg/Kg	5	7/10/2012 1:05:11 PM
Xylenes, Total	2.3	0.50		mg/Kg	5	7/10/2012 1:05:11 PM
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%REC	5	7/10/2012 1:05:11 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	5	7/10/2012 1:05:11 PM
Surr: Dibromofluoromethane	98.0	70-130		%REC	5	7/10/2012 1:05:11 PM
Surr: Toluene-d8	99.3	70-130		%REC	5	7/10/2012 1:05:11 PM

Qualifiers: \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit  
U Samples with CalcVal < MDL

Analytical Report

Lab Order 1207263

Date Reported: 7/16/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-2

Project: Newberry A #2

Collection Date: 7/9/2012 1:03:00 AM

Lab ID: 1207263-002

Matrix: MEOH (SOIL)

Received Date: 7/10/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	7/10/2012 1:33:32 PM
Toluene	0.21	0.050		mg/Kg	1	7/10/2012 1:33:32 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/10/2012 1:33:32 PM
Xylenes, Total	0.46	0.10		mg/Kg	1	7/10/2012 1:33:32 PM
Surr: 1,2-Dichloroethane-d4	96.0	70-130		%REC	1	7/10/2012 1:33:32 PM
Surr: 4-Bromofluorobenzene	89.2	70-130		%REC	1	7/10/2012 1:33:32 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	7/10/2012 1:33:32 PM
Surr: Toluene-d8	98.6	70-130		%REC	1	7/10/2012 1:33:32 PM

Qualifiers: \*X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit  
 U Samples with CalcVal < MDL

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental Services  
**Project:** Newberry A #2  
**Lab ID:** 1207263-003

**Client Sample ID:** SC-8  
**Collection Date:** 7/9/2012 1:18:00 PM  
**Received Date:** 7/10/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.25		mg/Kg	5	7/10/2012 2:01:52 PM
Toluene	0.26	0.25		mg/Kg	5	7/10/2012 2:01:52 PM
Ethylbenzene	ND	0.25		mg/Kg	5	7/10/2012 2:01:52 PM
Xylenes, Total	1.1	0.50		mg/Kg	5	7/10/2012 2:01:52 PM
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	5	7/10/2012 2:01:52 PM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	5	7/10/2012 2:01:52 PM
Surr: Dibromofluoromethane	103	70-130		%REC	5	7/10/2012 2:01:52 PM
Surr: Toluene-d8	97.3	70-130		%REC	5	7/10/2012 2:01:52 PM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Analytical Report

Lab Order 1207263

Date Reported: 7/16/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-14

Project: Newberry A #2

Collection Date: 7/9/2012 3:05:00 PM

Lab ID: 1207263-004

Matrix: MEOH (SOIL)

Received Date: 7/10/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	7/10/2012 2:30:14 PM
Toluene	0.56	0.25		mg/Kg	5	7/10/2012 2:30:14 PM
Ethylbenzene	ND	0.25		mg/Kg	5	7/10/2012 2:30:14 PM
Xylenes, Total	1.9	0.50		mg/Kg	5	7/10/2012 2:30:14 PM
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	5	7/10/2012 2:30:14 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	5	7/10/2012 2:30:14 PM
Surr: Dibromofluoromethane	98.9	70-130		%REC	5	7/10/2012 2:30:14 PM
Surr: Toluene-d8	98.3	70-130		%REC	5	7/10/2012 2:30:14 PM

Qualifiers: \*X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit  
 U Samples with CalcVal < MDL

Analytical Report

Lab Order 1207263

Date Reported: 7/16/2012

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SC-15

Project: Newberry A #2

Collection Date: 7/9/2012 3:50:00 PM

Lab ID: 1207263-005

Matrix: MEOH (SOIL)

Received Date: 7/10/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: SCC
Diesel Range Organics (DRO)	39	10		mg/Kg	1	7/10/2012 12:18:22 PM
Surr: DNOP	102	77.6-140		%REC	1	7/10/2012 12:18:22 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	7/10/2012 1:33:24 PM
Toluene	0.77	0.25		mg/Kg	5	7/10/2012 1:33:24 PM
Ethylbenzene	0.30	0.25		mg/Kg	5	7/10/2012 1:33:24 PM
Xylenes, Total	5.1	0.50		mg/Kg	5	7/10/2012 1:33:24 PM
Surr: 1,2-Dichloroethane-d4	83.9	70-130		%REC	5	7/10/2012 1:33:24 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	5	7/10/2012 1:33:24 PM
Surr: Dibromofluoromethane	83.3	71.7-132		%REC	5	7/10/2012 1:33:24 PM
Surr: Toluene-d8	84.7	70-130		%REC	5	7/10/2012 1:33:24 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	160	25		mg/Kg	5	7/10/2012 1:33:24 PM
Surr: BFB	98.3	70-130		%REC	5	7/10/2012 1:33:24 PM

Qualifiers: \* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RL Reporting Detection Limit  
 U Samples with CalcVal < MDL

Analytical Report

Lab Order 1207263

Date Reported: 7/16/2012

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental Services

**Client Sample ID:** SC-16

**Project:** Newberry A #2

**Collection Date:** 7/9/2012 4:00:00 PM

**Lab ID:** 1207263-006

**Matrix:** MEOH (SOIL)

**Received Date:** 7/10/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: SCC
Diesel Range Organics (DRO)	41	9.9		mg/Kg	1	7/10/2012 12:40:27 PM
Surr: DNOP	112	77.6-140		%REC	1	7/10/2012 12:40:27 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	0.076	0.050		mg/Kg	1	7/10/2012 1:05:39 PM
Toluene	2.9	0.050		mg/Kg	1	7/10/2012 1:05:39 PM
Ethylbenzene	0.66	0.050		mg/Kg	1	7/10/2012 1:05:39 PM
Xylenes, Total	10	0.10		mg/Kg	1	7/10/2012 1:05:39 PM
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%REC	1	7/10/2012 1:05:39 PM
Surr: 4-Bromofluorobenzene	120	70-130		%REC	1	7/10/2012 1:05:39 PM
Surr: Dibromofluoromethane	90.6	71.7-132		%REC	1	7/10/2012 1:05:39 PM
Surr: Toluene-d8	85.2	70-130		%REC	1	7/10/2012 1:05:39 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	230	5.0		mg/Kg	1	7/10/2012 1:05:39 PM
Surr: BFB	120	70-130		%REC	1	7/10/2012 1:05:39 PM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207263

16-Jul-12

**Client:** Animas Environmental Services

**Project:** Newberry A #2

Sample ID <b>MB-2731</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>2731</b>		RunNo: <b>3905</b>							
Prep Date: <b>7/8/2012</b>	Analysis Date: <b>7/9/2012</b>		SeqNo: <b>111052</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	77.6	140			

Sample ID <b>LCS-2731</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2731</b>		RunNo: <b>3905</b>							
Prep Date: <b>7/8/2012</b>	Analysis Date: <b>7/9/2012</b>		SeqNo: <b>111053</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.3	77.6	140			

Sample ID <b>MB-2732</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>2732</b>		RunNo: <b>3905</b>							
Prep Date: <b>7/8/2012</b>	Analysis Date: <b>7/9/2012</b>		SeqNo: <b>111542</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	77.6	140			

Sample ID <b>LCS-2732</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2732</b>		RunNo: <b>3905</b>							
Prep Date: <b>7/8/2012</b>	Analysis Date: <b>7/9/2012</b>		SeqNo: <b>111543</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.5	77.6	140			

Sample ID <b>1207211-009BMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>2732</b>		RunNo: <b>3905</b>							
Prep Date: <b>7/8/2012</b>	Analysis Date: <b>7/9/2012</b>		SeqNo: <b>111546</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		4.941		78.0	77.6	140			

Sample ID <b>1207211-009BMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>2732</b>		RunNo: <b>3905</b>							
Prep Date: <b>7/8/2012</b>	Analysis Date: <b>7/10/2012</b>		SeqNo: <b>111548</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		4.965		79.1	77.6	140	0	0	

Sample ID <b>MB-2755</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>2755</b>		RunNo: <b>3905</b>							
Prep Date: <b>7/10/2012</b>	Analysis Date: <b>7/10/2012</b>		SeqNo: <b>112276</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND		10							

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1207263  
16-Jul-12

**Client:** Animas Environmental Services  
**Project:** Newberry A #2

Sample ID <b>MB-2755</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>2755</b>	RunNo: <b>3905</b>								
Prep Date: <b>7/10/2012</b>	Analysis Date: <b>7/10/2012</b>	SeqNo: <b>112276</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		113	77.6	140			

Sample ID <b>LCS-2755</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>2755</b>	RunNo: <b>3905</b>								
Prep Date: <b>7/10/2012</b>	Analysis Date: <b>7/10/2012</b>	SeqNo: <b>112346</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	71.5	52.6	130			
Surr: DNOP	5.0		5.000		99.6	77.6	140			

Sample ID <b>1207263-005AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>								
Client ID: <b>SC-15</b>	Batch ID: <b>2755</b>	RunNo: <b>3924</b>								
Prep Date: <b>7/10/2012</b>	Analysis Date: <b>7/10/2012</b>	SeqNo: <b>112423</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	10	50.15	39.14	125	57.2	146			
Surr: DNOP	15		15.05		97.1	77.6	140			

Sample ID <b>1207263-005AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>								
Client ID: <b>SC-15</b>	Batch ID: <b>2755</b>	RunNo: <b>3924</b>								
Prep Date: <b>7/10/2012</b>	Analysis Date: <b>7/10/2012</b>	SeqNo: <b>112424</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	10	50.45	39.14	123	57.2	146	0.579	24.5	
Surr: DNOP	15		15.14		102	77.6	140	0	0	

**Qualifiers:**

- \* / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207263

16-Jul-12

**Client:** Animas Environmental Services

**Project:** Newberry A #2

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	PBS		Batch ID:	R3941		RunNo:	3941				
Prep Date:			Analysis Date:	7/10/2012		SeqNo:	113524		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.0	70	130				
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.4	70	130				
Surr: Dibromofluoromethane	0.39		0.5000		78.6	71.7	132				
Surr: Toluene-d8	0.45		0.5000		89.2	70	130				

Sample ID	100ng lcs		SampType:	LCS		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	LCSS		Batch ID:	R3941		RunNo:	3941				
Prep Date:			Analysis Date:	7/10/2012		SeqNo:	113525		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.94	0.050	1.000	0	94.0	70.7	123				
Toluene	0.93	0.050	1.000	0	92.9	80	120				
Surr: 1,2-Dichloroethane-d4	0.40		0.5000		80.2	70	130				
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.5	70	130				
Surr: Dibromofluoromethane	0.36		0.5000		72.9	71.7	132				
Surr: Toluene-d8	0.42		0.5000		83.8	70	130				

Sample ID	1207264-002a ms		SampType:	MS		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	BatchQC		Batch ID:	R3941		RunNo:	3941				
Prep Date:			Analysis Date:	7/10/2012		SeqNo:	113526		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.78	0.050	0.7810	0	99.3	81.3	119				
Toluene	0.72	0.050	0.7810	0	91.7	75	121				
Surr: 1,2-Dichloroethane-d4	0.32		0.3905		81.2	70	130				
Surr: 4-Bromofluorobenzene	0.34		0.3905		85.8	70	130				
Surr: Dibromofluoromethane	0.31		0.3905		79.8	71.7	132				
Surr: Toluene-d8	0.33		0.3905		84.3	70	130				

Sample ID	1207264-002a msd		SampType:	MSD		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	BatchQC		Batch ID:	R3941		RunNo:	3941				
Prep Date:			Analysis Date:	7/10/2012		SeqNo:	113527		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.74	0.050	0.7810	0	94.3	81.3	119	5.19	15.7		
Toluene	0.68	0.050	0.7810	0	86.8	75	121	5.47	16.2		
Surr: 1,2-Dichloroethane-d4	0.31		0.3905		80.1	70	130	0	0		
Surr: 4-Bromofluorobenzene	0.35		0.3905		88.5	70	130	0	0		

**Qualifiers:**

- \*/X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1207263

16-Jul-12

**Client:** Animas Environmental Services

**Project:** Newberry A #2

Sample ID	1207264-002a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	R3941	RunNo:	3941					
Prep Date:		Analysis Date:	7/10/2012	SeqNo:	113527	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.30		0.3905		76.1	71.7	132	0	0	
Surr: Toluene-d8	0.33		0.3905		83.9	70	130	0	0	

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R3944	RunNo:	3944					
Prep Date:		Analysis Date:	7/10/2012	SeqNo:	114315	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.4	70	130			
Surr: 4-Bromofluorobenzene	0.58		0.5000		115	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R3944	RunNo:	3944					
Prep Date:		Analysis Date:	7/10/2012	SeqNo:	114316	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	93.3	70.7	123			
Toluene	0.89	0.050	1.000	0	89.3	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.4	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.48		0.5000		95.6	70	130			

**Qualifiers:**

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207263

16-Jul-12

**Client:** Animas Environmental Services

**Project:** Newberry A #2

Sample ID: <b>5ml-rb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015B Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>R3941</b>	RunNo: <b>3941</b>								
Prep Date:	Analysis Date: <b>7/10/2012</b>	SeqNo: <b>113466</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		95.4	70	130			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015B Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>R3941</b>	RunNo: <b>3941</b>								
Prep Date:	Analysis Date: <b>7/10/2012</b>	SeqNo: <b>113490</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	85	115			
Surr: BFB	480		500.0		95.9	70	130			

Sample ID: <b>1207264-002A MS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015B Mod: Gasoline Range</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>R3941</b>	RunNo: <b>3941</b>								
Prep Date:	Analysis Date: <b>7/10/2012</b>	SeqNo: <b>113491</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	19.53	10.82	85.4	70	130			
Surr: BFB	340		390.5		87.4	70	130			

Sample ID: <b>1207264-002A MSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015B Mod: Gasoline Range</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>R3941</b>	RunNo: <b>3941</b>								
Prep Date:	Analysis Date: <b>7/10/2012</b>	SeqNo: <b>113492</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	19.53	10.82	82.4	70	130	2.12	20	
Surr: BFB	350		390.5		90.4	70	130	0	0	

**Qualifiers:**

- \*/X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

**Sample Log-In Check List**

Client Name: **Animas Environmental** Work Order Number: **1207263**  
 Received by/date: LM 07/10/12  
 Logged By: **Michelle Garcia** 7/10/2012 9:50:00 AM *Mirrell Sprue*  
 Completed By: **Michelle Garcia** 7/10/2012 9:55:46 AM *Mirrell Sprue*  
 Reviewed By: *[Signature]* 07/10/12

**Chain of Custody**

1. Were seals intact? Yes  No  Not Present
2. Is Chain of Custody complete? Yes  No  Not Present
3. How was the sample delivered? Courier

**Log In**

4. Coolers are present? (see 19. for cooler specific information) Yes  No  NA
5. Was an attempt made to cool the samples? Yes  No  NA
6. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
7. Sample(s) in proper container(s)? Yes  No
8. Sufficient sample volume for indicated test(s)? Yes  No
9. Are samples (except VOA and ONG) properly preserved? Yes  No
10. Was preservative added to bottles? Yes  No  NA
11. VOA vials have zero headspace? Yes  No  No VOA Vials
12. Were any sample containers received broken? Yes  No
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
14. Are matrices correctly identified on Chain of Custody? Yes  No
15. Is it clear what analyses were requested? Yes  No
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

17. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

18. Additional remarks:

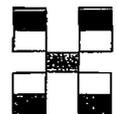
**19. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Yes			

# Chain-of-Custody Record

Client: Animas Environmental Services LLC  
 Mailing Address: 624 E Comanche Farmington NM  
 Phone #: 505 564 2281  
 email or Fax#: \_\_\_\_\_  
 QA/QC Package:  
 Standard       Level 4 (Full Validation)  
 Accreditation:  
 NELAP       Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard       Rush same day  
 Project Name: Newberry A#2  
 Project #: \_\_\_\_\_  
 Project Manager: R. Kennemer  
 Sampler: D. Watson  
 On-site:  Yes       No  
 Sample Temperature: 13



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975      Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBE (8021)	BTEX + MTBE + TPH (Gas only) <u>Gas/Diesel</u>	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Rubbles (Y or N)
7-9-12	1300	Soil	SC-1	14oz / Moist	Moist	207263	X											
	1303	Soil	SC-2				X											
	1318	Soil	SC-8				X											
	1505	Soil	SC-14				X											
	1550	Soil	SC-15				X	X										
	1600	Soil	SC-16				X	X										

Date: <u>7/9/12</u>	Time: <u>1740</u>	Relinquished by: <u>Debrah Watson</u>	Received by: <u>Christine Walker</u>	Date: <u>7/9/12</u>	Time: <u>1740</u>
Date: <u>7/9/12</u>	Time: <u>1752</u>	Relinquished by: <u>Christine Walker</u>	Received by: <u>Christine Walker</u>	Date: <u>7/10/12</u>	Time: <u>09:50</u>

Remarks: Direct bill to ConocoPhillips

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This does not affect the validity of this report.