

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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

SEP 02 2015

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 to  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company <b>Burlington Resources Oil &amp; Gas Company</b>	Contact <b>Crystal Tafoya</b>
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 326-9837</b>
Facility Name: <b>Cornell Com 500S</b>	Facility Type: <b>Gas Well</b>
Surface Owner <b>Fee</b>	Mineral Owner <b>Fee</b>
	API No. <b>30-045-33573</b>

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>P</b>	<b>2</b>	<b>29N</b>	<b>12W</b>	<b>665</b>	<b>South</b>	<b>1065</b>	<b>East</b>	<b>San Juan</b>

Latitude 36.74947 Longitude -108.06229

**NATURE OF RELEASE**

Type of Release <b>Produced Water</b>	Volume of Release <b>Unknown</b>	Volume Recovered <b>Unknown</b>
Source of Release <b>Below Grade Tank</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>February 7, 2013</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.\*  
N/A

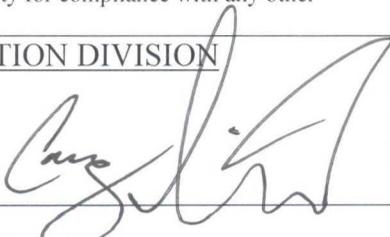
Describe Cause of Problem and Remedial Action Taken.\*

**Below-Grade Tank Closure activities with samples taken resulting in constituents exceeded standards outlined by 19.15.17.13 NMAC.**

Describe Area Affected and Cleanup Action Taken.\*

**NMOCD action levels for releases are specified in NMOCD's Guidelines for Leaks, Spills and Releases and the release was assigned a ranking score of 10. Samples were collected and analytical results are below applicable NMOCD action levels. No further work will be performed. The final report is attached for review.**

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: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: <b>Crystal Tafoya</b>	Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>9/4/15</b>	Expiration Date:
E-mail Address: <b>crystal.tafoya@conocophillips.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>8/31/2015</b>	Phone: <b>(505) 326-9837</b>	

\* Attach Additional Sheets If Necessary

#NCS 1524742721



Animas Environmental Services, LLC

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

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

Durango, Colorado  
970-403-3084

February 13, 2013

Crystal Tafoya  
ConocoPhillips  
San Juan Business Unit  
Office 214-05  
5525 Hwy 64  
Farmington, New Mexico 87401

**RE: Below Grade Tank Closure Report  
Cornell Com #500S  
San Juan County, New Mexico**

Dear Ms. Tafoya:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) Cornell Com #500S, located in San Juan County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

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## 1.0 Site Information

### 1.1 Location

Site Name – Cornell Com #500S

Legal Description – SE¼ SE¼, Section 2, T29N, R12W, San Juan County, New Mexico

Well Latitude/Longitude – N36.74977 and W108.06316, respectively

BGT Latitude/Longitude – N36.74998 and W108.06313, respectively

Land Jurisdiction – Private

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, February 2013

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a C-144 form dated January 2007 for the Cornell Com #500S 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 bgs. An unnamed wash is located approximately 900 feet south-southwest of the location and eventually drains to the San Juan River approximately 5.5 miles to the southwest. Based on this information, the location was assessed a ranking score of 10.

### *1.3 BGT Closure Assessment*

AES was initially contacted by Jess Henson, CoP representative, on February 6, 2013, and on February 7, 2013, Heather Woods and Zachary Trujillo of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

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## 2.0 Soil Sampling

On February 7, 2013, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for chloride and was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

### *2.1 Field Screening*

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

A portion of each sample was utilized for field screening of VOC vapors 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**

Soil samples were also analyzed in the field for TPH 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*.

### 2.1.3 Chlorides

Soil sample SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

## 2.2 Laboratory Analyses

The composite soil sample SC-1 collected for laboratory analysis was placed into a new, clean, laboratory-supplied container, which was then labeled, placed on ice, and logged onto a sample chain of custody record. The sample was maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- TPH as gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B; and
- Chloride per USEPA Method 300.0.

## 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM ranged from 0.0 ppm in S-3 and S-5 up to 0.4 ppm in S-2. Field TPH concentrations ranged from less than 20.0 mg/kg in S-2, S-3, and S-5 up to 390 mg/kg in S-4. The field chloride concentration in SC-1 was 60 mg/kg. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results  
 Cornell Com #500S BGT Closure, February 2013

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth below BGT (ft)</i>	<i>VOCs OVM Reading (ppm)</i>	<i>Field TPH (mg/kg)</i>	<i>Field Chlorides (mg/kg)</i>
<b>NMOCD Action Level (NMAC 19.15.17.13E)</b>			<b>--</b>	<b>100</b>	<b>250</b>
S-1	02/07/13	0.5	0.1	20.7	NA
S-2	02/07/13	0.5	0.4	<20.0	NA
S-3	02/07/13	0.5	0.0	<20.0	NA
S-4	02/07/13	0.5	0.2	<b>390</b>	NA
S-5	02/07/13	0.5	0.0	<20.0	NA

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth below BGT (ft)</i>	<i>VOCs OVM Reading (ppm)</i>	<i>Field TPH (mg/kg)</i>	<i>Field Chlorides (mg/kg)</i>
<b>NMOCD Action Level (NMAC 19.15.17.13E)</b>			--	<b>100</b>	<b>250</b>
SC-1	02/07/13	0.5	NA	NA	60

NA - not analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.050 mg/kg and 0.25 mg/kg, respectively. TPH concentrations were reported below the laboratory detection limits of 5.0 mg/kg GRO and 10 mg/kg DRO. The laboratory chloride concentration was reported as 140 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results  
 Cornell Com #500S BGT Closure, February 2013

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth (ft)</i>	<i>Benzene (mg/kg)</i>	<i>BTEX (mg/kg)</i>	<i>TPH-GRO (mg/kg)</i>	<i>TPH-DRO (mg/kg)</i>	<i>Chlorides (mg/kg)</i>
<b>NMOCD Action Level (NMAC 19.15.17.13E)</b>			<b>0.2</b>	<b>50</b>	<b>100</b>		<b>250</b>
SC-1	02/07/13	0.5	<0.050	<0.25	<5.0	<10	140

### 3.0 Conclusions and Recommendations

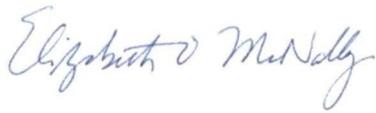
NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in one sample, S-4, with 390 mg/kg. However, laboratory analytical results for TPH (as GRO/DRO) in SC-1 were reported below the NMOCD action level of 100 mg/kg. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations in SC-1 were below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at the Cornell Com #500S.

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

Sincerely,



Landrea Cupps  
Environmental Scientist



Elizabeth McNally, P.E.

Attachments:

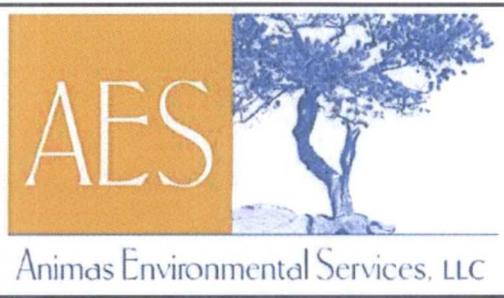
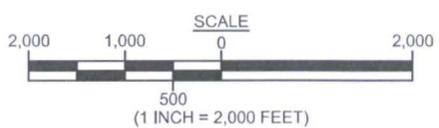
- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, February 2013
- AES Field Screening Report 020713
- Hall Analytical Report 1302300

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\Cornell Com #500S\Cornell Com #500S BGT Closure Report 021313.docx



FLORA VISTA QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 1963 PHOTOREVISED 1979  
 HORN CANYON QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 1965 PHOTOREVISED 1979

**CORNELL COM #500S**



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> February 7, 2013
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> February 7, 2013
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> February 12, 2013
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> February 12, 2013

**FIGURE 1**  
**TOPOGRAPHIC SITE LOCATION MAP**  
 ConocoPhillips  
 CORNELL COM #500S  
 SE¼ SE¼, SECTION 2, T29N, R12W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.74977, W108.06316

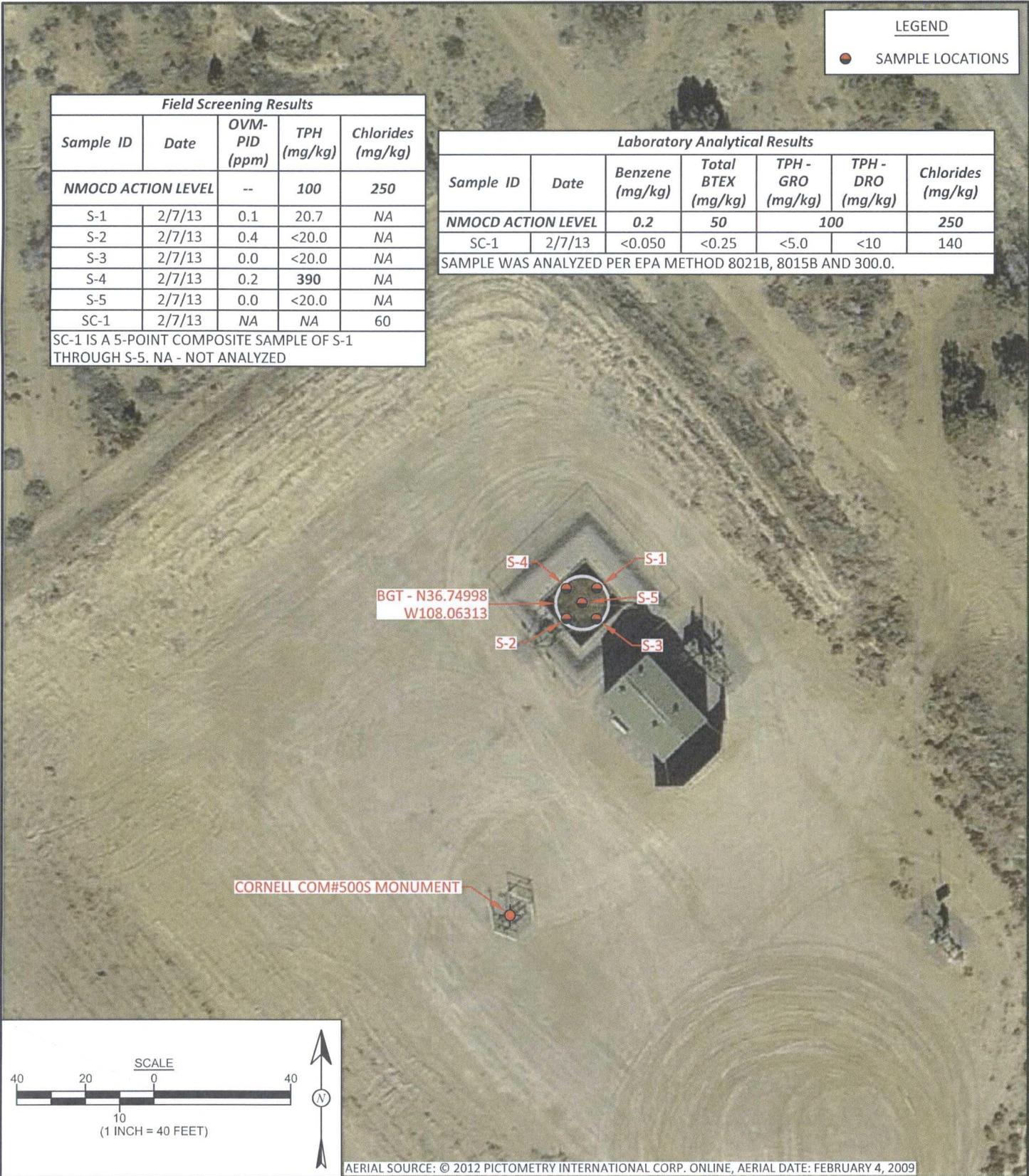
**LEGEND**  
 **SAMPLE LOCATIONS**

Field Screening Results				
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
<b>NMOC ACTION LEVEL</b>		--	100	250
S-1	2/7/13	0.1	20.7	NA
S-2	2/7/13	0.4	<20.0	NA
S-3	2/7/13	0.0	<20.0	NA
S-4	2/7/13	0.2	390	NA
S-5	2/7/13	0.0	<20.0	NA
SC-1	2/7/13	NA	NA	60

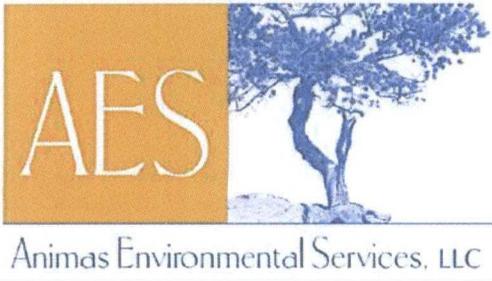
Laboratory Analytical Results						
Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
<b>NMOC ACTION LEVEL</b>		0.2	50	100		250
SC-1	2/7/13	<0.050	<0.25	<5.0	<10	140

SC-1 IS A 5-POINT COMPOSITE SAMPLE OF S-1 THROUGH S-5. NA - NOT ANALYZED

SAMPLE WAS ANALYZED PER EPA METHOD 8021B, 8015B AND 300.0.



AERIAL SOURCE: © 2012 PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL DATE: FEBRUARY 4, 2009



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> February 7, 2013
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> February 7, 2013
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> February 12, 2013
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> February 12, 2013

**FIGURE 2**  
**AERIAL SITE MAP**  
**BELOW GRADE TANK CLOSURE**  
**FEBRUARY 2013**  
 ConocoPhillips  
 CORNELL COM #500S  
 SE¼ SE¼, SECTION 2, T29N, R12W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.74977, W108.06316

# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: Cornell Com #500S

Date: 2/7/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	2/7/2013	9:55	North	0.1	NA	10:38	20.7	20.0	1	HMW
S-2	2/7/2013	9:58	South	0.4	NA	10:41	<20.0	20.0	1	HMW
S-3	2/7/2013	10:01	East	0.0	NA	10:43	<20.0	20.0	1	HMW
S-4	2/7/2013	10:03	West	0.2	NA	10:45	390	20.0	1	HMW
S-5	2/7/2013	10:05	Center	0.0	NA	10:47	<20.0	20.0	1	HMW
SC-1	2/7/2013	10:08	Composite	NA	60	NA	<i>Not analyzed for TPH.</i>			

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

NA Not Analyzed

DF Dilution Factor

\*Field TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Leather M. Woods*



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)

February 11, 2013

Debbie Watson

Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 486-4071  
FAX

RE: CoP Cornell Com #500S

OrderNo.: 1302300

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/8/2013 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 light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SC-1

Project: CoP Cornell Com #500S

Collection Date: 2/7/2013 10:08:00 AM

Lab ID: 1302300-001

Matrix: MEOH (SOIL)

Received Date: 2/8/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>MMD</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/8/2013 11:35:26 AM
Surr: DNOP	103	72.4-120		%REC	1	2/8/2013 11:35:26 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/8/2013 12:19:11 PM
Surr: BFB	105	84-116		%REC	1	2/8/2013 12:19:11 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.050		mg/Kg	1	2/8/2013 12:19:11 PM
Toluene	ND	0.050		mg/Kg	1	2/8/2013 12:19:11 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/8/2013 12:19:11 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/8/2013 12:19:11 PM
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	2/8/2013 12:19:11 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JRR</b>
Chloride	140	30		mg/Kg	20	2/8/2013 12:06:07 PM

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302300

11-Feb-13

**Client:** Animas Environmental Services

**Project:** CoP Cornell Com #500S

Sample ID	MB-6048	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	6048	RunNo:	8546					
Prep Date:	2/8/2013	Analysis Date:	2/8/2013	SeqNo:	245854	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-6048	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	6048	RunNo:	8546					
Prep Date:	2/8/2013	Analysis Date:	2/8/2013	SeqNo:	245855	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.4	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1302300

11-Feb-13

**Client:** Animas Environmental Services

**Project:** CoP Cornell Com #500S

Sample ID	1302243-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	6019	RunNo:	8537					
Prep Date:	2/7/2013	Analysis Date:	2/8/2013	SeqNo:	245775	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.097		98.5	72.4	120			

Sample ID	1302243-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	6019	RunNo:	8537					
Prep Date:	2/7/2013	Analysis Date:	2/8/2013	SeqNo:	245776	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		4.850		113	72.4	120	0	0	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302300

11-Feb-13

Client: Animas Environmental Services

Project: CoP Cornell Com #500S

Sample ID	MB-6013	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	R8541	RunNo:	8541					
Prep Date:	2/6/2013	Analysis Date:	2/8/2013	SeqNo:	246237	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	84	116			

Sample ID	LCS-6013	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	R8541	RunNo:	8541					
Prep Date:	2/6/2013	Analysis Date:	2/8/2013	SeqNo:	246242	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	74	117			
Surr: BFB	1100		1000		108	84	116			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302300

11-Feb-13

Client: Animas Environmental Services

Project: CoP Cornell Com #500S

Sample ID	MB-6013	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R8541	RunNo:	8541					
Prep Date:	2/6/2013	Analysis Date:	2/8/2013	SeqNo:	246298	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: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	LCS-6013	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R8541	RunNo:	8541					
Prep Date:	2/6/2013	Analysis Date:	2/8/2013	SeqNo:	246299	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.050	1.000	0	91.9	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.7	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

**Sample Log-In Check List**

Client Name: Animas Environmental Work Order Number: 1302300  
 Received by/date: [Signature] 02/08/13  
 Logged By: Michelle Garcia 2/8/2013 9:50:00 AM Michelle Garcia  
 Completed By: Michelle Garcia 2/8/2013 10:06:47 AM Michelle Garcia  
 Reviewed By: IO 02/08/2013

**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	1.0	Good	Not Present			

