

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

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>Allison Unit 71</b>	Facility Type: <b>Gas Well</b>

Surface Owner Fee	Mineral Owner Fee	API No. <b>30-045-29949</b>
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**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>24</b>	<b>32N</b>	<b>7W</b>	<b>1680</b>	<b>South</b>	<b>1750</b>	<b>West</b>	<b>San Juan</b>

Latitude 36.96310 Longitude 107.520817

**NATURE OF RELEASE**

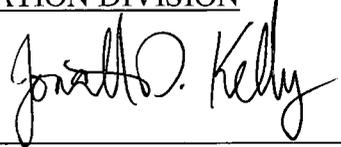
Type of Release <b>Produced Fluids</b>	Volume of Release <b>Unknown</b>	Volume Recovered <b>None</b>
Source of Release <b>Below Grade Tank</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>September 21, 2012</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? <b>RCVD JAN 25 '13</b>	
By Whom?	Date and Hour	<b>OIL CON. DIV.</b>
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>DIST. 3</b>	

If a Watercourse was Impacted. Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
**Below Grade Tank Closure Activities**

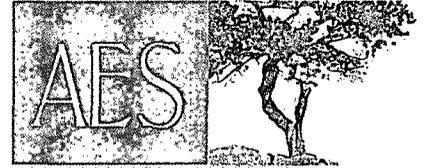
Describe Area Affected and Cleanup Action Taken.\*  
**The regulatory standard for closure at this site was determined to be 1000 ppm. A sample was taken and then transported to the lab and analytical results for TPH, BTEX and Chlorides were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required. The final report is attached for your 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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Crystal Tafoya</b>	Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>1/29/2013</b>	Expiration Date:
E-mail Address: <b>crystal.tafoya@conocophillips.com</b>	Conditions of Approval: <b>C-144 Closure</b>	Attached <input type="checkbox"/>
Date: <b>1/24/2013</b> Phone: <b>(505) 326-9837</b>	<b>Permit needed for BGT closure</b>	

\* Attach Additional Sheets If Necessary

**nJK 13029 55928**



Animas Environmental Services, LLC

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

December 7, 2012

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

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

Durango, Colorado  
970-403-3274

**RE: Below Grade Tank Closure and Release Report  
Allison #71  
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 and release confirmation at ConocoPhillips (CoP) Allison #71, located in San Juan County, New Mexico. Tank removal was completed by CoP contractors prior to AES arrival on site.

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## 1.0 Site Information

### 1.1 Location

Site Name – Allison #71

Legal Description - NE $\frac{1}{4}$  SW $\frac{1}{4}$ , Section 24, T32N, R7W, San Juan County, New Mexico

Well Latitude/Longitude – N36.96314 and W107.52142, respectively

BGT Latitude/Longitude - N36.96334 and W107.52162, respectively

Land Jurisdiction - Private

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, September 2012

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a C-144 form dated August 2011 for the Allison #71 well 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, and the nearest surface waters were an ephemeral drainage located approximately 800 feet southwest and a stock pond located approximately 1,200 feet northwest of the BGT location. Based on this information, the location was assessed a ranking score of 10.

### **1.3 BGT Closure Assessment**

AES was initially contacted by Bruce Yazzie, CoP representative, on September 21, 2012, and on September 24, 2012, Deborah Watson and Corwin Lameman of AES completed an assessment at the location.

AES personnel collected five soil samples (S-1 through S-5) from the below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, and one sample was collected from the center of the BGT footprint. A 5-point composite sample (SC-1) of the BGT footprint was collected for confirmation laboratory analysis.

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## **2.0 Soil Sampling**

On September 24, 2012, 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 S-1 through S-5 were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH). Soil sample SC-1 was field screened for chlorides and 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;
- Chloride per USEPA Method 300.0.

## **2.3 Field and Laboratory Analytical Results**

Field screening for VOCs via OVM showed readings ranging from 0.5 ppm in SC-1 up to 1.7 ppm in S-4. Field TPH concentrations ranged from 38.1 mg/kg in S-4 up to 51.4 mg/kg in S-1. The field chloride concentration in SC-1 was 120 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  
Allison #71 BGT Closure, September 2012

<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	09/24/12	0.5	1.0	51.4	NA
S-2	09/24/12	0.5	0.9	43.4	NA
S-3	09/24/12	0.5	0.6	48.8	NA
S-4	09/24/12	0.5	1.7	38.1	NA
S-5	09/24/12	0.5	1.5	50.1	NA
SC-1	09/24/12	0.5	0.5	NA	120

NA - not analyzed

Laboratory analytical results showed that the benzene and total BTEX concentrations in SC-1 were below the laboratory detection limits of 0.050 mg/kg and 0.25 mg/kg, respectively. The laboratory chloride concentration was 98 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  
Allison #71 BGT Closure, September 2012

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth (ft)</i>	<i>Benzene (mg/kg)</i>	<i>BTEX (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>250</b>
SC-1	09/24/12	0.5	<0.050	<0.25	98

### 3.0 Conclusions and Recommendations

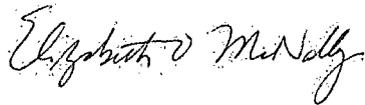
NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Field TPH concentrations were below the NMOCD action level of 100 mg/kg in each sample (S-1 through S-5), and the chloride concentration in SC-1 was below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results for benzene, BTEX, TPH, and chlorides, no further work is recommended.

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

Sincerely,



Landrea Cupps  
Environmental Scientist

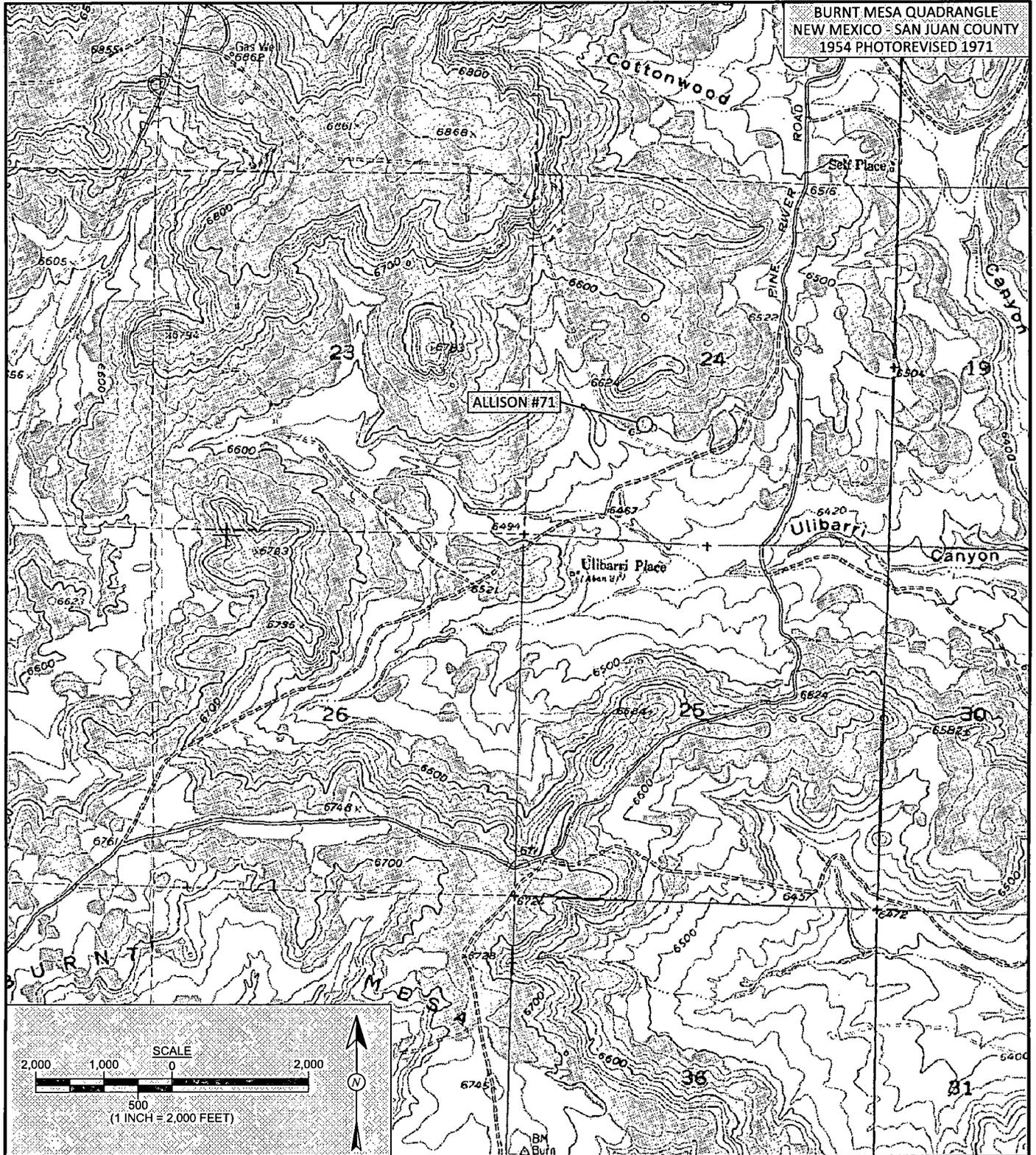


Elizabeth McNally, P.E.

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, September 2012
- AES Field Screening Report 092412
- Hall Analytical Report 1209A82

BURNT MESA QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 1954 PHOTOREVISED 1971



Animas Environmental Services, LLC

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

**FIGURE 1**  
**TOPOGRAPHIC SITE LOCATION MAP**  
 ConocoPhillips  
 ALLISON #71  
 SAN JUAN COUNTY, NEW MEXICO  
 NE¼ SW¼, SECTION 24, T32N, R7W  
 N36.96314, W107.52142

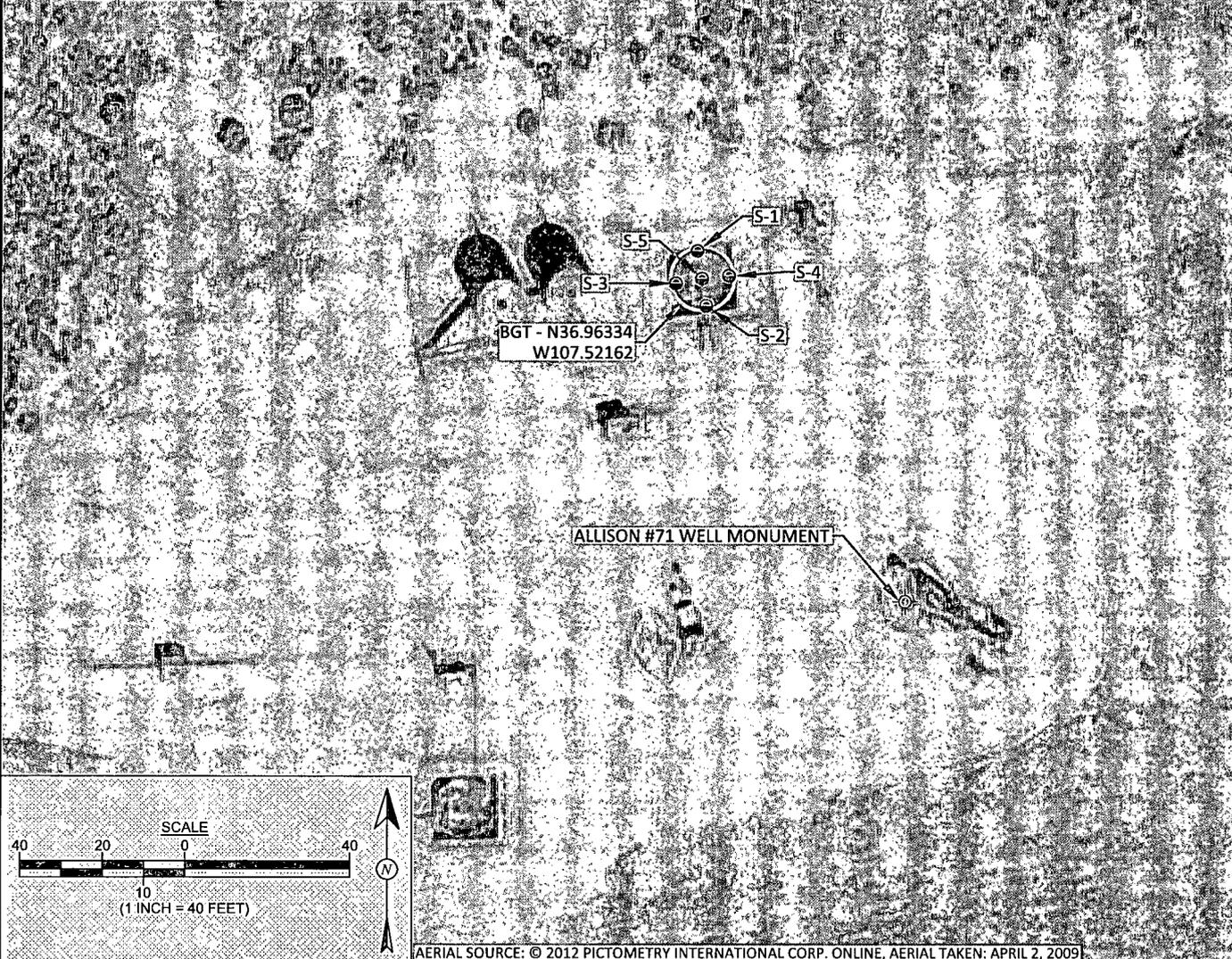
**LEGEND**  
 **SAMPLE LOCATIONS**

<i>Field Screening Results</i>				
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
<b>NMOCD ACTION LEVEL</b>		—	100	250
S-1	9/24/12	1.0	51.4	NA
S-2	9/24/12	0.9	43.4	NA
S-3	9/24/12	0.6	48.8	NA
S-4	9/24/12	1.7	38.1	NA
S-5	9/24/12	1.5	50.1	NA
SC-1	9/24/12	0.5	NA	120

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

<i>Laboratory Analytical Results</i>						
Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
<b>NMOCD ACTION LEVEL</b>		0.2	50	100		250
SC-1	9/24/12	<0.050	<0.25	NA	NA	98

SAMPLE WAS ANALYZED PER EPA METHOD 8021B AND 300.0.



AERIAL SOURCE: © 2012 PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL TAKEN: APRIL 2, 2009

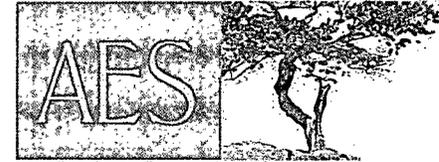


Animas Environmental Services, LLC

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

**FIGURE 2**  
**AERIAL SITE MAP**  
**BELOW GRADE TANK CLOSURE**  
**SEPTEMBER 2012**  
 ConocoPhillips  
 ALLISON #71  
 SAN JUAN COUNTY, NEW MEXICO  
 NE¼ SW¼, SECTION 24, T32N, R7W  
 N36.96314, W107.52142

# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3274

Client: ConocoPhillips

Project Location: Allison #71

Date: 9/24/2012

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	9/24/2012	12:45	North	1.0	NA	13:33	51.4	20.0	1	DAW
S-2	9/24/2012	12:50	South	0.9	NA	13:35	43.4	20.0	1	DAW
S-3	9/24/2012	12:55	West	0.6	NA	13:38	48.8	20.0	1	DAW
S-4	9/24/2012	13:00	East	1.7	NA	13:41	38.1	20.0	1	DAW
S-5	9/24/2012	13:05	Center	1.5	NA	13:43	50.1	20.0	1	DAW
SC-1	9/24/2012	13:10	Composite	0.5	120	Not Analyzed for Field TPH				

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

\*Field TPH concentrations recorded may be below PQL.

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:



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)

October 01, 2012

Debbie Watson

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

RE: COP Allison #71

OrderNo.: 1209A82

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/25/2012 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

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental Services

**Client Sample ID:** SC-1

**Project:** COP Allison #71

**Collection Date:** 9/24/2012 1:10:00 PM

**Lab ID:** 1209A82-001

**Matrix:** MEOH (SOIL)

**Received Date:** 9/25/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.050		mg/Kg	1	9/25/2012 12:19:52 PM
Toluene	ND	0.050		mg/Kg	1	9/25/2012 12:19:52 PM
Ethylbenzene	ND	0.050		mg/Kg	1	9/25/2012 12:19:52 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/25/2012 12:19:52 PM
Surr: 4-Bromofluorobenzene	98.0	80-120		%REC	1	9/25/2012 12:19:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>SRM</b>
Chloride	98	30		mg/Kg	20	9/25/2012 12:15:18 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#: 1209A82

01-Oct-12

Client: Animas Environmental Services

Project: COP Allison #71

Sample ID	1209A85-001BMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	3913	RunNo:	5775					
Prep Date:	9/25/2012	Analysis Date:	9/25/2012	SeqNo:	165984	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	30	15.00	19.09	67.6	64.4	117			

Sample ID	1209A85-001BMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	3913	RunNo:	5775					
Prep Date:	9/25/2012	Analysis Date:	9/25/2012	SeqNo:	165985	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	30	15.00	19.09	37.2	64.4	117	0	20	S

Sample ID	1209615-050AMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	3913	RunNo:	5775					
Prep Date:	9/25/2012	Analysis Date:	9/25/2012	SeqNo:	165987	Units:	mg/Kg-dry			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	79	9.2	18.36	67.90	60.6	64.4	117			S

Sample ID	1209615-050AMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	3913	RunNo:	5775					
Prep Date:	9/25/2012	Analysis Date:	9/25/2012	SeqNo:	165988	Units:	mg/Kg-dry			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	81	9.2	18.36	67.90	71.7	64.4	117	2.54	20	

## 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#: 1209A82

01-Oct-12

**Client:** Animas Environmental Services

**Project:** COP Allison #71

Sample ID	<b>5ML RB</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015B: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>R5753</b>	RunNo:	<b>5753</b>					
Prep Date:		Analysis Date:	<b>9/25/2012</b>	SeqNo:	<b>165877</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		98.3	84	116			

Sample ID	<b>2.5UG GRO LCSB</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015B: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>R5753</b>	RunNo:	<b>5753</b>					
Prep Date:		Analysis Date:	<b>9/25/2012</b>	SeqNo:	<b>165878</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		105	84	116			

Sample ID	<b>1209A84-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015B: Gasoline Range</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>R5753</b>	RunNo:	<b>5753</b>					
Prep Date:		Analysis Date:	<b>9/25/2012</b>	SeqNo:	<b>165880</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	710		678.9		105	84	116			

Sample ID	<b>1209A84-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015B: Gasoline Range</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>R5753</b>	RunNo:	<b>5753</b>					
Prep Date:		Analysis Date:	<b>9/25/2012</b>	SeqNo:	<b>165881</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	730		678.9		108	84	116	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#: 1209A82

01-Oct-12

**Client:** Animas Environmental Services

**Project:** COP Allison #71

Sample ID	<b>5ML RB</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>R5753</b>	RunNo:	<b>5753</b>					
Prep Date:		Analysis Date:	<b>9/25/2012</b>	SeqNo:	<b>165902</b>	Units:	<b>mg/Kg</b>			
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	0.98		1.000		98.2	80	120			

Sample ID	<b>100NG BTEX LCS</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>R5753</b>	RunNo:	<b>5753</b>					
Prep Date:		Analysis Date:	<b>9/25/2012</b>	SeqNo:	<b>165903</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	76.3	117			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	77	116			
Xylenes, Total	3.1	0.10	3.000	0	103	76.7	117			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID	<b>1209A82-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>SC-1</b>	Batch ID:	<b>R5753</b>	RunNo:	<b>5753</b>					
Prep Date:		Analysis Date:	<b>9/25/2012</b>	SeqNo:	<b>165905</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.29	0.050	0.7159	0	40.9	67.2	113			S
Toluene	0.30	0.050	0.7159	0	42.4	62.1	116			S
Ethylbenzene	0.31	0.050	0.7159	0	43.3	67.9	127			S
Xylenes, Total	0.93	0.10	2.148	0	43.3	60.6	134			S
Surr: 4-Bromofluorobenzene	0.72		0.7159		101	80	120			

Sample ID	<b>1209A82-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>SC-1</b>	Batch ID:	<b>R5753</b>	RunNo:	<b>5753</b>					
Prep Date:		Analysis Date:	<b>9/25/2012</b>	SeqNo:	<b>165906</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.7159	0	97.5	67.2	113	81.7	14.3	R
Toluene	0.71	0.050	0.7159	0	99.1	62.1	116	80.1	15.9	R
Ethylbenzene	0.71	0.050	0.7159	0	99.5	67.9	127	78.7	14.4	R
Xylenes, Total	2.1	0.10	2.148	0	99.9	60.6	134	79.0	12.6	R
Surr: 4-Bromofluorobenzene	0.75		0.7159		105	80	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



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 4901 Hawkins NE  
 Albuquerque, NM 87105  
 TEL: 505-345-3975 FAX: 505-345-410;  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1209A82  
 Received by/date: mg 09/25/12  
 Logged By: Ashley Gallegos 9/25/2012 10:00:00 AM AG  
 Completed By: Ashley Gallegos 9/25/2012 10:17:20 AM AG  
 Reviewed By: \_\_\_\_\_

### Chain of Custody

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

### Log In

- Coolers are present? (see 19. for cooler specific information) Yes  No  NA
- Was an attempt made to cool the samples? Yes  No  NA
- Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- Sample(s) in proper container(s)? Yes  No
- Sufficient sample volume for indicated test(s)? Yes  No
- Are samples (except VOA and ONG) properly preserved? Yes  No
- Was preservative added to bottles? Yes  No  NA
- VOA vials have zero headspace? Yes  No  No VOA Vials
- Were any sample containers received broken? Yes  No
- Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
- Are matrices correctly identified on Chain of Custody? Yes  No
- Is it clear what analyses were requested? Yes  No
- 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)

- 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			

