

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 ConocoPhillips	Contact Lindsay Dumas	
Address 3401 East 30 <sup>th</sup> St, Farmington, NM	Telephone No. (505) 258-1643	
Facility Name: AXI Apache 15A	Facility Type: Gas	
Surface Owner: Jicarilla	Mineral Owner Jicarilla Contrat 121	API No. 30-039-21840

#### LOCATION OF RELEASE

Unit Letter <b>O</b>	Section <b>11</b>	Township <b>25N</b>	Range <b>04W</b>	Feet from the <b>990'</b>	North/South Line <b>FSL</b>	Feet from the <b>1650'</b>	East/West Line <b>FEL</b>	County <b>Rio Arriba</b>
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Latitude 36.4095 Longitude -107.2179

#### NATURE OF RELEASE

Type of Release Hydrocarbons	Volume of Release Unknown	Volume Recovered: 0
Source of Release BGT	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>9/21/2012</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
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.\*

Describe Cause of Problem and Remedial Action Taken.\*

Describe Area Affected and Cleanup Action Taken.\*

**The below grade tank sample results were above regulatory standard by USEPA method 418.1 for TPH and Organic Vapors, confirming a release. The sample was then transported to the lab and analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required.**

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: <i>Lindsay Dumas</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Lindsay Dumas	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Field Environmental Specialist	Approval Date: <u>4/28/17</u>	Expiration Date:
E-mail Address: Lindsay.Dumas@conocophillips.com	Conditions of Approval: <u>—</u>	Attached <input type="checkbox"/>
Date: 10/8/2015	Phone: (505) 258-1643	

\* Attach Additional Sheets If Necessary

#1005171185 6373

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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

December 31, 2012

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

**RE: Below Grade Tank Closure Report  
AXI Apache N #15A  
Rio Arriba County, New Mexico**

Dear Ms. Maxwell:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) AXI Apache N #15A, located in Rio Arriba 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 – AXI Apache N #15A

Legal Description - SW¼ SE¼, Section 11, T25N, R4W, Rio Arriba County, New Mexico

Well Latitude/Longitude - N36.40932 and W107.21832, respectively

BGT Latitude/Longitude - N36.40951 and W107.21864, respectively

Land Jurisdiction – Jicarilla Apache Nation

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, September 2012

### 1.2 JANOGA Action Levels

AXI Apache N #15A is located on Jicarilla Apache Nation lands. Therefore, action levels are determined by Jicarilla Apache Nation Oil and Gas Administration (JANOGA).

JANOGA action levels for BGT closures are as follows: 0.2 mg/kg benzene, 50 mg/kg total BTEX (benzene, toluene, ethylbenzene, and xylene), 100 mg/kg total petroleum hydrocarbons (TPH), and 250 mg/kg for chlorides.



### 1.3 BGT Closure Assessment

AES was initially contacted by Jess Henson, CoP representative, on September 20, 2012, and on September 21, 2012, 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 September 21, 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 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:

- BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B;
- Chloride per USEPA Method 300.0.

### 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM ranged from 0.8 ppm in S-5 up to 1.8 ppm in S-4. Field TPH concentrations ranged from 43.8 mg/kg in S-3 up to 104 mg/kg in S-1. The field chloride concentration in SC-1 was 40 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  
 AXI Apache N #15A 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>JANOGA Action Level</b>			<b>--</b>	<b>100</b>	<b>250</b>
S-1	9/21/12	0.5	1.6	104	NA
S-2	9/21/12	0.5	1.7	51.9	NA
S-3	9/21/12	0.5	1.5	43.8	NA
S-4	9/21/12	0.5	1.8	49.2	NA
S-5	9/21/12	0.5	0.8	54.6	NA
SC-1	9/21/12	0.5	NA	NA	40

NA - not analyzed

Laboratory analytical results showed that the benzene and total BTEX concentrations in SC-1 were less than 0.050 mg/kg and less than 0.25 mg/kg, respectively. TPH concentrations were reported at less than 5.0 mg/kg GRO and less than 10 mg/kg DRO. The laboratory chloride concentration was below the laboratory detection limit of 30 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. The laboratory analytical report is attached.

Table 2. Soil Laboratory Analytical Results  
AXI Apache N #15A BGT Closure, September 2012

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)	Chlorides (mg/kg)
<b>JANOGA Action Level</b>			<b>0.2</b>	<b>50</b>	<b>100</b>		<b>250</b>
SC-1	9/21/12	0.5	<0.050	<0.25	<5.0	<10	<30

### 3.0 Conclusions and Recommendations

Action levels for BGT closures on Jicarilla lands have been set by JANOGA. Benzene and total BTEX concentrations in SC-1 were below the below the JANOGA action levels of 0.2 mg/kg and 50 mg/kg, respectively. Field TPH concentrations were below the JANOGA action level of 100 mg/kg in each sample, except S-1 with 104 mg/kg. However, laboratory analytical results for TPH as GRO/DRO were reported below the JANOGA threshold of 100 mg/kg in SC-1. Chloride concentrations in SC-1 were also below the JANOGA 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 AXI Apache N #15A.

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.

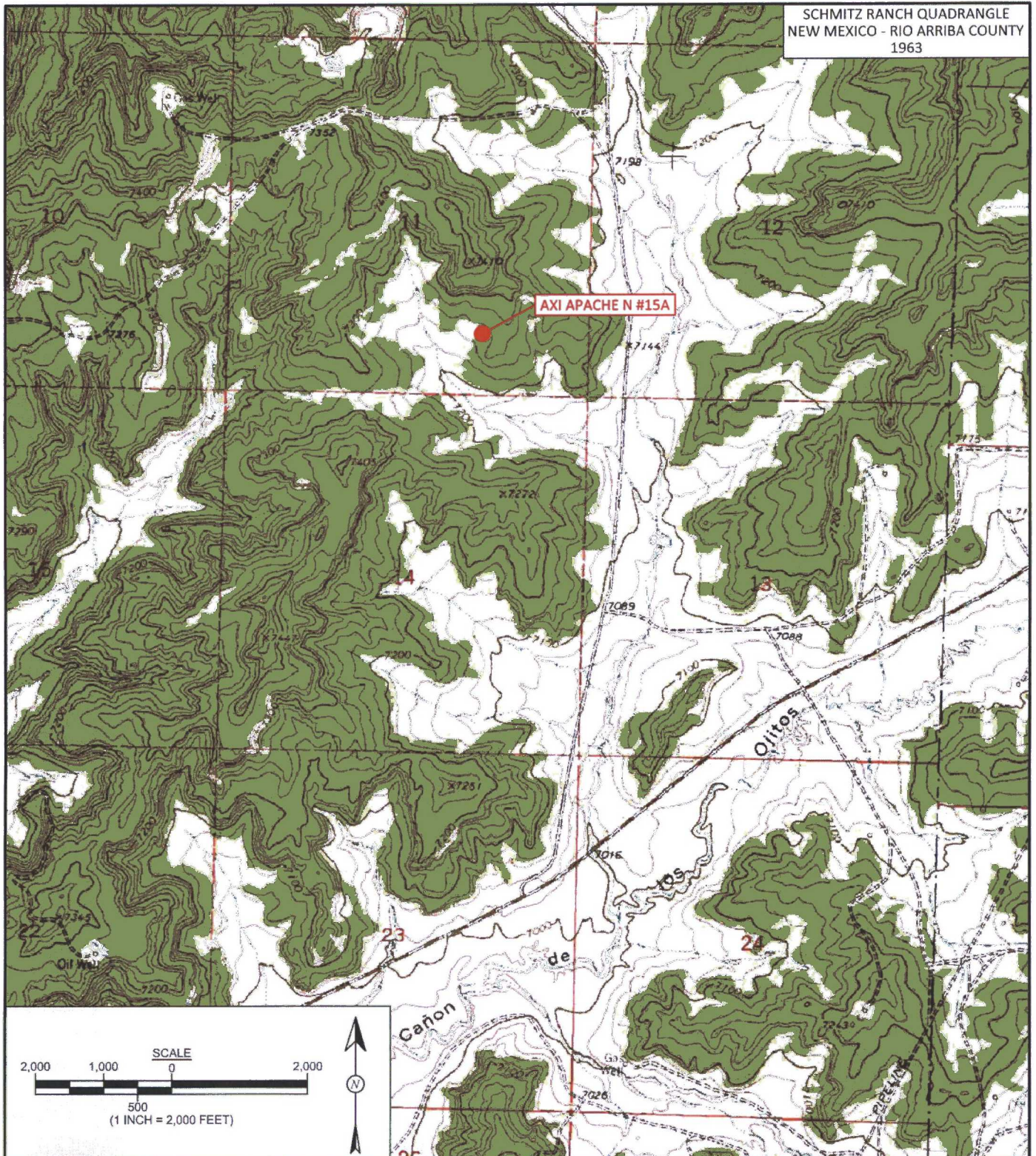
Attachments:

Figure 1. Topographic Site Location Map  
Figure 2. Aerial Site Map, September 2012  
AES Field Screening Report 092112  
Hall Analytical Report 1209969

R:\Animas 2000\Dropbox\2012 December 2012\ConocoPhillips\AXI Apache N #15A\AXI Apache N #15A  
BGT Closure Report 123112.docx



SCHMITZ RANCH QUADRANGLE  
NEW MEXICO - RIO ARriba COUNTY  
1963



**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**

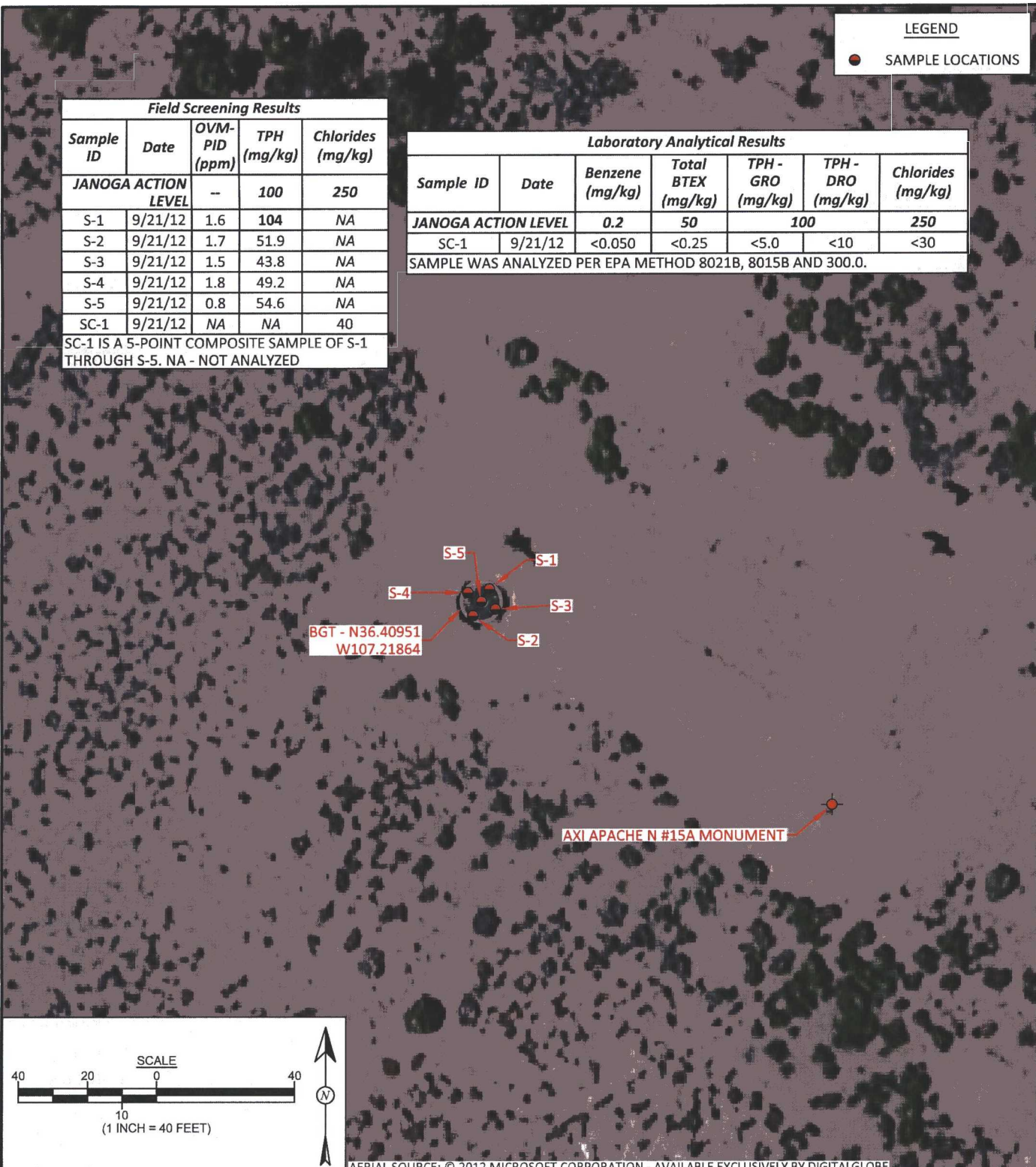
ConocoPhillips  
AXI APACHE N #15A  
RIO ARriba COUNTY, NEW MEXICO  
SW¼ SE¼, SECTION 11, T25N, R4W  
N36.40932, W107.21832



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> September 21, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> December 21, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> December 21, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> December 21, 2012





AERIAL SOURCE: © 2012 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> September 21, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> December 21, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> December 21, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> December 21, 2012

**FIGURE 2**  
**AERIAL SITE MAP**  
**BELOW GRADE TANK CLOSURE**  
**SEPTEMBER 2012**  
 ConocoPhillips  
 AXI APACHE N #15A  
 RIO ARriba COUNTY, NEW MEXICO  
 SW¼ SE¼, SECTION 11, T25N, R4W  
 N36.40932, W107.21832



## 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: AXI Apache N #15A

Date: 9/21/2012

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	9/21/2012	9:24	North	1.6	NA	10:29	104	20.0	1	HMW
S-2	9/21/2012	9:26	South	1.7	NA	10:08	51.9	20.0	1	HMW
S-3	9/21/2012	9:28	East	1.5	NA	10:11	43.8	20.0	1	HMW
S-4	9/21/2012	9:30	West	1.8	NA	10:13	49.2	20.0	1	HMW
S-5	9/21/2012	9:32	Center	0.8	NA	10:16	54.6	20.0	1	HMW
SC-1	9/21/2012	9:35	Composite	NA	40	Not Analyzed for TPH.				

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.

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Heather 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)

October 01, 2012

Debbie Watson

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: COP Axi Apachi N #15A

OrderNo.: 1209969

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/22/2012 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 Axi Apachi N #15A

Collection Date: 9/21/2012 9:35:00 AM

Lab ID: 1209969-001

Matrix: MEOH (SOIL)

Received Date: 9/22/2012 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/24/2012 11:09:31 AM
Surr: DNOP	111	77.6-140		%REC	1	9/24/2012 11:09:31 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/24/2012 12:05:10 PM
Surr: BFB	96.2	84-116		%REC	1	9/24/2012 12:05:10 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.050		mg/Kg	1	9/24/2012 12:05:10 PM
Toluene	ND	0.050		mg/Kg	1	9/24/2012 12:05:10 PM
Ethylbenzene	ND	0.050		mg/Kg	1	9/24/2012 12:05:10 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/24/2012 12:05:10 PM
Surr: 4-Bromofluorobenzene	96.6	80-120		%REC	1	9/24/2012 12:05:10 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>SRM</b>
Chloride	ND	30		mg/Kg	20	9/24/2012 11:49:22 AM

**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#: 1209969

01-Oct-12

Client: Animas Environmental Services

Project: COP Axi Apachi N #15A

Sample ID	MB-3890		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 3890		RunNo: 5743					
Prep Date:	9/24/2012		Analysis Date: 9/24/2012		SeqNo: 165130		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-3890		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 3890		RunNo: 5743					
Prep Date:	9/24/2012		Analysis Date: 9/24/2012		SeqNo: 165131		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Sample ID	1209928-003AMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: 3890		RunNo: 5743					
Prep Date:	9/24/2012		Analysis Date: 9/24/2012		SeqNo: 165148		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	21	15	15.00	9.728	74.6	64.4	117			

Sample ID	1209928-003AMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: 3890		RunNo: 5743					
Prep Date:	9/24/2012		Analysis Date: 9/24/2012		SeqNo: 165149		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	22	15	15.00	9.728	81.4	64.4	117	4.77	20	

Sample ID	1209929-001AMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: 3890		RunNo: 5743					
Prep Date:	9/24/2012		Analysis Date: 9/24/2012		SeqNo: 165167		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	15	15.00	0	102	64.4	117			

Sample ID	1209929-001AMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: 3890		RunNo: 5743					
Prep Date:	9/24/2012		Analysis Date: 9/24/2012		SeqNo: 165168		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	15	15.00	0	108	64.4	117	4.94	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#: 1209969

01-Oct-12

Client: Animas Environmental Services

Project: COP Axi Apachi N #15A

Sample ID	MB-3891		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 3891		RunNo: 5709					
Prep Date:	9/24/2012		Analysis Date: 9/24/2012		SeqNo: 164194		Units: mg/Kg			
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		108	77.6	140			

Sample ID	LCS-3891		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 3891		RunNo: 5709					
Prep Date:	9/24/2012		Analysis Date: 9/24/2012		SeqNo: 164208		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	10	50.00	0	70.7	52.6	130			
Surr: DNOP	4.5		5.000		90.7	77.6	140			

Sample ID	1209939-001AMS		SampType: MS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 3891		RunNo: 5734					
Prep Date:	9/24/2012		Analysis Date: 9/25/2012		SeqNo: 164622		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	31	10	51.07	0	61.3	57.2	146			
Surr: DNOP	4.9		5.107		96.3	77.6	140			

Sample ID	1209939-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 3891		RunNo: 5734					
Prep Date:	9/24/2012		Analysis Date: 9/25/2012		SeqNo: 164744		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	51.55	0	72.5	57.2	146	17.7	24.5	
Surr: DNOP	4.8		5.155		93.6	77.6	140	0	0	

Sample ID	MB-3915		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 3915		RunNo: 5734					
Prep Date:	9/25/2012		Analysis Date: 9/25/2012		SeqNo: 165234		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		126	77.6	140			

Sample ID	LCS-3915		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 3915		RunNo: 5734					
Prep Date:	9/25/2012		Analysis Date: 9/25/2012		SeqNo: 165235		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		110	77.6	140			

### 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#: 1209969

01-Oct-12

Client: Animas Environmental Services

Project: COP Axi Apachi N #15A

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	R5717	RunNo:	5717					
Prep Date:		Analysis Date:	9/24/2012	SeqNo:	164793	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	960		1000		95.8	84	116			

Sample ID	2.5UG GRO LCSB	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	R5717	RunNo:	5717					
Prep Date:		Analysis Date:	9/24/2012	SeqNo:	164794	Units:	mg/Kg			
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	74	117			
Surr: BFB	1000		1000		101	84	116			

Sample ID	1209969-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	SC-1	Batch ID:	R5717	RunNo:	5717					
Prep Date:		Analysis Date:	9/24/2012	SeqNo:	164796	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	15.05	0	104	70	130			
Surr: BFB	630		602.0		104	84	116			

Sample ID	1209969-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	SC-1	Batch ID:	R5717	RunNo:	5717					
Prep Date:		Analysis Date:	9/24/2012	SeqNo:	164797	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.05	0	101	70	130	3.75	22.1	
Surr: BFB	630		602.0		104	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#: 1209969

01-Oct-12

Client: Animas Environmental Services

Project: COP Axi Apachi N #15A

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R5717	RunNo:	5717					
Prep Date:		Analysis Date:	9/24/2012	SeqNo:	164861	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	0.97		1.000		96.5	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R5717	RunNo:	5717					
Prep Date:		Analysis Date:	9/24/2012	SeqNo:	164862	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	102	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	105	76.7	117			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	1209969-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	SC-1	Batch ID:	R5717	RunNo:	5717					
Prep Date:		Analysis Date:	9/24/2012	SeqNo:	164864	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	67.2	113			
Toluene	1.0	0.050	1.000	0	105	62.1	116			
Ethylbenzene	1.1	0.050	1.000	0	107	67.9	127			
Xylenes, Total	3.2	0.10	3.000	0	107	60.6	134			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	1209969-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	SC-1	Batch ID:	R5717	RunNo:	5717					
Prep Date:		Analysis Date:	9/24/2012	SeqNo:	164865	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	99.0	67.2	113	1.50	14.3	
Toluene	1.0	0.050	1.000	0	100	62.1	116	4.17	15.9	
Ethylbenzene	1.0	0.050	1.000	0	102	67.9	127	4.06	14.4	
Xylenes, Total	3.1	0.10	3.000	0	104	60.6	134	3.64	12.6	
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120	0	0	

### Qualifiers:

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- E Value above quantitation range
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Hall Environmental Analysis Laboratory  
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:	1209969
Received by/date:	AP 09/22/12		
Logged By:	Lindsay Mangin	9/22/2012 11:00:00 AM	<i>[Signature]</i>
Completed By:	Lindsay Mangin	9/23/2012 1:24:43 PM	<i>[Signature]</i>
Reviewed By:	mg 09/24/12		

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

18. Additional remarks:

### 19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			



# Chain-of-Custody Record

Client:

Ammonia Environmental Services

Turn-Around Time:

☐ Standard

☒ Rush Same Day

Project Name:

Mailing Address: 1024 E. Comanche

Cof Air Apache N #15A

Phone #: 505-564-2281

Project #:

email or Fax#:

Project Manager:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

D. Watson

Accreditation

☐ NELAP ☐ Other

Sampler: H. Woods

☐ EDD (Type)

Office: Sample Temperature: 28°C

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEADING

9/21/12

935

Soil

SG

MECH LIT

MECH / Non

-001

X

X

X

BTEX + MTBE + TPHs (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<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, NO<sub>2</sub><sup>-</sup>, PO<sub>4</sub><sup>3-</sup>, SO<sub>4</sub><sup>2-</sup>)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)

Date:

Time:

Relinquished by:

Received by:

Date

Time

Date:

Time:

Relinquished by:

Received by:

Date

Time

Remarks: Bill to Conoco Phillips

WO: 10330224

Super: Harry Dee

Area: 210

User ID: K6AACA

Activity: C200

Workorder by: Jess Henson



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

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Analysis Request