

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

Form C-141  
Revised August 8, 2011

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>Reese Mesa 9</b>	Facility Type: <b>Gas Well</b>

Surface Owner <b>BLM</b>	Mineral Owner <b>BLM (NM-6892)</b>	API No. <b>30-045-24710</b>
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**LOCATION OF RELEASE**

Unit Letter <b>D</b>	Section <b>13</b>	Township <b>32N</b>	Range <b>8W</b>	Feet from the <b>790</b>	North/South Line <b>North</b>	Feet from the <b>950</b>	East/West Line <b>West</b>	County <b>San Juan</b>
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Latitude **36.988** Longitude **107.63217**

**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>October 8, 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 CONS. 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.\*

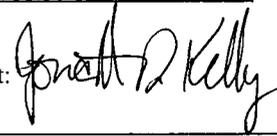
Describe Cause of Problem and Remedial Action Taken.\*

**Below Grade Tank Closure Activities**

Describe Area Affected and Cleanup Action Taken.\*

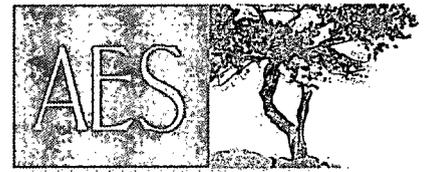
**The regulatory standard for closure at this site was determined to be 1000 ppm. A sample was taken and then transported to the lab and analytical results for TPH, BTEX and Chlorides were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required. The final report is attached for 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 1302955232**



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 10, 2012

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

**RE: Below Grade Tank Closure Report  
Reese Mesa #9  
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) Reese Mesa #9, 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 – Reese Mesa #9

Legal Description – NW¼ NW¼, Section 13, T32N, R8W, San Juan County, New Mexico

Well Latitude/Longitude – N36.98808 and W107.63279, respectively

BGT Latitude/Longitude – N36.98799 and W107.63298, respectively

Land Jurisdiction – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, October 2012

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Below Grade Tank Closure form dated October 2005 for the Reese Mesa #9 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. The wash in Reese Canyon is located approximately 250 feet north of the location. 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 October 8, 2012, and on October 9, 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 October 9, 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 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;
- Total petroleum hydrocarbons (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 0.0 ppm in S-1 up to 3.9 ppm in S-5. Field TPH concentrations ranged from 32.3 mg/kg in S-2 up to 285 mg/kg in S-5. 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  
 Reese Mesa #9 BGT Closure, October 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	10/9/12	0.5	0.0	40.3	NA
S-2	10/9/12	0.5	1.3	32.3	NA
S-3	10/9/12	0.5	0.8	52.3	NA
S-4	10/9/12	0.5	0.3	39.0	NA
S-5	10/9/12	0.5	3.9	<b>285</b>	NA
SC-1	10/9/12	0.5	NA	NA	40

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 9.9 mg/kg DRO. The laboratory chloride concentration was reported at 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  
Reese Mesa #9 BGT Closure, October 2012

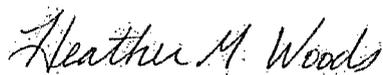
Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Chlorides (mg/kg)
<b>NMOCD Action Level (NMAC 19.15.17.13E)</b>			<b>0.2</b>	<b>50</b>	<b>100</b>		<b>250</b>
SC-1	10/9/12	0.5	<0.050	<0.25	<5.0	<9.9	140

### 3.0 Conclusions and Recommendations

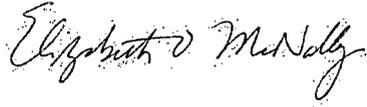
NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in S-5 with 285 mg/kg. However, laboratory analytical results in SC-1 for TPH as GRO/DRO were reported below the NMOCD action level of 100 mg/kg. The chloride concentration reported in SC-1 was also 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 me or Elizabeth McNally at (505) 564-2281.

Sincerely,



Heather M. Woods  
Staff Geologist



Elizabeth McNally, P.E.

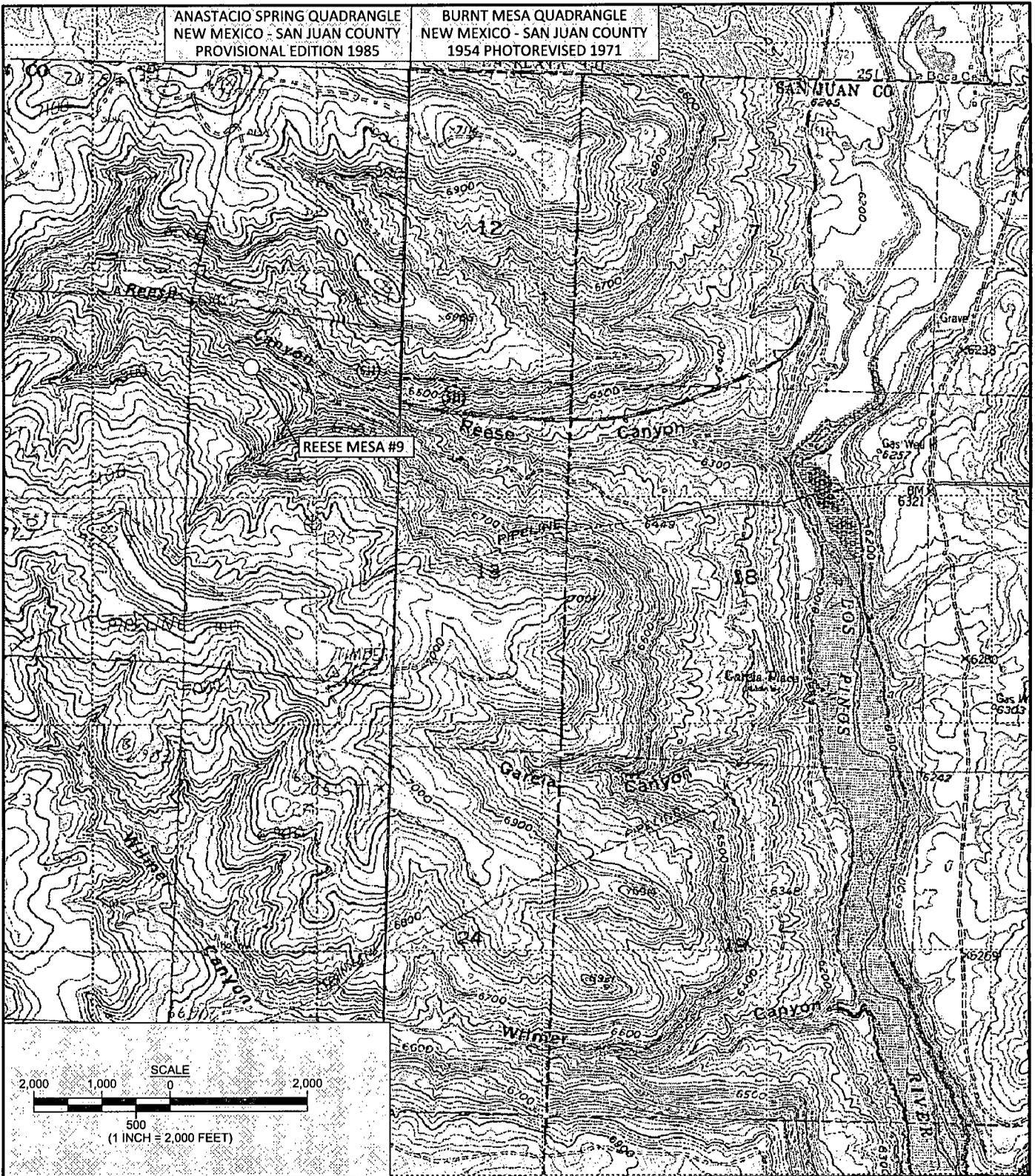
Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, October 2012
- AES Field Screening Report 100912
- Hall Analytical Report 1210528

C:\Dropbox\2012 December 2012 (Former Trial File)\ConocoPhillips\Reese Mesa #9\Reese Mesa #9 BGT Closure Report 121012.docx

ANASTACIO SPRING QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 PROVISIONAL EDITION 1985

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 16, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 16, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> October 16, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 16, 2012

**FIGURE 1**  
**TOPOGRAPHIC SITE LOCATION MAP**  
 ConocoPhillips  
 REESE MESA #9  
 SAN JUAN COUNTY, NEW MEXICO  
 NW¼ NW¼, SECTION 13, T32N, R8W  
 N36.98808, W107.63279

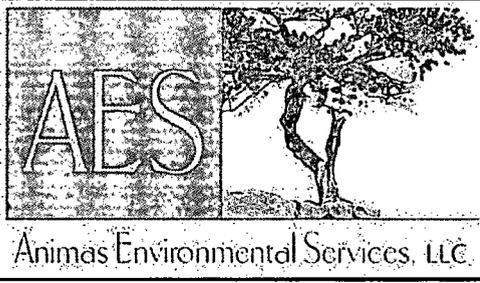
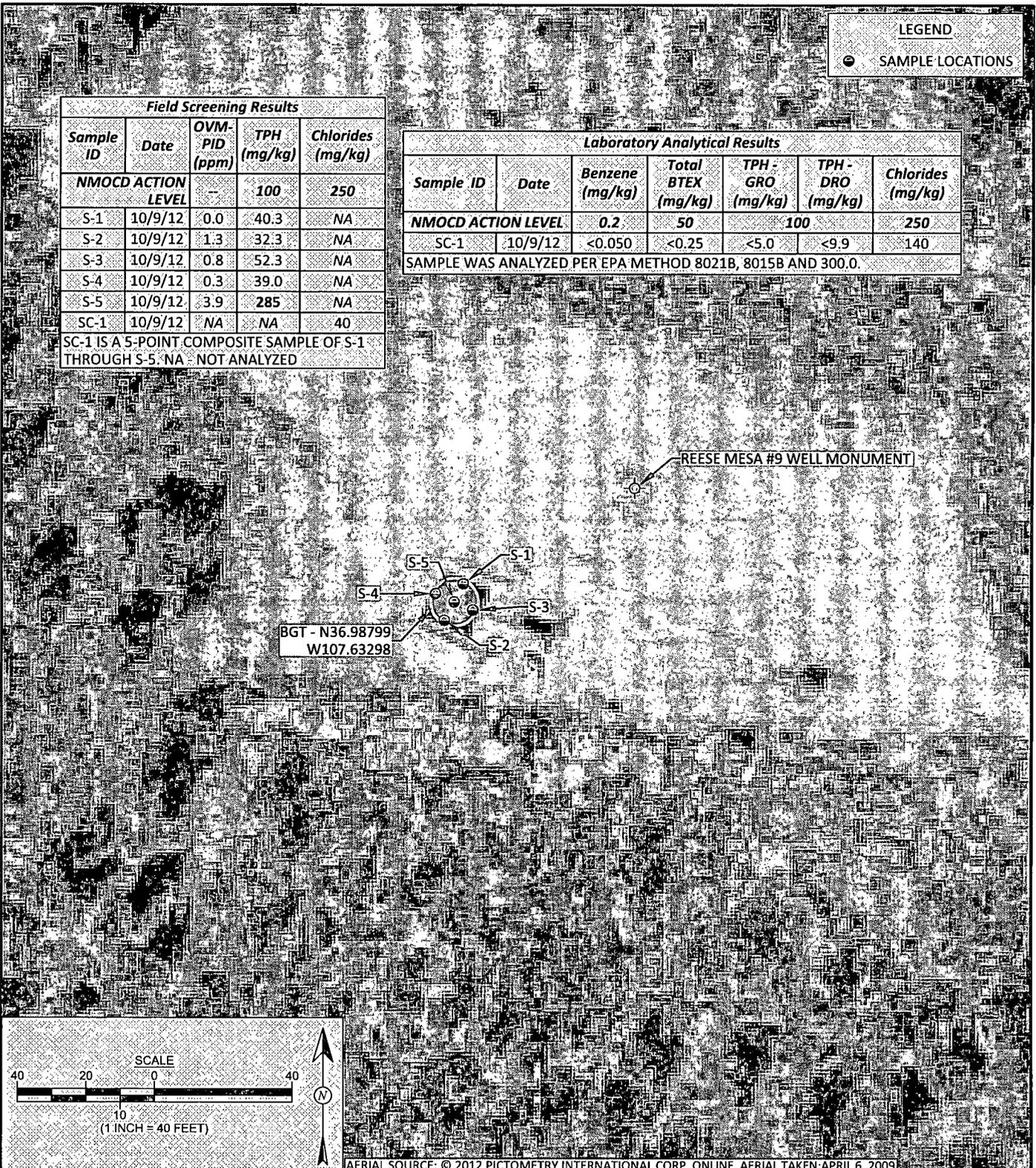
**LEGEND**  
 **SAMPLE LOCATIONS**

Field Screening Results				
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
<b>NMOC ACTION LEVEL</b>		--	100	250
S-1	10/9/12	0.0	40.3	NA
S-2	10/9/12	1.3	32.3	NA
S-3	10/9/12	0.8	52.3	NA
S-4	10/9/12	0.3	39.0	NA
S-5	10/9/12	3.9	285	NA
SC-1	10/9/12	NA	NA	40

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

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	10/9/12	<0.050	<0.25	<5.0	<9.9	140

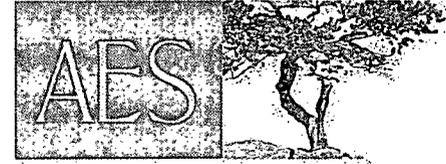
SAMPLE WAS ANALYZED PER EPA METHOD 8021B, 8015B AND 300.0.



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> October 16, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 16, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> October 16, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 16, 2012

**FIGURE 2**  
**AERIAL SITE MAP**  
**BELOW GRADE TANK CLOSURE**  
**OCTOBER 2012**  
 ConocoPhillips  
 REESE MESA #9  
 SAN JUAN COUNTY, NEW MEXICO  
 NW¼ NW¼, SECTION 13, T32N, R8W  
 N36.98808, W107.63279

# 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: Reese Mesa #9

Date: 10/9/2012

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	10/9/2012	9:35	North	0.0	NA	10:15	40.3	20.0	1	HMW
S-2	10/9/2012	9:37	South	1.3	NA	10:18	32.3	20.0	1	HMW
S-3	10/9/2012	9:39	East	0.8	NA	10:20	52.3	20.0	1	HMW
S-4	10/9/2012	9:42	West	0.3	NA	10:22	39.0	20.0	1	HMW
S-5	10/9/2012	9:44	Center	3.9	NA	10:25	285	20.0	1	HMW
SC-1	10/9/2012	9:50	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:

*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)

October 17, 2012

Debbie Watson

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: CoP Reese Mesa #9

OrderNo.: 1210528

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/10/2012 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

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210528

Date Reported: 10/17/2012

**CLIENT:** Animas Environmental Services

**Client Sample ID:** SC-1

**Project:** CoP Reese Mesa #9

**Collection Date:** 10/9/2012 9:50:00 AM

**Lab ID:** 1210528-001

**Matrix:** SOIL

**Received Date:** 10/10/2012 9:40:00 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	9.9		mg/Kg	1	10/10/2012 11:49:06 AM
Surr: DNOP	94.0	77.6-140		%REC	1	10/10/2012 11:49:06 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/10/2012 1:20:35 PM
Surr: BFB	104	84-116		%REC	1	10/10/2012 1:20:35 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.050		mg/Kg	1	10/10/2012 1:20:35 PM
Toluene	ND	0.050		mg/Kg	1	10/10/2012 1:20:35 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/10/2012 1:20:35 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/10/2012 1:20:35 PM
Surr: 4-Bromofluorobenzene	113	80-120		%REC	1	10/10/2012 1:20:35 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>SRM</b>
Chloride	140	30		mg/Kg	20	10/10/2012 11:03:34 AM

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	P Sample pH greater than 2	R RPD outside accepted recovery limits
	RL Reporting Detection Limit	S Spike Recovery outside accepted recovery limits

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1210528

17-Oct-12

Client: Animas Environmental Services

Project: CoP Reese Mesa #9

Sample ID	<b>MB-4224</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>4224</b>	RunNo:	<b>6131</b>					
Prep Date:	<b>10/10/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>176679</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-4224</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>4224</b>	RunNo:	<b>6131</b>					
Prep Date:	<b>10/10/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>176680</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.9	90	110			

Sample ID	<b>1210389-001BMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>4224</b>	RunNo:	<b>6131</b>					
Prep Date:	<b>10/10/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>176682</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	23	7.5	15.00	8.220	98.5	64.4	117			

Sample ID	<b>1210389-001BMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>4224</b>	RunNo:	<b>6131</b>					
Prep Date:	<b>10/10/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>176683</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	23	7.5	15.00	8.220	98.1	64.4	117	0.249	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#: 1210528

17-Oct-12

Client: Animas Environmental Services

Project: CoP Reese Mesa #9

Sample ID	<b>MB-4226</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015B: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>4226</b>	RunNo:	<b>6108</b>					
Prep Date:	<b>10/10/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>176584</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	8.7		10.00		87.4	77.6	140			

Sample ID	<b>LCS-4226</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015B: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>4226</b>	RunNo:	<b>6108</b>					
Prep Date:	<b>10/10/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>176585</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	52.6	130			
Surr: DNOP	4.0		5.000		79.7	77.6	140			

### Qualifiers:

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- 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#: 1210528

17-Oct-12

**Client:** Animas Environmental Services

**Project:** CoP Reese Mesa #9

Sample ID	<b>MB-4212</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015B: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>4212</b>	RunNo:	<b>6152</b>					
Prep Date:	<b>10/9/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>177240</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	1000		1000		105	84	116			

Sample ID	<b>LCS-4212</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015B: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>4212</b>	RunNo:	<b>6152</b>					
Prep Date:	<b>10/9/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>177241</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID	<b>1210474-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015B: Gasoline Range</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>4212</b>	RunNo:	<b>6152</b>					
Prep Date:	<b>10/9/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>177245</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	71	24	24.34	43.50	114	70	130			
Surr: BFB	5400		4869		112	84	116			

Sample ID	<b>1210474-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015B: Gasoline Range</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>4212</b>	RunNo:	<b>6152</b>					
Prep Date:	<b>10/9/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>177246</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	78	24	24.18	43.50	145	70	130	9.76	22.1	S
Surr: BFB	5300		4836		110	84	116	0	0	

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1210528

17-Oct-12

Client: Animas Environmental Services

Project: CoP Reese Mesa #9

Sample ID	<b>MB-4212</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>4212</b>	RunNo:	<b>6152</b>					
Prep Date:	<b>10/9/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>177271</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

Sample ID	<b>LCS-4212</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>4212</b>	RunNo:	<b>6152</b>					
Prep Date:	<b>10/9/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>177272</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		120	80	120			

Sample ID	<b>1210474-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>4212</b>	RunNo:	<b>6152</b>					
Prep Date:	<b>10/9/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>177278</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	5.5		4.869		112	80	120			

Sample ID	<b>1210474-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>4212</b>	RunNo:	<b>6152</b>					
Prep Date:	<b>10/9/2012</b>	Analysis Date:	<b>10/10/2012</b>	SeqNo:	<b>177279</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	5.4		4.836		113	80	120	0	0	

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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: **1210528**  
 Received by/date: LM 10/10/12  
 Logged By: **Michelle Garcia** 10/10/2012 9:40:00 AM *Michelle Garcia*  
 Completed By: **Michelle Garcia** 10/10/2012 9:53:01 AM *Michelle Garcia*  
 Reviewed By: *[Signature]* 10/10/12

**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	3.3	Good	Yes			

