

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>Lindsay Dumas</b>
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 599-4089</b>
Facility Name: <b>Zachry 14</b>	Facility Type: <b>Gas</b>

Surface Owner: <b>BLM</b>	Mineral Owner: <b>BLM (SF-080724A)</b>	API No. <b>30-045-13067</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>M</b>	<b>10</b>	<b>28N</b>	<b>10W</b>	<b>1100'</b>	<b>South</b>	<b>1170'</b>	<b>West</b>	<b>San Juan</b>

Latitude **36.67236** Longitude **-107.88746**

**NATURE OF RELEASE**

Type of Release <b>Produced Water</b>	Volume of Release <b>5 BBLs</b>	Volume Recovered <b>3 BBLs</b>
Source of Release <b>Pit tank</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>2/26/14 12:00 PM</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.	

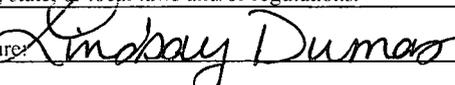
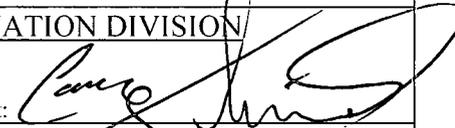
**OIL CONS. DIV DIST. 3**  
**MAY 20 2014**

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
**Pit tank began leaking due to corrosion. Well was shut in and fluid was pulled. Pit will be replaced and soil will be sampled under liner.**

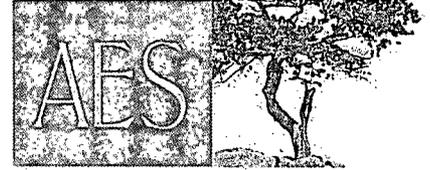
Describe Area Affected and Cleanup Action Taken.\*  
**The soil was assessed by third party contractor. All field screenings and laboratory analysis' were below NMOCD action levels. No further remediation necessary. The final report is attached.**

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>Lindsay Dumas</b>	Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>5/29/14</b>	Expiration Date:
E-mail Address: <b>Lindsay.Dumas@conocophillips.com</b>	Conditions of Approval:	
Date: <b>5/16/14</b> Phone: <b>(505) 599-4089</b>	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

**#NCS 141 4930 212**



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

May 12, 2014

Lindsay Dumas  
ConocoPhillips  
San Juan Business Unit  
Office 214-07  
5525 Hwy 64  
Farmington, New Mexico 87401

Via electronic mail to:  
[SJBUE-Team@ConocoPhillips.com](mailto:SJBUE-Team@ConocoPhillips.com)

OIL CONS. DIV DIST. 3

MAY 20 2014

**RE: Release Assessment Report  
Zachry #14  
San Juan County, New Mexico**

Dear Ms. Dumas:

On March 10, 2014, Animas Environmental Services, LLC (AES) completed a release assessment at the ConocoPhillips (CoP) Zachry #14, located in San Juan County, New Mexico. The release consisted of approximately 5 barrels (bbls) of produced water and condensate from the onsite below grade tank (BGT).

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## 1.0 Site Information

### 1.1 Location

Location – SW¼ SW¼, Section 10, T28N, R10W, San Juan County, New Mexico  
Well Head Latitude/Longitude – N36.67253 and W107.88794, respectively  
Release Location Latitude/Longitude – N36.67222 and W107.88808, respectively  
Land Jurisdiction – Bureau of Land Management (BLM)  
Figure 1. Topographic Site Location Map  
Figure 2. Aerial Site Map, March 2014

### 1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 40 based on the following factors:

- **Depth to Groundwater:** A cathodic protection report form dated May 1991 for the Zachry #14 reported the depth to groundwater at 40 feet below ground surface (bgs). (20 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** An unnamed wash which discharges to the wash in Chavez Canyon is located approximately 150 feet east of the location. (20 points)

### 1.3 Assessment

AES was initially contacted by Lindsay Dumas of CoP on March 5, 2014, and on March 10, 2014, Corwin Lameman and Emilee Skyles of AES completed the release assessment field work. The assessment included collection and field sampling of nine soil samples from four soil borings in and around the release area. Soil borings were terminated between 7.5 and 8 feet. Sample locations are presented on Figure 3.

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## 2.0 Soil Sampling

A total of nine soil samples from four borings (SB-1 through SB-4) were collected during the assessment. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Two samples (SB-2 and SB-3) were also submitted for confirmation laboratory analysis.

### 2.1 Field Sampling

#### 2.1.1 Volatile Organic Compounds

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

#### 2.1.2 Total Petroleum Hydrocarbons

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

## 2.2 Laboratory Analyses

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

- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

## 2.3 Field and Laboratory Analytical Results

On March 10, 2014, release assessment field screening results for VOCs via OVM showed concentrations were 0.0 ppm in all samples, except SB-1 with 0.2 ppm. Field TPH concentrations ranged from less than 20.0 mg/kg in SB-2 and SB-4 up to 113 mg/kg in SB-3. Results are included below in Table 1 and on Figure 3. The AES Field Sampling Report is attached.

Table 1. Field Sampling VOCs and TPH Results  
 Zachry #14 Release Assessment, March 2014

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>TPH 418.1 (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>100</i>	<i>100</i>
SB-1	3/10/14	5	0.2	31.2
		6	0.0	NA
		7.5	0.0	NA
SB-2	3/10/14	5	0.0	<b>100</b>
		8	0.0	<20.0
SB-3	3/10/14	5	0.0	<b>113</b>
		6	0.0	NA
		7.5	0.0	47.8
SB-4	3/10/14	5	0.0	<20.0

NA – not analyzed

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

Laboratory analyses for SB-2 and SB-3 were used to confirm field sampling results of the release assessment. TPH concentrations as GRO/DRO were reported below laboratory detection limits in SB-2 and at 22 mg/kg in SB-3. Results are presented in Table 2 and on Figure 3. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH  
 Zachry #14 Release Assessment, March 2014

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>
<i>NMOCD Action Level*</i>			10	50	100	
SB-2	3/10/14	5	NA	NA	<4.8	<9.9
SB-3	3/10/14	5	NA	NA	<4.7	22

NA – not analyzed

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

### 3.0 Conclusions and Recommendations

On March 10, 2014, AES conducted a release assessment of contaminated soils associated with an overflow of produced water and condensate from a BGT at the Zachry #14. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 40.

Release assessment field screening results above the NMOCD action level of 100 mg/kg TPH were reported in SB-2 and SB-3. The highest TPH concentration was reported in SB-3 with 113 mg/kg. VOC concentrations were below the NMOCD action level of 100 ppm in all samples.

Laboratory analyses for SB-2, and SB-3 were used to confirm field sampling results. TPH concentrations as GRO/DRO were below the NMOCD action level of 100 mg/kg, with the highest concentration reported in SB-3 with 22 mg/kg.

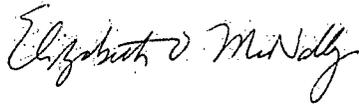
Based on final field sampling and laboratory analytical results of the release assessment at the Zachry #14, VOC and TPH concentrations were below applicable NMOCD action levels. No further work is recommended.

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

Sincerely,



Emilee Skyles  
Staff Geologist



Elizabeth McNally, PE

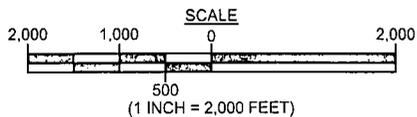
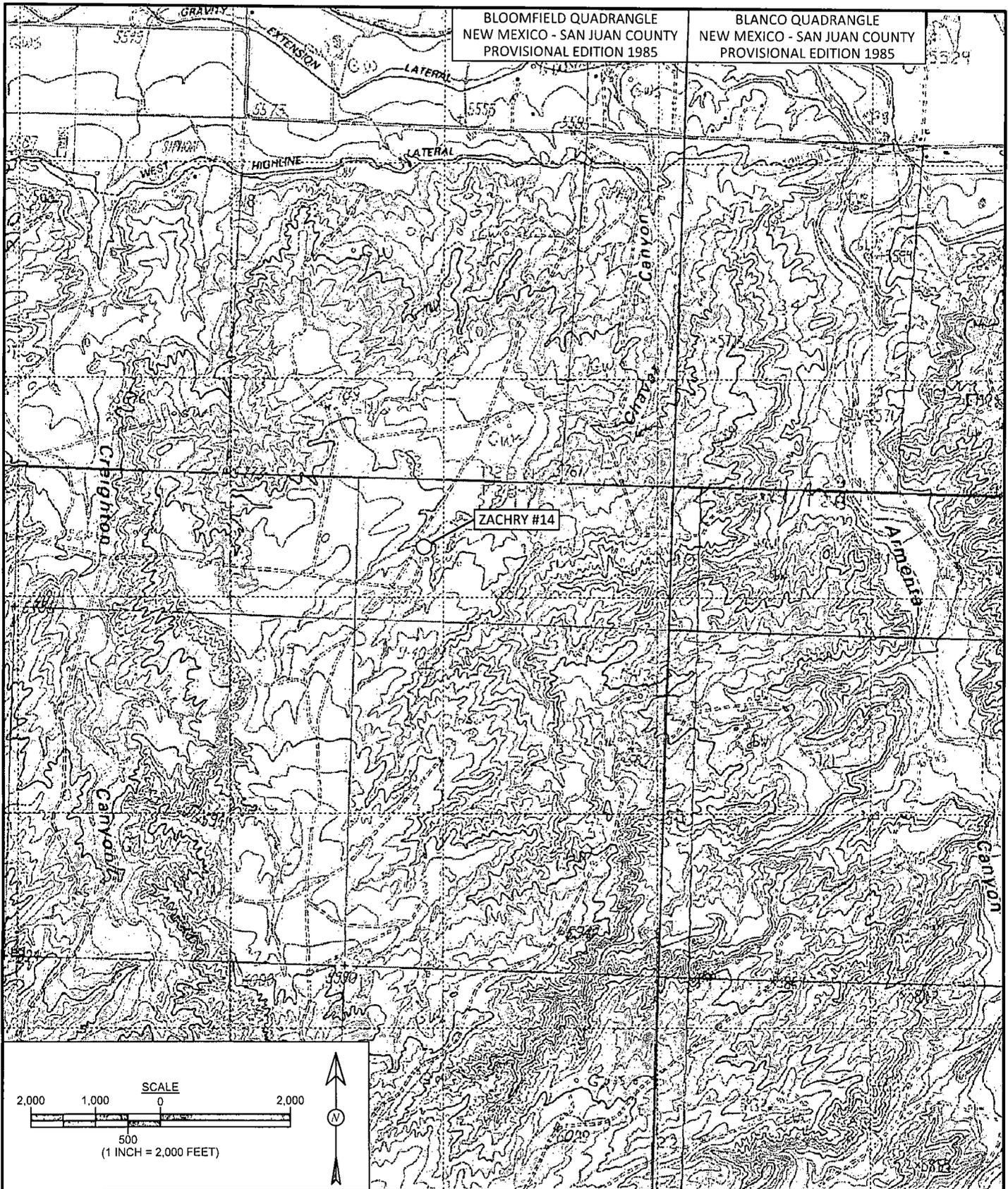
Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, March 2014
- Figure 3. Release Assessment Sample Locations and Results, March 2014
- AES Field Sampling Report 031014
- Hall Laboratory Analytical Report 1403425

SVRMAIN2\Shared\Animas 2000\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014  
Projects\ConocoPhillips\Zachry #14\Zachry #14 Release Assessment Report 051214.docx

BLOOMFIELD QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 PROVISIONAL EDITION 1985

BLANCO QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 PROVISIONAL EDITION 1985



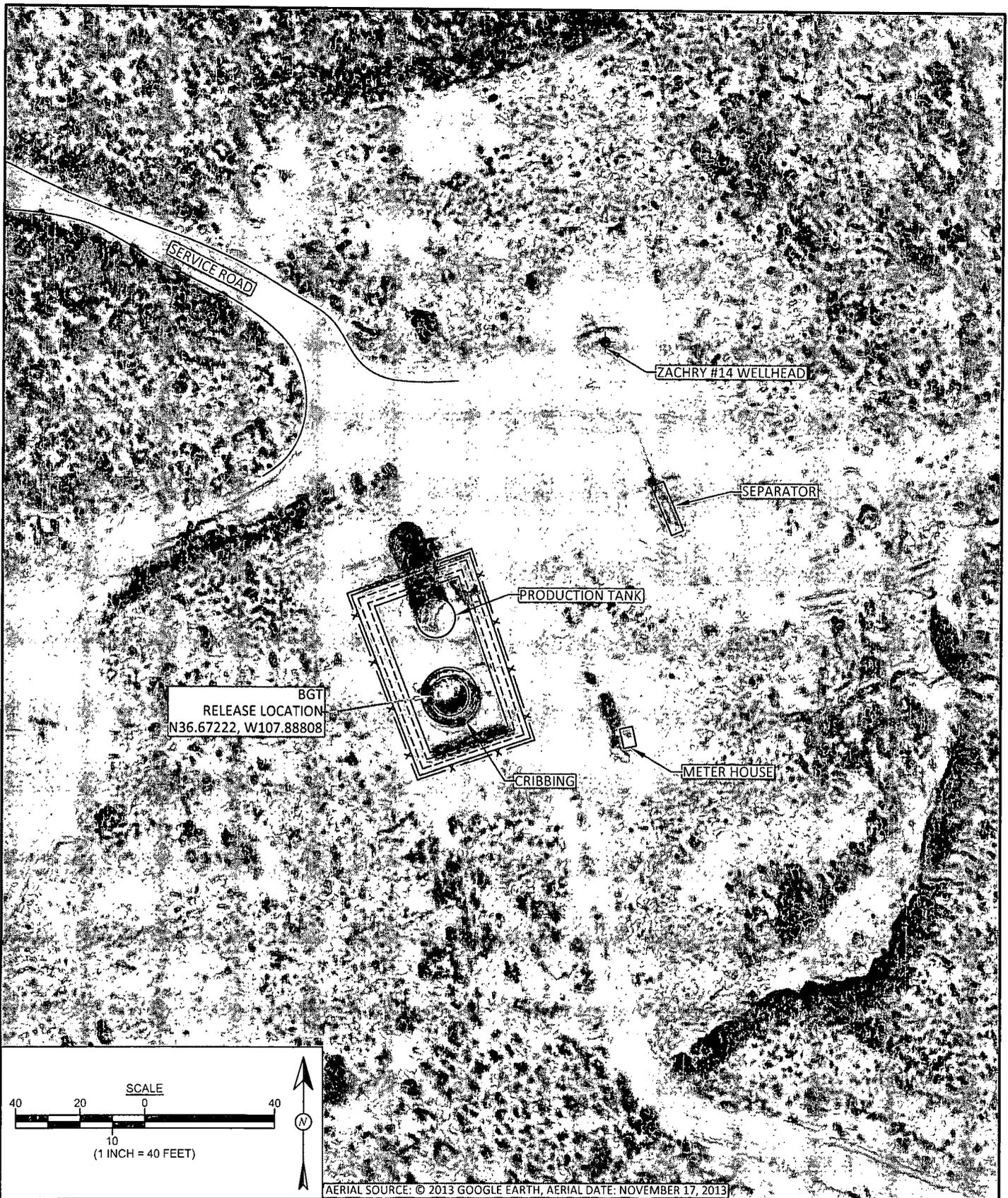
Animas Environmental Services, LLC

<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> March 11, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> April 23, 2014
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> April 23, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> April 23, 2014

### FIGURE 1

#### TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips  
 ZACHRY #14  
 SW¼ SW¼, SECTION 10, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.67253, W107.88794



AERIAL SOURCE: © 2013 GOOGLE EARTH, AERIAL DATE: NOVEMBER 17, 2013



<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> March 11, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> April 23, 2014
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> April 23, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> April 23, 2014

**FIGURE 2**

**AERIAL SITE MAP**  
**MARCH 2014**  
 ConocoPhillips  
 ZACHRY #14  
 SW¼ SW¼, SECTION 10, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.67253, W107.88794

**FIGURE 3**

**RELEASE ASSESSMENT SAMPLE LOCATIONS AND RESULTS MARCH 2014**  
 ConocoPhillips  
 ZACHRY #14  
 SW¼ SW¼, SECTION 10, T28N, R10W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.67253, W107.88794

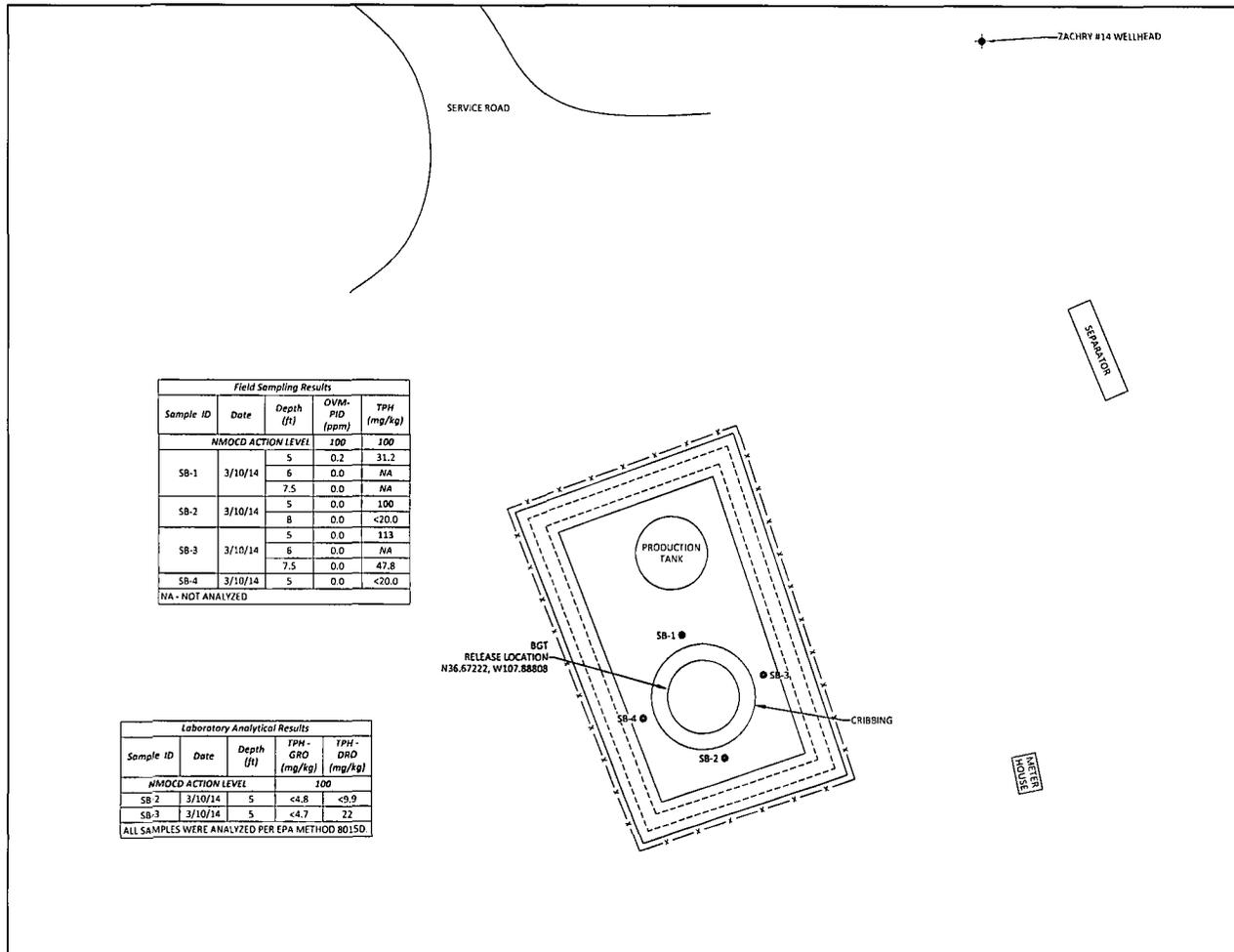
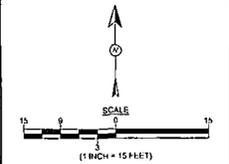


Animas Environmental Services, LLC

<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> March 11, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> April 23, 2014
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> April 23, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> April 23, 2014

**LEGEND**

- SAMPLE LOCATIONS
- ==== SECONDARY CONTAINMENT BERM
- x-x- FENCE



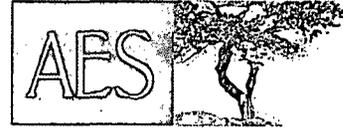
Sample ID	Date	Depth (ft)	OVM-PIID (ppm)	TPH (mg/kg)
<b>NMOCQ ACTION LEVEL</b>				
			100	100
SB-1	3/10/14	5	0.2	31.2
		6	0.0	NA
		7.5	0.0	NA
SB-2	3/10/14	5	0.0	100
		8	0.0	<70.0
		5	0.0	113
SB-3	3/10/14	6	0.0	NA
		7.5	0.0	47.8
		5	0.0	<20.0
SB-4	3/10/14	5	0.0	<20.0

NA - NOT ANALYZED

Sample ID	Date	Depth (ft)	TPH-G10 (mg/kg)	TPH-D10 (mg/kg)
<b>NMOCQ ACTION LEVEL</b>				
			100	
SB-2	3/10/14	5	<4.8	<9.9
SB-3	3/10/14	5	<4.7	22

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8015D

# AES Field Sampling 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: Zachry #14

Date: 3/10/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 5'	3/10/2014	12:35	0.2	31.2	13:27	20.0	1	EMS
SB-1 @ 6'	3/10/2014	14:35	0.0	Not Analyzed for TPH				
SB-1 @ 7.5'	3/10/2014	14:40	0.0	Not Analyzed for TPH				
SB-2 @ 5'	3/10/2014	12:50	0.0	100	13:29	20.0	1	EMS
SB-2 @ 8'	3/10/2014	14:20	0.0	9.4	14:39	20.0	1	EMS
SB-3 @ 5'	3/10/2014	13:00	0.0	113	13:32	20.0	1	EMS
SB-3 @ 6'	3/10/2014	14:12	0.0	Not Analyzed for TPH				
SB-3 @ 7.5'	3/10/2014	14:15	0.0	47.8	14:36	20.0	1	EMS
SB-4 @ 5'	3/10/2014	13:10	0.0	Not Analyzed for TPH				

DF Dilution Factor

Total Petroleum Hydrocarbons - USEPA 418.1

NA Not Analyzed

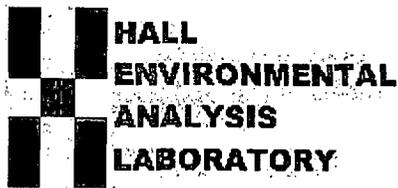
ND Not Detected at the Reporting Limit

Analyst:

*Erin Skyl*

PQL Practical Quantitation Limit

\*TPH concentrations recorded may be below PQL.



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)

March 18, 2014

Debbie Watson

Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 486-4071  
FAX (505) 324-2022

RE: CoP Zachry #14

OrderNo.: 1403425

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/11/2014 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. In order to properly interpret your results it is imperative that you review this report in its entirety. 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. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. 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.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SB-2@5'

Project: CoP Zachry #14

Collection Date: 3/10/2014 12:50:00 PM

Lab ID: 1403425-001

Matrix: SOIL

Received Date: 3/11/2014 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/13/2014 9:29:26 PM	12127
Surr: DNOP	101	66-131		%REC	1	3/13/2014 9:29:26 PM	12127
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>JMP</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/13/2014 2:28:49 PM	12150
Surr: BFB	87.3	74.5-129		%REC	1	3/13/2014 2:28:49 PM	12150

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<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
	O RSD is greater than RSDlimit	P Sample pH greater than 2.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Analytical Report

Lab Order 1403425

Date Reported: 3/18/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-3@5'

Project: CoP Zachry #14

Collection Date: 3/10/2014 1:00:00 PM

Lab ID: 1403425-002

Matrix: SOIL

Received Date: 3/11/2014 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	22	10		mg/Kg	1	3/14/2014 4:41:43 PM	12127
Surr: DNOP	97.3	66-131		%REC	1	3/14/2014 4:41:43 PM	12127
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>JMP</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/13/2014 2:57:23 PM	12150
Surr: BFB	88.3	74.5-129		%REC	1	3/13/2014 2:57:23 PM	12150

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<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
	O RSD is greater than RSDlimit	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#: 1403425

18-Mar-14

**Client:** Animas Environmental Services

**Project:** CoP Zachry #14

Sample ID	MB-12127	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12127	RunNo:	17275					
Prep Date:	3/11/2014	Analysis Date:	3/13/2014	SeqNo:	498023	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	9.1		10.00		91.2	66	131			

Sample ID	LCS-12127	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12127	RunNo:	17275					
Prep Date:	3/11/2014	Analysis Date:	3/13/2014	SeqNo:	498432	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	60.8	145			
Surr: DNOP	4.7		5.000		94.5	66	131			

Sample ID	MB-12165	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12165	RunNo:	17309					
Prep Date:	3/13/2014	Analysis Date:	3/14/2014	SeqNo:	499648	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	66	131			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1403425

18-Mar-14

Client: Animas Environmental Services

Project: CoP Zachry #14

Sample ID	<b>MB-12150</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>12150</b>	RunNo:	<b>17301</b>					
Prep Date:	<b>3/12/2014</b>	Analysis Date:	<b>3/13/2014</b>	SeqNo:	<b>498358</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	830		1000		82.6	74.5	129			

Sample ID	<b>LCS-12150</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>12150</b>	RunNo:	<b>17301</b>					
Prep Date:	<b>3/12/2014</b>	Analysis Date:	<b>3/13/2014</b>	SeqNo:	<b>498359</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	114	71.7	134			
Surr: BFB	930		1000		93.4	74.5	129			

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

**Sample Log-In Check List**

Client Name: **Animas Environmental** Work Order Number: **1403425** RcptNo: **1**

Received by/date: *LM 03/11/14*  
 Logged By: **Ashley Gallegos** 3/11/2014 9:50:00 AM *AG*  
 Completed By: **Ashley Gallegos** 3/11/2014 4:44:50 PM *AG*  
 Reviewed By: *[Signature]* 03/12/14

**Chain of Custody**

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

**Log In**

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

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

**Special Handling (if applicable)**

- 16. 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: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.1	Good	Yes			

# Chain-of-Custody Record

Client: **ANIMAS ENVIRONMENTAL SERVICES**

Mailing Address: **624 E. Comanche**

**FARMINGTON, NM 87401**

Phone #: **505-564-2281**

email or Fax#:

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

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

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

TURN-AROUND TIME:  
 Standard       Rush

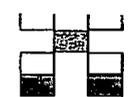
Project Name:  
**CoP ZACHRY # 14**

Project #:

Project Manager:  
**D. WATSON**

Sampler: **E. SKYLES**  
 On Ice:  Yes       No

Sample Temperature: **4.1**



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / TPO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)	
3/10/14	12:50	Soil	SB-2@5'	1-402	<del>1-402</del> non	1403425 -001			X										
3/10/14	13:00	soil	SB-3@5'	1-402	non	-002			X										

Date: 3/10/14      Time: 1631  
 Relinquished by: **Emilia Skyles**

Received by: **Christie Wheeler**      Date: 3/10/14      Time: 1631

Date: 3/10/14      Time: 1721  
 Relinquished by: **Christie Wheeler**

Received by: **[Signature]**      Date: 03/11/14      Time: 0950

Remarks: **Bill to Conoco Phillips**  
 WO: 26071248      USER: KGARCIA  
 AREA: 22      ORDERED BY: LINDSAY DUMAS  
 SUPERVISOR: **ERVIN WYCKOFF**      ACTIVITY CODES:

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