

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

SEP 02 2015

Form C-141  
Revised August 8, 2011

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

Submit 1 Copy to appropriate District Office to  
accordance with 19.15.29 NMAC.

## Release Notification and Corrective Action

## OPERATOR

☐ Initial Report ☒ Final Report


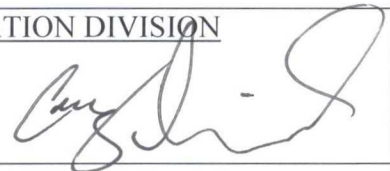
Name of Company <b>ConocoPhillips Company</b>	Contact <b>Lisa Hunter</b>
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 326-9786</b>
Facility Name: <b>Quinn 1</b>	Facility Type: <b>Gas Well</b>
Surface Owner <b>Private</b>	Mineral Owner <b>Federal (SF-078511)</b>
API No. <b>3004510484</b>	

## LOCATION OF RELEASE

Unit Letter <b>L</b>	Section <b>20</b>	Township <b>31N</b>	Range <b>08W</b>	Feet from the <b>1650</b>	North/South Line <b>South</b>	Feet from the <b>990</b>	East/West Line <b>West</b>	County <b>San Juan</b>
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Latitude **36.88040** Longitude **-107.70450**

## NATURE OF RELEASE

Type of Release <b>Produced Water/Hydrocarbon</b>	Volume of Release <b>Unknown</b>	Volume Recovered <b>None</b>
Source of Release <b>Below Grade Tank (BGT)</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? <b>N/A</b>	
By Whom? <b>N/A</b>	Date and Hour <b>N/A</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>N/A</b>	
If a Watercourse was Impacted, Describe Fully.* <b>N/A</b>		
Describe Cause of Problem and Remedial Action Taken.* <b>Below-Grade Tank Closure activities with samples taken resulting in constituents exceeded standards outlined by 19.15.17.13 NMAC.</b>		
Describe Area Affected and Cleanup Action Taken.* <b>NMOCD action levels for releases are specified in NMOCD's Guidelines for Leaks, Spills and Releases and the release was assigned a ranking score of 10. Samples were collected and analytical results are below applicable NMOCD action levels. No further work will be performed. The final report is attached for review.</b>		
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: 	OIL CONSERVATION DIVISION	
Printed Name: <b>Lisa Hunter</b>	Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>9/4/15</b>	Expiration Date:
E-mail Address: <b>Lisa.Hunter@cop.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>August 28, 2015</b>	Phone: <b>(505) 326-9786</b>	

\* Attach Additional Sheets If Necessary

#NCS 15 247 39 234



Animas Environmental Services, LLC

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

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

Durango, Colorado  
970-403-3084

February 5, 2014

Lisa Hunter  
ConocoPhillips  
San Juan Business Unit  
Office 214-04  
5525 Hwy 64  
Farmington, New Mexico 87401

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

**RE: Below Grade Tank Closure Report  
Quinn #1  
San Juan County, New Mexico**

Dear Ms. Hunter:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) Quinn #1, 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 – Quinn #1

Legal Description – NW¼ SW¼, Section 20, T31N, R8W, San Juan County, New Mexico

Well Latitude/Longitude – N36.88069 and W107.70409, respectively

BGT Latitude/Longitude – N36.88040 and W107.70450, respectively

Land Jurisdiction – Private

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, January 2014

### 1.2 NMOCD Ranking

In accordance with the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), the location was given a ranking score of 0 based on the following factors:

- **Depth to Groundwater:** A cathodic protection report dated May 1991 for the Quinn #339, located approximately 450 northwest of the location and at a similar elevation, reported the depth to groundwater at 270 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The tank location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** No down-gradient surface water bodies are within 1,000 feet of the location. (0 points)

### 1.3 BGT Closure Assessment

AES was initially contacted by Steve Welch, CoP representative, on January 2, 2014, and on January 3, 2014, Heather Woods and Jesse Christopherson 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 January 3, 2014, 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 composite sample SC-1 was field screened for VOCs and 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 composite sample SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

## 2.2 Laboratory Analyses

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

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

## 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM ranged from 0.2 ppm in S-4 up to 0.6 ppm in SC-1. Field TPH concentrations ranged from less than 20.0 mg/kg in S-4 up to 135 mg/kg in S-5. The field chloride concentration in SC-1 was 100 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  
 Quinn #1 BGT Closure, January 2014

<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	1/3/14	0.5	0.5	75.8	NA
S-2	1/3/14	0.5	0.3	105	NA
S-3	1/3/14	0.5	0.4	40.3	NA
S-4	1/3/14	0.5	0.2	<20.0	NA
S-5	1/3/14	0.5	0.3	135	NA
SC-1	1/3/14	0.5	0.6	NA	100

NA - not analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.033 mg/kg and 0.164 mg/kg, respectively. TPH concentrations as GRO and DRO were reported at less than 3.3 mg/kg and 10.0 mg/kg, respectively. The laboratory chloride concentration was reported 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  
Quinn #1 BGT Closure, January 2014

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level (NMAC 19.15.17.13E)			0.2	50	100		250
SC-1	1/3/2014	0.5	<0.033	<0.164	<3.3	<10	<30

NA - not analyzed

### 3.0 Conclusions and Recommendations

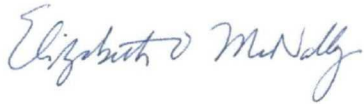
NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in two samples, S-2 (105 mg/kg) and S-5 (135 mg/kg), respectively. However, laboratory analytical results for TPH (as GRO/DRO) in SC-1 were reported below the NMOCD action level of 100 mg/kg. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations in SC-1 were also below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at Quinn #1.

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

Sincerely,



David J. Reese  
Environmental Scientist



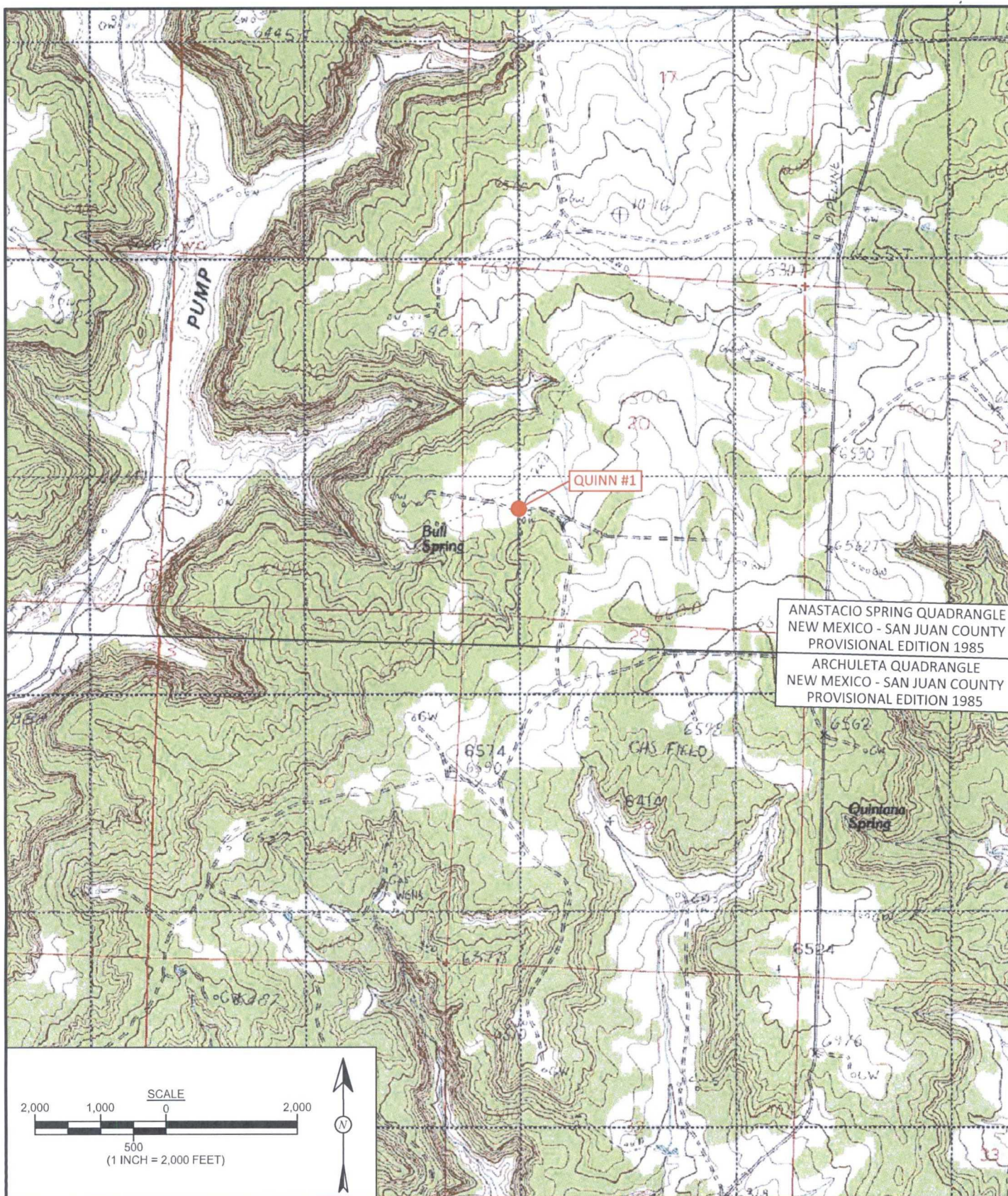
Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map  
Figure 2. Aerial Site Map, January 2014  
AES Field Screening Report 010314  
Hall Analytical Report 1401096

R:\Animas 2000\Dropbox\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\Quinn  
#1\Quinn #1 BGT Closure Report 020514.docx



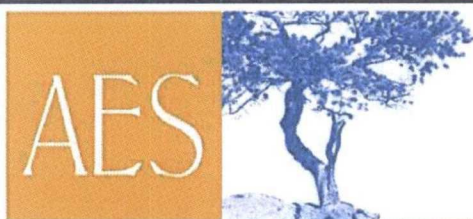


**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**

ConocoPhillips  
QUINN #1

NW¼, SW¼, SECTION 20, T31N, R8W  
SAN JUAN COUNTY, NEW MEXICO  
N36.88069, W107.70409



Animas Environmental Services, LLC

<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> January 13, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> January 13, 2014
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> January 13, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> January 13, 2014



LEGEND

● SAMPLE LOCATIONS

Field Screening Results

Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	1/3/14	0.5	75.8	NA
S-2	1/3/14	0.3	105	NA
S-3	1/3/14	0.4	40.3	NA
S-4	1/3/14	0.2	<20.0	NA
S-5	1/3/14	0.3	135	NA
SC-1	1/3/14	0.6	NA	100

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

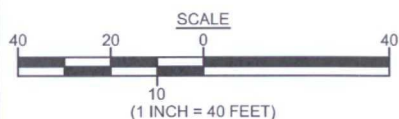
Laboratory Analytical Results

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		0.2	50	100		250
SC-1	1/3/14	<0.033	<0.164	<3.3	<10	<30

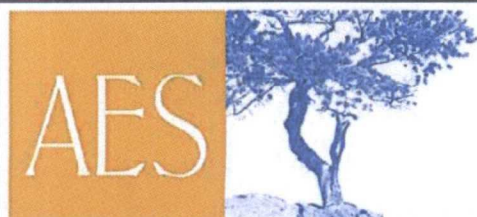
SAMPLE WAS ANALYZED PER EPA METHOD 8021B, 8015D AND 300.0.

QUINN #1 WELL MONUMENT

BGT - N36.88040  
W107.70450



AERIAL SOURCE: © 2013 GOOGLE EARTH, AERIAL DATE: MAY 2, 2013



Animas Environmental Services, LLC

DRAWN BY:

S. Glasses

DATE DRAWN:

January 13, 2014

REVISIONS BY:

C. Lameman

DATE REVISED:

January 13, 2014

CHECKED BY:

D. Watson

DATE CHECKED:

January 13, 2014

APPROVED BY:

E. McNally

DATE APPROVED:

January 13, 2014

## FIGURE 2

### AERIAL SITE MAP BELOW GRADE TANK CLOSURE JANUARY 2014

ConocoPhillips

QUINN #1

NW¼ SW¼, SECTION 20, T31N, R8W  
SAN JUAN COUNTY, NEW MEXICO  
N36.88069, W107.70409



# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: Quinn #1

Date: 1/3/2014

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	1/3/2014	10:45	North	0.5	NA	11:26	75.8	20.0	1	HMW
S-2	1/3/2014	10:46	South	0.3	NA	11:28	105	20.0	1	HMW
S-3	1/3/2014	10:47	East	0.4	NA	11:31	40.3	20.0	1	HMW
S-4	1/3/2014	10:48	West	0.2	NA	11:32	16.5	20.0	1	HMW
S-5	1/3/2014	10:49	Center	0.3	NA	11:34	135	20.0	1	HMW
SC-1	1/3/2014	10:51	Composite	0.6	100	Not Analyzed for TPH				

DF Dilution Factor  
NA Not Analyzed  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitation Limit

\*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)

January 09, 2014

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

RE: COP Quinn #1

OrderNo.: 1401096

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/4/2014 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 horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1401096

Date Reported: 1/9/2014

CLIENT: Animas Environmental

Client Sample ID: SC-1

Project: COP Quinn #1

Collection Date: 1/3/2014 10:51:00 AM

Lab ID: 1401096-001

Matrix: SOIL

Received Date: 1/4/2014 10:20:00 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	10		mg/Kg	1	1/6/2014 11:04:13 AM	11080
Surr: DNOP	85.1	66-131		%REC	1	1/6/2014 11:04:13 AM	11080
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	1/6/2014 3:57:53 PM	R15910
Surr: BFB	83.1	74.5-129		%REC	1	1/6/2014 3:57:53 PM	R15910
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.033		mg/Kg	1	1/6/2014 3:57:53 PM	R15910
Toluene	ND	0.033		mg/Kg	1	1/6/2014 3:57:53 PM	R15910
Ethylbenzene	ND	0.033		mg/Kg	1	1/6/2014 3:57:53 PM	R15910
Xylenes, Total	ND	0.065		mg/Kg	1	1/6/2014 3:57:53 PM	R15910
Surr: 4-Bromofluorobenzene	93.9	80-120		%REC	1	1/6/2014 3:57:53 PM	R15910
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	ND	30		mg/Kg	20	1/6/2014 11:41:34 AM	11089

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

Qualifiers:	*	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 for VOA and TOC only.
	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#: 1401096

09-Jan-14

Client: Animas Environmental

Project: COP Quinn #1

Sample ID	MB-11089	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID: 11089			RunNo: 15918					
Prep Date:	1/6/2014	Analysis Date: 1/6/2014			SeqNo: 458986		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-11089	SampType: LCS			TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID: 11089			RunNo: 15918					
Prep Date:	1/6/2014	Analysis Date: 1/6/2014			SeqNo: 458987		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	90	110			

## 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 for VOA and TOC only.  
RL Reporting Detection Limit



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401096

09-Jan-14

Client: Animas Environmental

Project: COP Quinn #1

Sample ID	MB-11080	SampType: MBLK			TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 11080			RunNo: 15891					
Prep Date:	1/6/2014	Analysis Date: 1/6/2014			SeqNo: 458449		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	8.3		10.00		82.9	66	131			

Sample ID	LCS-11080		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 11080		RunNo: 15891					
Prep Date:	1/6/2014		Analysis Date: 1/6/2014		SeqNo: 458450		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	50.00	0	114	60.8	145			
Surr: DNOP	4.5		5.000		90.0	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 for VOA and TOC only.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1401096

09-Jan-14

Client: Animas Environmental

Project: COP Quinn #1

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R15910	RunNo:	15910					
Prep Date:		Analysis Date:	1/6/2014	SeqNo:	458752	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	870		1000		87.1	74.5	129			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R15910	RunNo:	15910					
Prep Date:		Analysis Date:	1/6/2014	SeqNo:	458753	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	102	74.5	126			
Surr: BFB	920		1000		91.6	74.5	129			

Sample ID	1401096-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SC-1	Batch ID:	R15910	RunNo:	15910					
Prep Date:		Analysis Date:	1/6/2014	SeqNo:	458756	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.3	16.29	0	98.2	69.5	145			
Surr: BFB	600		651.5		92.0	74.5	129			

Sample ID	1401096-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SC-1	Batch ID:	R15910	RunNo:	15910					
Prep Date:		Analysis Date:	1/6/2014	SeqNo:	458757	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	3.3	16.29	0	93.0	69.5	145	5.52	20	
Surr: BFB	600		651.5		92.7	74.5	129	0	0	

### 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 for VOA and TOC only.  
RL Reporting Detection Limit



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401096

09-Jan-14

Client: Animas Environmental

Project: COP Quinn #1

Sample ID	5ML RB		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R15910		RunNo:	15910			
Prep Date:			Analysis Date:	1/6/2014		SeqNo:	458865		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	100NG BTEX LCS		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R15910		RunNo:	15910			
Prep Date:			Analysis Date:	1/6/2014		SeqNo:	458866		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	105	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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 for VOA and TOC only.  
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1401096

RcptNo: 1

Received by/date: AF 01/04/14

Logged By: Anne Thorne 1/4/2014 10:20:00 AM

*Anne Thorne*

Completed By: Anne Thorne 1/6/2014

*Anne Thorne*

Reviewed By: AF 01/06/14

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
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?  
(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)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

17. Additional remarks:

### 18. Cooler Information

Cooler No.	Temp °C	Condition	Seal Intact	Seal No.	Seal Date	Signed By
1	4.9	Good	Yes			



[illegible]☐ Standard ☒ Rush Same Day

Project Name:

Col Quinn #1

Project #:

Phone #: 505-564-2281

**Project Manager:**

email or Fax#:

QA/QC Package:

D. Watson

## Accreditation

Sampler: H. Woods

☐ NELAP      ☐ OtherOn Ice: ☒ Yes ☐ No☐ EDD (Type)

Sample Temperature: 4.9°C

[illegible]

Date:	Time:	Relinquished by:
1/31/14	1517	Heather M. Woods

Received by:	Date	Time
	1/4/13	10:20

Date:	Time:	Relinquished by:
-------	-------	------------------

Received by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Remarks:  
Bill to Conocophillips  
WO: 10353249  
Area: 5  
Supervisor: Carlos Ray

Activity: C200  
User ID: BENALE  
Ordered by: Steve Welch

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 notated on the analytical report.



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]