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 **Burlington Resources Oil & Gas**	Contact **Crystal Tafoya**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 326-9837
Facility Name: **Pierce SRC 2B**	Facility Type: **Gas Well**

Surface Owner **Fee**	Mineral Owner **Fee**	API No.**30-045-29999**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	**30**	**31N**	**10W**	**1445**	**North**	**1835**	**West**	**San Juan**

Latitude 36.87275 Longitude 107.92613

NATURE OF RELEASE

Type of Release **Hydrocarbon**	Volume of Release **53bbls**	Volume Recovered **0 bbls**
Source of Release **Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **6/12/2013 at 8:40 AM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Jonathan Kelly**	
By Whom? **Crystal Tafoya**	Date and Hour **6/12/2013 at 4:30 PM**	RCVD AUG 23 '13
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	OIL CONS. DIV. DIST. 3

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Production tank was vandalized with three bullet holes causing 53bbls of condensate to be released from the production tank. The release was contained within the berm and did not leave location. The lowest bullet hole was 3' 1" from the base of tank. The well was immediately shut-in and remaining condensate was transferred.

Describe Area Affected and Cleanup Action Taken.*
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 were above applicable NMOCD action levels. ConocoPhillips chose to excavate the hydrocarbon impacted soil. The excavation was 30' X 35' X 12' Deep and 528yds of soil was transported to IEI landfarm. 540 yds of clean soil was transported from Aztec Machine and placed in the excavation site. The soil sampling 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: Crystal L. Tafoya	OIL CONSERVATION DIVISION
Printed Name: **Crystal Tafoya**	Approved by Environmental Specialist: Jonathon D. Kelly
Title: **Field Environmental Specialist**	Approval Date: 9/11/2013 Expiration Date:
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval: Attached ☐
Date: 8/23/2013 Phone: (505) 326-9837	

* Attach Additional Sheets If Necessary

nJK1325442269

22

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

August 19, 2013

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

Via electronic mail to: SJBUE-Team@ConocoPhillips.com

RE: Initial Release Assessment and Final Excavation Report
Pierce SRC #2B
San Juan County, New Mexico

Dear Ms. Tafoya:

On June 17 and July 3, 2013, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Pierce SRC #2B, located in San Juan County, New Mexico. The condensate tank at the location was shot several times, which resulted in a release of approximately 53 barrels of condensate. The initial release assessment was completed by AES on June 17, 2013. The final excavation was completed by CoP contractors prior to AES' arrival on location on July 3, 2013.

1.0 Site Information

1.1 Location

Location – SE¼ NW¼, Section 30, T31N, R10W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.87286 and W107.92677, respectively
Release Location Latitude/Longitude – N36.87305 and W107.92676, respectively
Land Jurisdiction – Fee
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, June 2013

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 location was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** A cathodic report dated January 1994 for the Pierce SRC #2A located approximately 650 feet southwest of the location at roughly the same elevation, reported the depth to groundwater as 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** A small unnamed wash which discharges to Hart Canyon is located approximately 225 feet south of the location. (10 points)

1.3 Assessment

AES was initially contacted by Crystal Tafoya of CoP on June 12, 2013, and on June 17, 2013, Heather Woods and Jesse Christopherson of AES completed the release assessment field work. The assessment included collection and field screening of 31 soil samples from 9 borings (SB-1 through SB-9) in and around the release area. Based on the field screening results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On July 3, 2013, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-1 through SC-5) of the walls and base of the excavation. The area of the final excavation was approximately 1,190 ft^2 by 11.5 to 12 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 31 soil samples were collected from 9 soil borings (SB-1 through SB-9), and 5 composite samples (SC-1 through SC-5) were collected during the assessments. 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-1 and SB-3) collected during the assessment were submitted for confirmation laboratory analysis.

2.1 Field Screening

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 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 (SB-1 and SB-3) 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. Soil samples were laboratory analyzed for:

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

2.3 Field Screening and Laboratory Analytical Results

On June 17, 2013, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 7.2 ppm in SB-9 up to 4,267 ppm in SB-4. Field TPH concentrations ranged from 39.7 mg/kg in SB-8 up to 5,690 mg/kg in SB-2.

On July 3, 2013, final excavation field screening results for VOCs via OVM showed concentrations ranging from 5.2 ppm in SC-2 up to 22.4 ppm in SC-5. Field TPH concentrations ranged from 59.2 mg/kg in SC-1 up to 91.3 mg/kg in SC-3. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Table 1. Field Screening VOCs and TPH Results
Pierce SRC #2B Initial Release Assessment and Final Excavation
June and July 2013

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*Field TPH (mg/kg)*
NMOCD Action Level*			***100***	***1,000***
SB-1	6/17/13	0.5	**3,047**	NA
		9	**2,592**	NA

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
*NMOCD Action Level**			*100*	*1,000*
		11	**3,009**	**4,500**
SB-2	6/17/13	0.5	**4,001**	NA
		2	**1,862**	NA
		4	**3,114**	NA
		6	**3,026**	NA
		8	**2,739**	NA
		9	**3,150**	**5,690**
SB-3	6/17/13	0.5	**4,202**	NA
		2	**3,385**	NA
		4	**524**	NA
		6	**234**	NA
		8	**689**	1,000
SB-4	6/17/13	0.5	**4,267**	NA
		2	**3,484**	NA
		4	**147**	394
SB-5	6/17/13	0.5	23.7	144
		2	16.8	NA
		4	10.0	NA
SB-6	6/17/13	0.5	10.0	NA
		2	17.2	75.3
SB-7	6/17/13	0.5	151	NA
		2	**3,985**	NA
		4	**2,526**	NA
SB-8	6/17/13	1	9.1	39.7
		2.5	7.4	NA
		4	7.3	NA
SB-9	6/17/13	0.5	7.6	NA
		2	7.2	NA
		4	9.2	46.9

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
NMOCD Action Level*			***100***	***1,000***
SC-1	7/3/13	1 to 12	7.0	59.2
SC-2	7/3/13	1 to 12	5.2	66.1
SC-3	7/3/13	1 to 12	11.3	91.3
SC-4	7/3/13	1 to 12	10.1	66.1
SC-5	7/3/13	12	22.4	63.3

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

Laboratory analyses for SB-1 and SB-3 were used to confirm field screening results during the initial assessment. Benzene concentrations in SB-1 and SB-3 were reported below the laboratory detection limits of 0.47 mg/kg and 0.047 mg/kg, respectively. Total BTEX concentrations were reported at 36 mg/kg in SB-1 and 3.1 mg/kg in SB-3. TPH concentrations as GRO/DRO were reported as 2,560 mg/kg in SB-1 and 504 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
Pierce SRC #2B Initial Release Assessment and Final Excavation
June and July 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMOCD Action Level*			***10***	***50***	***1,000***	
SB-1	6/17/13	11	<0.47	36	**760**	**1,800**
SB-3	6/17/13	8	<0.047	3.1	84	420

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

3.0 Conclusions and Recommendations

On June 17, 2013, AES conducted an initial assessment of petroleum contaminated soils associated with a condensate release at the Pierce SRC #2B. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 10. Field screening results above the NMOCD action level of 100 ppm VOCs were reported in SB-1 through

SB-4 and SB-7. The highest VOC concentration was reported in SB-4 with 4,267 ppm. Field screening results also showed TPH concentrations above the NMOCD action level of 1,000 mg/kg in SB-1 and SB-2, with the highest TPH concentration reported in SB-2 with 5,690 mg/kg.

On July 3, 2013, final assessment of the excavation area was completed. Field screening results of the excavation extents showed that VOC and TPH concentrations were below applicable NMOCD action levels for all of the final four walls and base of the excavation. No further work is recommended at the Pierce SRC #2B.

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 R. Cupps

Landrea Cupps
Environmental Scientist

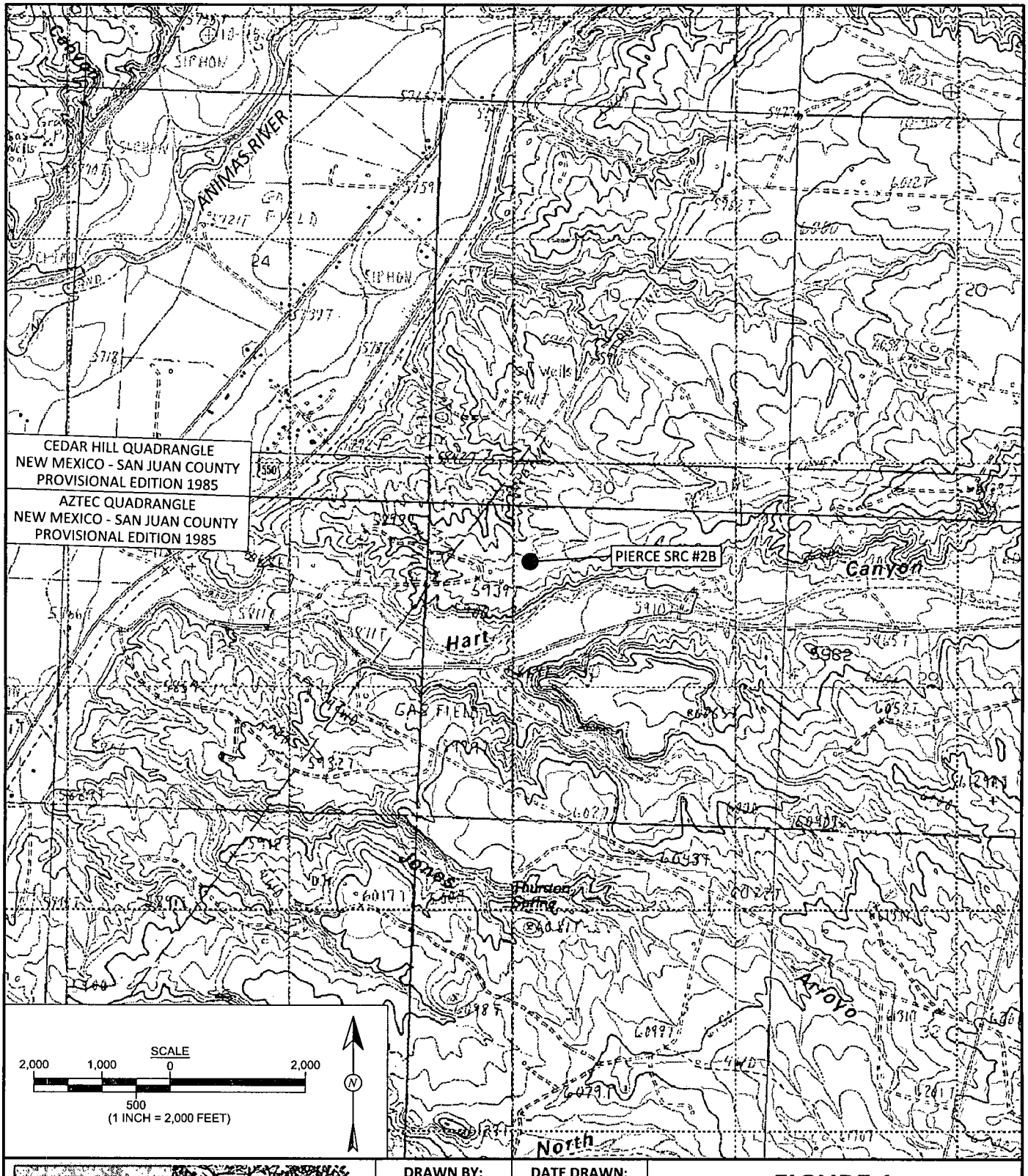
Elizabeth D McNally

Elizabeth McNally, PE

Attachments:

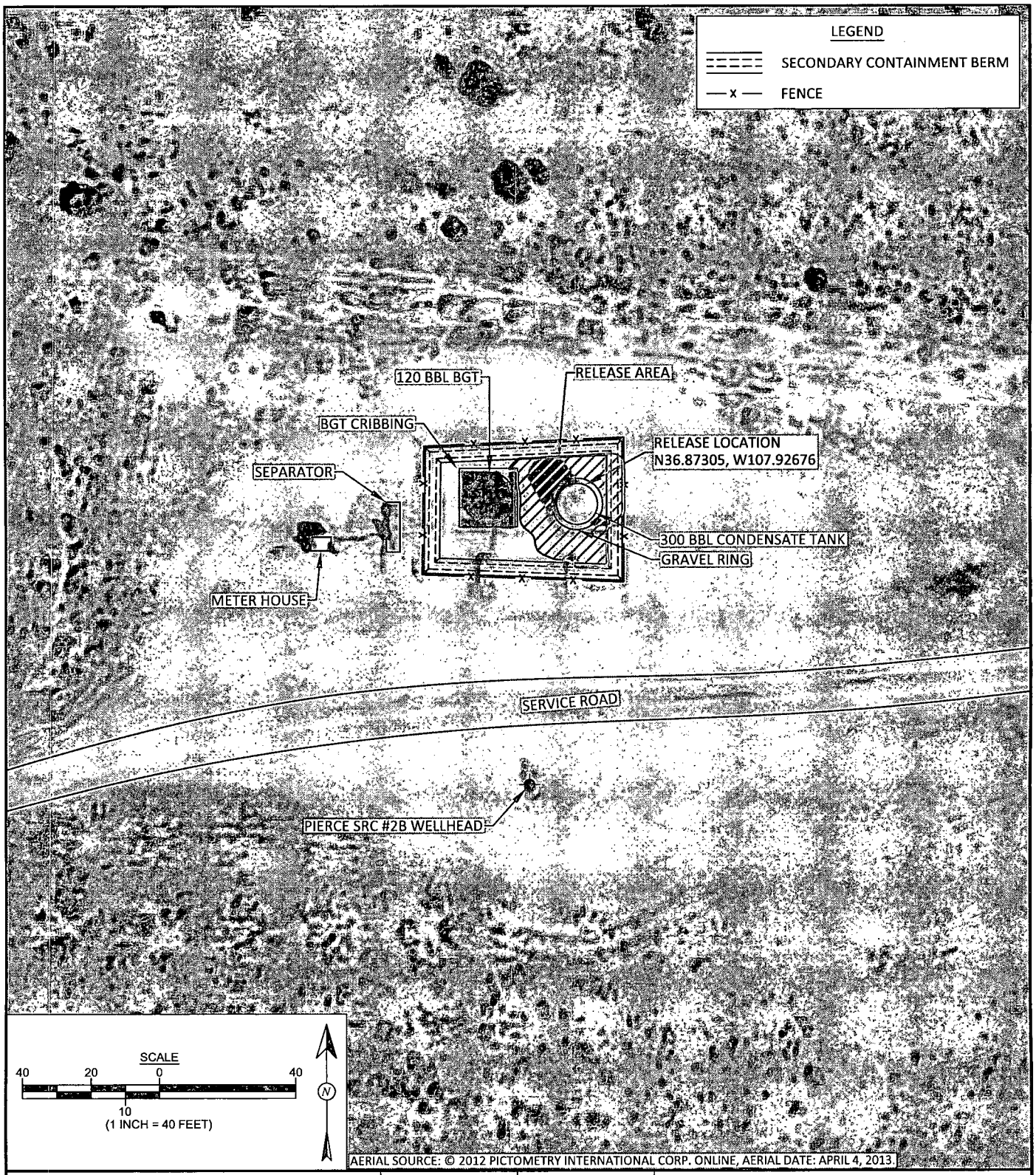
- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, June 2013
- Figure 3. Initial Assessment Sample Locations and Results, June 2013
- Figure 4. Final Excavation Sample Locations and Results, July 2013
- AES Field Screening Report 061713
- AES Field Screening Report 070313
- Hall Laboratory Analytical Report 1306769

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\Pierce SRC 2B\CoP Pierce SRC 2B Initial Release Assessment and Final Excavation Report 081913.docx



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** June 18, 2013	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** June 18, 2013	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: D. Watson	**DATE CHECKED:** June 18, 2013	ConocoPhillips PIERCE SRC #2B SE¼ NW¼, SECTION 30, T31N, R10W SAN JUAN COUNTY, NEW MEXICO N36.87286, W107.92677
APPROVED BY: E. McNally	**DATE APPROVED:** June 18, 2013	



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** June 18, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** June 18, 2013
CHECKED BY: D. Watson	**DATE CHECKED:** June 18, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** June 18, 2013

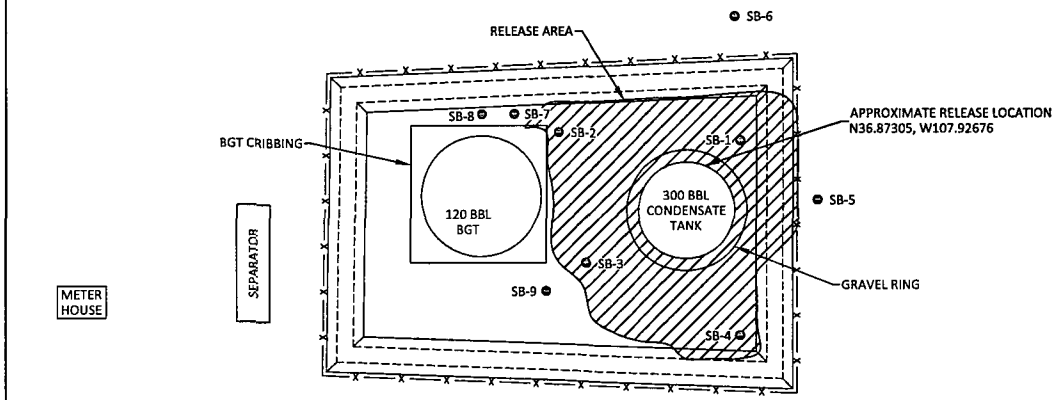
FIGURE 2

AERIAL SITE MAP
JUNE 2013
ConocoPhillips
PIERCE SRC #2B
SE¼ NW¼, SECTION 30, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.87286, W107.92677

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS JUNE 2013

ConocoPhillips
PIERCE SRC #2B
SE¼ NW¼, SECTION 30, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.87286, W107.92677



Laboratory Analytical Results

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
SB-1	6/17/13	11	<0.47	36	760	1,800
SB-3	6/17/13	8	<0.047	3.1	84	420
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.						

Field Screening Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SB-1	6/17/13	0.5	3,047	NA
		9	2,592	NA
		11	3,009	4,500
SB-2	6/17/13	0.5	4,001	NA
		2	1,862	NA
		4	3,114	NA
		6	3,026	NA
		8	2,739	NA
		9	3,150	5,690
SB-3	6/17/13	0.5	4,202	NA
		2	3,385	NA
		4	524	NA
		6	234	NA
		8	689	1,000
SB-4	6/17/13	0.5	4,267	NA
		2	3,484	NA
		4	147	394
SB-5	6/17/13	0.5	23.7	144
		2	16.8	NA
		4	10.0	NA
SB-6	6/17/13	0.5	10.0	NA
		2	17.2	75.3
SB-7	6/17/13	0.5	151	NA
		2	3,985	NA
		4	2,526	NA
SB-8	6/17/13	1	9.1	39.7
		2.5	7.4	NA
		4	7.3	NA
SB-9	6/17/13	0.5	7.6	NA
		2	7.2	NA
		4	9.2	46.9
NA - NOT ANALYZED				

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: June 18, 2013
REVISIONS BY: C. Lameman	DATE REVISED: June 18, 2013
CHECKED BY: D. Watson	DATE CHECKED: June 18, 2013
APPROVED BY: E. McNally	DATE APPROVED: June 18, 2013

LEGEND

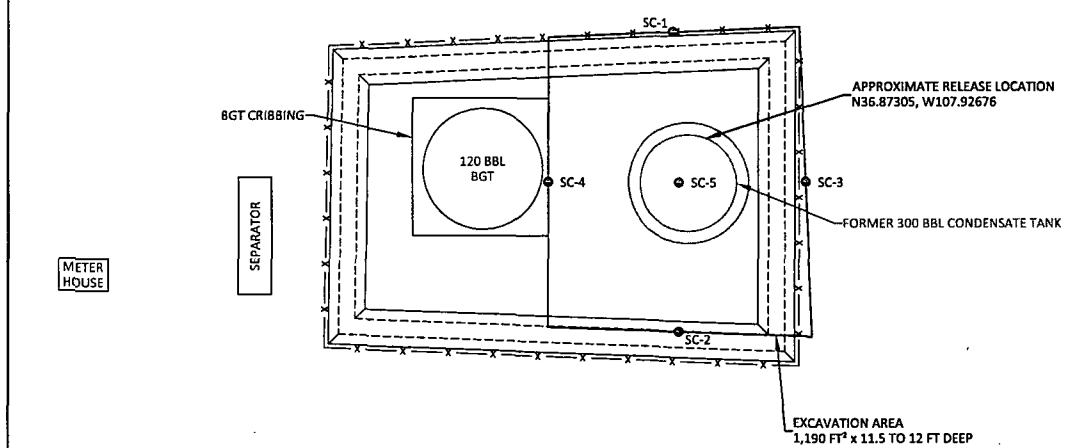
- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- —x— FENCE

N

SCALE
15 9 0 15
3
(1 INCH = 15 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
JULY 2013
ConocoPhillips
PIERCE SRC #2B
SE¼ NW¼, SECTION 30, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.87286, W107.92677



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	7/3/13	1 to 12	7.0	59.2
SC-2	7/3/13	1 to 12	5.2	66.1
SC-3	7/3/13	1 to 12	11.3	91.3
SC-4	7/3/13	1 to 12	10.1	66.1
SC-5	7/3/13	12	22.4	63.3
ALL SAMPLES WERE COMPOSITE SAMPLES.				

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: July 7, 2013
REVISIONS BY: C. Lameman	DATE REVISED: July 7, 2013
CHECKED BY: D. Watson	DATE CHECKED: July 7, 2013
APPROVED BY: E. McNally	DATE APPROVED: July 7, 2013

LEGEND

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

N

SCALE
15 9 0 15
3
(1 INCH = 15 FEET)

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: Pierce SRC #2B

Date: 6/17/2013

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 0.5'	6/17/2013	11:57	3,047	*Not Analyzed for TPH*				
SB-1 @ 9'	6/17/2013	12:25	2,592	*Not Analyzed for TPH*				
SB-1 @ 11'	6/17/2013	12:36	3,009	12:58	4,500	40.0	1	HMW
SB-2 @ 0.5'	6/17/2013	12:39	4,001	*Not Analyzed for TPH*				
SB-2 @ 2'	6/17/2013	12:43	1,862	*Not Analyzed for TPH*				
SB-2 @ 4'	6/17/2013	12:48	3,114	*Not Analyzed for TPH*				
SB-2 @ 6'	6/17/2013	12:52	3,026	*Not Analyzed for TPH*				
SB-2 @ 8'	6/17/2013	12:56	2,739	*Not Analyzed for TPH*				
SB-2 @ 9'	6/17/2013	13:00	3,150	13:52	5,690	40.0	1	HMW
SB-3 @ 0.5'	6/17/2013	13:04	4,202	*Not Analyzed for TPH*				
SB-3 @ 2'	6/17/2013	13:08	3,385	*Not Analyzed for TPH*				
SB-3 @ 4'	6/17/2013	13:12	524	*Not Analyzed for TPH*				
SB-3 @ 6'	6/17/2013	13:17	234	*Not Analyzed for TPH*				
SB-3 @ 8'	6/17/2013	13:21	689	13:55	1,000	20.0	1	HMW
SB-4 @ 0.5'	6/17/2013	13:24	4,267	*Not Analyzed for TPH*				
SB-4 @ 2'	6/17/2013	13:35	3,484	*Not Analyzed for TPH*				
SB-4 @ 4'	6/17/2013	13:40	147	14:38	394	20.0	1	HMW
SB-5 @ 0.5'	6/17/2013	13:42	23.7	14:41	144	20.0	1	HMW
SB-5 @ 2'	6/17/2013	13:46	16.8	*Not Analyzed for TPH*				
SB-5 @ 4'	6/17/2013	13:49	10.0	*Not Analyzed for TPH*				
SB-6 @ 0.5'	6/17/2013	14:00	10.0	*Not Analyzed for TPH*				
SB-6 @ 2'	6/17/2013	14:03	17.2	14:45	75.3	20.0	1	HMW

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-7 @ 0.5'	6/17/2013	15:05	151	*Not Analyzed for TPH*				
SB-7 @ 2'	6/17/2013	15:09	3,985	*Not Analyzed for TPH*				
SB-7 @ 4'	6/17/2013	15:13	2,526	*Not Analyzed for TPH*				
SB-8 @ 1'	6/17/2013	15:19	9.1	16:10	39.7	20.0	1	HMW
SB-8 @ 2.5'	6/17/2013	15:22	7.4	*Not Analyzed for TPH*				
SB-8 @ 4'	6/17/2013	15:25	7.3	*Not Analyzed for TPH*				
SB-9 @ 0.5'	6/17/2013	15:28	7.6	*Not Analyzed for TPH*				
SB-9 @ 2'	6/17/2013	15:30	7.2	*Not Analyzed for TPH*				
SB-9 @ 4'	6/17/2013	15:34	9.2	16:13	46.9	20.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst: Heather M. Woods

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: Pierce SRC #2B

Date: 7/3/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	7/3/2013	8:55	North Wall	7.0	9:49	59.2	20.0	1	DAW
SC-2	7/3/2013	9:00	South Wall	5.2	9:52	66.1	20.0	1	DAW
SC-3	7/3/2013	9:03	East Wall	11.3	9:55	91.3	20.0	1	DAW
SC-4	7/3/2013	9:07	West Wall	10.1	9:58	66.1	20.0	1	DAW
SC-5	7/3/2013	9:10	Base	22.4	10:03	63.3	20.0	1	DAW

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

Total Petroleum Hydrocarbons - USEPA 418.1

**Field TPH concentrations recorded may be below PQL.*

Analyst: Deborah Watson

Report Finalized: 07/03/13

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 25, 2013

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

RE: CoP Pierce SRC # 2B OrderNo.: 1306769

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/18/2013 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 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 qualifers 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Pierce SRC # 2B
Lab ID: 1306769-001 **Matrix:** SOIL

Client Sample ID: SB-1@11
Collection Date: 6/17/2013 12:36:00 PM
Received Date: 6/18/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	1800	100		mg/Kg	10	6/21/2013 3:07:21 PM	7942
Surr: DNOP	0	63-147	S	%REC	10	6/21/2013 3:07:21 PM	7942
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	760	47		mg/Kg	10	6/21/2013 1:13:39 AM	7981
Surr: BFB	458	80-120	S	%REC	10	6/21/2013 1:13:39 AM	7981
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.47		mg/Kg	10	6/21/2013 1:13:39 AM	7981
Toluene	2.3	0.47		mg/Kg	10	6/21/2013 1:13:39 AM	7981
Ethylbenzene	2.7	0.47		mg/Kg	10	6/21/2013 1:13:39 AM	7981
Xylenes, Total	31	0.95		mg/Kg	10	6/21/2013 1:13:39 AM	7981
Surr: 4-Bromofluorobenzene	122	80-120	S	%REC	10	6/21/2013 1:13:39 AM	7981

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Pierce SRC # 2B
Lab ID: 1306769-002 **Matrix:** SOIL

Client Sample ID: SB-3@8
Collection Date: 6/17/2013 1:21:00 PM
Received Date: 6/18/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	420	10		mg/Kg	1	6/20/2013 7:36:42 PM	7942
Surr: DNOP	96.3	63-147		%REC	1	6/20/2013 7:36:42 PM	7942
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	84	4.7		mg/Kg	1	6/21/2013 2:10:48 AM	7981
Surr: BFB	517	80-120	S	%REC	1	6/21/2013 2:10:48 AM	7981
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.047		mg/Kg	1	6/21/2013 2:10:48 AM	7981
Toluene	0.14	0.047		mg/Kg	1	6/21/2013 2:10:48 AM	7981
Ethylbenzene	0.23	0.047		mg/Kg	1	6/21/2013 2:10:48 AM	7981
Xylenes, Total	2.7	0.094		mg/Kg	1	6/21/2013 2:10:48 AM	7981
Surr: 4-Bromofluorobenzene	123	80-120	S	%REC	1	6/21/2013 2:10:48 AM	7981

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306769**

25-Jun-13

Client: Animas Environmental

Project: CoP Pierce SRC # 2B

Sample ID	LCS-7942	SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	7942		RunNo:	11358				
Prep Date:	6/17/2013	Analysis Date:	6/18/2013		SeqNo:	321057	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	79.0	77.1	128			
Surr: DNOP	3.8		5.000		75.2	63	147			

Sample ID	MB-7942	SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	7942		RunNo:	11358				
Prep Date:	6/17/2013	Analysis Date:	6/18/2013		SeqNo:	321058	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	7.3		10.00		73.4	63	147			

Sample ID	1306640-003AMS	SampType:	MS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	BatchQC	Batch ID:	7942		RunNo:	11393				
Prep Date:	6/17/2013	Analysis Date:	6/20/2013		SeqNo:	322995	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	49.95	0	102	61.3	138			
Surr: DNOP	5.8		4.995		115	63	147			

Sample ID	1306640-003AMSD	SampType:	MSD		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	BatchQC	Batch ID:	7942		RunNo:	11393				
Prep Date:	6/17/2013	Analysis Date:	6/20/2013		SeqNo:	322996	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.9	49.60	0	93.4	61.3	138	9.04	20	
Surr: DNOP	5.1		4.960		104	63	147	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
- 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#: **1306769**

25-Jun-13

Client: Animas Environmental

Project: CoP Pierce SRC # 2B

Sample ID **MB-7981**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **7981**	RunNo: **11457**
Prep Date: **6/18/2013**	Analysis Date: **6/20/2013**	SeqNo: **324014** 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	920		1000		92.2	80	120			

Sample ID **LCS-7981**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **7981**	RunNo: **11457**
Prep Date: **6/18/2013**	Analysis Date: **6/20/2013**	SeqNo: **324015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	62.6	136			
Surr: BFB	1000		1000		101	80	120			

Sample ID **1306707-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **7981**	RunNo: **11457**
Prep Date: **6/18/2013**	Analysis Date: **6/20/2013**	SeqNo: **324018** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.52	0	107	76	156			
Surr: BFB	960		940.7		102	80	120			

Sample ID **1306707-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **7981**	RunNo: **11457**
Prep Date: **6/18/2013**	Analysis Date: **6/20/2013**	SeqNo: **324019** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.7	23.52	0	110	76	156	2.36	17.7	
Surr: BFB	950		940.7		101	80	120	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
- 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#: **1306769**

25-Jun-13

Client: Animas Environmental

Project: CoP Pierce SRC # 2B

Sample ID **MB-7981**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **7981**	RunNo: **11457**
Prep Date: **6/18/2013**	Analysis Date: **6/20/2013**	SeqNo: **324039** 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	0.98		1.000		97.8	80	120			

Sample ID **LCS-7981**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **7981**	RunNo: **11457**
Prep Date: **6/18/2013**	Analysis Date: **6/20/2013**	SeqNo: **324041** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	107	80	120			
Toluene	1.1	0.050	1.000	0	107	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.2	0.10	3.000	0	107	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID **1306707-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **7981**	RunNo: **11457**
Prep Date: **6/18/2013**	Analysis Date: **6/20/2013**	SeqNo: **324043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.048	0.9615	0	109	67.3	145			
Toluene	1.1	0.048	0.9615	0.008918	109	66.8	144			
Ethylbenzene	1.1	0.048	0.9615	0.008909	110	61.9	153			
Xylenes, Total	3.2	0.096	2.885	0	111	65.8	149			
Surr: 4-Bromofluorobenzene	1.0		0.9615		104	80	120			

Sample ID **1306707-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **7981**	RunNo: **11457**
Prep Date: **6/18/2013**	Analysis Date: **6/21/2013**	SeqNo: **324045** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.048	0.9615	0	108	67.3	145	0.987	20	
Toluene	1.0	0.048	0.9615	0.008918	105	66.8	144	4.03	20	
Ethylbenzene	1.0	0.048	0.9615	0.008909	106	61.9	153	3.65	20	
Xylenes, Total	3.1	0.096	2.885	0	108	65.8	149	3.20	20	
Surr: 4-Bromofluorobenzene	1.0		0.9615		104	80	120	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
- 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

Hall Envir ital 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: 1306769 | RcptNo: 1

Received by/date: AG 06/18/13

Logged By: Lindsay Mangin 6/18/2013 10:00:00 AM

Completed By: Lindsay Mangin 6/18/2013 3:16:04 PM

Reviewed By: 06/18/2013

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? (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: _____ 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	2.0	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 Pierce SRC #28

Project #:

Project Manager: D. Watson

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 2 °C

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. 1306161	BTEX + MTBE + TPH (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
6/17/13	1236	Soil	SB-1@11	1-4oz	—	-001	X		X									
6/17/13	1321	Soil	SB-3@8	1-4oz	—	-002	X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/17/13	1729	Heath M. Woods	Christine Walters	6/17/13	1729
6/17/13	1748		DLE	6/18/13	1000

Remarks: Bill to ConocoPhillips

WO:

~~Activity~~:

User ID: FARRELL

Area: 4

Supervisor: Jim Kennedy

Ordered by: Crystal Tafoya

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.