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 **ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 East 30th St, Farmington, NM**	Telephone No. **(505) 326-9786**
Facility Name: **State Com V #18**	Facility Type: **Gas Well**

Surface Owner **State**	Mineral Owner **State**	API No.**3004509792**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**02**	**30N**	**08W**	**900'**	**South**	**1650'**	**West**	**San Juan**

Latitude 36.83469 Longitude -107.64759

NATURE OF RELEASE

Type of Release **Historic Impacted Soil**	Volume of Release **Unknown**	Volume Recovered **200 yds**
Source of Release **Condensate Production Tank – Found during facility reset**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **11/04/13 @ 8:00 am**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **N/A**	
By Whom? **N/A**	Date and Hour **N/A**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

RCVD JAN 14'14
OIL CONS. DIV.
DIST. 3

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

Describe Cause of Problem and Remedial Action Taken.*
Historic (hydrocarbon) impacted soil was discovered on well pad during facility reset. Third-party environmental assessment was ordered.

Describe Area Affected and Cleanup Action Taken.*
Historical hydrocarbon impacted soil was discovered on well pad during facility reset. The excavation was 45' x 36' x 1-7' in depth and 200 yds of soil was transported to IEI land farm and 200 yds of clean soil was transported from M & M Trucking and placed in the excavation site. Analytical results were below the regulatory standards – no further action required. 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:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:	
Printed Name: **Lisa Hunter**		
Title: **Field Environmental Specialist**	Approval Date: 9/4/14	Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval:	Attached ☐
Date: **January 9, 2014** Phone: **(505) 326-9786**		

* Attach Additional Sheets If Necessary

#NCS 1424750350

22

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

December 30, 2013

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

RE: Initial Release Assessment and Final Excavation Report
State Com V #18
San Juan County, New Mexico

Dear Ms. Hunter:

On October 29 and November 18, 2013, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) State Com V #18, located in San Juan County, New Mexico. Historic contamination was discovered during facility reset at the location. The initial release assessment was completed by AES on October 29, 2013, and the final excavation was completed by CoP contractors while AES was on location on November 18, 2013.

1.0 Site Information

1.1 Location

Site Name – State Com V #18
Location – SE¼ SW¼, Section 2, T30N, R8W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.83561 and W107.64845, respectively
Release Location Latitude/Longitude – N36.83534 and W107.64871, respectively
Land Jurisdiction – State of New Mexico
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, October 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 release was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** A cathodic report for the FC State Com #21A, located approximately 3,150 feet southeast of the location and 84 feet lower elevation, reported the depth to groundwater as 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** An unnamed wash which discharges to the San Juan River is located approximately 560 feet east of the location. The San Juan River is located 4,100 feet to the south. (10 points)

1.3 Assessment

AES was initially contacted by Jess Henson of CoP on October 28, 2013, and on October 29, 2013, Heather Woods and David Reese of AES completed the release assessment field work. The assessment included collection and field screening of 25 soil samples from 16 assessment trenches (TH-1 to TH-16) in and around the release area. Soil borings were terminated on sandstone present between 1 and 5 feet. Based on the field screening results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On November 18, 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 from the walls and base of the excavation. The area of the final excavation was approximately 45 feet by 36 feet by 1 to 7 feet in depth. The depth of the excavation was limited due to the confining sandstone layer encountered between 1 to 7 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 25 soil samples from 16 assessment trenches (TH-1 to TH-16) 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). One composite sample (SC-5)

collected during the excavation clearance was 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 sample 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-5 was 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 October 29, 2013, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 1.0 ppm in TH-3 up to 1,564 ppm in TH-5. Field TPH concentrations ranged from less than 20.0 mg/kg in TH-10 up to 3,540 mg/kg in TH-6.

On November 18, 2013, final excavation field screening results for VOCs via OVM ranged from 14.8 ppm in SC-3 up to 1,871 ppm in SC-5. Field TPH concentrations ranged from 108 mg/kg in SC-4 to greater than 2,500 mg/kg in SC-5. 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
State Com V #18 Initial Release Assessment and Excavation Clearance
October and November, 2013

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*Field TPH (mg/kg)*
*NMOCD Action Level**			*100*	*1,000*
TH-1	10/29/13	3	6.8	NA
TH-2	10/29/13	3	49.4	NA
		3.5	23.2	NA
TH-3	10/29/13	1.5	1.0	NA
		2	12.3	NA
		5	42.1	NA
		6	**957**	NA
TH-4	10/29/13	5.5	**1,032**	**2,450**
TH-5	10/29/13	2	**1,514**	NA
		4	**1,564**	NA
TH-6	10/29/13	1.5	**683**	**3,540**
TH-7	10/29/13	1	**195**	NA
TH-8	10/29/13	1	71.8	26.5
TH-9	10/29/13	1.5	47.4	52.9
TH-10	10/29/13	1.5	45.8	<20.0
		4	13.0	NA
TH-11	10/29/13	3	38.7	30.6
		3.5	15.0	NA
TH-12	10/29/13	2	9.6	NA
		4	15.8	22.4
TH-13	10/29/13	2.5	18.1	22.4
TH-14	10/29/13	1	33.7	38.8
TH-15	10/29/13	1	75.1	59.3
TH-16	10/29/13	3	1.1	NA
		5	1.1	368
SC-1	11/18/13	1 to 1.5	88.9	643
SC-2	11/18/13	1 to 7	20.8	407

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
*NMOCD Action Level**			*100*	*1,000*
SC-3	11/18/13	1 to 7	14.8	283
SC-4	11/18/13	1 to 7	27.7	108
SC-5	11/18/13	1 to 7	**1,871**	**>2,500**

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 SC-5 were used to confirm field screening results from the final excavation. Benzene and total BTEX concentrations were reported at 0.91 mg/kg and 83.5 mg/kg, respectively. TPH concentrations as GRO and DRO in SC-5 were reported at 890 mg/kg and 1,700 mg/kg, respectively. Results are presented in Table 2 and on Figure 4. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
State Com V #18 Excavation Clearance, November 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*	
SC-5	11/18/13	1 to 7	0.91	**83.5**	**890**	**1,700**

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 October 29, 2013, AES conducted an initial assessment of petroleum contaminated soils associated with a historic release at the State Com V #18. 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 10.

Initial assessment field screening results above the NMOCD action level of 100 ppm VOCs and 1,000 mg/kg TPH were reported in TH-3 through TH-7. The highest VOC concentration was reported in TH-5 with 1,564 ppm, and the highest TPH concentration was reported in TH-6 with 3,540 mg/kg.

On November 18, 2013, final clearance of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations and field TPH concentrations were below applicable NMOCD action levels for the final walls of the excavation. However, the base (SC-5) exceeded the NMOCD action levels of 100 ppm VOCs and 1,000 mg/kg TPH with 1,871 ppm VOCs and greater than 2,500 mg/kg TPH, respectively. Laboratory analytical results from November 20, 2013, reported benzene concentrations in SC-5 below NMOCD action levels. However, total BTEX and TPH (as GRO/DRO) concentrations in SC-5 were above applicable NMOCD action levels.

Based on the final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the State Com V #18, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for the final sidewalls of the excavation. However, the base of the excavation exceeded applicable NMOCD action levels for total BTEX and TPH. On November 20, 2013, CoP received approval to backfill the excavation from Jonathan Kelly of the NMOCD following application of potassium permanganate to the base of the excavation. No further work is recommended for the State Com V #18 release area.

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

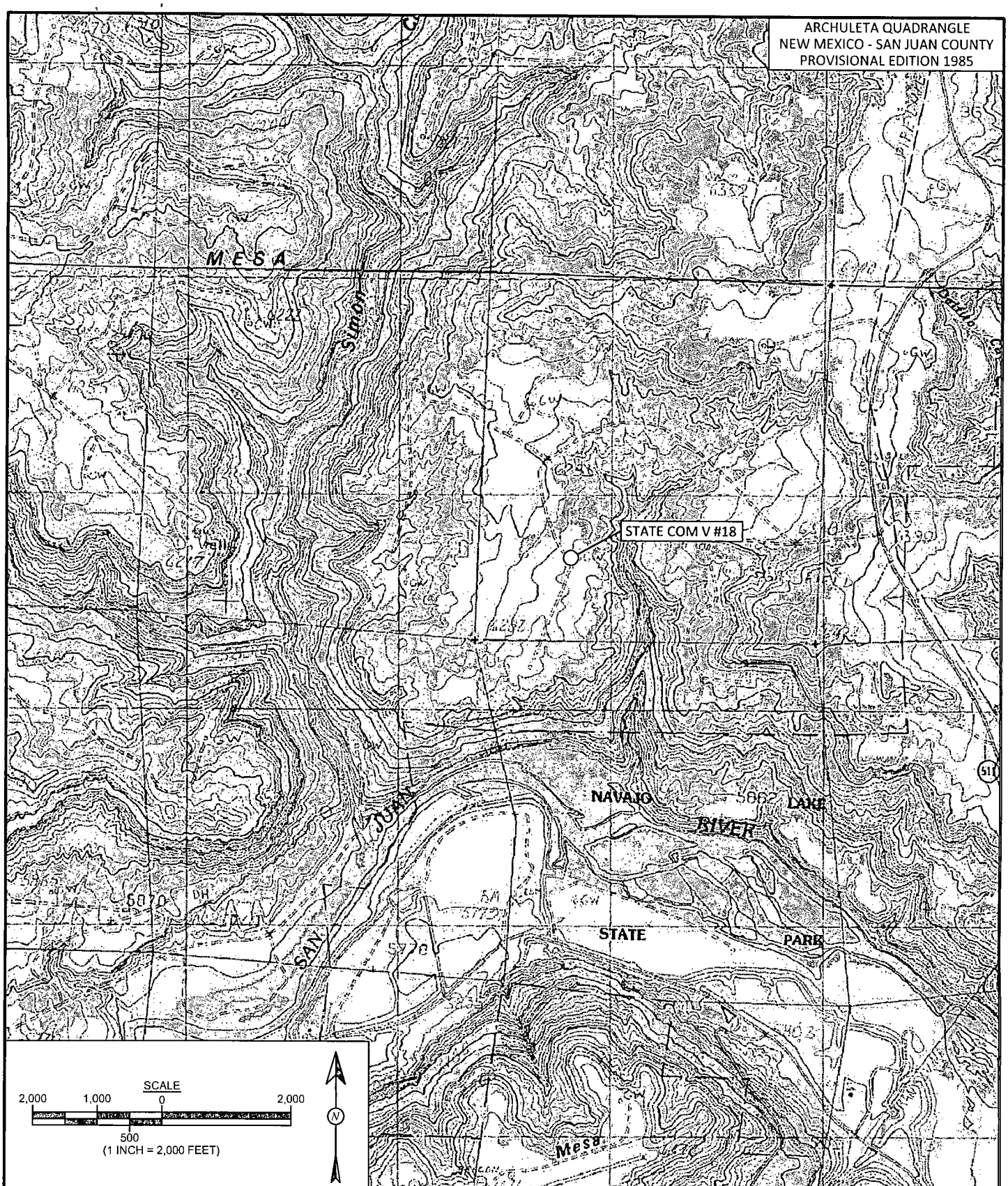
Sincerely,

David J. Reese
Environmental Scientist

Elizabeth McNally, PE

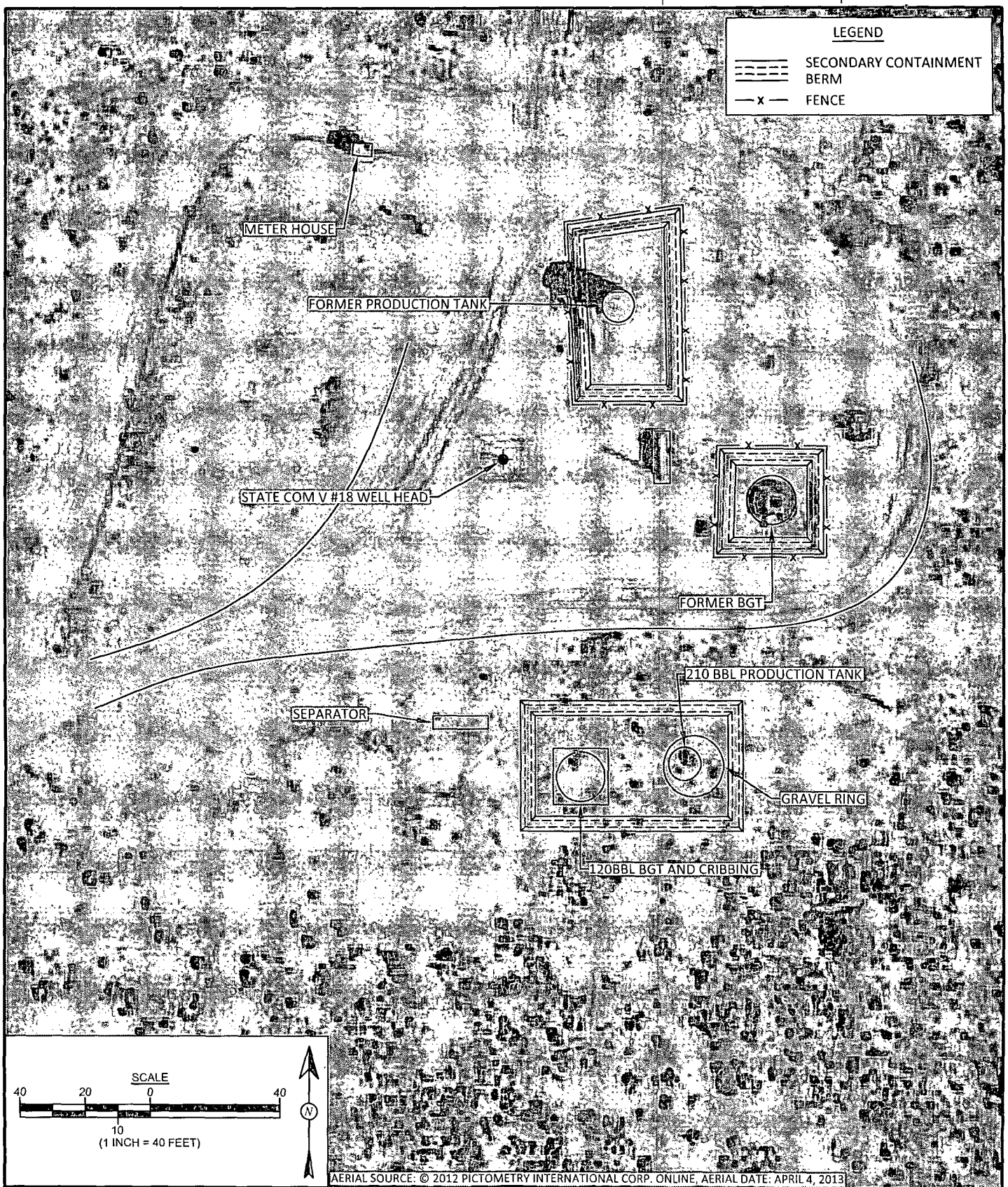
Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, October 2013
Figure 3. Initial Assessment Sample Locations and Results, October 2013
Figure 4. Final Excavation Sample Locations and Results, November 2013
AES Field Screening Report 102913
AES Field Screening Report 111813
Hall Laboratory Analytical Report 1311755



DRAWN BY: S. Glasses	**DATE DRAWN:** October 30, 2013	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** October 30, 2013	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: D. Watson	**DATE CHECKED:** October 30, 2013	ConocoPhillips STATE COM V #18 SE¼ SW¼, SECTION 2, T30N, R8W SAN JUAN COUNTY, NEW MEXICO N36.83561, W107.64845
APPROVED BY: E. McNally	**DATE APPROVED:** October 30, 2013	

AES
Animas Environmental Services, LLC



Animas Environmental Services, LLC

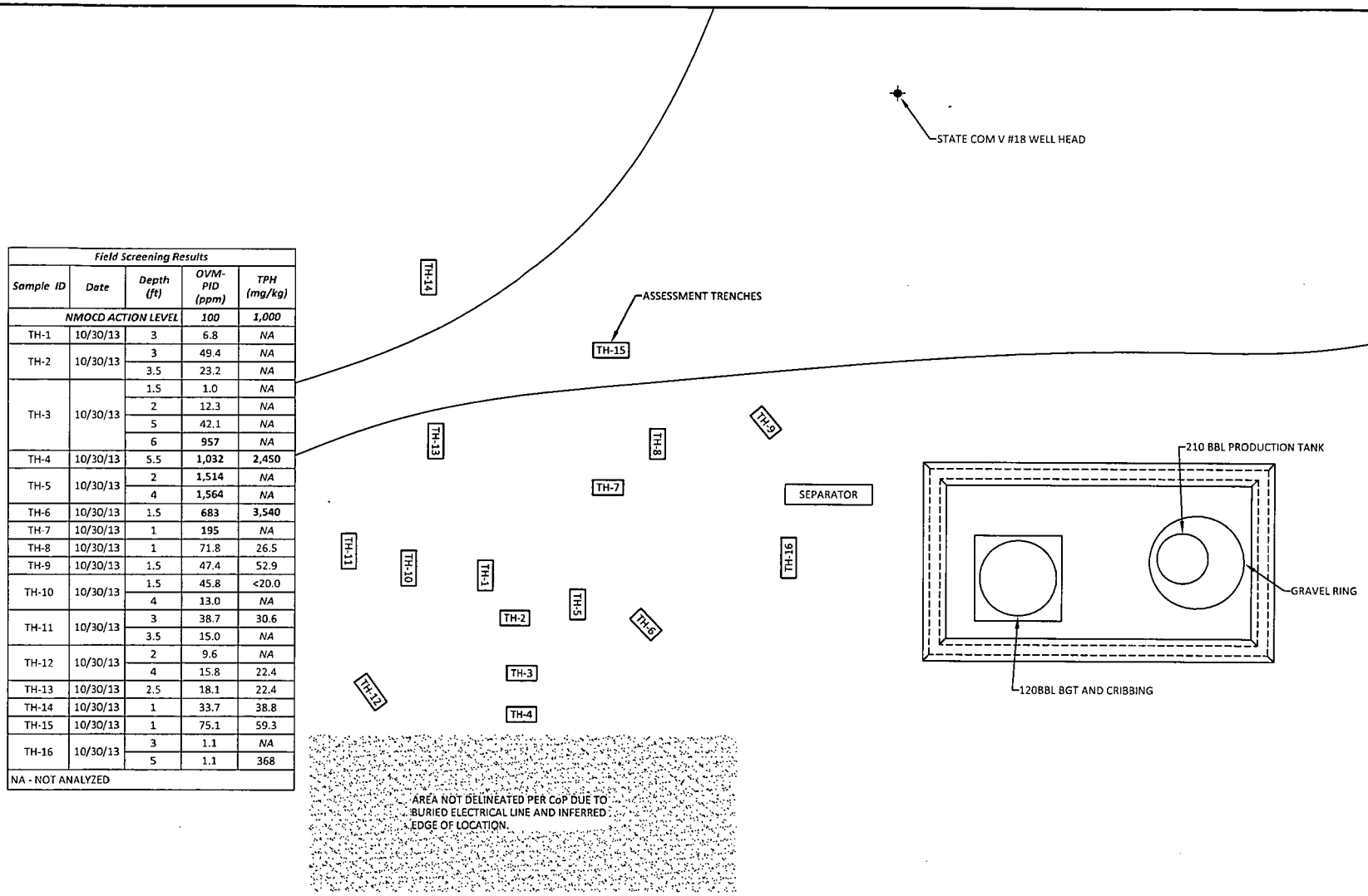
DRAWN BY: C. Lameman	**DATE DRAWN:** November 20, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** November 20, 2013
CHECKED BY: D. Watson	**DATE CHECKED:** November 20, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** November 20, 2013

FIGURE 2

AERIAL SITE MAP
OCTOBER 2013
ConocoPhillips
STATE COM V #18
SE¼ SW¼, SECTION 2, T30N, R8W
SAN JUAN COUNTY, NEW MEXICO
N36.83561, W107.64845

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS, OCTOBER 2013
ConocoPhillips
STATE COM V #18
SE¼ SW¼, SECTION 2, T30N, R8W
SAN JUAN COUNTY, NEW MEXICO
N36.83561, W107.64845



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
TH-1	10/30/13	3	6.8	NA
TH-2	10/30/13	3	49.4	NA
		3.5	23.2	NA
TH-3	10/30/13	1.5	1.0	NA
		2	12.3	NA
		5	42.1	NA
		6	957	NA
TH-4	10/30/13	5.5	1,032	2,450
TH-5	10/30/13	2	1,514	NA
		4	1,564	NA
TH-6	10/30/13	1.5	683	3,540
TH-7	10/30/13	1	195	NA
TH-8	10/30/13	1	71.8	26.5
TH-9	10/30/13	1.5	47.4	52.9
TH-10	10/30/13	1.5	45.8	<20.0
		4	13.0	NA
TH-11	10/30/13	3	38.7	30.6
		3.5	15.0	NA
TH-12	10/30/13	2	9.6	NA
		4	15.8	22.4
TH-13	10/30/13	2.5	18.1	22.4
TH-14	10/30/13	1	33.7	38.8
TH-15	10/30/13	1	75.1	59.3
TH-16	10/30/13	3	1.1	NA
		5	1.1	368

NA - NOT ANALYZED

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	October 30, 2013
REVISIONS BY:	DATE REVISED:
C. Lameman	November 20, 2013
CHECKED BY:	DATE CHECKED:
D. Watson	November 20, 2013
APPROVED BY:	DATE APPROVED:
E. McNally	November 20, 2013

LEGEND

SECONDARY CONTAINMENT BERM

N

SCALE
20 10 0 20
(1 INCH = 20 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE *LOCATIONS AND RESULTS*
NOVEMBER 2013
ConocoPhillips
STATE COM V #18
SE¼ SW¼, SECTION 2, T30N, R8W
SAN JUAN COUNTY, NEW MEXICO
N36.83561, W107.64845

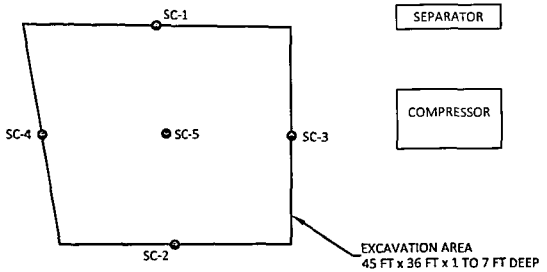
DRAWN BY:	DATE DRAWN:
C. Lameman	November 20, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	November 20, 2013
CHECKED BY:	**DATE CHECKED:**
D. Watson	November 20, 2013
APPROVED BY:	**DATE APPROVED:**
E. McNally	November 20, 2013

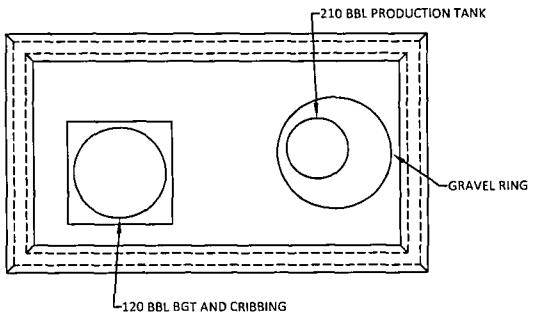
Field Screening Results

Sample ID	*Date*	*Depth (ft)*	*OVM-PID (ppm)*	*TPH (mg/kg)*
NMOCD ACTION LEVEL			*100*	*1,000*
SC-1	11/18/13	1 to 3	88.9	643
SC-2	11/18/13	1 to 7	20.8	407
SC-3	11/18/13	1 to 5	14.8	283
SC-4	11/18/13	1 to 7	27.7	108
SC-5	11/18/13	1.5 to 7	1,871	>2,500
ALL SAMPLES WERE COMPOSITE SAMPLES.				

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*	
SC-5	11/18/13	1.5 to 7	0.91	83.5	890	1,700
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.						



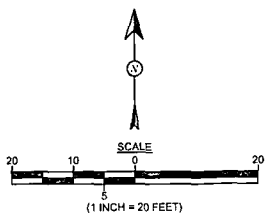


STATE COM V #18 WELL HEAD

AREA NOT DELINEATED PER CoP DUE TO BURIED ELECTRICAL LINE AND INFERRED EDGE OF LOCATION.

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM



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: State Com V #18

Date: 10/29/2013

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 3'	10/29/2013	11:23	6.8	*Not Analyzed for TPH*				
TH-2 @ 3'	10/29/2013	11:25	49.4	*Not Analyzed for TPH*				
TH-2 @ 3.5'	10/29/2013	11:26	23.2	*Not Analyzed for TPH*				
TH-3 @ 1.5'	10/29/2013	11:28	1.0	*Not Analyzed for TPH*				
TH-3 @ 2'	10/29/2013	11:30	12.3	*Not Analyzed for TPH*				
TH-3 @ 5'	10/29/2013	11:31	42.1	*Not Analyzed for TPH*				
TH-3 @ 6'	10/29/2013	11:36	957	*Not Analyzed for TPH*				
TH-4 @ 5.5'	10/29/2013	11:44	1,032	2,450	12:57	40.0	1	HMW
TH-5 @ 2'	10/29/2013	11:51	1,514	*Not Analyzed for TPH*				
TH-5 @ 4'	10/29/2013	11:53	1,564	*Not Analyzed for TPH*				
TH-6 @ 1.5'	10/29/2013	11:57	683	3,540	12:59	40.0	1	HMW
TH-7 @ 1'	10/29/2013	12:01	195	*Not Analyzed for TPH*				
TH-8 @ 1'	10/29/2013	12:02	71.8	26.5	17:49	20.0	1	HMW
TH-9 @ 1.5'	10/29/2013	12:05	47.4	52.9	13:04	40.0	1	HMW
TH-10 @ 1.5'	10/29/2013	12:37	45.8	<20.0	17:54	20.0	1	HMW
TH-10 @ 4'	10/29/2013	13:24	13.0	*Not Analyzed for TPH*				
TH-11 @ 3'	10/29/2013	12:45	38.7	30.6	17:30	20.0	1	HMW
TH-11 @ 3.5'	10/29/2013	12:47	15.0	*Not Analyzed for TPH*				
TH-12 @ 2'	10/29/2013	12:52	9.6	*Not Analyzed for TPH*				
TH-12 @ 4'	10/29/2013	12:54	15.8	22.4	17:43	20.0	1	HMW

Report Finalized: 10/29/13

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-13 @ 2.5'	10/29/2013	13:02	18.1	22.4	17:37	20.0	1	HMW
TH-14 @ 1'	10/29/2013	13:06	33.7	38.8	17:34	20.0	1	HMW
TH-15 @ 1'	10/29/2013	13:13	75.1	59.3	13:35	20.0	1	HMW
TH-16 @ 3'	10/29/2013	13:19	1.1					
TH-16 @ 5'	10/29/2013	13:22	1.1	368	13:37	20.0	1	HMW

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.

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: State Com V #18

Date: 11/18/2013

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	11/18/2013	13:23	North Wall	88.9	13:48	643	20.0	1	DAW
SC-2	11/18/2013	12:07	South Wall	20.8	12:55	407	20.0	1	DAW
SC-3	11/18/2013	13:20	East Wall	14.8	13:50	283	20.0	1	DAW
SC-4	11/18/2013	12:12	West Wall	27.7	13:01	108	20.0	1	DAW
SC-5	11/18/2013	12:15	Base	1,871	13:04	>2,500	20.0	1	DAW

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.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Deborah Watson

Report Finalized: 11/18/13

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

November 20, 2013

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

RE: CoP State Com V #18 OrderNo.: 1311755

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/19/2013 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.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1311755**
Date Reported: **11/20/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP State Com V #18
Lab ID: 1311755-001

Client Sample ID: SC-5
Collection Date: 11/18/2013 12:15:00 PM
Matrix: MEOH (SOIL) **Received Date:** 11/19/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: **BCN**
Diesel Range Organics (DRO)	1700	100		mg/Kg	10	11/19/2013 11:26:49 AM	10407
Surr: DNOP	0	66-131	S	%REC	10	11/19/2013 11:26:49 AM	10407
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**
Gasoline Range Organics (GRO)	890	18		mg/Kg	5	11/19/2013 11:43:59 AM	R14893
Surr: BFB	900	74.5-129	S	%REC	5	11/19/2013 11:43:59 AM	R14893
EPA METHOD 8021B: VOLATILES							Analyst: **NSB**
Benzene	0.91	0.18		mg/Kg	5	11/19/2013 11:43:59 AM	R14893
Toluene	10	0.18		mg/Kg	5	11/19/2013 11:43:59 AM	R14893
Ethylbenzene	4.6	0.18		mg/Kg	5	11/19/2013 11:43:59 AM	R14893
Xylenes, Total	68	3.5		mg/Kg	50	11/19/2013 12:41:14 PM	R14893
Surr: 4-Bromofluorobenzene	168	80-120	S	%REC	5	11/19/2013 11:43:59 AM	R14893

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

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#: **1311755**

20-Nov-13

Client: Animas Environmental
Project: CoP State Com V #18

Sample ID **MB-10407**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **10407**	RunNo: **14885**
Prep Date: **11/19/2013**	Analysis Date: **11/19/2013**	SeqNo: **429519** 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		83.1	66	131			

Sample ID **LCS-10407**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **10407**	RunNo: **14885**
Prep Date: **11/19/2013**	Analysis Date: **11/19/2013**	SeqNo: **429520** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	112	62.1	127			
Surr: DNOP	4.7		5.000		94.9	66	131			

Qualifiers:

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- 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#: 1311755

20-Nov-13

Client: Animas Environmental

Project: CoP State Com V #18

Sample ID	MB-10383	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	10383		RunNo:	14893				
Prep Date:	11/18/2013	Analysis Date:	11/19/2013		SeqNo:	430191	Units:	%REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.4	74.5	129			

Sample ID	LCS-10383	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	10383		RunNo:	14893				
Prep Date:	11/18/2013	Analysis Date:	11/19/2013		SeqNo:	430208	Units:	%REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.7	74.5	129			

Sample ID	mb-10383 5	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	R14893		RunNo:	14893				
Prep Date:		Analysis Date:	11/19/2013		SeqNo:	430222	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	910		1000		91.4	74.5	129			

Sample ID	lcs-10383 21	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	R14893		RunNo:	14893				
Prep Date:		Analysis Date:	11/19/2013		SeqNo:	430223	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	94.0	74.5	126			
Surr: BFB	990		1000		98.7	74.5	129			

Qualifiers:

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- 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#: **1311755**

20-Nov-13

Client: Animas Environmental

Project: CoP State Com V #18

Sample ID **mb-10383 5**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R14893**	RunNo: **14893**
Prep Date:	Analysis Date: **11/19/2013**	SeqNo: **430224** 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	1.1		1.000		110	80	120			

Sample ID **lcs-10383 22**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R14893**	RunNo: **14893**
Prep Date:	Analysis Date: **11/19/2013**	SeqNo: **430225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	100	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	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

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: 1311755 | RcptNo: 1

Received by/date: MG 11/19/13

Logged By: Michelle Garcia 11/19/2013 9:55:00 AM Michelle Garcia

Completed By: Michelle Garcia 11/19/2013 10:07:11 AM Michelle Garcia

Reviewed By: 11/19/13

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	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

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 Same day

Project Name:
Cop State Com V #18

Project #:

Project Manager:
D. Watson

Sampler: S. Lynn

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1311755	BTEX + ~~MTBE~~ + ~~TMB's~~ (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)
11/18/13	Soil	12:15	SC-5	MeOH Kit 1-4oz	MeOH None	-001	X		X													

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/18/13	1718	Stephanie Lynn	Christine Walker	11/18/13	1718
11/18/13	1737	Christine Walker	Michelle Gee	11/19/13	0955

Remarks: Bill to Concco Phillips
WO: 9846979 supervisor: Mike Smith
Area: 5 User: KGARCIA
act code: D150 ordered by: Eric Smith

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.