thatDistrict I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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 in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **ConocoPhillips Company**	Contact **Ashley Maxwell**
Address **3401 E. 30th St., Farmington, NM 87402**	Telephone No. **505-324-5169**
Facility Name: State Com W #19	Facility Type: Gas Well

Surface Owner: State	Mineral Owner: State	API No. 3004509948

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County – San Juan County
A	2	30N	08W	990'	North	990'	East	

Latitude 36.844718 ° N **Longitude -107.63874 ° W**

RCVD OCT 23 '12
OIL CONS. DIV.
DIST. 3

NATURE OF RELEASE

Type of Release: Condensate	Volume of Release – 23BBL	Volume Recovered – 0BBL
Source of Release: Production Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery – 4/20/12 @ 2:00PM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*COP employee noticed a discrepancy in his tank gauging from the previous months' level. Employee began to look around the tank and noticed a stained spot on the gravel. Employee moved gravel away from the Production Tank and found a small hole 3" from the base of the Production Tank. Hole was plugged and remaining liquid removed.

Describe Area Affected and Cleanup Action Taken.*Affected area has had a spill assessment conducted and the area impacted will be excavated and confirmation sampled. The tank will be replaced.
Excavation occurred and resulted in approximately 216 cubic yards of soil being removed. Field screening results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels in all samples, except SC-2 with 5,588 ppm at 12 feet bgs, which was collected at competent sandstone. Field TPH results were below the NMOCD action level of 1,000 mg/kg in SC-1, SC-3, SC-4, and SC-5. Laboratory analytical results for SC-2 (collected at sandstone) showed reported total BTEX and TPH concentrations above the applicable NMOCD thresholds with 540 mg/kg and 14,700 mg/kg TPH, respectively. The application of KMnO4 and approval to back fill was granted by Brandon Powell, OCD, on May 17, 2012 based on depth to ground water.

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: **Ashley Maxwell**	Approved by Environmental Specialist: Jonathan D. Kelly	
Title: **Field Environmental Specialist**	Approval Date: 1/8/2014	Expiration Date:
E-mail Address: **ashley.p.wethington@conocophillips.com**	Conditions of Approval:	Attached ☐
Date: **October 22, 2012** Phone: **505-324-5169**		

* Attach Additional Sheets If Necessary

nJK1400835445

20

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

September 28, 2012

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

RE: Initial Release Assessment and Final Excavation Report
State Com W #19
San Juan County, New Mexico

Dear Ms. Tafoya:

On April 23 and May 15, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) State Com W #19, located in San Juan County, New Mexico. The initial release assessment was conducted by AES on April 23, 2012. The final excavation was completed by contractors prior to AES' arrival to the location on May 15, 2012. Additionally, on May 23, 2012, while AES personnel were on location, potassium permanganate was applied to the base of the excavation. The estimated 23 barrel (bbl) release resulted from a small hole located at the base of the production tank.

1.0 Site Information

1.1 Location

Location - NE¼ NE¼, Section 2, T30N, R8W, San Juan County, New Mexico
Well Head Latitude/Longitude - N36.84474 and W107.63924, respectively
Release Latitude/Longitude – N36.84453 and W107.63933, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and no prior ranking information was located. Additionally, the New Mexico Office of the State Engineer (NMOSE) database was reviewed, and no registered water wells are located within 1,000 feet of the location. Once on site, AES personnel assessed the ranking using topographical interpretation, Global Positioning System

(GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet below ground surface (bgs), and the location is not within a well-head protection area. Distance to the nearest surface water, an unnamed wash draining to the San Juan River, was located approximately 600 feet to the south-southeast. The site location has been assigned a ranking score of 10 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 Release Assessments

AES was initially contacted by Shelly Cook-Cowden of CoP on April 23, 2012, and the same day, Ross Kennemer and Deborah Watson of AES completed the release assessment field work. The assessment included collection and field screening of 19 soil samples from five test holes (TH-1 through TH-5) at the center and around the perimeter of the release area. Based on the field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On May 15, 2012, AES returned to the location to collect confirmation soil samples from the final 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 final excavation was approximately 19 feet by 19 feet by 12 feet in depth. The base of the excavation was limited by a confining sandstone layer. Sample locations and final excavation extents are shown on Figure 4.

2.0 Soil Sampling

A total of 19 soil samples and 5 5-point composite soil samples were collected during the assessments. All soil samples were field-screened for volatile organic compounds (VOCs), and selected soil samples were analyzed for total petroleum hydrocarbons (TPH). Soil sample SC-2 from the final excavation was submitted for 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 (SC-2) 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. The soil sample 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 8015B.

2.3 Field Screening and Laboratory Analytical Results

On April 23, 2012, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.4 ppm in TH-4 up to 5,032 ppm in TH-1. Field TPH concentrations ranged from 26.4 mg/kg in TH-4 up to 85,500 mg/kg in TH-1.

On May 15, 2012, final excavation field screening results for VOCs via OVM showed concentrations ranging from 16.3 ppm in SC-5 to 5,588 ppm in SC-2. Field TPH concentrations ranged from 45.0 mg/kg in SC-5 up to 109 mg/kg in SC-4. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Table 1. Soil Field Screening VOCs and TPH Results
State Com W #19 Release Assessment and Final Excavation, April and May 2012

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*Field TPH (mg/kg)*
	*NMOCD Action Level**		*100*	*1,000*
TH-1	4/23/12	0.5	**5,032**	**24,700**
		3	**4,196**	**41,040**
		5	**3,640**	**85,500**
		8	**4,417**	**19,900**
		9	**4,471**	**19,300**
TH-2	4/23/12	0.5	31.6	42.3
		3	36.8	48.9

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
	*NMOCD Action Level**		*100*	*1,000*
TH-3	4/23/12	5	79.5	58.2
		9.5	9.2	38.3
		0.5	8.9	42.3
		3	9.2	52.9
		5	0.9	30.4
		9	1.3	38.3
TH-4	4/23/12	0.5	0.4	37.0
		5	1.5	26.4
		9	2.8	29.1
TH-5	4/23/12	0.5	8.3	78.1
		5	41.9	67.5
		9	0.7	30.4
SC-1	5/15/12	1 to 12	37.9	66.6
SC-2	5/15/12	12	**5,588**	NA
SC-3	5/15/12	1 to 12	44.0	53.1
SC-4	5/15/12	1 to 12	83.0	109
SC-5	5/15/12	1 to 12	16.3	45.0

NA – Not Analyzed

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

Laboratory analyses for SC-2 were used to confirm field screening results from the final excavation. The benzene concentration was 4.0 mg/kg, and the total BTEX concentration was 540 mg/kg. TPH concentrations were 4,700 mg/kg GRO and 10,000 mg/kg DRO. Results are presented in Table 2 and on Figure 3. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results
State Com W #19 Final Excavation, May 2012

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*Benzene (mg/kg)*	*BTEX (mg/kg)*	*GRO (mg/kg)*	*DRO (mg/kg)*
NMOCD Action Level*			***10***	***50***	***1,000***	
SC-2	5/15/12	12	4.0	**540**	**4,700**	**10,000**

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

3.0 Conclusions and Recommendations

On April 23, 2012, AES conducted an initial assessment of a release from the production tank at the State Com W #19, located in San Juan County, New Mexico. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993). Field screening showed concentrations above the NMOCD action levels of 100 ppm VOCs and 1,000 mg/kg TPH in TH-1. The highest VOC concentration in TH-1 was 5,032 ppm at 0.5 feet bgs, and the highest TPH concentration was at 5 feet bgs with 85,500 mg/kg. Based on field screening results, excavation of the release area was recommended for the location.

On May 15, 2012, final confirmation of the excavation was completed. Field screening results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels in all samples, except SC-2 with 5,588 ppm at 12 feet bgs, which was collected at competent sandstone. Field TPH results were below the NMOCD action level of 1,000 mg/kg in SC-1, SC-3, SC-4, and SC-5. Laboratory analytical results for SC-2 (collected at sandstone) showed reported total BTEX and TPH concentrations above the applicable NMOCD thresholds with 540 mg/kg and 14,700 mg/kg TPH, respectively. Based on field screening and laboratory results, additional mitigation was recommended for the base of the excavation.

On May 23, 2012, with concurrence from NMOCD, AES and AlphaBioscience applied a dilute potassium permanganate solution to the base of the excavation to enhance degradation of residual petroleum hydrocarbons. The solution consisted of 75 gallons of water and 19 lbs of $KMnO_4$.

Based on the final field screening and laboratory analytical results, petroleum contaminated soils at the State Com W #19 were excavated to below applicable NMOCD action levels. Further mitigation at the base of excavation (sandstone) was completed with coordination of NMOCD. No further work is recommended.

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

Sincerely,

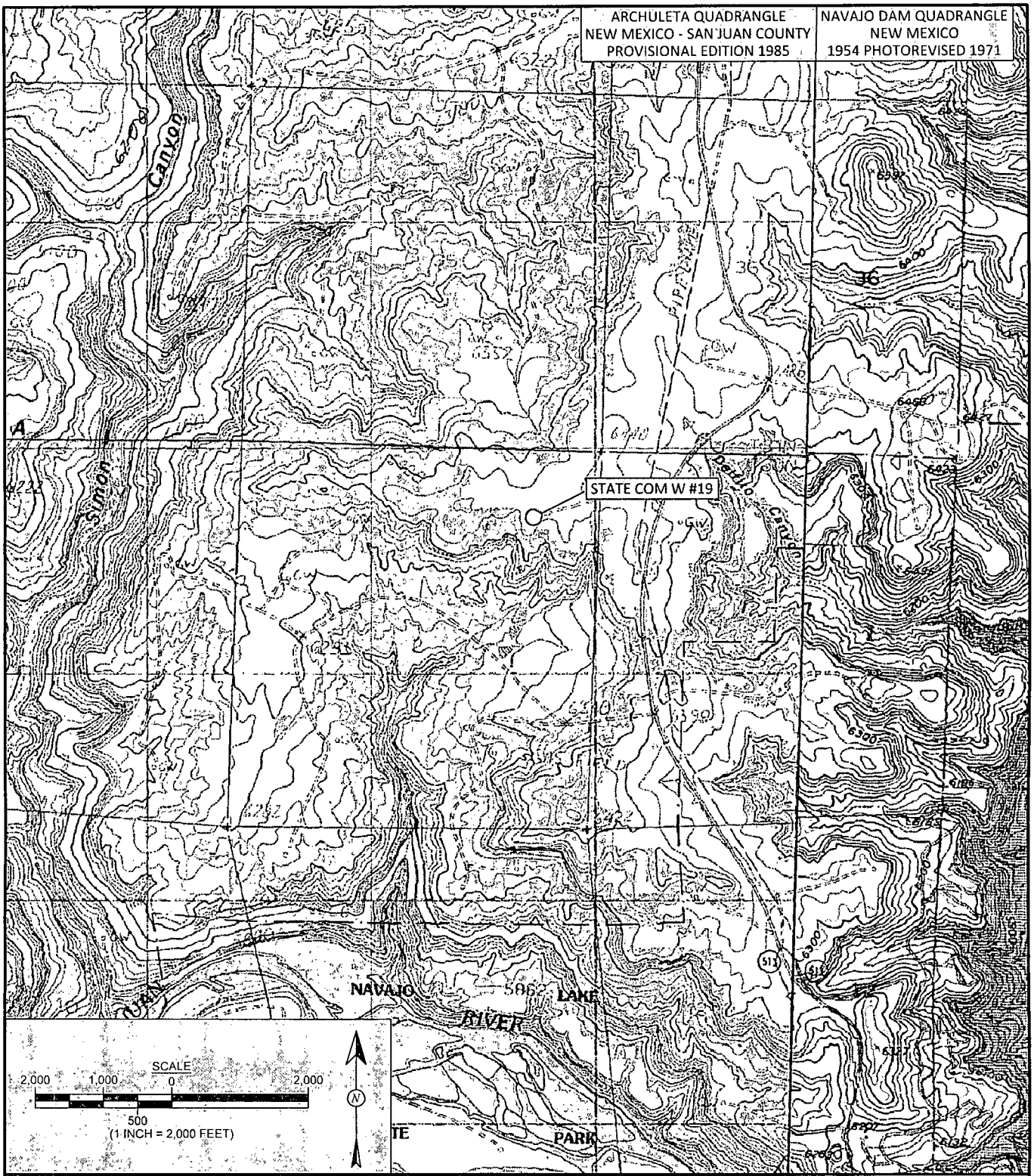
Deborah Watson, Geologist
Project Manager

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map
Figure 3. Initial Assessment Sample Locations and Results, April 2012
Figure 4. Final Excavation Sample Locations and Results, May 2012
AES Field Screening Report 042312
AES Field Screening Report 051512
Hall Laboratory Analytical Report 1205680

R:\Animas 2000\2012 Projects\Conoco Phillips\State Com W#19\State Com W#19 Release and Final Excavation Report 092812.docx



Animas Environmental Services, LLC	**DRAWN BY:** C. Lameman	**DATE DRAWN:** April 24, 2012	**FIGURE 1**
	REVISIONS BY: C. Lameman	**DATE REVISED:** September 1, 2012	**TOPOGRAPHIC SITE LOCATION MAP** ConocoPhillips STATE COM W #19 SAN JUAN COUNTY, NEW MEXICO NE¼ NE¼, SECTION 2, T30N, R8W N36.84474, W107.63924
	CHECKED BY: D. Watson	**DATE CHECKED:** September 1, 2012	
	APPROVED BY: E. McNally	**DATE APPROVED:** September 1, 2012	

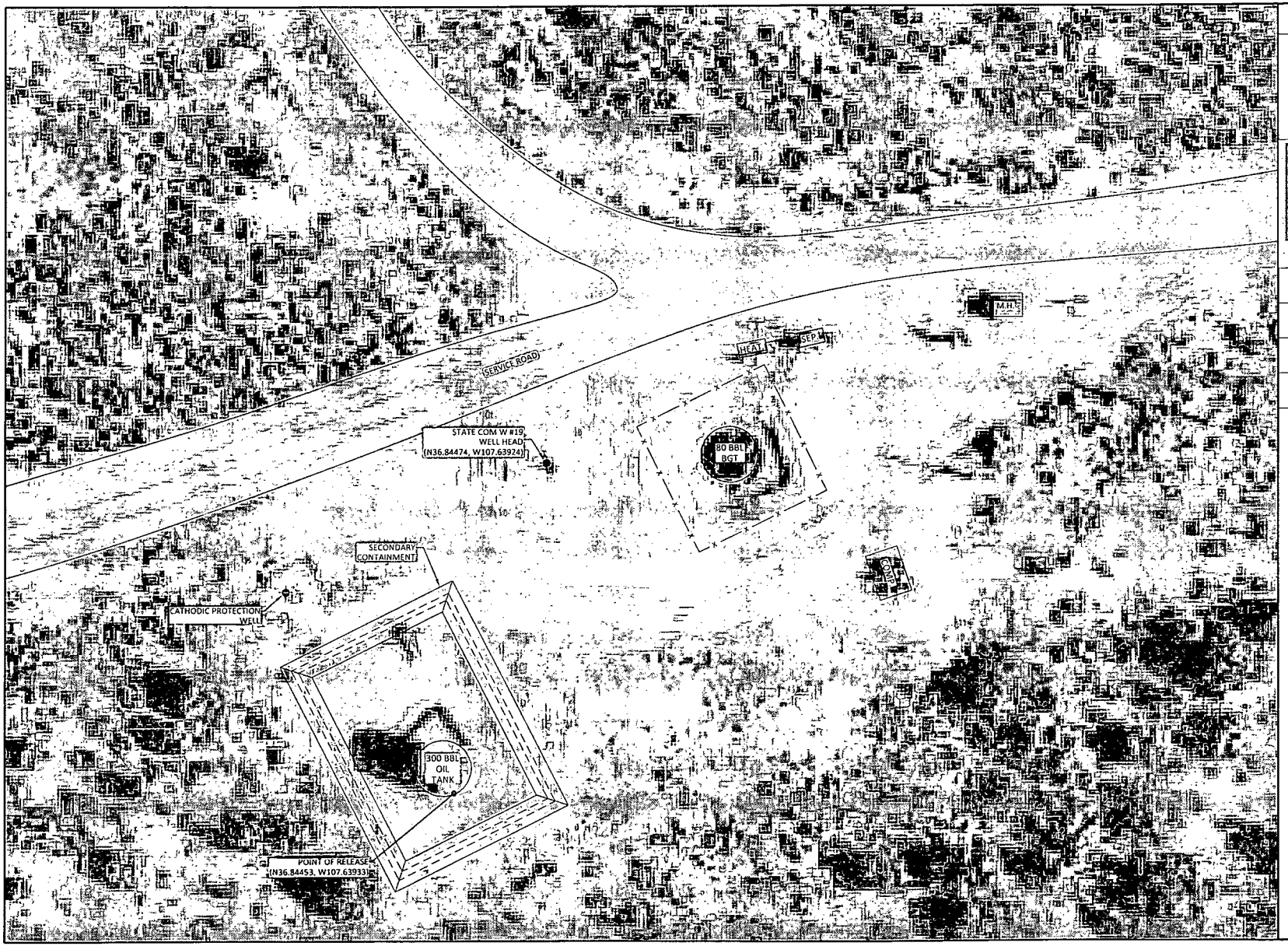


FIGURE 2

AERIAL SITE MAP
ConocoPhillips
STATE COM W #19
SAN JUAN COUNTY, NEW MEXICO
NE¼ NE¼, SECTION 2, T30N, R8W
N36.84474, W107.63924

AES
Animas Environmental Services, LLC

DRAWN BY: R. Kennemer	**DATE DRAWN:** April 24, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** September 1, 2012
CHECKED BY: D. Watson	**DATE CHECKED:** September 1, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** September 1, 2012

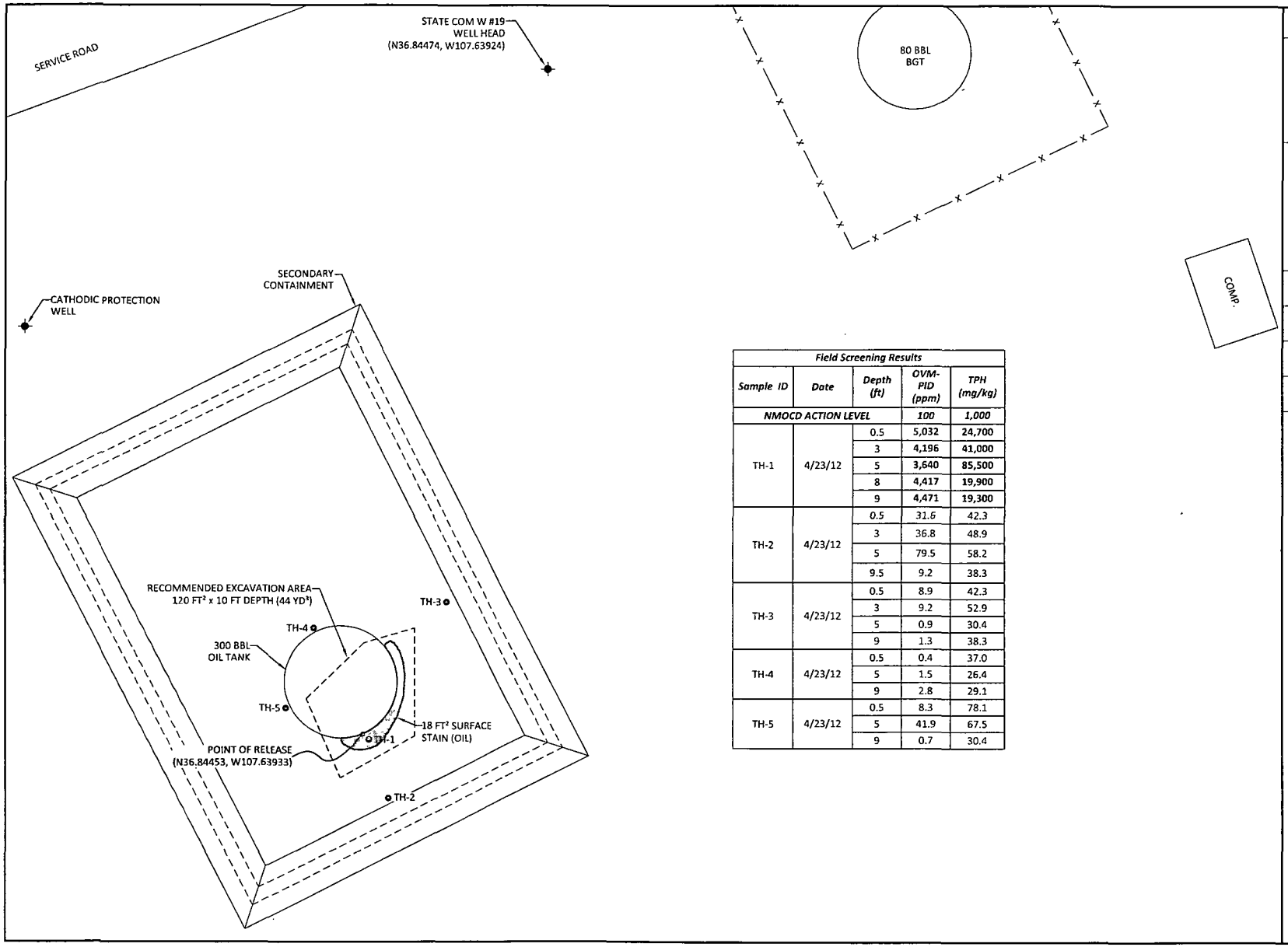
LEGEND

—x— Fence

AERIAL SOURCE: (c) 2012 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE

N

SCALE
20 10 0 20
5
(1 INCH = 20 FEET)



Field Screening Results				
Sample ID	*Date*	*Depth (ft)*	*OVM-PID (ppm)*	*TPH (mg/kg)*
NMOCD ACTION LEVEL			*100*	*1,000*
TH-1	4/23/12	0.5	5,032	24,700
		3	4,196	41,000
		5	3,640	85,500
		8	4,417	19,900
		9	4,471	19,300
TH-2	4/23/12	0.5	31.6	42.3
		3	36.8	48.9
		5	79.5	58.2
		9.5	9.2	38.3
TH-3	4/23/12	0.5	8.9	42.3
		3	9.2	52.9
		5	0.9	30.4
		9	1.3	38.3
TH-4	4/23/12	0.5	0.4	37.0
		5	1.5	26.4
		9	2.8	29.1
TH-5	4/23/12	0.5	8.3	78.1
		5	41.9	67.5
		9	0.7	30.4

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS, APRIL 2012
ConocoPhillips
STATE COM W #19
SAN JUAN COUNTY, NEW MEXICO
NE¼ NE¼, SECTION 2, T30N, R8W
N36.84474, W107.63924

Animas Environmental Services, LLC

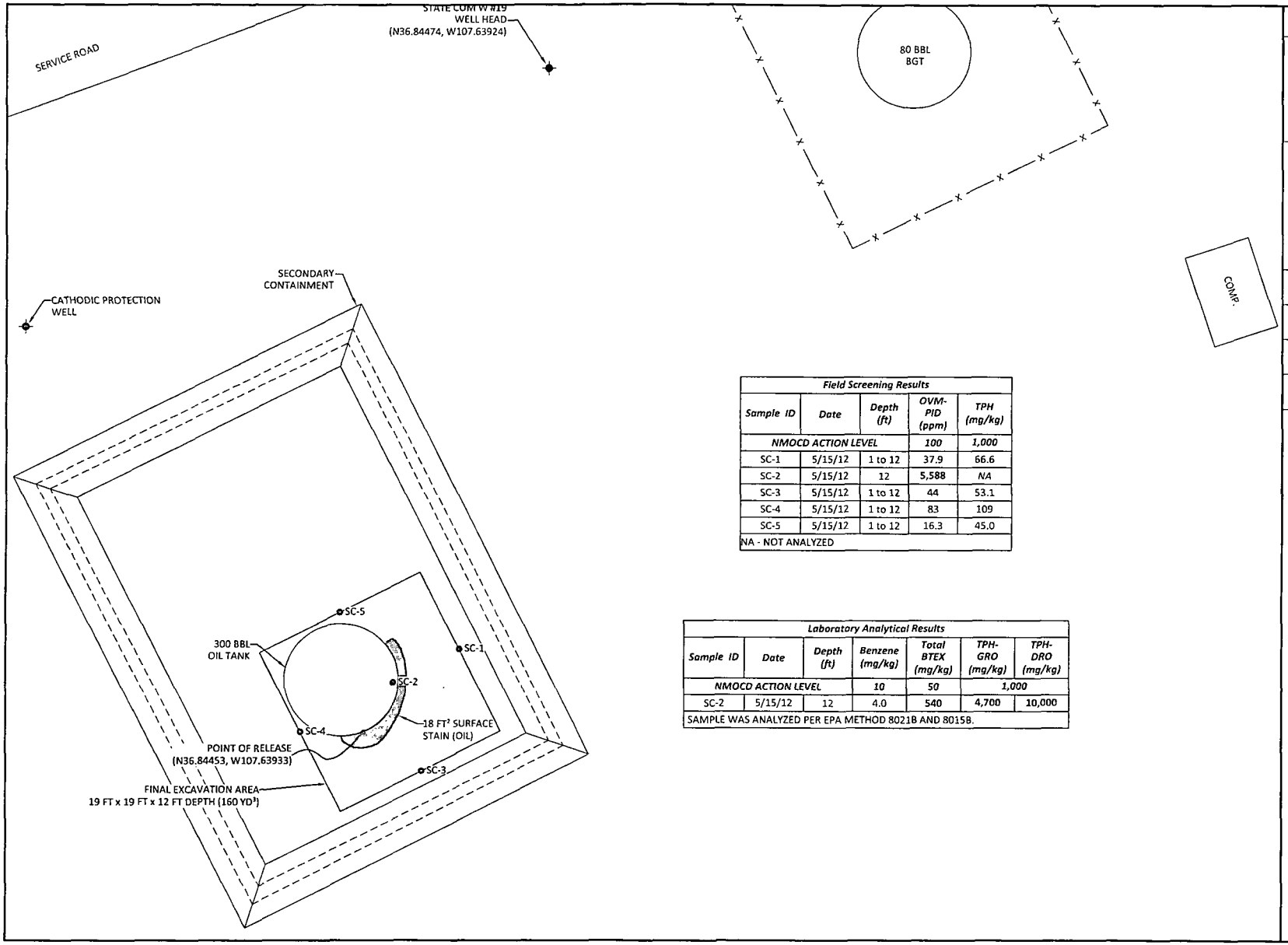
DRAWN BY:	DATE DRAWN:
R. Kennemer	April 24, 2012
REVISIONS BY:	**DATE REVISED:**
C. Lameman	September 1, 2012
CHECKED BY:	**DATE CHECKED:**
D. Watson	September 1, 2012
APPROVED BY:	**DATE APPROVED:**
E. McNally	September 1, 2012

LEGEND

● RELEASE ASSESSMENT TEST HOLE LOCATION

N

SCALE
10 6 0 10
2
(1 INCH = 10 FEET)



Field Screening Results				
Sample ID	*Date*	*Depth (ft)*	*OVM-PID (ppm)*	*TPH (mg/kg)*
NMOCD ACTION LEVEL			*100*	*1,000*
SC-1	5/15/12	1 to 12	37.9	66.6
SC-2	5/15/12	12	5,588	*NA*
SC-3	5/15/12	1 to 12	44	53.1
SC-4	5/15/12	1 to 12	83	109
SC-5	5/15/12	1 to 12	16.3	45.0
NA - NOT ANALYZED				

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-2	5/15/12	12	4.0	540	4,700	10,000
SAMPLE WAS ANALYZED PER EPA METHOD 8021B AND 8015B.						

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS, MAY 2012

ConocoPhillips
STATE COM W #19
SAN JUAN COUNTY, NEW MEXICO
NE¼ NE¼, SECTION 2, T30N, R8W
N36.84474, W107.63924

Animas Environmental Services, LLC

DRAWN BY: R. Kennemer	**DATE DRAWN:** April 24, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** September 1, 2012
CHECKED BY: D. Watson	**DATE CHECKED:** September 1, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** September 1, 2012

LEGEND

● 5-POINT COMPOSITE SAMPLE LOCATION

N

SCALE
10 8 0 10
2
(1 INCH = 10 FEET)

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: State Com W #19

Date: 4/23/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	DF	TPH PQL (mg/kg)	TPH Analysts Initials
TH-1 @ 0.5'	4/23/2012	16:30	5,032	17:36	24,700	10	200	DAW
TH-1 @ 3'	4/23/2012	16:35	4,196	17:45	41,000	100	2,000	DAW
TH-1 @ 5'	4/23/2012	16:40	3,640	17:58	85,500	100	2,000	DAW
TH-1 @ 8'	4/23/2012	16:45	4,417	18:04	19,900	10	200	DAW
TH-1 @ 9'	4/23/2012	18:20	4,471	19:31	19,300	10	200	DAW
TH-2 @ 0.5'	4/23/2012	18:30	31.6	19:37	42.3	1	20.0	DAW
TH-2 @ 3'	4/23/2012	18:35	36.8	19:40	48.9	1	20.0	DAW
TH-2 @ 5'	4/23/2012	18:40	79.5	19:43	58.2	1	20.0	DAW
TH-2 @ 9.5'	4/23/2012	18:45	9.2	19:46	38.3	1	20.0	DAW
TH-3 @ 0.5'	4/23/2012	19:00	8.9	19:49	42.3	1	20.0	DAW
TH-3 @ 3'	4/23/2012	19:16	9.2	19:51	52.9	1	20.0	DAW
TH-3 @ 5'	4/23/2012	19:20	0.9	20:34	30.4	1	20.0	DAW
TH-3 @ 9'	4/23/2012	19:30	1.3	20:37	38.3	1	20.0	DAW
TH-4 @ 0.5'	4/23/2012	19:45	0.4	20:51	37.0	1	20.0	DAW
TH-4 @ 5'	4/23/2012	19:53	1.5	0:00	26.4	1	20.0	DAW
TH-4 @ 9'	4/23/2012	20:07	2.8	20:57	29.1	1	20.0	DAW
TH-5 @ 0.5'	4/23/2012	20:15	8.3	21:00	78.1	1	20.0	DAW
TH-5 @ 5'	4/23/2012	20:21	41.9	21:04	67.5	1	20.0	DAW
TH-5 @ 9'	4/23/2012	20:35	0.7	21:09	30.4	1	20.0	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

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

Analyst: Deborah Watson

Report Finalized: 04/23/12

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: State Com W #19

Date: 5/15/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	DF	TPH PQL (mg/kg)	TPH Analysts Initials
SC-1	5/15/2012	10:46	East Wall	37.9	11:04	66.6	1	20.0	DAW
SC-2	5/15/2012	10:43	Base	5,588	*Not analyzed for Field TPH.*				
SC-3	5/15/2012	9:43	South Wall	44.0	10:27	53.1	1	20.0	DAW
SC-4	5/15/2012	9:45	West Wall	83.0	10:31	109	1	20.0	DAW
SC-5	5/15/2012	9:48	North Wall	16.3	10:33	45.0	1	20.0	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

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

Analyst: Deborah Watson

Report Finalized: 05/15/12

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

May 17, 2012

Ross Kennemer

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-1776
FAX (505) 324-2022

RE: COP State Com W#19 OrderNo.: 1205680

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/16/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1205680**
Date Reported: **5/17/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: COP State Com W#19
Lab ID: 1205680-001

Client Sample ID: SC-2
Collection Date: 5/15/2012 10:43:00 AM
Matrix: MEOH (SOIL)
Received Date: 5/16/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	10,000	1,000		mg/Kg	100	5/16/2012 12:46:45 PM
Surr: DNOP	0	82.1-121	S	%REC	100	5/16/2012 12:46:45 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	4,700	1,000		mg/Kg	200	5/16/2012 2:34:05 PM
Surr: BFB	152	69.7-121	S	%REC	200	5/16/2012 2:34:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	4.0	1.0		mg/Kg	20	5/16/2012 12:31:13 PM
Toluene	82	10		mg/Kg	200	5/16/2012 2:34:05 PM
Ethylbenzene	24	1.0		mg/Kg	20	5/16/2012 12:31:13 PM
Xylenes, Total	430	20		mg/Kg	200	5/16/2012 2:34:05 PM
Surr: 4-Bromofluorobenzene	142	80-120	S	%REC	20	5/16/2012 12:31:13 PM

Qualifiers:

*/X	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
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#: **1205680**

17-May-12

Client: Animas Environmental Services

Project: COP State Com W#19

Sample ID **MB-1966**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **1966**	RunNo: **2804**
Prep Date: **5/16/2012**	Analysis Date: **5/16/2012**	SeqNo: **77890** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.9		10.00		99.0	82.1	121			

Sample ID **LCS-1966**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **1966**	RunNo: **2804**
Prep Date: **5/16/2012**	Analysis Date: **5/16/2012**	SeqNo: **77891** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	34	10	50.00	0	68.5	52.6	130			
Surr: DNOP	4.2		5.000		83.9	82.1	121			

Sample ID **1205623-013AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **1966**	RunNo: **2831**
Prep Date: **5/16/2012**	Analysis Date: **5/17/2012**	SeqNo: **78855** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	51.28	4.948	73.7	57.2	146			
Surr: DNOP	4.8		5.128		92.8	82.1	121			

Sample ID **1205623-013AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **1966**	RunNo: **2831**
Prep Date: **5/16/2012**	Analysis Date: **5/17/2012**	SeqNo: **78856** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	49.80	4.948	80.7	57.2	146	5.42	26.7	
Surr: DNOP	4.6		4.980		92.6	82.1	121	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205680**

17-May-12

Client: Animas Environmental Services

Project: COP State Com W#19

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **R2817**	RunNo: **2817**
Prep Date:	Analysis Date: **5/16/2012**	SeqNo: **78226** 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	800		1,000		80.1	69.7	121			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R2817**	RunNo: **2817**
Prep Date:	Analysis Date: **5/16/2012**	SeqNo: **78227** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	98.5	133			
Surr: BFB	990		1,000		98.6	69.7	121			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 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
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205680**

17-May-12

Client: Animas Environmental Services

Project: COP State Com W#19

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R2817**	RunNo: **2817**
Prep Date:	Analysis Date: **5/16/2012**	SeqNo: **78231** 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	0.76		1.000		76.2	80	120			S

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R2817**	RunNo: **2817**
Prep Date:	Analysis Date: **5/16/2012**	SeqNo: **78232** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	98.9	83.3	107			
Toluene	0.99	0.050	1.000	0	99.0	74.3	115			
Ethylbenzene	0.98	0.050	1.000	0	98.2	80.9	122			
Xylenes, Total	3.0	0.10	3.000	0	98.7	85.2	123			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.2	80	120			

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	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: 1205680

Received by/date: 05/16/12

Logged By: Lindsay Mangin 5/16/2012 10:00:00 AM

Completed By: Lindsay Mangin 5/16/2012 10:24:52 AM

Reviewed By: KMS 5/16/12

Chain of Custody

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

Log In

		Yes	No	
4.	Coolers are present? (see 19. for cooler specific information)	✓		NA
5.	Was an attempt made to cool the samples?	✓		NA
6.	Were all samples received at a temperature of >0° C to 6.0°C	✓		NA
7.	Sample(s) in proper container(s)?	✓		
8.	Sufficient sample volume for indicated test(s)?	✓		
9.	Are samples (except VOA and ONG) properly preserved?	✓		
10.	Was preservative added to bottles?		✓	NA
11.	VOA vials have zero headspace?			No VOA Vials ✓
12.	Were any sample containers received broken?		✓	
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	✓		# of preserved bottles checked for pH:
14.	Are matrices correctly identified on Chain of Custody?	✓		(<2 or >12 unless noted)
15.	Is it clear what analyses were requested?	✓		Adjusted?
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	✓		Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✓

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	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 W #19

Project #:

Project Manager: R. Kennemer

Sampler: D Watson

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 1205680	BTEX + MTBE + TMB (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel) 8015D(GRO/DRO)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
5-15-12	1043	soil	SC-2	1-Methkit 1-4oz jar	MeOH non	-001	X		X									

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/15/12	1633	Debra Watson	[illegible]	5/15/12	1633
5/15/12	1721	Christine Walters	[illegible]	05/16/12	1000

Remarks: Bill to ConocoPhillips
WO: 8993507
Area: 5
Super: Kendal Bissing
User ID: KAITLW
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.