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: **San Juan 29-6 Unit 66**	Facility Type: **Gas Well**

Surface Owner **Public (Private)**	Mineral Owner **Federal**	API No. **3003907660**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	**09**	**29N**	**06W**	**1450**	**South**	**1850**	**West**	**Rio Arriba**

Latitude 36.7368813 Longitude -107.47039

NATURE OF RELEASE

Type of Release **Hydrocarbon/Condensate**	Volume of Release **10 BBLs**	Volume Recovered **0 BBLs**
Source of Release **Oil Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **01/23/14 @ 2:00 PM**
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**	

OIL CONS. DIV DIST. 3
JUN 26 2014

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

Describe Cause of Problem and Remedial Action Taken.*
Oil Production Tank developed a small leak due to corrosion on the weld seam at the bottom of tank. Well was shut in. Third-Party Environmental called to assess.

Describe Area Affected and Cleanup Action Taken.*
ConocoPhillips will assess the soil to determine a path forward for clean-up if necessary. Excavation was 30' x 30' x 4' Deep. 160 c/yds of soil was transported to IEI Land Farm and 160 c/yds of clean soil was transported from Aztec Machine, 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
Printed Name: **Lisa Hunter**	Approved by Environmental Specialist:
Title: **Field Environmental Specialist**	Approval Date: 7/7/14 Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval: Attached ☐
Date: **June 25, 2014** Phone: **(505) 326-9786**	

* Attach Additional Sheets If Necessary

#NCS 1418835501

(24)

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

June 23, 2014

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

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

RE: Initial Release Assessment and Final Excavation Report
San Juan 29-6 #66
Rio Arriba County, New Mexico

Dear Ms. Hunter:

On January 27 and April 21, 2014, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 29-6 #66, located in Rio Arriba County, New Mexico. The release consisted of an unknown quantity of hydrocarbons from the onsite 100 barrel (bbl) condensate tank. The initial release assessment was completed by AES on January 27, 2014, and the final excavation was completed by CoP contractors prior to AES' arrival at the location on April 21, 2014.

1.0 Site Information

1.1 Location

Location – NE¼ SW¼, Section 9, T29N, R6W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude – N36.73691 and W107.47097, respectively
Release Location Latitude/Longitude – N36.73668 and W107.47099, respectively
Land Jurisdiction – Private
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, January 2014

1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills,*

and Releases (August 1993) prior to site work. The release was given a ranking score of 20 based on the following factors:

- **Depth to Groundwater:** A cathodic protection report form dated June 1993 for this well location reported the depth to groundwater at 80 feet below ground surface (bgs). (10 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** An ephemeral stream is located approximately 450 feet to the northwest. Drainage is ultimately to Frances Creek. (10 points)

1.3 Assessment

AES was initially contacted by Lisa Hunter of CoP on January 23, 2014, and on January 27, 2014, Deborah Watson and Emilee Skyles of AES completed the release assessment field work. The assessment included collection and field sampling of 17 soil samples from 8 borings in and around the release area. Soil borings were terminated between 3 and 4 feet where the ground was not frozen. Based on the field sampling results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On April 21, 2014, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of five confirmation soil samples from the walls and base of the excavation. The area of the final excavation measured approximately 23 feet by 22 feet by 5.5 feet in depth. A competent sandstone layer was encountered at 5 to 6 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 17 soil samples from 8 borings (SB-1 through SB-8) 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). Composite samples SC-1 through SC-5 collected during the excavation clearance were submitted for confirmation laboratory analysis.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

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

2.1.2 Total Petroleum Hydrocarbons

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

2.2 Laboratory Analyses

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

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

2.3 Field and Laboratory Analytical Results

On January 27, 2014, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 1.7 ppm in SB-7 up to 3,855 ppm in SB-1. Field TPH concentrations ranged from less than 20.0 mg/kg in SB-2 and SB-7 to greater than 2,500 mg/kg in SB-1.

On April 21, 2014, final excavation field screening results for VOCs via OVM ranged from 0.0 ppm in SC-1 up to 28.6 ppm in SC-5. Field TPH concentrations ranged from 37.8 mg/kg in SC-3 up to 53.3 mg/kg in SC-2. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Field Screening VOCs and TPH Results
San Juan 26-6 #66 Initial Release Assessment and Final Excavation
January and April 2014

Sample ID	***Date Sampled***	***Sample Depth (ft bgs)***	***VOCs via OVM (ppm)***	***Field TPH (mg/kg)***
*NMOCD Action Level**			*100*	*100*
SB-1	1/27/14	Surface	**3,855**	**552**
		1	**3,803**	NA
		2	**3,192**	NA
		4	**3,150**	**>2,500**
SB-2	1/27/14	Surface	39.6	<20.0
SB-3	1/27/14	Surface	11.1	NA
SB-4	1/27/14	Surface	**769**	NA
		1	**3,130**	NA
		2.5-3	**3,197**	**2,020**
SB-5	1/27/14	Surface	5.5	NA
SB-6	1/27/14	Surface	5.6	NA
		3	**3,054**	**1,230**
SB-7	1/27/14	Surface	32.8	NA
		2	11.2	NA
		3	1.7	<20.0
SB-8	1/27/14	Surface	1.8	NA
		3	3.0	NA
SC-1	4/21/14	1 to 5.5	0.0	41.7
SC-2	4/21/14	1 to 5.5	8.8	53.3
SC-3	4/21/14	1 to 5.5	1.0	37.8
SC-4	4/21/14	1 to 5.5	4.7	43.0
SC-5	4/21/14	5.5	28.6	49.4

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-1 through SC-5 were used to confirm field sampling results from the final excavation. TPH concentrations as GRO/DRO were reported below laboratory detection limits in SC-1 through SC-4. Sample SC-5 reported TPH concentrations as GRO/DRO at 5.8 mg/kg and less than 9.8 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
San Juan 29-6 #66 Initial Release Assessment and Final Excavation
January and April 2014

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*	*100*	
SC-1	4/21/14	1 to 5.5	NA	NA	<4.9	<10
SC-2	4/21/14	1 to 5.5	NA	NA	<5.0	<9.9
SC-3	4/21/14	1 to 5.5	NA	NA	<4.9	<10
SC-4	4/21/14	1 to 5.5	NA	NA	<4.7	<10
SC-5	4/21/14	5.5	NA	NA	5.8	<9.8

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 January 27, 2014, AES conducted an initial assessment of petroleum contaminated soils associated with a petroleum hydrocarbon release at the San Juan 29-6 #66. 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 20.

Initial assessment field screening results above the NMOCD action level of 100 ppm VOCs and 100 mg/kg TPH were reported in SB-1, SB-4, and SB-6. The highest VOC and TPH concentrations were reported in SB-1 with 3,855 ppm and greater than 2,500 mg/kg, respectively.

On April 21, 2014, final clearance of the excavation area was completed. Field screening results of the excavation extents showed that VOC and field TPH concentrations were below applicable NMOCD action levels for the final walls and base of the excavation.

Laboratory analytical results from April 21, 2014, reported TPH concentrations as GRO/DRO below the applicable NMOCD action level of 100 mg/kg in SC-1 through SC-5.

Based on final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 29-6 #66, VOC and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,

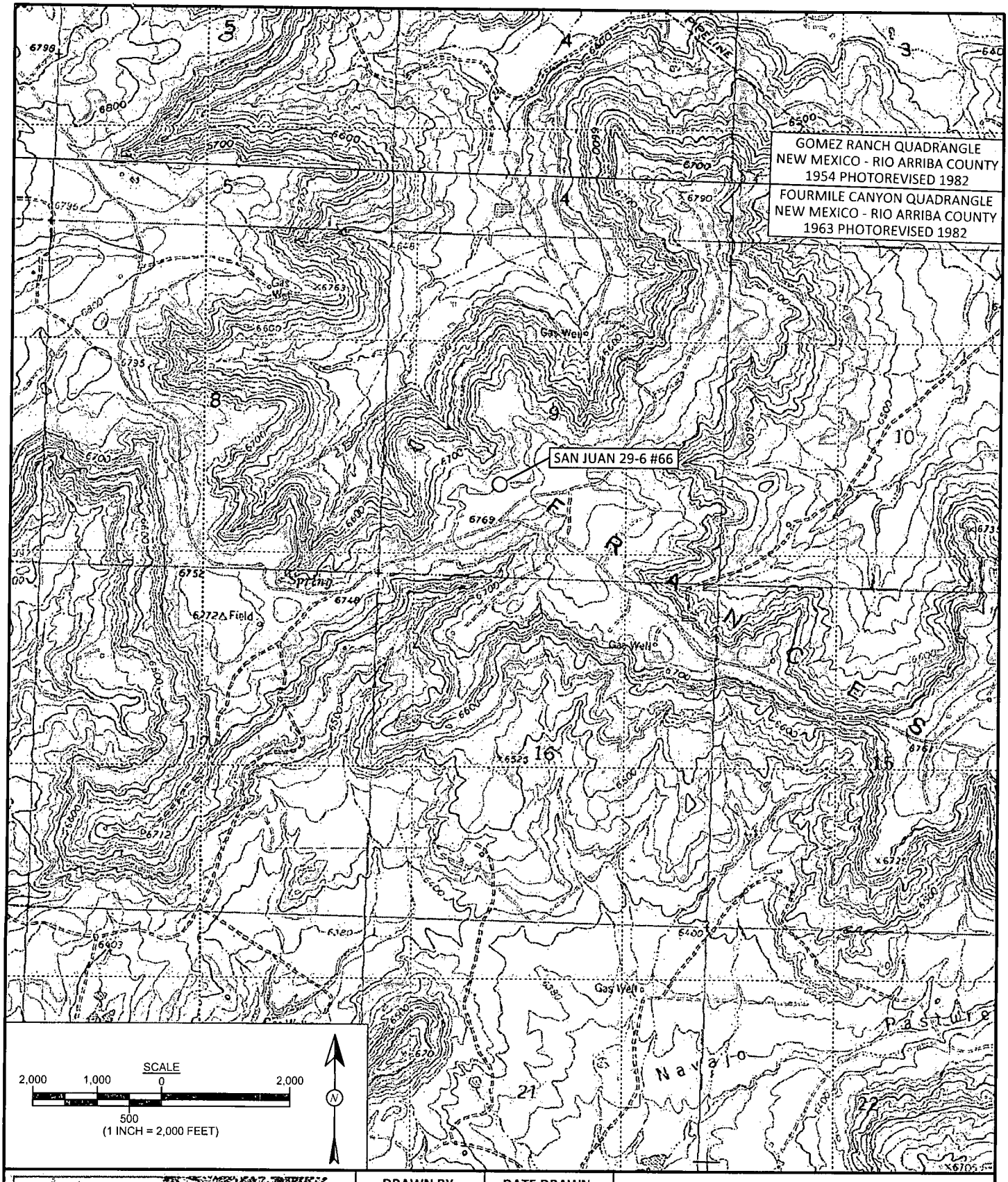
Emilee Skyles
Staff Geologist

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, January 2014
Figure 3. Initial Assessment Sample Locations and Results, January 2014
Figure 4. Final Excavation Sample Locations and Results, April 2014
AES Field Sampling Report 012714
AES Field Sampling Report 042114
Hall Laboratory Analytical Report 1404916

C:\Users\emcnally.AES\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\SJ 29-6 #66\San Juan 29-6 #66 Initial Release and Final Excavation Report 062314.docx

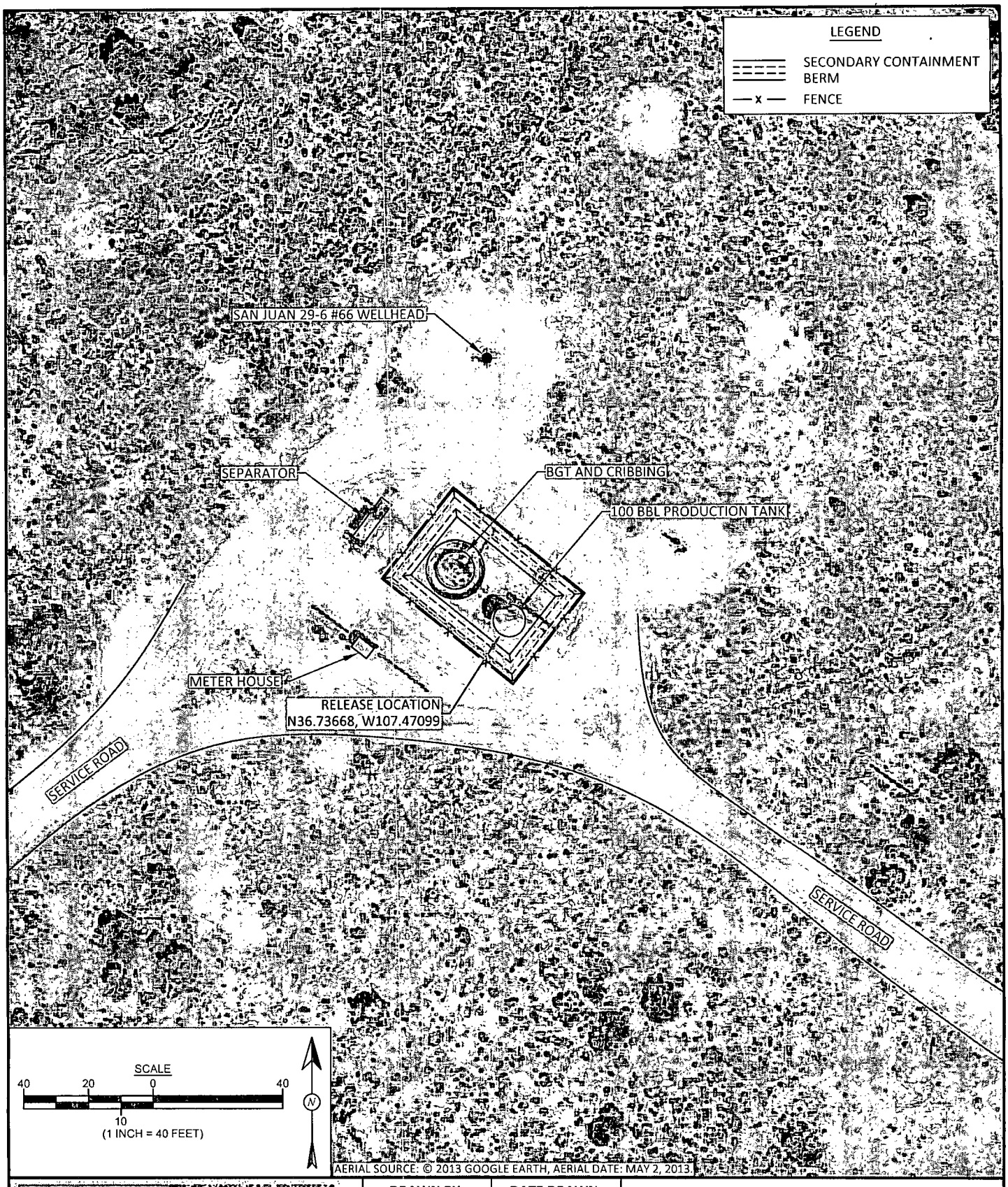


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** January 28, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** January 28, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** May 27 , 2014
APPROVED BY: E. McNally	**DATE APPROVED:** May 27 , 2014

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
SAN JUAN 29-6 #66
NE¼ SW¼, SECTION 9, T29N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.73691, W107.47097



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** January 28, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** January 28, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** May 27, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** May 27, 2014

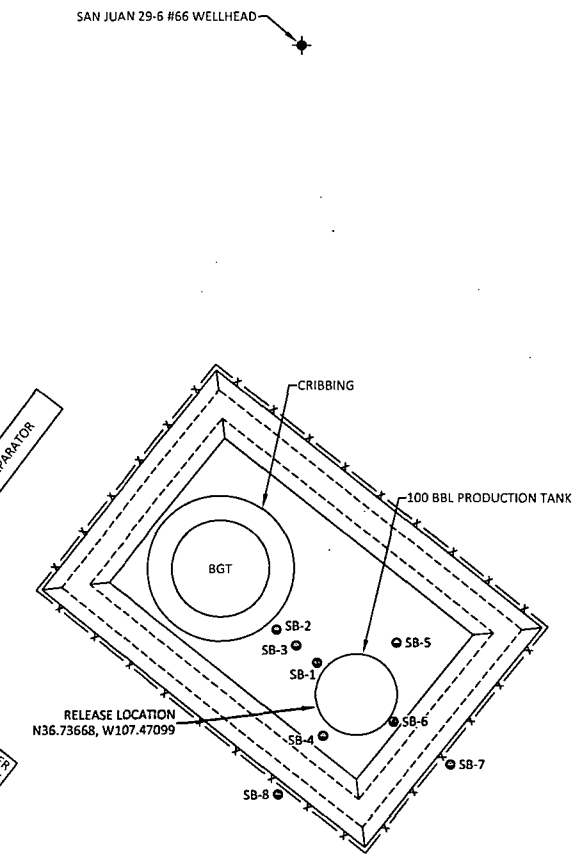
FIGURE 2

AERIAL SITE MAP
JANUARY 2014
ConocoPhillips
SAN JUAN 29-6 #66
NE¼ SW¼, SECTION 9, T29N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.73691, W107.47097

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS JANUARY 2014

ConocoPhillips
SAN JUAN 29-6 #66
NE¼ SW¼, SECTION 9, T29N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.73691, W107.47097



Field Sampling Results				
Sample ID	*Date*	*Depth (ft)*	*OVM-PID (ppm)*	*TPH (mg/kg)*
NMOCD ACTION LEVEL			*100*	*100*
SB-1	1/27/14	Surface	3,855	552
		1	3,803	*NA*
		2	3,192	*NA*
		4	3,150	>2,500
SB-2	1/27/14	Surface	39.6	<20.0
SB-3	1/27/14	Surface	11.1	*NA*
SB-4	1/27/14	Surface	769	*NA*
		1	3,130	*NA*
		3	3,197	2,020
SB-5	1/27/14	Surface	5.5	*NA*
SB-6	1/27/14	Surface	5.6	*NA*
		3	3,054	1,230
SB-7	1/27/14	Surface	32.8	*NA*
		2	11.2	*NA*
		3	1.7	<20.0
SB-8	1/27/14	Surface	1.8	*NA*
		3	3.0	*NA*
NA - NOT ANALYZED				

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** January 28, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** April 28, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** May 27, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** May 27, 2014

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- FENCE

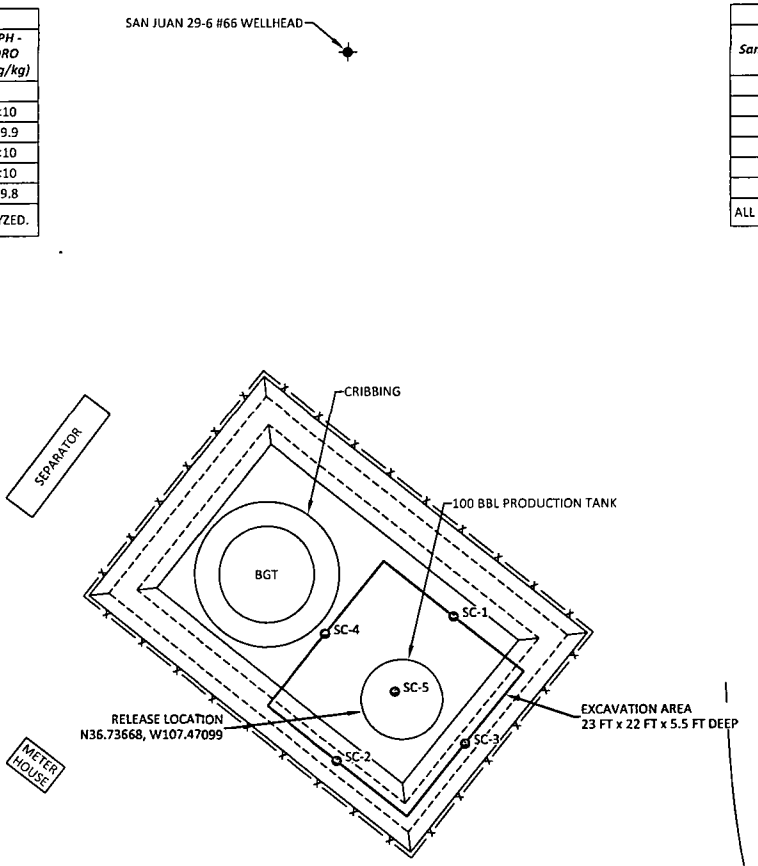
SCALE
15 9 0 15
3
(1 INCH = 15 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
APRIL 2014
ConocoPhillips
SAN JUAN 29-6 #66
NE¼ SW¼, SECTION 9, T29N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.73691, W107.47097

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*	*100*	
SC-1	4/21/14	1 to 5.5	*NA*	*NA*	<4.9	<10
SC-2	4/21/14	1 to 5.5	*NA*	*NA*	<5.0	<9.9
SC-3	4/21/14	1 to 5.5	*NA*	*NA*	<4.9	<10
SC-4	4/21/14	1 to 5.5	*NA*	*NA*	<4.7	<10
SC-5	4/21/14	5.5	*NA*	*NA*	5.8	<9.8
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8015D. NA - NOT ANALYZED.						

Field Sampling Results				
Sample ID	*Date*	*Depth (ft)*	*OVM-PID (ppm)*	*TPH (mg/kg)*
NMOCD ACTION LEVEL			*100*	*100*
SC-1	4/21/14	1 to 5.5	0.0	41.7
SC-2	4/21/14	1 to 5.5	8.8	53.3
SC-3	4/21/14	1 to 5.5	1.0	37.8
SC-4	4/21/14	1 to 5.5	4.7	43.0
SC-5	4/21/14	5.5	28.6	49.4
ALL SAMPLES WERE COMPOSITE SAMPLES.				



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** April 28, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** April 28, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** April 28, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** April 28, 2014

LEGEND

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

N

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

AES Field Sampling Report

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

Client: ConocoPhillips

Project Location: San Juan 29-6 #66

Date: 1/27/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	TPH* 418.1 (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ surface	1/27/2014	14:15	3,855	552	15:00	20	1	DAW
SB-1 @ 1'	1/27/2014	14:35	3,803	*Not Anaylyzed for TPH*				
SB-1 @ 2'	1/27/2014	14:40	3,192	*Not Anaylyzed for TPH*				
SB-1 @ 4'	1/27/2014	14:45	3,150	>2,500	15:20	20	1	DAW
SB-2 @ surface	1/27/2014	14:56	39.6	16.5	15:48	20	1	DAW
SB-3 @ surface	1/27/2014	14:59	11.1	*Not Anaylyzed for TPH*				
SB-4 @ surface	1/27/2014	15:02	769	*Not Anaylyzed for TPH*				
SB-4 @ 1'	1/27/2014	15:05	3,130	*Not Anaylyzed for TPH*				
SB-4 @ 2.5-3'	1/27/2014	15:13	3,197	2,020	15:55	20	1	DAW
SB-5 @ surface	1/27/2014	15:14	5.5	*Not Anaylyzed for TPH*				
SB-6 @ surface	1/27/2014	15:18	5.6	*Not Anaylyzed for TPH*				
SB-6 @ 3'	1/27/2014	15:20	3,054	1,230	15:52	20	1	DAW
SB-7 @ surface	1/27/2014	15:30	32.8	*Not Anaylyzed for TPH*				
SB-7 @ 2'	1/27/2014	15:38	11.2	*Not Anaylyzed for TPH*				
SB-7 @ 3'	1/27/2014	15:42	1.7	17.9	15:58	20	1	DAW
SB-8 @ surface	1/27/2014	15:45	1.8	*Not Anaylyzed for TPH*				
SB-8 @ 3'	1/27/2014	15:50	3.0	*Not Anaylyzed for TPH*				

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Deborah Watts

**TPH concentrations recorded may be below PQL.*

Report Finalized: 1/27/14

AES Field Sampling Report

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

Client: ConocoPhillips

Project Location: San Juan 29-6 #66

Date: 4/21/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* 418.1 (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	4/21/2014	10:20	North Wall	0.0	41.7	10:53	20.0	1	EMS
SC-2	4/21/2014	10:22	South Wall	8.8	53.3	10:57	20.0	1	EMS
SC-3	4/21/2014	10:25	East Wall	1.0	37.8	10:59	20.0	1	EMS
SC-4	4/21/2014	10:29	West Wall	4.7	43.0	11:01	20.0	1	EMS
SC-5	4/21/2014	10:30	Base	28.6	49.4	11:04	20.0	1	EMS

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

PQL Practical Quantitation Limit

**TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Erik Sy L

Report Finalized: 4/21/14

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

April 30, 2014

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

RE: SJ 29-6 #66 OrderNo.: 1404916

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/22/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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 **1404916**
Date Reported: **4/30/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: SJ 29-6 #66
Lab ID: 1404916-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 4/21/2014 10:20:00 AM
Received Date: 4/22/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/24/2014 11:42:37 AM	12796
Surr: DNOP	98.6	57.9-140		%REC	1	4/24/2014 11:42:37 AM	12796
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/24/2014 12:36:15 PM	12823
Surr: BFB	86.0	74.5-129		%REC	1	4/24/2014 12:36:15 PM	12823

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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Analytical Report
Lab Order **1404916**
Date Reported: **4/30/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: SJ 29-6 #66
Lab ID: 1404916-002 **Matrix:** SOIL

Client Sample ID: SC-2
Collection Date: 4/21/2014 10:22:00 AM
Received Date: 4/22/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/24/2014 1:47:01 PM	12796
Surr: DNOP	102	57.9-140		%REC	1	4/24/2014 1:47:01 PM	12796
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/24/2014 2:02:14 PM	12823
Surr: BFB	84.0	74.5-129		%REC	1	4/24/2014 2:02:14 PM	12823

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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-3
Project: SJ 29-6 #66
Collection Date: 4/21/2014 10:25:00 AM
Lab ID: 1404916-003
Matrix: SOIL
Received Date: 4/22/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/24/2014 2:18:21 PM	12796
Surr: DNOP	99.3	57.9-140		%REC	1	4/24/2014 2:18:21 PM	12796
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/24/2014 2:30:52 PM	12823
Surr: BFB	85.2	74.5-129		%REC	1	4/24/2014 2:30:52 PM	12823

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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-4
Project: SJ 29-6 #66
Collection Date: 4/21/2014 10:29:00 AM
Lab ID: 1404916-004
Matrix: SOIL
Received Date: 4/22/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/24/2014 2:49:20 PM	12796
Surr: DNOP	100	57.9-140		%REC	1	4/24/2014 2:49:20 PM	12796
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/24/2014 2:59:28 PM	12823
Surr: BFB	84.7	74.5-129		%REC	1	4/24/2014 2:59:28 PM	12823

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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: SJ 29-6 #66
Lab ID: 1404916-005 **Matrix:** SOIL

Client Sample ID: SC-5
Collection Date: 4/21/2014 10:30:00 AM
Received Date: 4/22/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/24/2014 3:20:28 PM	12796
Surr: DNOP	101	57.9-140		%REC	1	4/24/2014 3:20:28 PM	12796
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	5.8	4.7		mg/Kg	1	4/24/2014 3:28:04 PM	12823
Surr: BFB	104	74.5-129		%REC	1	4/24/2014 3:28:04 PM	12823

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.
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#: **1404916**

30-Apr-14

Client: Animas Environmental

Project: SJ 29-6 #66

Sample ID **MB-12796**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **12796**	RunNo: **18181**
Prep Date: **4/22/2014**	Analysis Date: **4/24/2014**	SeqNo: **524863** 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	9.6		10.00		96.1	57.9	140			

Sample ID **LCS-12796**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **12796**	RunNo: **18181**
Prep Date: **4/22/2014**	Analysis Date: **4/24/2014**	SeqNo: **524864** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.1	60.8	145			
Surr: DNOP	4.7		5.000		93.9	57.9	140			

Sample ID **1404916-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-1**	Batch ID: **12796**	RunNo: **18181**
Prep Date: **4/22/2014**	Analysis Date: **4/24/2014**	SeqNo: **524870** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.9	49.31	0	104	47.4	148			
Surr: DNOP	5.1		4.931		103	57.9	140			

Sample ID **1404916-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-1**	Batch ID: **12796**	RunNo: **18181**
Prep Date: **4/22/2014**	Analysis Date: **4/24/2014**	SeqNo: **524872** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.8	49.16	0	98.1	47.4	148	6.37	22.7	
Surr: DNOP	5.1		4.916		105	57.9	140	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404916**

30-Apr-14

Client: Animas Environmental

Project: SJ 29-6 #66

Sample ID **MB-12823**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **12823**	RunNo: **18182**
Prep Date: **4/22/2014**	Analysis Date: **4/24/2014**	SeqNo: **525363** 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	830		1000		82.9	74.5	129			

Sample ID **LCS-12823**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **12823**	RunNo: **18182**
Prep Date: **4/22/2014**	Analysis Date: **4/24/2014**	SeqNo: **525364** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.9	71.7	134			
Surr: BFB	910		1000		91.1	74.5	129			

Sample ID **1404916-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-1**	Batch ID: **12823**	RunNo: **18182**
Prep Date: **4/22/2014**	Analysis Date: **4/24/2014**	SeqNo: **525366** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.25	0	92.0	69.5	145			
Surr: BFB	900		969.9		93.1	74.5	129			

Sample ID **1404916-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-1**	Batch ID: **12823**	RunNo: **18182**
Prep Date: **4/22/2014**	Analysis Date: **4/24/2014**	SeqNo: **525367** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	24.22	0	87.8	69.5	145	4.77	20	
Surr: BFB	890		969.0		91.6	74.5	129	0	0	

Qualifiers:

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

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1404916 RcptNo: 1

Received by/date: C.S. 04/22/14

Logged By: Ashley Gallegos 4/22/2014 10:00:00 AM

Completed By: Ashley Gallegos 4/22/2014 11:01:27 AM

Reviewed By: CS 04/22/14

Chain of Custody

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

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	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ✔	No	Adjusted?
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	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	2.3	Good	Yes			

Chain-of-Custody Record

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

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
Project Name: SJ 29-6 #66
Project #:
Project Manager: D. Watson
Sampler: E. SKYLES
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.3°

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1404914	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / [illegible])	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)
21/14	10:[illegible]	SOIL	SC-1	1-4oz	non	-001			X									
21/14	10:22	SOIL	SC-2	1-4oz	non	-002			X									
21/14	10:25	SOIL	SC-3	1-4oz	non	-003			X									
21/14	10:29	SOIL	SC-4	1-4oz	non	-004			X									
21/14	10:30	SOIL	SC-5	1-4oz	non	-005			X									

Date	Time	Relinquished by	Received by	Date	Time
21/14	1725	[signature]	[signature] Walter	4/21/14	1725
4/14	1740	[signature] Walter	[signature]	04/22/14	1000

Remarks: Bill to ConocoPhillips:
WO:
AREA: 7
USER ID: LINDAJ
SUPERVISOR: Paul Goosey
PROPPED BY: Lisa Hunter
see email from Ashley
VG 4-23-14

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.