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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Burlington Resources Oil & Gas Company**	Contact **Crystal Tafoya**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 326-9837
Facility Name: **San Juan 30-6 Unit 44**	Facility Type: **Gas Well**

Surface Owner **Federal**	Mineral Owner **Federal (SF-080713-B)**	API No.**30-039-07837**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**15**	**30N**	**6W**	**1180**	**South**	**1800**	**West**	**Rio Arriba**

Latitude 36.80849 Longitude -107.45264

NATURE OF RELEASE

Type of Release **Produced Fluids**	Volume of Release **Unknown**	Volume Recovered **486 cubic yards**
Source of Release **Below Grade Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **September 19, 2013**
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.*
N/A

OIL CONS. DIV DIST. 3
JAN 10 2014

Describe Cause of Problem and Remedial Action Taken.*
Below Grade Tank Closure Activities

Describe Area Affected and Cleanup Action Taken.*
The below grade tank sample results were above regulatory standards by USEPA method 418.1 for TPH confirming a release. The excavation was 40' x 40' x 8' and 468 cubic yards of soil was transported to a third party landfarm. Excavation and confirmation sampling occurred. Analytical results for TPH, BTEX and Chlorides were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required. The final report is attached for review.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Crystal L. Tafoya	OIL CONSERVATION DIVISION Approved by Environmental Specialist:	
Printed Name: **Crystal Tafoya**		
Title: **Field Environmental Specialist**	Approval Date: 9/4/14	Expiration Date:
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval:	Attached ☐
Date: 1/7/2014 Phone: (505) 326-9837		

* Attach Additional Sheets If Necessary

#NCS 1424754491

25

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

December 19, 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: Below Grade Tank Closure, Release Assessment and Final Excavation Report
San Juan 30-6 #44
Rio Arriba County, New Mexico

Dear Ms. Hunter:

On September 19, October 18, and October 22, 2013, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, an initial release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 30-6 #44, located in Rio Arriba County, New Mexico. The historic release was discovered during a facility reset. An initial release assessment was completed on September 19, 2013. The final excavation was completed by CoP contractors while AES was on location on October 22, 2013.

1.0 Site Information

1.1 Location

Location – SE¼ SW¼, Section 15, T30N, R6W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude – N36.80862 and W107.45311, respectively
Release Location Latitude/Longitude – N36.80875 and W107.45288, respectively
Land Jurisdiction – Bureau of Land Management
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, September 2013

1.2 NMOCD Ranking

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

and Releases (August 1993) prior to site work. The location was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** A cathodic protection report form dated May 1991 reported the depth to groundwater at 280 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 wash in La Jara Canyon is located approximately 620 feet to the southeast of the location. (10 points)

1.3 Assessment

AES was initially contacted by Jess Henson, CoP representative, on September 19, 2013, for BGT closure sampling, and on the same day, Heather Woods and Lavina Lamone of AES traveled to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample. Sample locations are included on Figure 2.

Following BGT closure activities on September 19, 2013, 16 soil samples were collected from 7 test holes (TH-1 through TH-7) in and around the release area. Based on the field screening results, AES recommended further excavation of the release area. Sample locations are presented on Figure 3.

On October 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 (SC-1 through SC-5) of the walls and base of the excavation. Additional excavation of the west wall continued on October 22, 2013, with the collection of SC-6 and SC-7. The area of the final excavation was approximately 34 feet by 36 feet by 8.5 to 10 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

On September 19, 2013, during BGT closure sampling, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (BGT SC-1) from below the BGT. Surface soil samples were collected from the former

BGT for field screening of volatile organic compounds (VOCs), total petroleum hydrocarbon (TPH), and chlorides.

A total of 16 soil samples from TH-1 through TH-7 and 7 composite samples (SC-1 through SC-7) were collected for field screening during the release and excavation assessments. All soil samples were field screened for VOCs and selected samples were also analyzed for TPH. One composite sample (SC-3) collected during the excavation assessment 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*.

2.1.3 Chlorides

Soil sample BGT SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

2.2 Laboratory Analyses

The 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-3 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8260B; 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 September 19, 2013, BGT closure field screening results for VOCs via OVM ranged from 0.0 ppm in S-1 up to 3,805 ppm in S-5. Field TPH concentrations ranged from 52.3 mg/kg in S-2 to greater than 2,500 mg/kg in S-4 and S-5. The field chloride concentration in BGT SC-1 was reported at 40 mg/kg.

On September 19, 2013, initial assessment field screening results for VOCs via OVM ranged from 0.0 ppm (TH-3, TH-4, TH-5, and TH-7) up to 2,780 ppm (TH-1). Field TPH concentrations ranged from 60.4 mg/kg in TH-4 up to 252 mg/kg in TH-1.

On October 18 and October 22, 2013, final excavation field screening results for VOCs via OVM ranged from 0.0 ppm in SC-1 and SC-4 up to 3,016 ppm in SC-3. Field TPH concentrations ranged from 29.2 mg/kg in SC-1 up to 1,830 mg/kg in SC-3. Results are included below in Table 1 and on Figures 2 through 4. The AES field screening reports are attached.

Table 1. Field Screening VOCs, TPH, and Chloride Results
San Juan 30-6 #44
BGT Closure, Initial Release Assessment, and Final Excavation
September and October 2013

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*Field TPH (mg/kg)*	*Chloride (mg/kg)*
	*NMOCD Action Level**		*100*	*1,000*	*250*
S-1	9/19/13	0.5	0.0	60.4	NA
S-2	9/19/13	0.5	6.0	52.3	NA
S-3	9/19/13	0.5	**367**	116	NA
S-4	9/19/13	0.5	**3,622**	**>2,500**	NA
S-5	9/19/13	0.5	**3,805**	**>2,500**	NA
BGT SC-1	9/19/13	0.5	NA	NA	40
TH-1	9/19/13	6	**2,780**	NA	NA
	9/19/13	8	**1,654**	NA	NA
	9/19/13	8.5	**1,537**	252	NA
TH-2	9/19/13	4	**691**	NA	NA
	9/19/13	6	**192**	NA	NA
	9/19/13	8	65.0	NA	NA
TH-3	9/19/13	2.5	0.0	NA	NA

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)	Chloride (mg/kg)
	*NMOCD Action Level**		*100*	*1,000*	*250*
	9/19/13	6	67.6	NA	NA
	9/19/13	8	**180**	89.0	NA
TH-4	9/19/13	5	0.0	60.4	NA
	9/19/13	7	76.4	126	NA
TH-5	9/19/13	4	0.0	NA	NA
	9/19/13	6	0.0	NA	NA
TH-6	9/19/13	8	**677**	NA	NA
TH-7	9/19/13	4	0.0	NA	NA
	9/19/13	6	0.0	NA	NA
SC-1	10/18/13	1 to 10.5	0.0	29.2	NA
SC-2	10/18/13	1 to 10.5	3.0	39.7	NA
SC-3	10/18/13	1 to 10.5	**3,016**	**1,830**	NA
SC-4	10/18/13	1 to 8.5	0.0	68.6	NA
SC-5	10/18/13	8.5 to 10.5	28.1	38.4	NA
SC-6	10/22/13	1 to 10.5	0.2	37.3	NA
SC-7	10/22/13	1 to 10.5	10.2	35.9	NA

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-3 were used to confirm field screening results during excavation activities. Benzene concentrations were reported below the laboratory detection limit of 0.12 mg/kg, and the total BTEX concentration was reported at 42.5 mg/kg. TPH concentrations as GRO and DRO were reported at 1,400 mg/kg and 980 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 30-6 #44 Final Excavation, October 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
NMOCD Action Level*			***10***	***50***	***1,000***	
SC-3	10/18/13	1 to 10.5	<0.12	42.5	**1,400**	**980**

*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

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. On September 19, 2013, field VOCs and TPH concentrations above the NMOCD action level of 100 ppm VOCs and 100 mg/kg TPH were reported in S-3, S-4, and S-5. The highest VOC concentration was reported in S-5 with 3,805 ppm, and the highest TPH concentrations were reported in S-4 and S-5, each with greater than 2,500 mg/kg. The chloride concentration was reported below the NMOCD action level of 250 mg/kg. Based on field results for TPH, a release was confirmed at the San Juan 30-6 #44.

Also on September 19, 2013, AES conducted an initial release assessment of petroleum contaminated soils associated with a historical release discovered during facility reset activities at the location. 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 were reported in TH-1 through TH-3, and TH-6. Based on the field screening results, AES recommended further excavation of the release area.

On October 18, 2013, final assessment of the excavation area was initiated. Field screening results of the excavation extents showed that VOC and TPH concentrations were below applicable NMOCD action levels for three sidewalls and base of the excavation. The west wall reported VOCs and TPH above the applicable NMOCD action levels with 3,016 ppm and 1,830 mg/kg, respectively. Laboratory results for SC-3 exceeded the NMOCD action levels for TPH as GRO/DRO with 2,380 mg/kg. Following additional excavation of the west wall, field screening of the additional excavation extents on October 22, 2013, showed that VOCs and TPH concentrations in SC-6 and SC-7 were below applicable NMOCD action levels.

Based on the final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 30-6 #44, VOCs, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for the final 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,

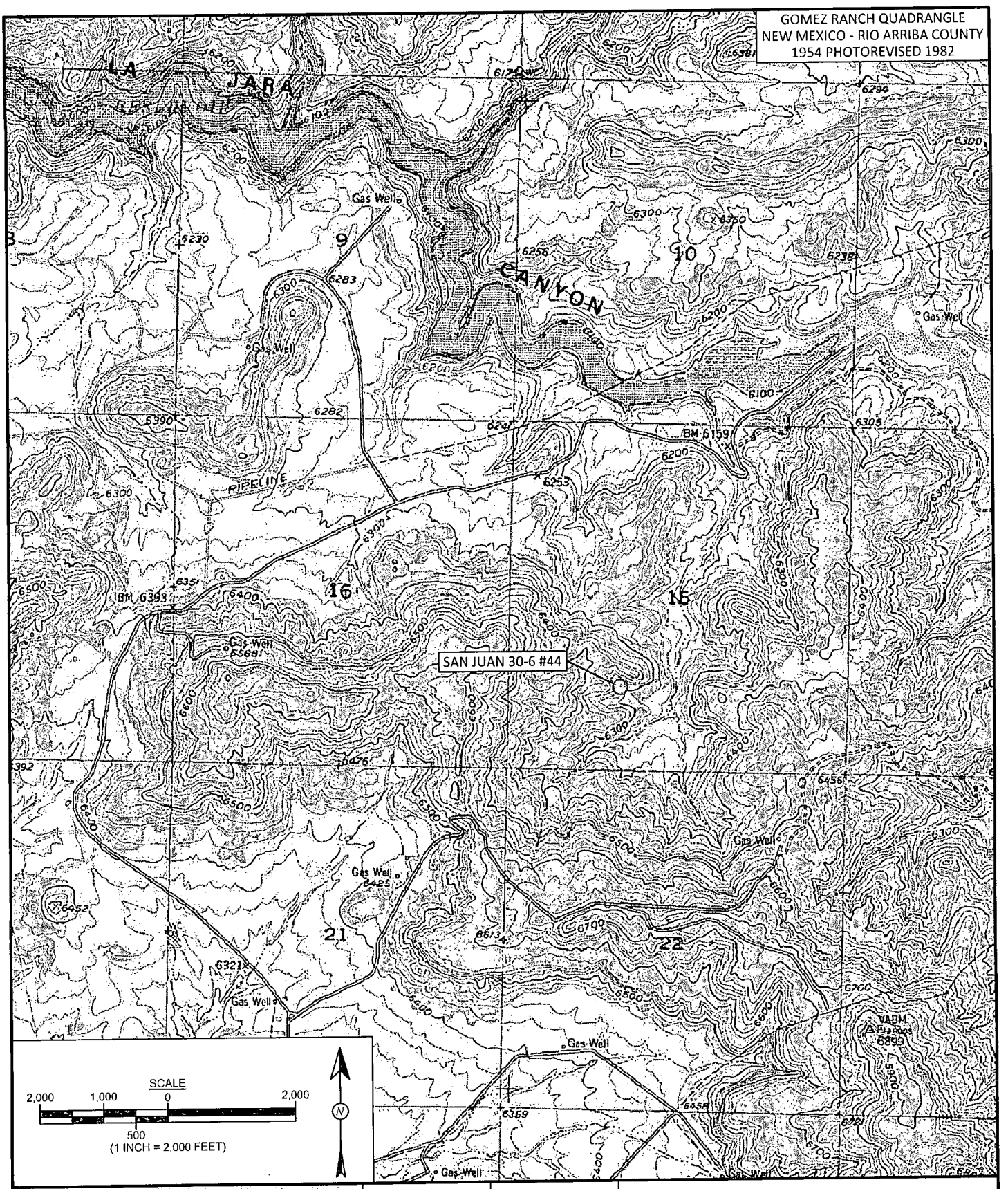
David J. Reese
Environmental Scientist

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, September 2013
Figure 3. Initial Assessment Sample Locations and Results, September 2013
Figure 4. Final Excavation Sample Locations and Results, October 2013
AES Field Screening Report 091913 BGT
AES Field Screening Report 091913 Assessment
AES Field Screening Report 101813
AES Field Screening Report 102213
Hall Laboratory Analytical Report 1310947

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\SJ 30-6 #44\San Juan 30-6 #44 Release and Final Excavation Report 121913.docx

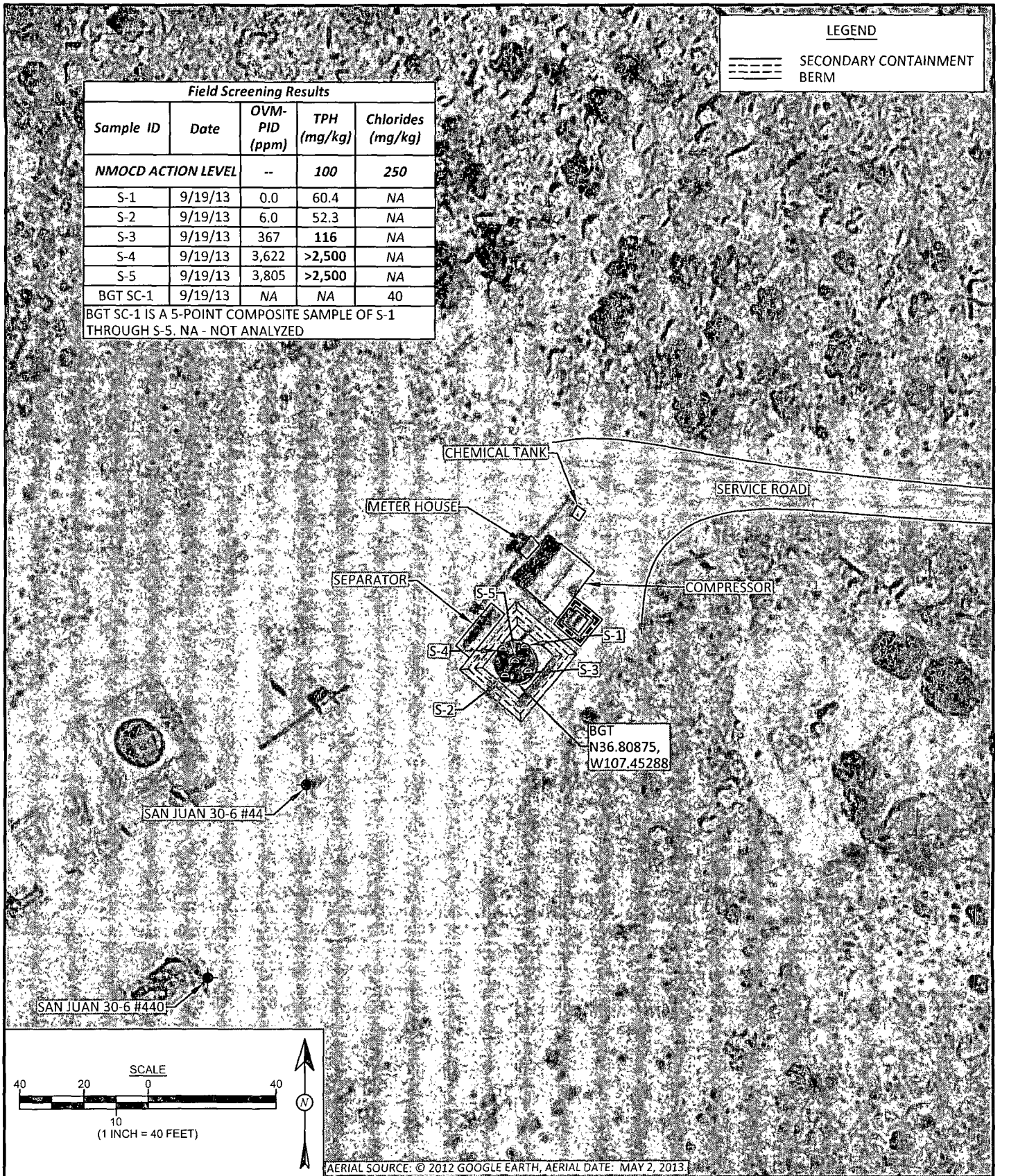


DRAWN BY: C. Lameman	**DATE DRAWN:** September 20, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** September 20, 2013
CHECKED BY: D. Watson	**DATE CHECKED:** September 20, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** September 20, 2013

Animas Environmental Services, LLC

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
SAN JUAN 30-6 #44
SE¼ SW¼, SECTION 15, T30N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.80862, W107.45311



Field Screening Results				
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	9/19/13	0.0	60.4	NA
S-2	9/19/13	6.0	52.3	NA
S-3	9/19/13	367	**116**	NA
S-4	9/19/13	3,622	**>2,500**	NA
S-5	9/19/13	3,805	**>2,500**	NA
BGT SC-1	9/19/13	NA	NA	40

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

Animas Environmental Services, LLC

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

FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
SEPTEMBER 2013
ConocoPhillips
SAN JUAN 30-6 #44
SE¼ SW¼, SECTION 15, T30N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.80862, W107.45311

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
SEPTEMBER 2013
ConocoPhillips
SAN JUAN 30-6 #44
SE¼ SW¼, SECTION 15, T30N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.80862, W107.45311

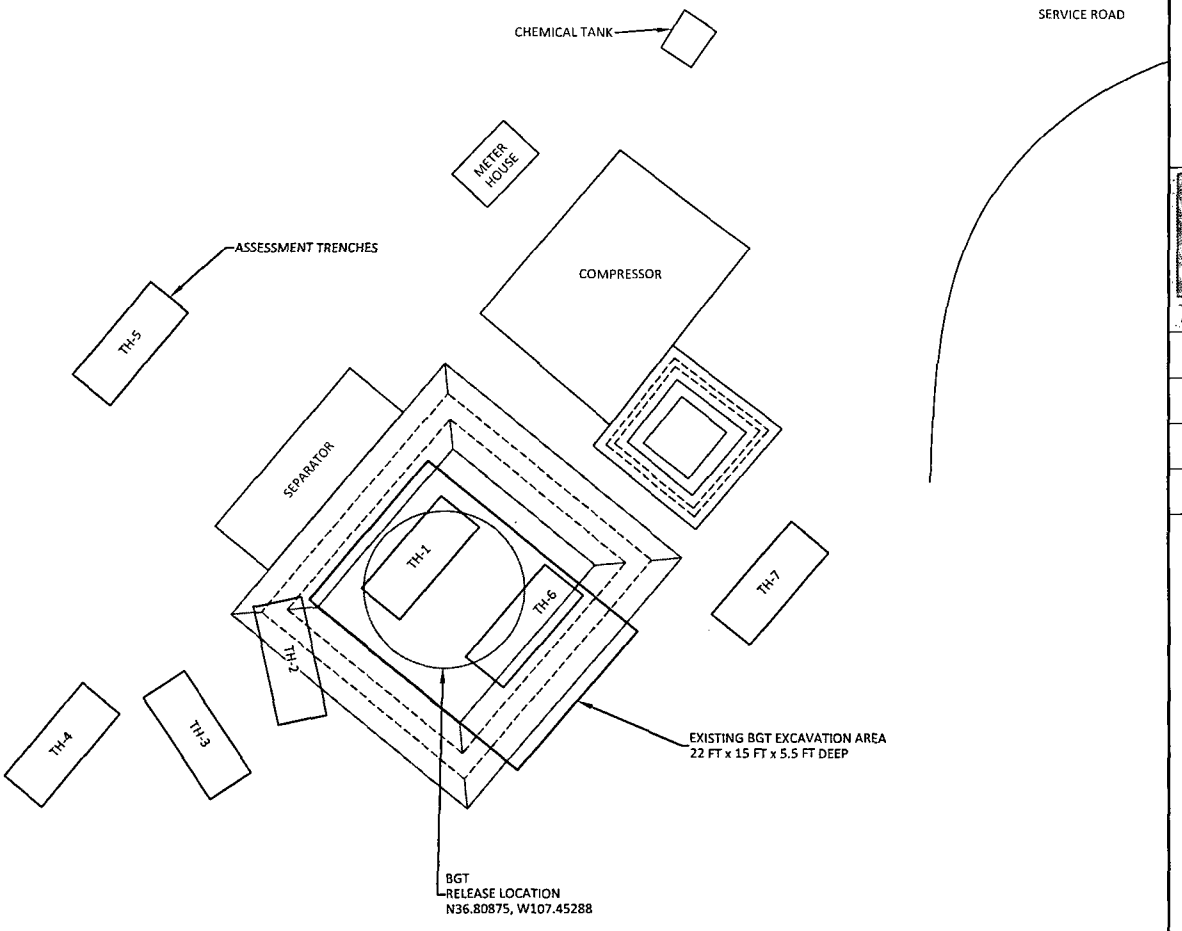
Animas Environmental Services, LLC

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

Field Screening Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
TH-1	9/19/13	6	2,780	NA
		8	1,654	NA
		8.5	1,537	252
TH-2	9/19/13	4	691	NA
		6	192	NA
		8	65.0	NA
TH-3	9/19/13	2.5	0.0	NA
		6	67.6	NA
		8	180	89.0
TH-4	9/19/13	5	0.0	60.4
		7	76.4	126
TH-5	9/19/13	4	0.0	NA
		6	0.0	NA
TH-6	9/19/13	8	677	NA
TH-7	9/19/13	4	0.0	NA
		6	0.0	NA

NA - NOT ANALYZED



LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM

SCALE
10 6 0 10
2
(1 INCH ≈ 10 FEET)

FIGURE 4

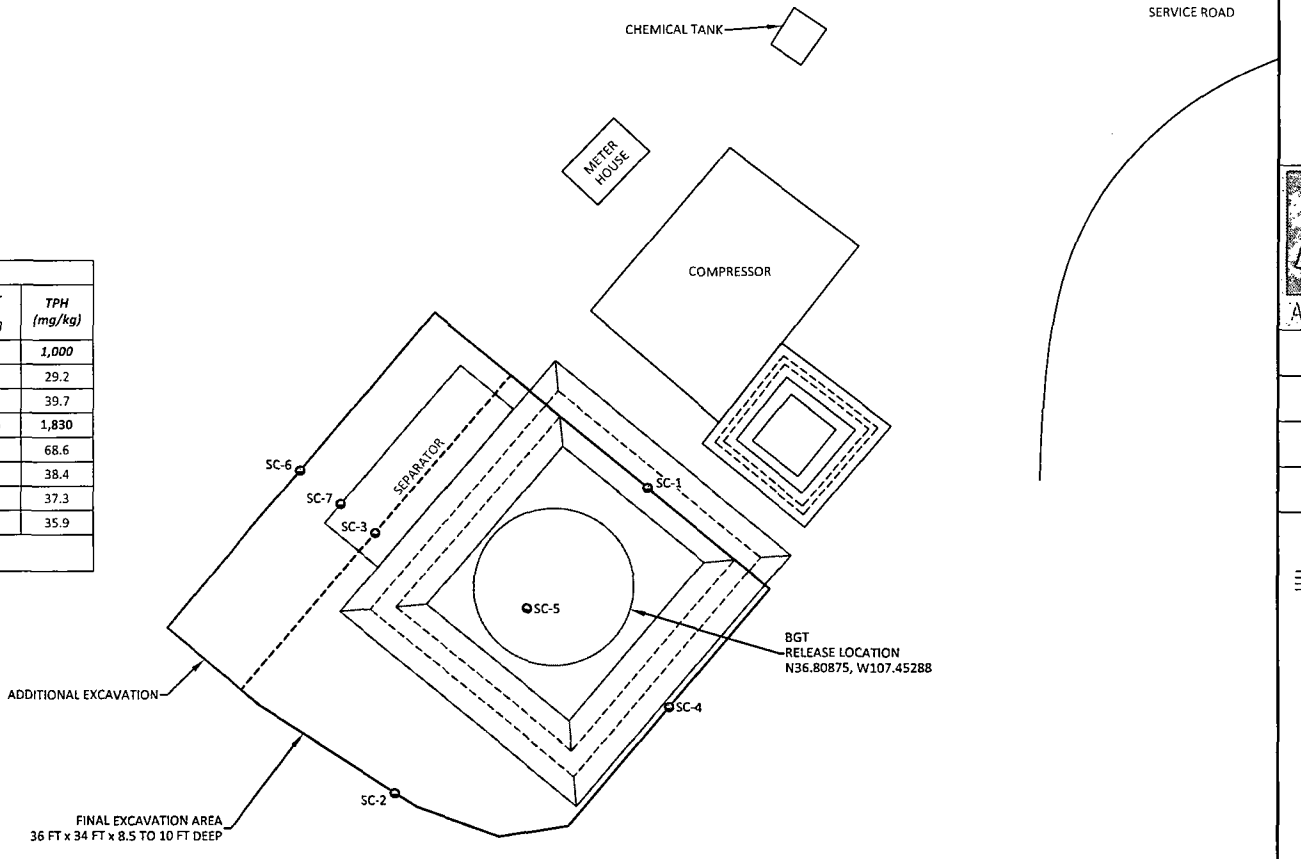
FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
OCTOBER 2013
ConocoPhillips
SAN JUAN 30-6 #44
SE¼ SW¼, SECTION 15, T30N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.80862, W107.45311

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	November 6, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	November 6, 2013
CHECKED BY:	**DATE CHECKED:**
D. Watson	November 6, 2013
APPROVED BY:	**DATE APPROVED:**
E. McNally	November 6, 2013

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM



Field Screening Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	10/18/13	1 to 10.5	0.0	29.2
SC-2	10/18/13	1 to 10	3.0	39.7
SC-3	10/18/13	1 to 10.5	3,016	1,830
SC-4	10/18/13	1 to 8.5	0.0	68.6
SC-5	10/18/13	8.5 to 10.5	28.1	38.4
SC-6	10/22/13	1 to 10.5	0.2	37.3
SC-7	10/22/13	8.5 to 10	10.2	35.9

ALL SAMPLES WERE COMPOSITE SAMPLES.
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-3	10/18/13	1 to 10.5	<0.12	42.5	1,400	980

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8260B AND 8015D.

SCALE
10 6 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
970-403-3084

Client: ConocoPhillips

Project Location: San Juan 30-6 #44

Date: 9/19/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	9/19/2013	13:20	East	0.0	NA	14:43	60.4	20.0	1	HMW
S-2	9/19/2013	13:22	South	6.0	NA	14:47	52.3	20.0	1	HMW
S-3	9/19/2013	13:24	West	367	NA	14:51	116	20.0	1	HMW
S-4	9/19/2013	13:26	North	3,622	NA	14:56	>2,500	20.0	1	HMW
S-5	9/19/2013	13:27	Center	3,805	NA	15:01	>2,500	20.0	1	HMW
SC-1	9/19/2013	13:30	Composite	NA	40	*Not Analyzed for TPH.*				

DF Dilution Factor
NA Not Analyzed
ND Not Detected at the Reporting Limit
PQL Practical Quantitation Limit
**Field TPH concentrations recorded may be below PQL.*

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate
Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Heather M. Woods

Report Finalized: 9/19/13

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: San Juan 30-6 #44

Date: 9/19/2013

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 @ 6'	9/19/2013	15:14	2,780	*Not Analyzed for TPH*				
TH-1 @ 8'	9/19/2013	15:16	1,654	*Not Analyzed for TPH*				
TH-1 @ 8.5'	9/19/2013	15:18	1,537	252	15:48	40.0	1	HMW
TH-2 @ 4'	9/19/2013	15:22	691	*Not Analyzed for TPH*				
TH-2 @ 6'	9/19/2013	15:24	192	*Not Analyzed for TPH*				
TH-2@ 8'	9/19/2013	15:26	65.0	*Not Analyzed for TPH*				
TH-3 @ 2.5'	9/19/2013	15:30	0.0	*Not Analyzed for TPH*				
TH-3 @ 6'	9/19/2013	15:32	67.6	*Not Analyzed for TPH*				
TH-3 @ 8'	9/19/2013	15:34	180	89.0	17:22	20.0	1	HMW
TH-4 @ 5'	9/19/2013	15:50	0.0	60.4	16:50	20.0	1	HMW
TH-4 @ 7'	9/19/2013	15:52	76.4	126	16:54	20.0	1	HMW
TH-5 @ 4'	9/19/2013	16:00	0.0	*Not Analyzed for TPH*				
TH-5 @ 6'	9/19/2013	16:04	0.0	*Not Analyzed for TPH*				

Report Finalized: 9/19/13

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-6 @ 8'	9/19/2013	16:10	677	*Not Analyzed for TPH*				
TH-7 @ 4'	9/19/2013	16:15	0.0	*Not Analyzed for TPH*				
TH-7 @ 6'	9/19/2013	16:17	0.0	*Not Analyzed for TPH*				

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

Analyst: Heather M. Woods

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

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: San Juan 30-6 #44

Date: 10/18/2013

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	10/18/2013	10:41	North Wall	0.0	29.2	11:36	20.0	1	SL
SC-2	10/18/2013	10:44	South Wall	3.0	39.7	11:38	20.0	1	SL
SC-3	10/18/2013	11:50	West Wall	3,016	1,830	12:10	20.0	1	SL
SC-4	10/18/2013	11:52	East Wall	0.0	68.6	11:42	20.0	1	SL
SC-5	10/18/2013	10:51	Base	28.1	38.4	11:44	20.0	1	SL

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: Stephanie Dyer

Report Finalized: 10/18/13

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: San Juan 30-6 #44

Date: 10/22/2013

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	10/22/2013	10:30	West Wall	0.2	37.3	10:58	20.0	1	DAW
SC-7	10/22/2013	10:32	Composite N-S-B	10.2	35.9	10:56	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.*

Analyst: Deborah Watson

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

October 23, 2013

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

RE: CoP San Juan 30-6 #44 OrderNo.: 1310947

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/19/2013 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 **1310947**
Date Reported: **10/23/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP San Juan 30-6 #44
Lab ID: 1310947-001 **Matrix:** SOIL

Client Sample ID: SC-3
Collection Date: 10/18/2013 11:50:00 AM
Received Date: 10/19/2013 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	980	10		mg/Kg	1	10/21/2013 12:14:55 PM	9920
Surr: DNOP	109	66-131		%REC	1	10/21/2013 12:14:55 PM	9920
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.12		mg/Kg	5	10/21/2013 12:10:03 PM	R14226
Toluene	0.91	0.25		mg/Kg	5	10/21/2013 12:10:03 PM	R14226
Ethylbenzene	1.6	0.25		mg/Kg	5	10/21/2013 12:10:03 PM	R14226
Xylenes, Total	40	5.0		mg/Kg	50	10/21/2013 1:07:31 PM	R14226
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%REC	5	10/21/2013 12:10:03 PM	R14226
Surr: 4-Bromofluorobenzene	82.4	70-130		%REC	5	10/21/2013 12:10:03 PM	R14226
Surr: Dibromofluoromethane	100	70-130		%REC	5	10/21/2013 12:10:03 PM	R14226
Surr: Toluene-d8	91.2	70-130		%REC	5	10/21/2013 12:10:03 PM	R14226
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	1400	250		mg/Kg	50	10/21/2013 1:07:31 PM	R14226
Surr: BFB	82.0	70-130		%REC	50	10/21/2013 1:07:31 PM	R14226

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1310947**

23-Oct-13

Client: Animas Environmental

Project: CoP San Juan 30-6 #44

Sample ID **MB-9920**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **9920**	RunNo: **14215**
Prep Date: **10/21/2013**	Analysis Date: **10/21/2013**	SeqNo: **407543** 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	10		10.00		103	66	131			

Sample ID **LCS-9920**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **9920**	RunNo: **14215**
Prep Date: **10/21/2013**	Analysis Date: **10/21/2013**	SeqNo: **407544** 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	93.2	77.1	128			
Surr: DNOP	4.8		5.000		96.0	66	131			

Sample ID **MB-9947**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **9947**	RunNo: **14241**
Prep Date: **10/22/2013**	Analysis Date: **10/22/2013**	SeqNo: **408483** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		95.2	66	131			

Sample ID **LCS-9947**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **9947**	RunNo: **14241**
Prep Date: **10/22/2013**	Analysis Date: **10/22/2013**	SeqNo: **408493** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.6	66	131			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1310947**

23-Oct-13

Client: Animas Environmental

Project: CoP San Juan 30-6 #44

Sample ID **mb-9887**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **9887**	RunNo: **14226**
Prep Date: **10/17/2013**	Analysis Date: **10/21/2013**	SeqNo: **408430** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.9	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.0	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.45		0.5000		89.5	70	130			

Sample ID **LCS-9887**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **9887**	RunNo: **14226**
Prep Date: **10/17/2013**	Analysis Date: **10/21/2013**	SeqNo: **408436** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.8	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.45		0.5000		90.5	70	130			

Sample ID **mb-9887**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **R14226**	RunNo: **14226**
Prep Date:	Analysis Date: **10/21/2013**	SeqNo: **408451** 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: 1,2-Dichloroethane-d4	0.50		0.5000		99.9	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.0	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.45		0.5000		89.5	70	130			

Sample ID **lcs-9887 b**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **R14226**	RunNo: **14226**
Prep Date:	Analysis Date: **10/21/2013**	SeqNo: **408452** 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	101	70	130			
Toluene	0.94	0.050	1.000	0	94.0	69.9	139			
Ethylbenzene	0.99	0.050	1.000	0	98.9	70	130			
Xylenes, Total	3.1	0.10	3.000	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.8	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			

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#: **1310947**

23-Oct-13

Client: Animas Environmental

Project: CoP San Juan 30-6 #44

Sample ID	**lcs-9887 b**	SampType: **LCS**		TestCode: **EPA Method 8260B: Volatiles Short List**					
Client ID:	**LCSS**	Batch ID: **R14226**		RunNo: **14226**					
Prep Date:		Analysis Date: **10/21/2013**		SeqNo: **408452**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.45		0.5000		90.5	70	130			

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#: **1310947**

23-Oct-13

Client: Animas Environmental

Project: CoP San Juan 30-6 #44

Sample ID **mb-9887**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **9887**	RunNo: **14226**
Prep Date: **10/17/2013**	Analysis Date: **10/21/2013**	SeqNo: **408368** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	460		500.0		92.0	70	130			

Sample ID **LCS-9887**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **9887**	RunNo: **14226**
Prep Date: **10/17/2013**	Analysis Date: **10/21/2013**	SeqNo: **408370** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	450		500.0		89.9	70	130			

Sample ID **mb-9887**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **R14226**	RunNo: **14226**
Prep Date:	Analysis Date: **10/21/2013**	SeqNo: **408412** 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	460		500.0		92.0	70	130			

Sample ID **LCS-9887**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R14226**	RunNo: **14226**
Prep Date:	Analysis Date: **10/21/2013**	SeqNo: **408413** 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	94.8	80	120			
Surr: BFB	450		500.0		89.9	70	130			

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: 1310947 RcptNo: 1

Received by/date: AT 10/19/13
AT 10/21/13

Logged By: Anne Thorne 10/19/2013 11:00:00 AM Anne Thorne

Completed By: Anne Thorne 10/21/2013 Anne Thorne

Reviewed By: AT 10/21/13

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	4.0	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 San Juan 30-6 #44

Project #:

Project Manager: D. Watson

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.0

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. 1310941	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)
10-18-13	1150	soil	SC-3	2-4oz Med H Cap	Med H	-001	X		X													

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/18/13	1640		Christine Walker	10/18/13	1640
10/18/13	1700	Christine Walker		10/19/13	11:00

Remarks: Bill to ConocoPhillips

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.