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 **Lindsay Dumas**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 599-4089
Facility Name: **Northeast Haynes 1**	Facility Type: **Gas**

Surface Owner **Jicarilla**	Mineral Owner **Jicarilla Apache (36)**	API No.**3003905565**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	**9**	**24N**	**05W**	**1850**	**South**	**790**	**West**	**Rio Arriba**

Latitude 36.32465 Longitude -107.37175

NATURE OF RELEASE

Type of Release **Hydrocarbons**	Volume of Release **unknown**	Volume Recovered **0**
Source of Release **Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **10/28/13**
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.	

RCVD JAN 29 '14
OIL CONS. DIV.
DIST. 3

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Contaminated soil was associated with a historical release was discovered during an equipment reset, on October 28, 2013. Third party environmental was contracted for an assessment.

Describe Area Affected and Cleanup Action Taken.*
The historical release was discovered during equipment reset on location.
Excavation was 35' x 45' x 25' Deep. 868 c/yds of soil was transported to TNT Land Farm and 868 c/yds of clean soil was transported from TNT, and placed in the excavation site. Analytical results were not below the regulatory standards – further remedial action will follow in coordinationg with NMOCD State Office. 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: Lindsay Dumas

Printed Name: **Lindsay Dumas**

Title: **Field Environmental Specialist**

E-mail Address: **Lindsay.Dumas**@conocophillips.com

Date: 1/28/14 Phone: (505) 599-4089

OIL CONSERVATION DIVISION

Approved by Environn **DENIED**

Approval Date: BY: Cory Smith 9/4/14

DATE: (505) 334-6178 Ext. 115

Conditions of Approva Attached ☐

* COPC Has 90 DAYS to Return to site to Further Dilineate Release. Contamination Above Regulatory STANDARDS.

(42)

* Attach Additional Sheets If Necessary

#NOS 1424743236

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

January 23, 2014

Lindsay Dumas
ConocoPhillips
San Juan Business Unit
Office 214-07
5525 Hwy 64
Farmington, New Mexico 87401

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

RE: Initial Release Assessment and Excavation Report
Northeast Haynes #1
Rio Arriba County, New Mexico

Dear Ms. Dumas:

On October 28, 2013 and November 7, 8, and 11, 2013, Animas Environmental Services, LLC (AES) completed an initial release assessment and evaluation of the excavation limits at the ConocoPhillips (CoP) Northeast Haynes #1, located in Rio Arriba County, New Mexico. The historic release was discovered during facility reset activities at the location. The initial release assessment was completed by AES on October 28, 2013, and the excavation was completed by CoP contractors prior to AES' arrival at the location on November 11, 2013.

1.0 Site Information

1.1 Location

Location – NW¼ SW¼, Section 9, T24N, R5W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude – N36.32514 and W107.37221, respectively
Release Location Latitude/Longitude – N36.32595 and W107.37266, respectively
Land Jurisdiction – Jicarilla Apache Nation
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map

1.2 Risk Ranking

The Northeast Haynes #1 is located on Jicarilla Apache Nation lands, and soil remediation action levels are determined by the Jicarilla Apache Nation Oil and Gas Administration (JANOGA). JANOGA action levels for soils currently follow the New

Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993). Per JANOGA, all locations within Jicarilla Apache Nation lands receive a ranking score of 20:

- 100 ppm volatile organic compounds (VOCs) or 10 mg/kg benzene and 50 mg/kg total BTEX (benzene, toluene, ethylbenzene, and xylenes); and
- 100 mg/kg total petroleum hydrocarbons (TPH).

1.3 Assessment

AES was initially contacted by Lisa Hunter of CoP on October 28, 2013, and on the same day, Kelsey Christiansen and Corwin Lameman of AES completed the release assessment field work. The assessment included collection and field screening of 30 soil samples from 8 assessment trenches (TH-1 to TH-8) in and around the release area. Based on the field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On November 7, 2013, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples from the walls and base of the excavation. Based on field screening results, the excavation was extended an additional 5 feet in depth to a total of 18 feet below ground surface (bgs) followed by additional excavation which extended the final base of the excavation to 25 feet bgs. The final dimensions of the excavation were approximately 32 feet by 31 feet by 25 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 30 soil samples from 8 assessment trenches (TH-1 through TH-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). Two samples (TH-3 and TH-5) collected during the initial assessment and five composite samples (SC-1 to SC-5) collected during the excavation clearance were submitted for confirmation laboratory analysis.

2.1 Field Screening

2.1.1 Volatile Organic Compounds

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

2.1.2 Total Petroleum Hydrocarbons

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

2.2 Laboratory Analyses

The soil samples 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:

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

2.3 Field Screening and Laboratory Analytical Results

On October 28, 2013, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.3 ppm in TH-6 up to 4,165 ppm in TH-2. Field TPH concentrations ranged from 43.3 mg/kg in TH-4 up to 1,330 mg/kg in TH-3.

Excavation field screening results for VOCs via OVM ranged from 0.5 ppm in SC-1 and SC-4 up to 2,621 ppm in SC-5. Field TPH concentrations ranged from 20.3 mg/kg in SC-4 up to 2,430 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Table 1. Field Screening VOCs and TPH Results
Northeast Haynes #1 Initial Release Assessment and Excavation
October and November 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
*JANOGA Action Level**			*100*	*100*
TH-1	10/28/13	3	18.0	72.9
		5	7.3	NA
		7	23.2	NA
		9	30.8	71.5

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
*JANOGA Action Level**			*100*	*100*
TH-2	10/28/13	3	**2,148**	**1,260**
		5	**4,165**	NA
		7	12.1	**112**
		9	22.2	NA
TH-3	10/28/13	3	**4,147**	**1,330**
		5	**989**	NA
		7	20.1	**163**
		9	19.1	NA
		12	6.3	**914**
TH-4	10/28/13	3	5.7	43.3
		5	2.1	NA
		7	40.3	NA
		9	1.2	NA
TH-5	10/28/13	0	1.2	NA
		3	80.3	**172**
		5	1.5	NA
		8	0.6	NA
TH-6	10/28/13	3	0.6	NA
		5	0.4	NA
		8	0.3	NA
TH-7	10/28/13	3	3.8	NA
		5.5	**879**	**364**
		9	5.9	NA
TH-8	10/28/13	3	1.6	NA
		5.5	0.8	NA
		9	0.9	NA
SC-1	11/7/13	1 to 18	0.5	73.4
SC-2	11/7/13	1 to 18	128	**156**
SC-3	11/7/13	1 to 18	0.6	85.6
SC-4	11/7/13	1 to 18	0.5	20.3

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
*JANOGA Action Level**			*100*	*100*
SC-5	11/7/13	13	**1,028**	**2,430**
	11/8/13	18	**2,621**	**953**
	11/11/13	25	**2,577**	**317**

NA – Not Analyzed
*Action level determined by JANOGA (Ref. NMOCD ranking score of 20 per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993).

Laboratory analyses for TH-3 and TH-5 were used to confirm field screening results of the initial release assessment. Benzene concentrations were reported below laboratory detection limits in both samples. Total BTEX concentrations were reported below laboratory detection limits in TH-3 and at 0.856 mg/kg in TH-5. TPH concentrations as GRO/DRO were detected in TH-3 (1,200 mg/kg) and TH-5 (262 mg/kg).

Laboratory analyses for SC-1 through SC-5 were used to confirm field screening results of the final excavation. Benzene concentrations were reported below laboratory detection limits in each sample. Total BTEX concentrations were reported below laboratory detection limits for samples SC-1 through SC-4, and at 17 mg/kg in SC-5. TPH concentrations as GRO/DRO were reported in SC-2 (19 mg/kg) and SC-5 (1,370 mg/kg). Results are presented in Table 2 and on Figure 4. The laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
Northeast Haynes #1 Initial Release Assessment and Excavation
October and November 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
*JANOGA Action Level**			*10*	*50*	*100*	
TH-3	10/28/13	12	<0.12	<1.12	**<25**	**1,200**
TH-5	10/28/13	3	<0.050	0.856	**12**	**250**
SC-1	11/7/13	1 to 18	<0.050	<0.25	<5.0	<10
SC-2	11/7/13	1 to 18	<0.050	<0.25	<5.0	19
SC-3	11/7/13	1 to 18	<0.050	<0.25	<5.0	<10
SC-4	11/7/13	1 to 18	<0.050	<0.25	<5.0	<10
SC-5	11/11/13	25	<0.12	17	**490**	**880**

NA – Not Analyzed
*Action level determined by JANOGA (Ref. NMOCD ranking score of 20 per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993).

3.0 Conclusions and Recommendations

On October 28, 2013, AES conducted an initial assessment of petroleum contaminated soils associated with a historic release at the Northeast Haynes #1. Action levels for releases are determined by JANOGA and currently reflect a site ranking of 20 per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993).

Initial assessment field screening results above the JANOGA (NMOCD) action level of 100 ppm VOCs and 100 mg/kg TPH were reported in TH-2, TH-3, TH-5, and TH-7. The highest VOC concentration was reported in TH-2 with 4,165 ppm, and the highest field TPH concentration was reported in TH-3 with 1,330 mg/kg.

Laboratory analyses for TH-3 and TH-5 were used to confirm field screening results. Benzene and total BTEX concentrations were reported below the JANOGA action levels of 10 mg/kg and 50 mg/kg, respectively, in each sample. TPH concentrations as GRO/DRO exceeded the JANOGA action level of 100 mg/kg in TH-3 (1,200 mg/kg) and TH-5 (262 mg/kg).

On November 11, 2013, assessment of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were below applicable JANOGA action levels for the final walls of the excavation; however, the base exceeded JANOGA action levels with 2,577 ppm. Field TPH concentrations were below the applicable JANOGA action level of 100 mg/kg for three of the final walls of the excavation; however, JANOGA action levels were exceeded in SC-2 (south wall) with 156 mg/kg and SC-5 (base) with 317 mg/kg. Laboratory analytical results reported benzene and total BTEX concentrations in all samples to be below JANOGA action levels. TPH concentrations as GRO/DRO were reported below the applicable JANOGA action level in SC-1 through SC-4 but were above the action level in SC-5 with 1,370 mg/kg.

Based on the final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the Northeast Haynes #1, benzene, total BTEX, and TPH concentrations were below the applicable JANOGA (NMOCD) action levels for the final sidewalls. However, the base of the excavation exceeded applicable JANOGA (NMOCD) action levels for TPH (as GRO/DRO). Additional remedial actions are recommended for the Northeast Haynes #1 release location.

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
Figure 3. Initial Assessment Sample Locations and Results, October 2013
Figure 4. Final Excavation Sample Locations and Results, November 2013
AES Field Screening Report 102813
AES Field Screening Report 110713
AES Field Screening Report 110813
AES Field Screening Report 111113
Hall Laboratory Analytical Report 1310D74
Hall Laboratory Analytical Report 1311312
Hall Laboratory Analytical Report 1311431

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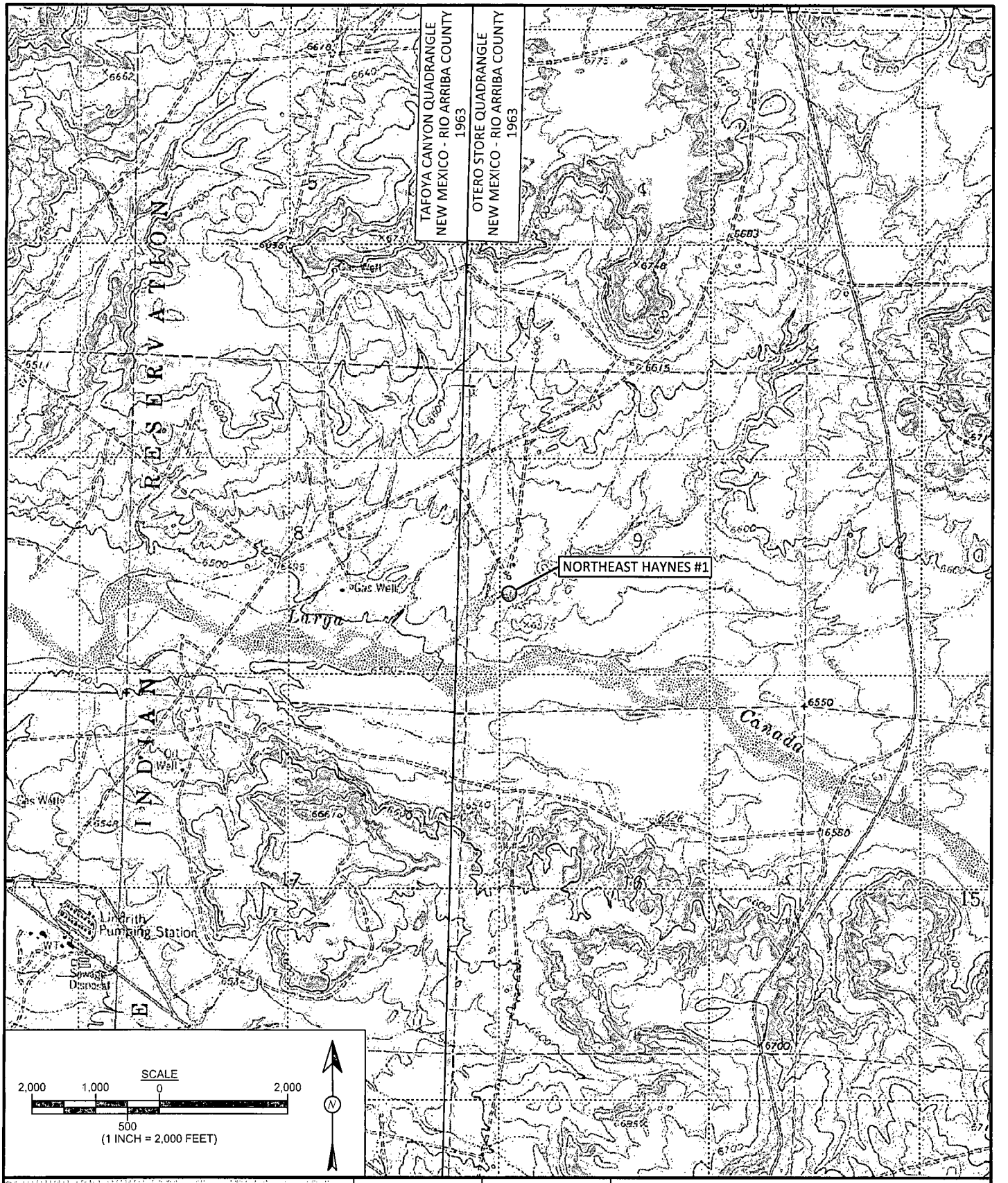


Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** November 18, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** November 18, 2013
CHECKED BY: D. Watson	**DATE CHECKED:** January 23, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** January 23, 2014

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
NORTHEAST HAYNES #1
NW¼ SW¼, SECTION 9, T24N, R5W
RIO ARRIBA COUNTY, NEW MEXICO
N36.32514, W107.37221

Animas Environmental Services, LLC

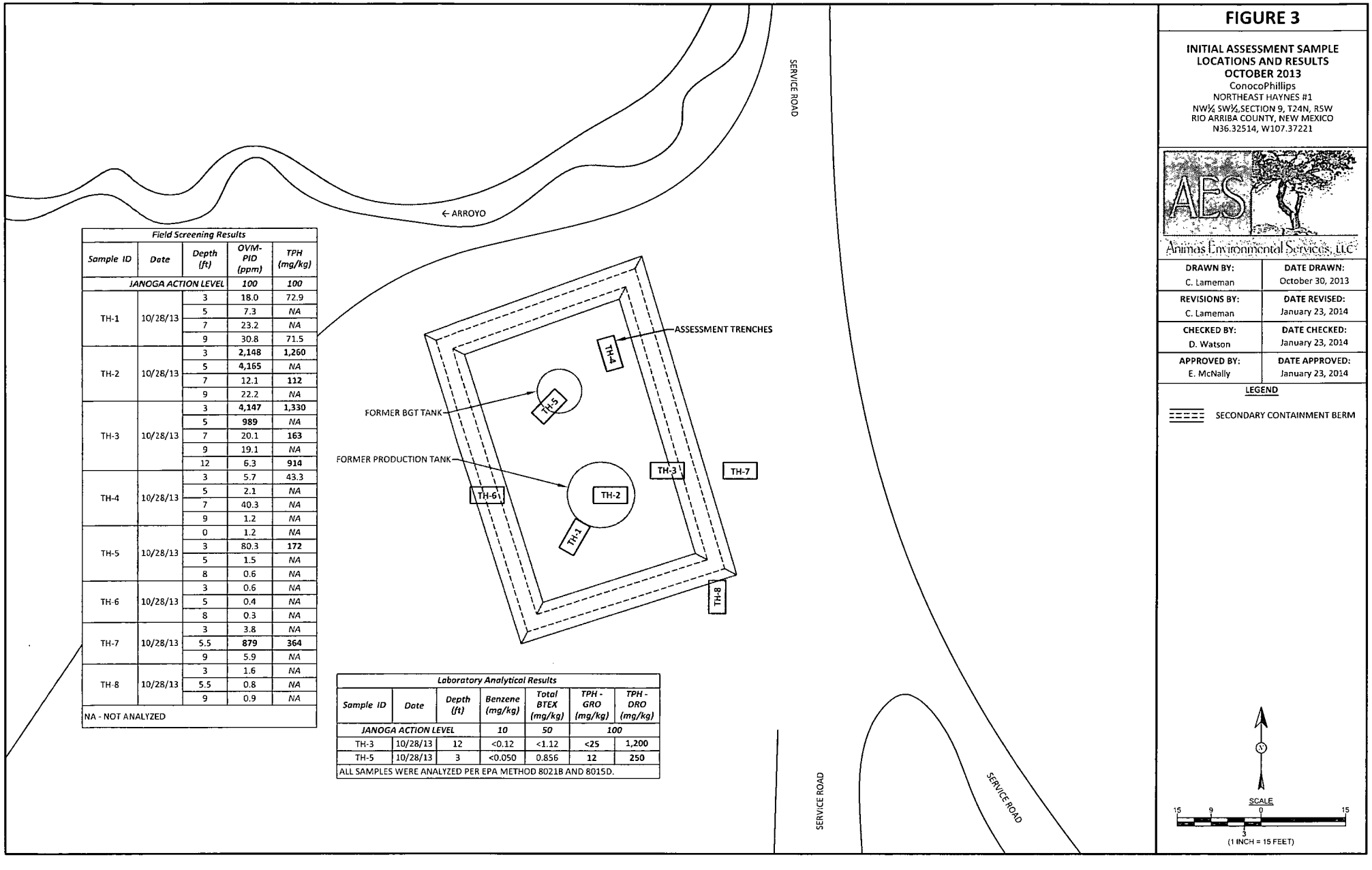
DRAWN BY: S. Glasses	**DATE DRAWN:** November 18, 2013	**FIGURE 2**
REVISIONS BY: C. Lameman	**DATE REVISED:** November 18, 2013	**AERIAL SITE MAP** ConocoPhillips NORTHEAST HAYNES #1 NW¼ SW¼, SECTION 9, T24N, R5W RIO ARRIBA COUNTY, NEW MEXICO N36.32514, W107.37221
CHECKED BY: D. Watson	**DATE CHECKED:** January 23, 2014	
APPROVED BY: E. McNally	**DATE APPROVED:** January 23, 2014	

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
OCTOBER 2013
ConocoPhillips
NORTHEAST HAYNES #1
NW¼ SW¼,SECTION 9, T24N, R5W
RIO ARRIBA COUNTY, NEW MEXICO
N36.32514, W107.37221

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	October 30, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	January 23, 2014
CHECKED BY:	**DATE CHECKED:**
D. Watson	January 23, 2014
APPROVED BY:	**DATE APPROVED:**
E. McNally	January 23, 2014



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
JANOGA ACTION LEVEL			100	100
TH-1	10/28/13	3	18.0	72.9
		5	7.3	NA
		7	23.2	NA
		9	30.8	71.5
TH-2	10/28/13	3	**2,148**	**1,260**
		5	**4,165**	NA
		7	12.1	**112**
		9	22.2	NA
TH-3	10/28/13	3	**4,147**	**1,330**
		5	**989**	NA
		7	20.1	**163**
		9	19.1	NA
		12	6.3	**914**
TH-4	10/28/13	3	5.7	43.3
		5	2.1	NA
		7	40.3	NA
		9	1.2	NA
TH-5	10/28/13	0	1.2	NA
		3	80.3	**172**
		5	1.5	NA
		8	0.6	NA
TH-6	10/28/13	3	0.6	NA
		5	0.4	NA
		8	0.3	NA
TH-7	10/28/13	3	3.8	NA
		5.5	**879**	**364**
		9	5.9	NA
TH-8	10/28/13	3	1.6	NA
		5.5	0.8	NA
		9	0.9	NA
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)
JANOGA ACTION LEVEL			10	50	100	
TH-3	10/28/13	12	<0.12	<1.12	<25	1,200
TH-5	10/28/13	3	<0.050	0.856	12	250
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.						

FIGURE 4

EXCAVATION SAMPLE LOCATIONS AND RESULTS NOVEMBER 2013

ConocoPhillips
NORTHEAST HAYNES #1
NW¼ SW¼,SECTION 9, T24N, R5W
RIO ARRIBA COUNTY, NEW MEXICO
N36.32514, W107.37221

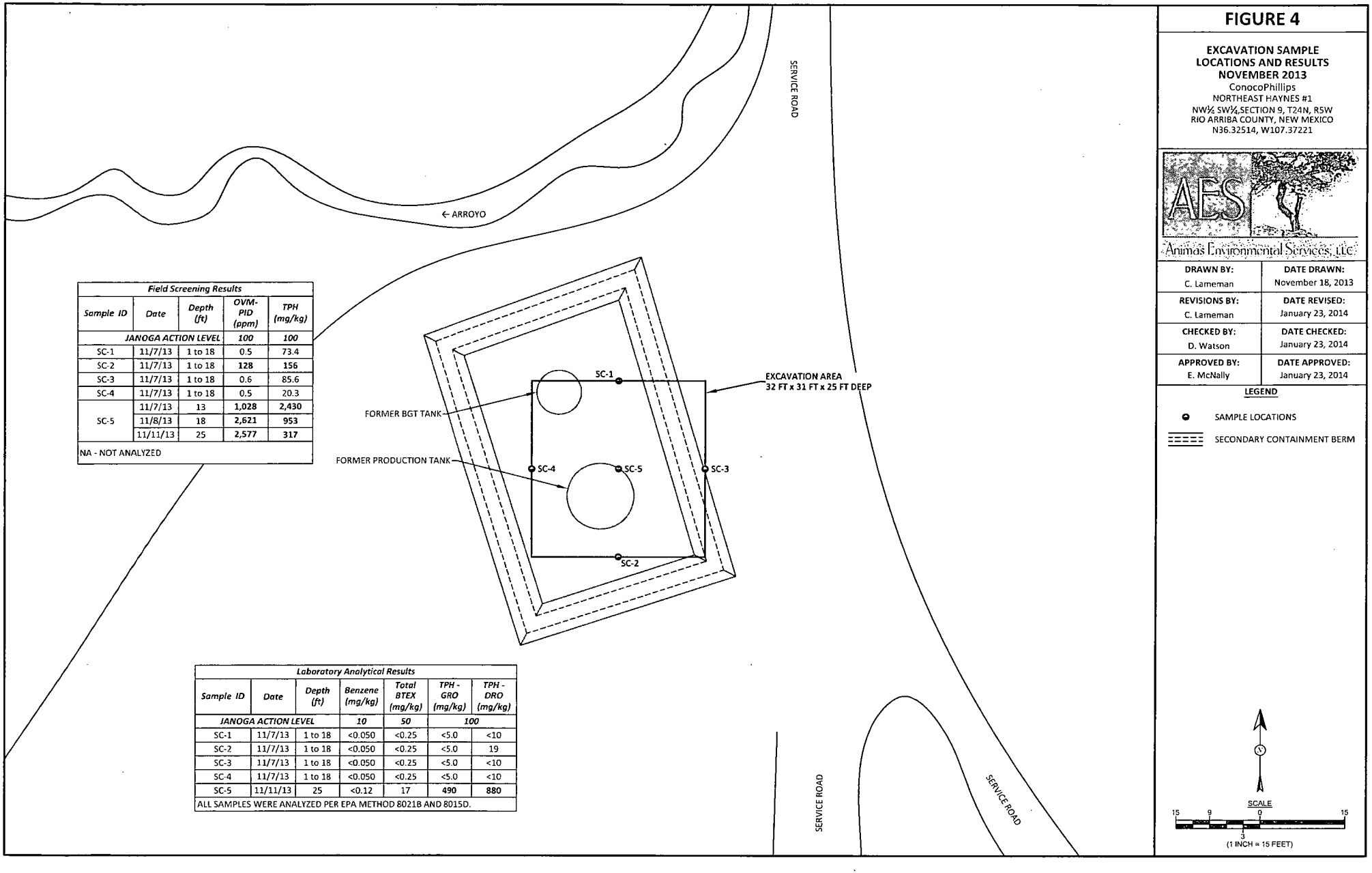
Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	November 18, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	January 23, 2014
CHECKED BY:	**DATE CHECKED:**
D. Watson	January 23, 2014
APPROVED BY:	**DATE APPROVED:**
E. McNally	January 23, 2014

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM

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



Field Screening Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
JANOGA ACTION LEVEL			*100*	*100*
SC-1	11/7/13	1 to 18	0.5	73.4
SC-2	11/7/13	1 to 18	**128**	**156**
SC-3	11/7/13	1 to 18	0.6	85.6
SC-4	11/7/13	1 to 18	0.5	20.3
SC-5	11/7/13	13	**1,028**	**2,430**
	11/8/13	18	**2,621**	**953**
	11/11/13	25	**2,577**	**317**

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)
JANOGA ACTION LEVEL			*10*	*50*	*100*	
SC-1	11/7/13	1 to 18	<0.050	<0.25	<5.0	<10
SC-2	11/7/13	1 to 18	<0.050	<0.25	<5.0	19
SC-3	11/7/13	1 to 18	<0.050	<0.25	<5.0	<10
SC-4	11/7/13	1 to 18	<0.050	<0.25	<5.0	<10
SC-5	11/11/13	25	<0.12	17	**490**	**880**

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.

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: Northeast Haynes #1

Date: 10/28/2013

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 3'	10/28/2013	10:38	18.0	72.9	11:08	20.0	1	KC
TH-1 @ 5'	10/28/2013	11:00	7.3	*Not Analyzed for TPH*				
TH-1 @ 7'	10/28/2013	11:05	23.2	*Not Analyzed for TPH*				
TH-1 @ 9'	10/28/2013	11:08	30.8	71.5	11:20	20.0	1	KC
TH-2 @ 3'	10/28/2013	10:40	2,148	1,260	11:11	20.0	1	KC
TH-2 @ 5'	10/28/2013	11:11	4,165	*Not Analyzed for TPH*				
TH-2 @ 7'	10/28/2013	11:14	12.1	112	12:44	20.0	1	KC
TH-2 @ 9'	10/28/2013	11:15	22.2	*Not Analyzed for TPH*				
TH-3 @ 3'	10/28/2013	10:43	4,147	1,330	11:14	20.0	1	KC
TH-3 @ 5'	10/28/2013	11:19	989	*Not Analyzed for TPH*				
TH-3 @ 7'	10/28/2013	11:21	20.1	163	12:46	20.0	1	KC
TH-3 @ 9'	10/28/2013	11:23	19.1	*Not Analyzed for TPH*				
TH-3 @ 12'	10/28/2013	11:25	6.3	914	12:37	20.0	1	KC
TH-4 @ 3'	10/28/2013	10:45	5.7	43.3	11:17	20.0	1	KC
TH-4 @ 5'	10/28/2013	11:30	2.1	*Not Analyzed for TPH*				
TH-4 @ 7'	10/28/2013	11:33	40.3	*Not Analyzed for TPH*				
TH-4 @ 9'	10/28/2013	11:34	1.2	*Not Analyzed for TPH*				
TH-5 @ surface	10/28/2013	11:40	1.2	*Not Analyzed for TPH*				
TH-5 @ 3'	10/28/2013	11:42	80.3	172	12:35	20.0	1	KC
TH-5 @ 5'	10/28/2013	11:44	1.5	*Not Analyzed for TPH*				
TH-5 @ 8'	10/28/2013	11:45	0.6	*Not Analyzed for TPH*				
TH-6 @ 3'	10/28/2013	11:50	0.6	*Not Analyzed for TPH*				
TH-6 @ 5'	10/28/2013	11:52	0.4	*Not Analyzed for TPH*				

Report Finalized: 10/28/13

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'	10/28/2013	11:54	0.3	*Not Analyzed for TPH*				
TH-7 @ 3'	10/28/2013	11:57	3.8	*Not Analyzed for TPH*				
TH-7 @ 5.5'	10/28/2013	11:59	879	364	12:41	20.0	1	KC
TH-7 @ 9'	10/28/2013	12:01	5.9	*Not Analyzed for TPH*				
TH-8 @ 3'	10/28/2013	12:03	1.6	*Not Analyzed for TPH*				
TH-8 @ 5.5'	10/28/2013	12:05	0.8	*Not Analyzed for TPH*				
TH-8 @ 9'	10/28/2013	12:09	0.9	*Not Analyzed for TPH*				

Total Petroleum Hydrocarbons - USEPA 418.1

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: Kelsey Christian

Report Finalized: 10/28/13

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: Northeast Haynes #1

Date: 11/7/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	11/7/2013	10:40	North Wall	0.5	11:22	73.4	20.0	1	DAW
SC-2	11/7/2013	12:20	South Wall	128	12:52	156	20.0	1	DAW
SC-3	11/7/2013	11:45	East Wall	0.6	12:14	85.6	20.0	1	DAW
SC-4	11/7/2013	10:42	West Wall	0.5	11:31	20.3	20.0	1	DAW
SC-5	11/7/2013	13:30	Base @ 13'	1,028	13:55	2,430	20.0	1	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

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.*

Analysts:

Report Finalized: 11/07/13

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: Northeast Haynes #1

Date: 11/8/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-5	11/8/2013	11:07	Base @ 18'	2,621	11:39	953	20.0	1	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

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

Report Finalized: 11/08/13

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: Northeast Haynes #1

Date: 11/11/2013

Matrix: Soil

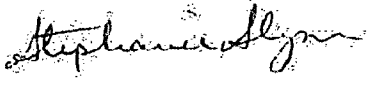
Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-5	11/11/2013	12:25	Base @ 25'	2,577	12:56	317	20.0	1	SL

Total Petroleum Hydrocarbons - USEPA 418.1

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:



Report Finalized: 11/11/13

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 24, 2014

Debbie Watson

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX (505) 324-2022

RE: CoP NE Haynes #1 OrderNo.: 1310D74

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 10/29/2013 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued November 14, 2013.

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 **1310D74**
Date Reported: **1/24/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: TH-3 @ 12'
Project: CoP NE Haynes #1
Collection Date: 10/28/2013 11:25:00 AM
Lab ID: 1310D74-001
Matrix: MEOH (SOIL)
Received Date: 10/29/2013 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)	1200	100		mg/Kg	10	10/31/2013 12:30:34 PM	10100
Surr: DNOP	0	66-131	S	%REC	10	10/31/2013 12:30:34 PM	10100
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	10/30/2013 4:32:32 PM	R14452
Surr: BFB	96.1	74.5-129		%REC	5	10/30/2013 4:32:32 PM	R14452
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.12		mg/Kg	5	10/30/2013 4:32:32 PM	R14452
Toluene	ND	0.25		mg/Kg	5	10/30/2013 4:32:32 PM	R14452
Ethylbenzene	ND	0.25		mg/Kg	5	10/30/2013 4:32:32 PM	R14452
Xylenes, Total	ND	0.50		mg/Kg	5	10/30/2013 4:32:32 PM	R14452
Surr: 4-Bromofluorobenzene	101	80-120		%REC	5	10/30/2013 4:32:32 PM	R14452

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: CoP NE Haynes #1
Lab ID: 1310D74-002 **Matrix:** MEOH (SOIL)

Client Sample ID: TH-5 @ 3'
Collection Date: 10/28/2013 11:45:00 AM
Received Date: 10/29/2013 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)	250	9.9		mg/Kg	1	10/31/2013 12:52:38 PM	10100
Surr: DNOP	97.3	66-131		%REC	1	10/31/2013 12:52:38 PM	10100
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	12	5.0		mg/Kg	1	10/30/2013 5:36:15 PM	R14452
Surr: BFB	173	74.5-129	S	%REC	1	10/30/2013 5:36:15 PM	R14452
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	10/30/2013 5:36:15 PM	R14452
Toluene	ND	0.050		mg/Kg	1	10/30/2013 5:36:15 PM	R14452
Ethylbenzene	0.066	0.050		mg/Kg	1	10/30/2013 5:36:15 PM	R14452
Xylenes, Total	0.79	0.10		mg/Kg	1	10/30/2013 5:36:15 PM	R14452
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	10/30/2013 5:36:15 PM	R14452

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#: **1310D74**

24-Jan-14

Client: Animas Environmental Services

Project: CoP NE Haynes #1

Sample ID **MB-10100**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **10100**	RunNo: **14468**
Prep Date: **10/30/2013**	Analysis Date: **10/31/2013**	SeqNo: **415904** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		91.4	66	131			

Sample ID **LCS-10100**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **10100**	RunNo: **14468**
Prep Date: **10/30/2013**	Analysis Date: **10/31/2013**	SeqNo: **416005** 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	4.4		5.000		88.7	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#: **1310D74**

24-Jan-14

Client: Animas Environmental Services

Project: CoP NE Haynes #1

Sample ID **MB-10085 MK**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R14452**	RunNo: **14452**
Prep Date:	Analysis Date: **10/30/2013**	SeqNo: **415568** 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	950		1000		95.3	74.5	129			

Sample ID **LCS-10085 MK**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R14452**	RunNo: **14452**
Prep Date:	Analysis Date: **10/30/2013**	SeqNo: **415570** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.9	74.5	126			
Surr: BFB	1000		1000		105	74.5	129			

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#: **1310D74**

24-Jan-14

Client: Animas Environmental Services

Project: CoP NE Haynes #1

Sample ID **MB-10085 MK**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R14452**	RunNo: **14452**
Prep Date:	Analysis Date: **10/30/2013**	SeqNo: **415590** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID **LCS-10085 MK**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R14452**	RunNo: **14452**
Prep Date:	Analysis Date: **10/30/2013**	SeqNo: **415591** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	93.2	80	120			
Toluene	0.94	0.050	1.000	0	93.7	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1310D74 RcptNo: 1

Received by/date: AG 10/29/13

Logged By: Anne Thorne 10/29/2013 10:00:00 AM Anne Thorne

Completed By: Anne Thorne 10/29/2013 Anne Thorne

Reviewed By: 10/30/13

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	2.4	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche Farmington NM 87401

Phone #: 505-564-2281

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ~~☑ Rush~~ Same Day per Dennis YMS 10/29/13

Project Name: CoP NE Haynes #1

Project #:

Project Manager: D. Watson

Sampler: KC/CL

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.6°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1310074	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)
10-28-13	1125	Soil	TH-3@ 12'	4oz jar	non	001	X		X													
10-28-13	1145	Soil	TH-5@ 3'	4oz jar	non	002	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/29/13	1630		Client Walk	10/29/13	630
Date:	Time:	Relinquished by:	Received by:	Date	Time
10/29/13	1637	Client Walk		10/29/13	1000

Remarks:

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.

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

January 24, 2014

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

RE: COP Northeast Haynes #1 OrderNo.: 1311312

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 11/8/2013 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued November 11, 2013.

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1311312**
Date Reported: **1/24/2014**

CLIENT: Animas Environmental
Project: COP Northeast Haynes #1
Lab ID: 1311312-001

Client Sample ID: SC-1
Collection Date: 11/7/2013 10:40:00 AM
Matrix: MEOH (SOIL)
Received Date: 11/8/2013 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	11/8/2013 1:39:50 PM	10249
Surr: DNOP	100	66-131		%REC	1	11/8/2013 1:39:50 PM	10249
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/8/2013 11:59:02 AM	R14664
Surr: BFB	97.1	74.5-129		%REC	1	11/8/2013 11:59:02 AM	R14664
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	11/8/2013 11:59:02 AM	R14664
Toluene	ND	0.050		mg/Kg	1	11/8/2013 11:59:02 AM	R14664
Ethylbenzene	ND	0.050		mg/Kg	1	11/8/2013 11:59:02 AM	R14664
Xylenes, Total	ND	0.10		mg/Kg	1	11/8/2013 11:59:02 AM	R14664
Surr: 4-Bromofluorobenzene	115	80-120		%REC	1	11/8/2013 11:59:02 AM	R14664

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-2
Project: COP Northeast Haynes #1
Collection Date: 11/7/2013 12:20:00 PM
Lab ID: 1311312-002
Matrix: MEOH (SOIL)
Received Date: 11/8/2013 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)	19	9.9		mg/Kg	1	11/8/2013 2:10:53 PM	10249
Surr: DNOP	95.1	66-131		%REC	1	11/8/2013 2:10:53 PM	10249
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/8/2013 12:27:30 PM	R14664
Surr: BFB	93.9	74.5-129		%REC	1	11/8/2013 12:27:30 PM	R14664
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	11/8/2013 12:27:30 PM	R14664
Toluene	ND	0.050		mg/Kg	1	11/8/2013 12:27:30 PM	R14664
Ethylbenzene	ND	0.050		mg/Kg	1	11/8/2013 12:27:30 PM	R14664
Xylenes, Total	ND	0.10		mg/Kg	1	11/8/2013 12:27:30 PM	R14664
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	11/8/2013 12:27:30 PM	R14664

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COP Northeast Haynes #1
Lab ID: 1311312-003

Client Sample ID: SC-3
Collection Date: 11/7/2013 11:45:00 AM
Matrix: MEOH (SOIL) **Received Date:** 11/8/2013 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	11/8/2013 3:14:23 PM	10249
Surr: DNOP	98.0	66-131		%REC	1	11/8/2013 3:14:23 PM	10249
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/8/2013 12:56:10 PM	R14664
Surr: BFB	93.6	74.5-129		%REC	1	11/8/2013 12:56:10 PM	R14664
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	11/8/2013 12:56:10 PM	R14664
Toluene	ND	0.050		mg/Kg	1	11/8/2013 12:56:10 PM	R14664
Ethylbenzene	ND	0.050		mg/Kg	1	11/8/2013 12:56:10 PM	R14664
Xylenes, Total	ND	0.10		mg/Kg	1	11/8/2013 12:56:10 PM	R14664
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	11/8/2013 12:56:10 PM	R14664

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-4
Project: COP Northeast Haynes #1
Collection Date: 11/7/2013 10:42:00 AM
Lab ID: 1311312-004
Matrix: MEOH (SOIL)
Received Date: 11/8/2013 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	11/8/2013 3:12:20 PM	10249
Surr: DNOP	104	66-131		%REC	1	11/8/2013 3:12:20 PM	10249
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/8/2013 1:24:49 PM	R14664
Surr: BFB	91.9	74.5-129		%REC	1	11/8/2013 1:24:49 PM	R14664
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	11/8/2013 1:24:49 PM	R14664
Toluene	ND	0.050		mg/Kg	1	11/8/2013 1:24:49 PM	R14664
Ethylbenzene	ND	0.050		mg/Kg	1	11/8/2013 1:24:49 PM	R14664
Xylenes, Total	ND	0.10		mg/Kg	1	11/8/2013 1:24:49 PM	R14664
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	11/8/2013 1:24:49 PM	R14664

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#: **1311312**

24-Jan-14

Client: Animas Environmental

Project: COP Northeast Haynes #1

Sample ID **MB-10249**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **10249**	RunNo: **14634**
Prep Date: **11/8/2013**	Analysis Date: **11/8/2013**	SeqNo: **421930** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.6	66	131			

Sample ID **LCS-10249**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **10249**	RunNo: **14634**
Prep Date: **11/8/2013**	Analysis Date: **11/8/2013**	SeqNo: **421931** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.4	62.1	127			
Surr: DNOP	4.8		5.000		95.8	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#: **1311312**

24-Jan-14

Client: Animas Environmental

Project: COP Northeast Haynes #1

Sample ID **MB-10237 MK**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R14664**	RunNo: **14664**
Prep Date:	Analysis Date: **11/8/2013**	SeqNo: **422498** 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	950		1000		94.8	74.5	129			

Sample ID **LCS-10237 MK**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R14664**	RunNo: **14664**
Prep Date:	Analysis Date: **11/8/2013**	SeqNo: **422499** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.4	74.5	126			
Surr: BFB	1000		1000		102	74.5	129			

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#: **1311312**

24-Jan-14

Client: Animas Environmental

Project: COP Northeast Haynes #1

Sample ID **MB-10237 MK**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R14664**	RunNo: **14664**
Prep Date:	Analysis Date: **11/8/2013**	SeqNo: **422527** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Sample ID **LCS-10237 MK**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R14664**	RunNo: **14664**
Prep Date:	Analysis Date: **11/8/2013**	SeqNo: **422528** 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	102	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	105	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		118	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1311312 RcptNo: 1

Received by/date: ML 11/8/13

Logged By: **Lindsay Mangin** 11/8/2013 10:00:00 AM

Completed By: **Lindsay Mangin** 11/8/2013 10:19:47 AM

Reviewed By: MS 11/08/13

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505 564 2281

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush Same day

Project Name: CoP Northeast Haynes #1

Project #:

Project Manager: D Watson

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1311312	BTEX + ~~MTBE~~ + ~~TPH~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)
11-7-13	1040	soil	SC-1	~~Mason Jar~~ 4oz	Meoh	-001	X		X								
"	1220	"	SC-2	"	"	-002	X		X								
"	1145	"	SC-3	"	"	-003	X		X								
"	1042	"	SC-4	"	"	-004	X		X								

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/8/13	1630	Deborah Watson	Christa Waele	11/8/13	1630
11/8/13	1645	Christa Waele	Michelle Gee	11/08/13	1000

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.

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

January 24, 2014

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

RE: CoP NE Haynes #1 OrderNo.: 1311431

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/12/2013 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued November 13, 2013.

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 **1311431**
Date Reported: **1/24/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP NE Haynes #1
Lab ID: 1311431-001

Client Sample ID: SC-5 @ 25'
Collection Date: 11/11/2013 12:25:00 PM
Matrix: MEOH (SOIL) **Received Date:** 11/12/2013 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)	880	99		mg/Kg	10	11/12/2013 1:00:12 PM	10292
Surr: DNOP	0	66-131	S	%REC	10	11/12/2013 1:00:12 PM	10292
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	490	25		mg/Kg	5	11/12/2013 12:55:54 PM	R14740
Surr: BFB	993	74.5-129	S	%REC	5	11/12/2013 12:55:54 PM	R14740
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.12		mg/Kg	5	11/12/2013 12:55:54 PM	R14740
Toluene	ND	0.25		mg/Kg	5	11/12/2013 12:55:54 PM	R14740
Ethylbenzene	ND	0.25		mg/Kg	5	11/12/2013 12:55:54 PM	R14740
Xylenes, Total	17	0.50		mg/Kg	5	11/12/2013 12:55:54 PM	R14740
Surr: 4-Bromofluorobenzene	153	80-120	S	%REC	5	11/12/2013 12:55:54 PM	R14740

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#: **1311431**

24-Jan-14

Client: Animas Environmental

Project: CoP NE Haynes #1

Sample ID **MB-10292**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **10292**	RunNo: **14724**
Prep Date: **11/12/2013**	Analysis Date: **11/12/2013**	SeqNo: **424197** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.6	66	131			

Sample ID **LCS-10292**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **10292**	RunNo: **14724**
Prep Date: **11/12/2013**	Analysis Date: **11/12/2013**	SeqNo: **424198** 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	94.4	62.1	127			
Surr: DNOP	4.7		5.000		94.1	66	131			

Sample ID **1311337-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **10292**	RunNo: **14753**
Prep Date: **11/12/2013**	Analysis Date: **11/13/2013**	SeqNo: **425368** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.20	0	86.8	47.4	148			
Surr: DNOP	5.4		5.020		108	66	131			

Sample ID **1311337-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **10292**	RunNo: **14753**
Prep Date: **11/12/2013**	Analysis Date: **11/13/2013**	SeqNo: **425394** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	49.80	0	85.6	47.4	148	2.25	22.7	
Surr: DNOP	5.1		4.980		103	66	131	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 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311431

24-Jan-14

Client: Animas Environmental

Project: CoP NE Haynes #1

Sample ID	MB-10281 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R14740	RunNo:	14740					
Prep Date:		Analysis Date:	11/12/2013	SeqNo:	424557	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.4	74.5	129			

Sample ID	LCS-10281 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R14740	RunNo:	14740					
Prep Date:		Analysis Date:	11/12/2013	SeqNo:	424558	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.9	74.5	126			
Surr: BFB	980		1000		98.2	74.5	129			

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#: **1311431**

24-Jan-14

Client: Animas Environmental

Project: CoP NE Haynes #1

Sample ID **MB-10281 MK**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R14740**	RunNo: **14740**
Prep Date:	Analysis Date: **11/12/2013**	SeqNo: **424628** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Sample ID **LCS-10281 MK**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R14740**	RunNo: **14740**
Prep Date:	Analysis Date: **11/12/2013**	SeqNo: **424629** 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	99.7	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1311431 RcptNo: 1

Received by/date: 11/12/13

Logged By: Michelle Garcia 11/12/2013 10:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 11/12/2013 10:07:43 AM Michelle Garcia

Reviewed By: 11/12/13

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 624 E. Comanche
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush Same day

Project Name:
CoP NE Haynes #1

Project #:

Project Manager:
D. Watson

Sampler: S. Lynn

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1311431	BTEX + ~~MBE~~ + ~~TMB~~'s (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
11/11/13	12:25	Soil	SC-@5 @ 25'	MeOH Kit 1-4oz	MeOH non	-001	X		X													

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/11/13	1716	Stephanie Stynn	Christy Walton	11/11/13	1716
11/11/13	1740	Christy Walton		11/12/13	1000

Remarks: Bill to ConocoPhillips

Added MRO per Debbie Watson. Kms 11/12/13.

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.