

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: Hare 15	Facility Type: Gas Well
Surface Owner Federal	Mineral Owner Federal (SF-076958)
API No. 3004508646	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	3	29N	10W	860	South	960	West	San Juan

Latitude **36.74938** Longitude **107.87714**

NATURE OF RELEASE

Type of Release Hydrocarbon	Volume of Release 93.8 BBLS	Volume Recovered 0 BBLS
Source of Release Bulk Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 12/11/2013 at 1:00PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM (Shari Ketcham) & OCD (Jonathan Kelly)	
By Whom? Crystal Tafoya	Date and Hour 12/12/13 at 7:03AM (BLM) & 12/11/13 at 8:55PM (OCD)	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: Oil cons. Div BLM	

MAY 14 2014

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

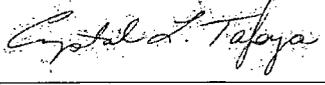
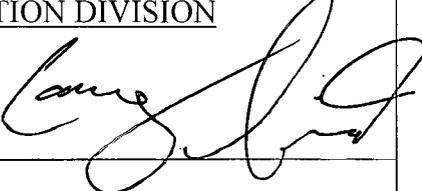
Describe Cause of Problem and Remedial Action Taken.*

Discovered a hole due to suspected corrosion in the bottom of the 300bbl bulk oil tank. Installed tank plug and took oil dump out of service. All fluid remained inside the berm and did not leave location.

Describe Area Affected and Cleanup Action Taken.*

NMOCD action levels for releases are specified in NMOCD's Guidelines for Leaks, Spills and Releases and the release was assigned a ranking score of 10. Samples were taken confirming a release and an excavation was conducted. The excavation was 30' x 32' x 8' and 740 cubic yards of soil was transported to a third party landfarm. Excavation and confirmation sampling occurred. Analytical results for TPH and BTEX 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: 	OIL CONSERVATION DIVISION	
	Approved by Environmental Specialist: 	
Printed Name: Crystal Tafoya	Approval Date: 5/15/14	Expiration Date:
Title: Field Environmental Specialist	Conditions of Approval:	
E-mail Address: crystal.tafoya@conocophillips.com	Attached <input type="checkbox"/>	
Date: 5/12/2014	Phone: (505) 326-9837	

NCS 1413527971



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche
Farmington, NM 87401
505-564-2281

Durango, Colorado
970-403-3084

May 2, 2014

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

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

**RE: Initial Release Assessment and Final Excavation Report
Hare #15
San Juan County, New Mexico**

Dear Ms. Tafoya:

On December 17 and 18, 2013, and March 4 and 7, 2014, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Hare #15, located in San Juan County, New Mexico. The release of approximately 94 barrels (bbls) of hydrocarbon was the result of a corrosion hole near the bottom of the production tank at the location. The initial release assessment was completed by AES on December 18, 2013, and the final excavation was completed by CoP contractors prior to AES' arrival at the location on March 4, 2014.

1.0 Site Information

1.1 Location

Location – SW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 3, T29N, R10W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.74941 and W107.87737, respectively
Release Location Latitude/Longitude – N36.74911 and W107.87748, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, December 2013

1.2 NMOCD Ranking

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

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

- **Depth to Groundwater:** Based on elevation, topographic interpretation and visual reconnaissance, depth to groundwater is interpreted to be greater than 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** A stock pond is located approximately 550 feet southeast of the location, and the wash in Slane Canyon is located approximately 700 feet east of the location. (10 points)

1.3 Assessment

AES was initially contacted by Crystal Tafoya of CoP on December 12, 2013, and on December 17 and 18, 2013, Stephanie Lynn and Deborah Watson of AES completed the release assessment field work. The assessment included collection and field sampling of 21 soil samples from 11 borings in and around the release area. Based on the field sampling results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On March 4, 2014, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of five confirmation soil samples from the walls and base of the excavation. The area of the final excavation measured approximately 37 feet by 30 feet by 17 feet in depth. The depth of the excavation was limited due to a confining sandstone layer around 17 feet bgs. A final confirmation soil sample (SC-6) was collected from the excavation base on March 7, 2014, following application of Quantum Growth™. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 21 soil samples from 11 borings (SB-1 through SB-11) and 6 composite samples (SC-1 through SC-6) 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). Three composite samples (SC-4 through SC-6) collected during the excavation clearance were submitted for confirmation laboratory analysis.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

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

2.1.2 Total Petroleum Hydrocarbons

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

2.2 Laboratory Analyses

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

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B.

In addition, soil sample SC-5 was laboratory analyzed for:

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

2.3 Field and Laboratory Analytical Results

On December 17 and 18, 2013, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 35.2 ppm in SB-2 up to 3,432 ppm in SB-3. Field TPH concentrations ranged from 22.5 mg/kg in SB-8 and SB-9 up to 15,000 mg/kg in SB-3.

On March 4 and 7, 2014, final excavation field screening results for VOCs via OVM ranged from 2.5 ppm in SC-3 up to 2,685 ppm in SC-6. Field TPH concentrations ranged from less than 20.0 mg/kg in SC-2 and SC-3 up to 2,050 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Soil Field Sampling VOCs and TPH Results
Hare #15 Initial Release Assessment and Final Excavation
December 2013 and March 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)
<i>NMOCOD Action Level*</i>			100	1,000
SB-1	12/17/13	Surface	213	66.1
SB-2	12/17/13	Surface	65.5	NA
		1	75.5	NA
		2	35.2	NA
		4	36.7	NA
		6	42.2	71.4
	12/18/13	10	NA	164
SB-3	12/17/13	Surface	2,677	10,300
		1	3,159	NA
		1.5	2,496	NA
	12/18/13	6	3,432	15,000
SB-4	12/17/13	Surface	46.3	NA
SB-5	12/18/13	0.25	NA	104
SB-6	12/18/13	0.5	2,913	>2,500
SB-7	12/18/13	0.5	NA	51.6
SB-8	12/18/13	0.5	NA	22.5
		2	NA	26.5
		6	NA	22.5
SB-10	12/18/13	Surface	NA	23.8
		1	NA	37.0
SB-11	12/18/13	Surface	NA	29.1
SC-1	3/4/14	1 to 17	72.8	21.1
SC-2	3/4/14	1 to 17	14.0	<20.0
SC-3	3/4/14	1 to 17	2.5	<20.0
SC-4	3/4/14	1 to 17	1,139	603
SC-5	3/4/14	17	2,295	2,050
SC-6	3/7/14	17	2,685	934

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-4 through SC-6 were used to confirm field sampling results from the final excavation. Benzene concentrations were reported below laboratory detection limits in SC-4 through SC-6. Total BTEX concentrations were reported at 10.4 mg/kg (SC-4), 196 mg/kg (SC-5), and 74.8 mg/kg (SC-6). TPH concentrations as GRO/DRO in SC-5 were reported at 2,300 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
Hare #15 Final Excavation, March 2014

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>TPH-GRO (mg/kg)</i>	<i>TPH-DRO (mg/kg)</i>
<i>NMOCD Action Level*</i>			10	50	1,000	
SC-4	3/4/14	1 to 17	<0.17	10.4	NA	NA
SC-5	3/4/14	17	<0.90	196	1,700	600
SC-6	3/7/14	17	<0.74	74.8	NA	NA

NA – not analyzed

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

3.0 Conclusions and Recommendations

On December 17 and 18, 2013, AES conducted an initial assessment of petroleum contaminated soils associated with a hydrocarbon release at the Hare #15. 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 SB-1, SB-3, and SB-6, with the highest VOC concentration reported in SB-3 with 3,432 ppm. Field TPH concentrations above the NMOCD action level of 1,000 mg/kg were reported in SB-3 and SB-6, with the highest TPH concentration reported in SB-3 with 15,000 mg/kg.

On March 4, 2014, final clearance of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for the north (SC-1), south (SC-2), and east (SC-3) walls.

The remaining sidewall (SC-4) and the base (SC-5) exceeded the NMOCD action level of 100 ppm VOCs. Field TPH concentrations were reported below the applicable NMOCD action level of 1,000 mg/kg in all final sidewalls; however, the base exceeded the NMOCD action level with 2,050 mg/kg. Laboratory analytical results from March 4, 2014, reported benzene and total BTEX concentrations in SC-4 and benzene concentrations in SC-5 below NMOCD action levels. However, total BTEX and TPH concentrations as GRO/DRO were reported above the applicable NMOCD action levels in SC-5 (base).

Quantum Growth™ was applied to the base of the excavation, and an additional confirmation sample (SC-6) was collected on March 7, 2014. Field sampling results for SC-6 reported VOCs above the NMOCD action level of 100 ppm and TPH concentrations below the NMOCD action level of 1,000 mg/kg. Laboratory analytical results for SC-6 reported benzene concentrations below the NMOCD action level of 10 mg/kg, but total BTEX concentrations were above the NMOCD action level of 50 mg/kg with 74.8 mg/kg.

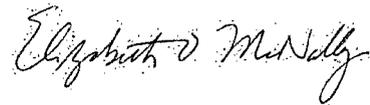
Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the Hare #15, VOCs, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for the final sidewalls of the excavation. However, the base of the excavation exceeded applicable NMOCD action levels for total BTEX following an application of Quantum Growth™. On March 10, 2014, CoP received approval to backfill the excavation from Shari Ketcham of the BLM and Brandon Powell of the NMOCD. No further work is recommended at the Hare #15.

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

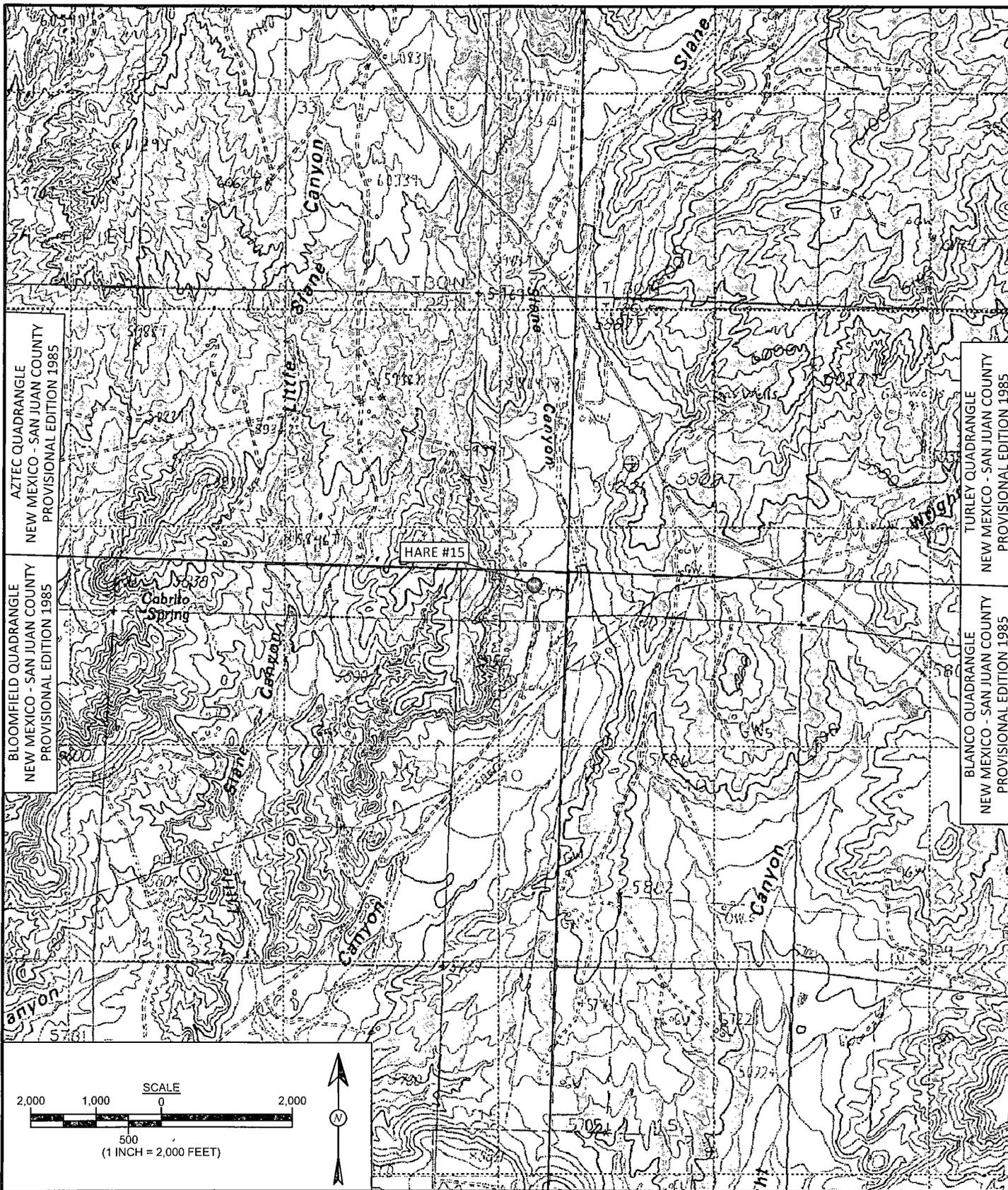


Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, December 2013
- Figure 3. Initial Assessment Sample Locations and Results, December 2013
- Figure 4. Final Excavation Sample Locations and Results, March 2014
- AES Field Sampling Report 121713 and 121813
- AES Field Sampling Report 030413
- AES Field Sampling Report 030713
- Hall Laboratory Analytical Report 1403138
- Hall Laboratory Analytical Report 1403304

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EM\2014 Projects\ConocoPhillips\Hare #15\Hare #15 Release and Final Excavation Report 050214.docx



Animas Environmental Services, LLC

DRAWN BY: S. Glasses	DATE DRAWN: December 26, 2013
REVISIONS BY: C. Lameman	DATE REVISED: April 21, 2014
CHECKED BY: D. Watson	DATE CHECKED: April 21, 2014
APPROVED BY: E. McNally	DATE APPROVED: April 21, 2014

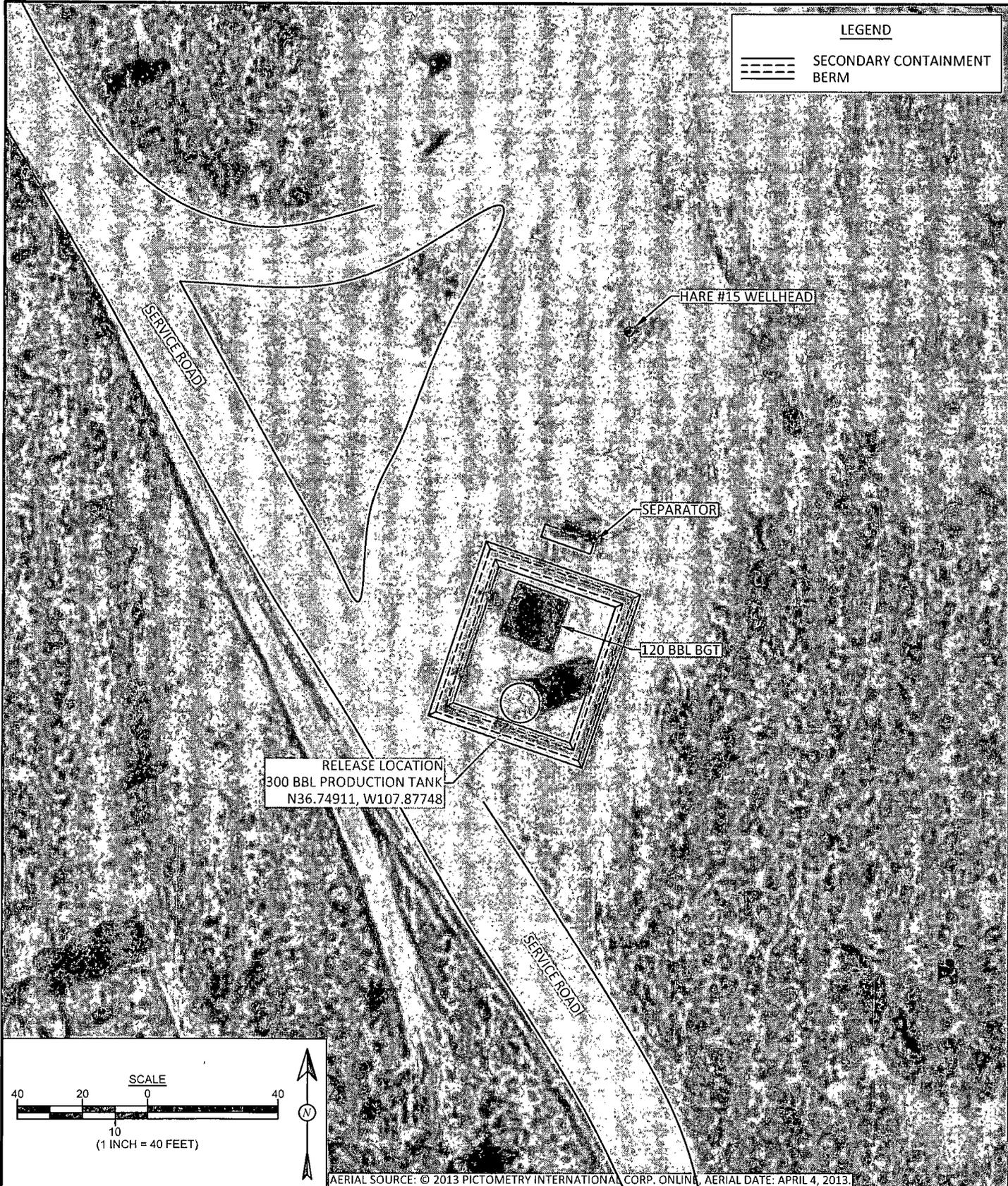
FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips
HARE #15
SW $\frac{1}{4}$ SW $\frac{1}{4}$, SECTION 3, T29N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.74941, W107.87737

LEGEND

===== SECONDARY CONTAINMENT BERM



AERIAL SOURCE: © 2013 PICTOMETRY INTERNATIONAL, CORP. ONLINE, AERIAL DATE: APRIL 4, 2013.



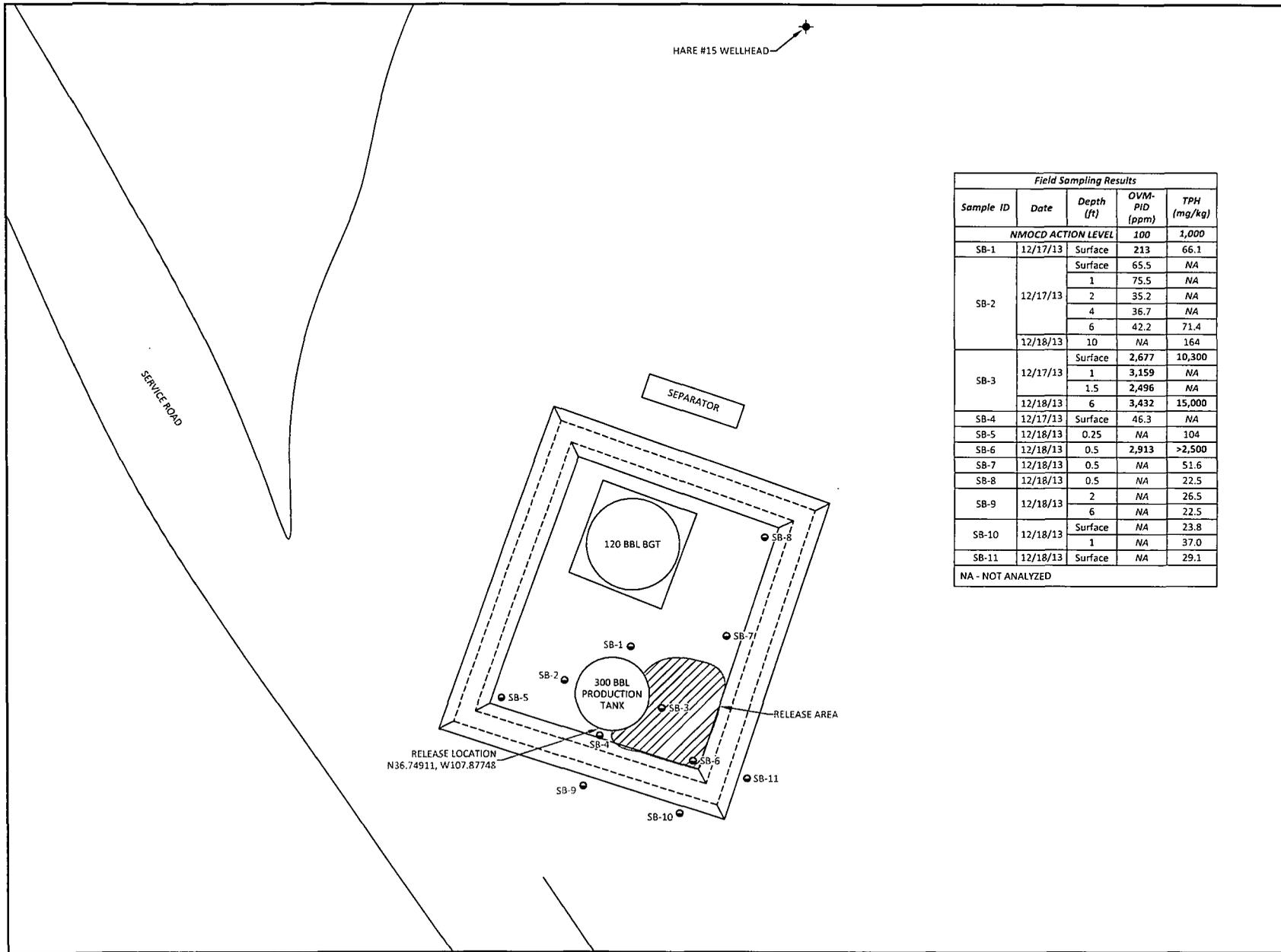
Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: March 4, 2014
REVISIONS BY: C. Lameman	DATE REVISED: April 21, 2014
CHECKED BY: D. Watson	DATE CHECKED: April 21, 2014
APPROVED BY: E. McNally	DATE APPROVED: April 21, 2014

FIGURE 2

**AERIAL SITE MAP
DECEMBER 2013**

ConocoPhillips
HARE #15
SW¼ SW¼, SECTION 3, T29N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.74941, W107.87737



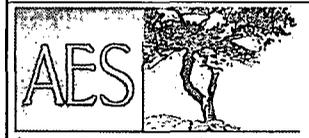
Field Sampling Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOC D ACTION LEVEL			100	1,000
SB-1	12/17/13	Surface	213	66.1
SB-2	12/17/13	Surface	65.5	NA
		1	75.5	NA
		2	35.2	NA
		4	36.7	NA
		6	42.2	71.4
SB-3	12/18/13	10	NA	164
		Surface	2,677	10,300
		1	3,159	NA
SB-3	12/18/13	1.5	2,496	NA
		6	3,432	15,000
SB-4	12/17/13	Surface	46.3	NA
SB-5	12/18/13	0.25	NA	104
SB-6	12/18/13	0.5	2,913	>2,500
SB-7	12/18/13	0.5	NA	51.6
SB-8	12/18/13	0.5	NA	22.5
SB-9	12/18/13	2	NA	26.5
		6	NA	22.5
SB-10	12/18/13	Surface	NA	23.8
		1	NA	37.0
SB-11	12/18/13	Surface	NA	29.1

NA - NOT ANALYZED

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS DECEMBER 2013
 ConocoPhillips
 HARE #15
 SW¼, SW¼, SECTION 3, T29N, R10W
 SAN JUAN COUNTY, NEW MEXICO
 N36.74941, W107.87737



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: December 30, 2013
REVISIONS BY: C. Lameman	DATE REVISED: April 21, 2014
CHECKED BY: D. Watson	DATE CHECKED: April 21, 2014
APPROVED BY: E. McNally	DATE APPROVED: April 21, 2014

LEGEND
 ● SAMPLE LOCATIONS
 ===== SECONDARY CONTAINMENT BERM

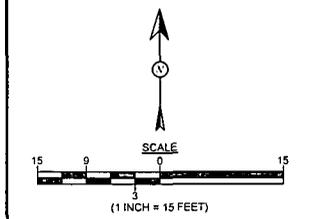


FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
MARCH 2014
 ConocoPhillips
 HARE #15
 SW¼ SW¼, SECTION 3, T29N, R10W
 SAN JUAN COUNTY, NEW MEXICO
 N36.74941, W107.87737

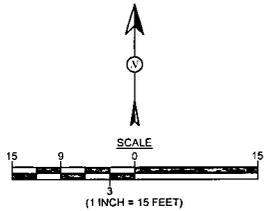


Animas Environmental Services, LLC.

DRAWN BY: C. Lameman	DATE DRAWN: March 4, 2014
REVISIONS BY: C. Lameman	DATE REVISED: April 21, 2014
CHECKED BY: D. Watson	DATE CHECKED: April 21, 2014
APPROVED BY: E. McNally	DATE APPROVED: April 21, 2014

LEGEND

- SAMPLE LOCATIONS
- ≡≡≡ SECONDARY CONTAINMENT BERM

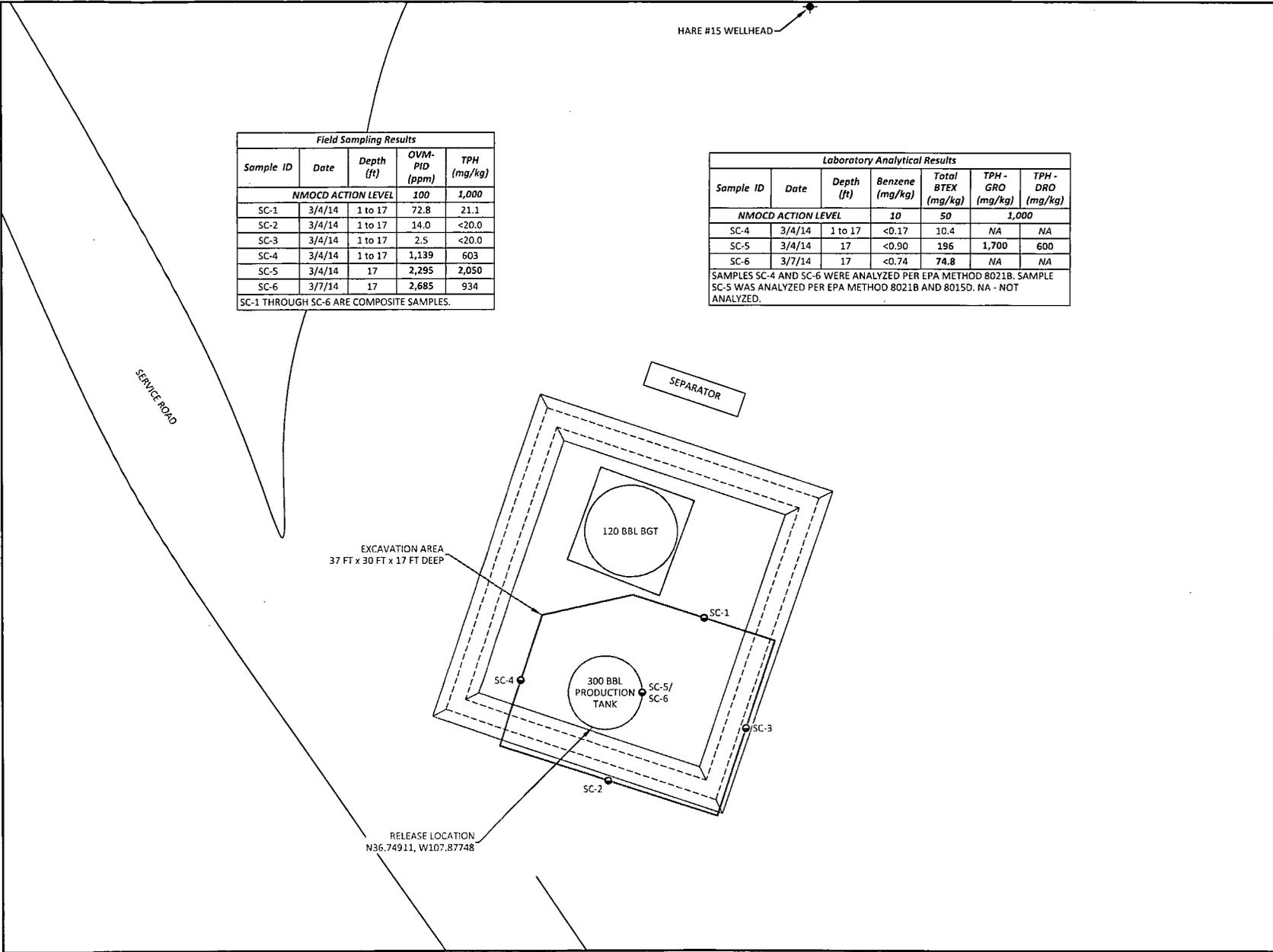


Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOC ACTION LEVEL			100	1,000
SC-1	3/4/14	1 to 17	72.8	21.1
SC-2	3/4/14	1 to 17	14.0	<20.0
SC-3	3/4/14	1 to 17	2.5	<20.0
SC-4	3/4/14	1 to 17	1,139	603
SC-5	3/4/14	17	2,295	2,050
SC-6	3/7/14	17	2,685	934

SC-1 THROUGH SC-6 ARE COMPOSITE SAMPLES.

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
NMOC ACTION LEVEL			10	50	1,000	
SC-4	3/4/14	1 to 17	<0.17	10.4	NA	NA
SC-5	3/4/14	17	<0.90	196	1,700	600
SC-6	3/7/14	17	<0.74	74.8	NA	NA

SAMPLES SC-4 AND SC-6 WERE ANALYZED PER EPA METHOD 8021B. SAMPLE SC-5 WAS ANALYZED PER EPA METHOD 8021B AND 8015D. NA - NOT ANALYZED.



AES Field Sampling Report



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche
Farmington, NM 87401
505-564-2281

Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: Hare #15

Date: 12/17/2013 - 12/18/2013

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
SB-1 @ surface	12/17/2013	12:48	213	66.1	16:23	20.0	1	DAW
SB-2 @ surface	12/17/2013	12:50	65.5	Not Analyzed for TPH				
SB-2 @ 1'	12/17/2013	12:53	75.5	Not Analyzed for TPH				
SB-2 @ 2'	12/17/2013	12:57	35.2	Not Analyzed for TPH				
SB-2 @ 4'	12/17/2013	13:00	36.7	Not Analyzed for TPH				
SB-2 @ 6'	12/17/2013	13:28	42.2	71.4	16:27	20.0	1	DAW
SB-2 @ 10'	12/18/2013	13:40	NA	164	21:46	20.0	1	DAW
SB-3 @ surface	12/17/2013	13:11	2,677	10,300	16:18	200	10	DAW
SB-3 @ 1'	12/17/2013	13:15	3,159	Not Analyzed for TPH				
SB-3 @ 1.5'	12/17/2013	13:20	2,496	Not Analyzed for TPH				
SB-3 @ 6'	12/18/2013	13:55	3,432	15,000	21:56	200	10	DAW
SB-4 @ surface	12/17/2013	13:40	46.3	Not Analyzed for TPH				
SB-5 @ 0.25'	12/18/2013	13:35	NA	104	21:51	20.0	1	DAW

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-6 @ 0.5'	12/18/2013	13:58	2,913	>2,500	21:49	20.0	1	DAW
SB-7 @ 0.5'	12/18/2013	14:00	NA	51.6	21:28	20.0	1	DAW
SB-8 @ 0.5'	12/18/2013	14:05	NA	22.5	21:31	20.0	1	DAW
SB-9 @ 2'	12/18/2013	14:09	NA	26.5	21:36	20.0	1	DAW
SB-9 @ 6'	12/18/2013	14:12	NA	22.5	21:38	20.0	1	DAW
SB-10 @ surface	12/18/2013	14:15	NA	23.8	21:40	20.0	1	DAW
SB-10 @ 1'	12/18/2013	14:18	NA	37.0	21:42	20.0	1	DAW
SB-11 @ surface	12/18/2013	14:20	NA	29.1	21:44	20.0	1	DAW

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

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

Debrah Waters

AES Field Sampling Report



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche
Farmington, NM 87401
505-564-2281

Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: Hare #15

Date: 3/4/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	3/4/2014	9:40	North Wall	72.8	21.1	10:36	20.0	1	SL
SC-2	3/4/2014	9:43	South Wall	14.0	19.8	10:39	20.0	1	SL
SC-3	3/4/2014	9:45	East Wall	2.5	11.9	10:42	20.0	1	SL
SC-4	3/4/2014	9:50	West Wall	1,139	603	10:26	20.0	1	SL
SC-5	3/4/2014	9:53	Base	2,295	2,050	10:45	20.0	1	SL

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

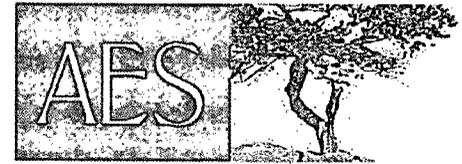
PQL Practical Quantitation Limit

*TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

AES Field Sampling Report



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche
Farmington, NM 87401
505-564-2281

Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: Hare #15

Date: 3/7/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	3/7/2014	9:45	Base	2,685	934	10:07	20.0	1	SL

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

*TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: *Stephanie Lynn*



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

March 06, 2014

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

RE: CoP HARE #15

OrderNo.: 1403138

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/5/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1403138

Date Reported: 3/6/2014

CLIENT: Animas Environmental

Client Sample ID: SC-5

Project: CoP HARE #15

Collection Date: 3/4/2014 9:53:00 AM

Lab ID: 1403138-001

Matrix: SOIL

Received Date: 3/5/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	600	10		mg/Kg	1	3/5/2014 11:28:07 AM	11977
Surr: DNOP	83.2	66-131		%REC	1	3/5/2014 11:28:07 AM	11977
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JMP
Gasoline Range Organics (GRO)	1700	180		mg/Kg	50	3/5/2014 12:06:11 PM	R17108
Surr: BFB	200	74.5-129	S	%REC	50	3/5/2014 12:06:11 PM	R17108
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.90		mg/Kg	50	3/5/2014 12:06:11 PM	R17108
Toluene	25	1.8		mg/Kg	50	3/5/2014 12:06:11 PM	R17108
Ethylbenzene	11	1.8		mg/Kg	50	3/5/2014 12:06:11 PM	R17108
Xylenes, Total	160	3.6		mg/Kg	50	3/5/2014 12:06:11 PM	R17108
Surr: 4-Bromofluorobenzene	112	80-120		%REC	50	3/5/2014 12:06:11 PM	R17108

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-4

Project: CoP HARE #15

Collection Date: 3/4/2014 9:50:00 AM

Lab ID: 1403138-002

Matrix: SOIL

Received Date: 3/5/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.17		mg/Kg	10	3/5/2014 12:34:41 PM	R17108
Toluene	1.3	0.33		mg/Kg	10	3/5/2014 12:34:41 PM	R17108
Ethylbenzene	0.75	0.33		mg/Kg	10	3/5/2014 12:34:41 PM	R17108
Xylenes, Total	8.3	0.67		mg/Kg	10	3/5/2014 12:34:41 PM	R17108
Surr: 4-Bromofluorobenzene	112	80-120		%REC	10	3/5/2014 12:34:41 PM	R17108

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1403138

06-Mar-14

Client: Animas Environmental

Project: CoP HARE #15

Sample ID	MB-11977	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	11977	RunNo:	17113					
Prep Date:	3/3/2014	Analysis Date:	3/5/2014	SeqNo:	492065	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.3		10.00		82.9	66	131			

Sample ID	LCS-11977	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	11977	RunNo:	17113					
Prep Date:	3/3/2014	Analysis Date:	3/5/2014	SeqNo:	492066	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	60.8	145			
Surr: DNOP	3.8		5.000		75.4	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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1403138

06-Mar-14

Client: Animas Environmental

Project: CoP HARE #15

Sample ID	MB-12008 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R17108	RunNo:	17108					
Prep Date:		Analysis Date:	3/5/2014	SeqNo:	492293	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	810		1000		81.1	74.5	129			

Sample ID	LCS-12008 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R17108	RunNo:	17108					
Prep Date:		Analysis Date:	3/5/2014	SeqNo:	492294	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	71.7	134			
Surr: BFB	910		1000		90.5	74.5	129			

Sample ID	MB-12010	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	12010	RunNo:	17108					
Prep Date:	3/4/2014	Analysis Date:	3/5/2014	SeqNo:	492296	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	840		1000		84.1	74.5	129			

Sample ID	LCS-12010	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	12010	RunNo:	17108					
Prep Date:	3/4/2014	Analysis Date:	3/5/2014	SeqNo:	492297	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.6	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.
- RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **1403138** RcptNo: **1**

Received by/date: *LM* *03/05/14*
 Logged By: **Anne Thorne** 3/5/2014 10:20:00 AM *Anne Thorne*
 Completed By: **Anne Thorne** 3/5/2014 *Anne Thorne*
 Reviewed By: *my* *03/05/14*

Chain of Custody

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



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

March 12, 2014

Debbie Watson

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

RE: COP Hare 15

OrderNo.: 1403304

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/8/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
 Lab Order 1403304
 Date Reported: 3/12/2014

CLIENT: Animas Environmental

Client Sample ID: SC-6

Project: COP Hare 15

Collection Date: 3/7/2014 9:45:00 AM

Lab ID: 1403304-001

Matrix: SOIL

Received Date: 3/8/2014 12:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.74		mg/Kg	50	3/10/2014 10:12:54 AM	R17195
Toluene	13	1.5		mg/Kg	50	3/10/2014 10:12:54 AM	R17195
Ethylbenzene	3.8	1.5		mg/Kg	50	3/10/2014 10:12:54 AM	R17195
Xylenes, Total	58	2.9		mg/Kg	50	3/10/2014 10:12:54 AM	R17195
Surr: 4-Bromofluorobenzene	110	80-120		%REC	50	3/10/2014 10:12:54 AM	R17195

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1403304

12-Mar-14

Client: Animas Environmental

Project: COP Hare 15

Sample ID	LCS-12060	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	12060	RunNo:	17195					
Prep Date:	3/6/2014	Analysis Date:	3/10/2014	SeqNo:	495211	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	B 1	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R17195	RunNo:	17195					
Prep Date:		Analysis Date:	3/10/2014	SeqNo:	495215	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	1.2		1.000		117	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R17195	RunNo:	17195					
Prep Date:		Analysis Date:	3/10/2014	SeqNo:	495216	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	118	80	120			
Toluene	1.2	0.050	1.000	0	118	80	120			
Ethylbenzene	1.1	0.050	1.000	0	114	80	120			
Xylenes, Total	3.5	0.10	3.000	0	117	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	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.
- RL Reporting Detection Limit

Client Name: Animas Environmental

Work Order Number: 1403304

RcptNo: 1

Received by/date: At 03/08/14

Logged By: **Anne Thorne** 3/8/2014 12:00:00 PM *Anne Thorne*

Completed By: **Anne Thorne** 3/10/2014 *Anne Thorne*

Reviewed By: At 03/10/14

Chain of Custody

- 1. Custody seals intact on sample bottles? Yes No Not Present
- 2. Is Chain of Custody complete? Yes No Not Present
- 3. How was the sample delivered? 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? Yes No
(Note discrepancies on chain of custody)
- 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? Yes No
(If no, notify customer for authorization.)

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:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			

