

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 Lindsay Dumas	
Address 3401 East 30 th St, Farmington, NM	Telephone No. (505) 599-4089	
Facility Name: San Juan 27-4 Unit 137	Facility Type: Gas Well	
Surface Owner: Federal	Mineral Owner : Federal (SF-080675)	API No. 30-039-22376

LOCATION OF RELEASE

Unit Letter A	Section 34	Township 27N	Range 04W	Feet from the 800	North/South Line North	Feet from the 1120	East/West Line East	County Rio Arriba
-------------------------	----------------------	------------------------	---------------------	-----------------------------	----------------------------------	------------------------------	-------------------------------	-----------------------------

Latitude 36.53464 Longitude -107.23277

NATURE OF RELEASE

Type of Release Historic Release	Volume of Release Unknown	Volume Recovered Unknown
Source of Release Unknown	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 10/22/2012 Hour: Unknown
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour RCVD OCT 22 '13	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. OIL CONS. DIV. DIST. 3	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* Historically impacted soil was discovered. Third party environmental company contacted for assessment.		
Describe Area Affected and Cleanup Action Taken.* This excavation was in winter closure and the final assessment of the excavation was completed on May 9, 2013. Excavation was 40' x 45' x 15' Deep. 1038 c/yds of soil was transported to TNT Land Farm and 1038 c/yds of clean soil was transported from TNT, and placed in the excavation site. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: <u>Lindsay Dumas</u>	OIL CONSERVATION DIVISION	
Printed Name: Lindsay Dumas	Approved by Environmental Specialist: <u>Jonathan D. Kelly</u>	
Title: Field Environmental Specialist	Approval Date: <u>11/7/2013</u>	Expiration Date:
E-mail Address: Lindsay.Dumas@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 10/16/2013 Phone: (505) 599-4089		

* Attach Additional Sheets If Necessary

NSK 1331133354



Animas Environmental Services, LLC

www.animasenvironmental.com

June 24, 2013

Lisa Hunter
ConocoPhillips
San Juan Business Unit
Office 214-4
5525 Hwy 64
Farmington, New Mexico 87401

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

Durango, Colorado
970-403-3084

Via electronic mail to:

SJBUE-Team@ConocoPhillips.com

**RE: Initial Release Assessment and Final Excavation Report
San Juan 27-4 Com #137
Rio Arriba County, New Mexico**

Dear Ms. Hunter:

On October 23, 2012, and May 9, 2013, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 27-4 Com #137, located in Rio Arriba County, New Mexico. The historical release was reported to be from the former condensate tank at the location. The initial release assessment was completed by AES on October 23, 2012. The final excavation was also completed by contractors while AES was on location on May 9, 2013.

1.0 Site Information

1.1 Location

Location - NE¼ NE¼, Section 34, T27N, R4W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude - N36.53483 and W107.23351, respectively
Release Location Latitude/Longitude – N36.53462 and W107.23343, respectively
Land Jurisdiction – U.S. Forest Service
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and no ranking information was located. The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered

water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (<http://ford.nmt.edu/react/project.html>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet below ground surface (bgs). The wash in Ciruelas Canyon is located approximately 800 feet north of the location. Based on this information, the location was assessed a ranking score of 10 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 Assessments

AES was initially contacted by Bruce Yazzie of CoP on October 22, 2012, and on October 23, 2012, Heather Woods and Zachary Trujillo of AES completed the release assessment field work. The assessment included collection and field screening of a total of 41 soil samples from 10 test holes (TH-1 through TH-10) within the vicinity of the release. Based on the field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On May 9, 2013, AES returned to the location to collect confirmation soil samples of the final excavation. The field screening activities included collection of seven confirmation soil samples (SC-1 through SC-7) of the walls and base of the excavation. The final excavation was approximately 2,016 square feet by 12 to 17 feet in depth. Note that the base of the excavation was terminated on sandstone. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 41 soil samples from TH-1 through TH-10 and seven composite soil samples (SC-1 through SC-7) 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 of the soil samples collected during the initial assessment (TH-2, TH-4, and TH-7) and two composite samples (SC-1 and SC-7) collected during the excavation clearance were submitted for laboratory analysis.

2.1 Field Screening

2.1.1 Volatile Organic Compounds

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

2.1.2 Total Petroleum Hydrocarbons

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

2.2 Laboratory Analyses

The soil 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. Soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B/8260B.

Soil samples TH-2, TH-4, and TH-7 were also laboratory analyzed for:

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

2.3 Field Screening and Laboratory Analytical Results

On October 23, 2012, initial assessment field screening readings for VOCs via OVM ranged from 3.2 ppm in TH-10 up to 4,736 ppm in TH-2. Field TPH concentrations ranged from 104 mg/kg in TH-2 up to 1,140 mg/kg in TH-4.

On May 9, 2013, final excavation field screening results for VOCs via OVM showed concentrations ranging from 4.4 ppm in SC-4 to 746 ppm in SC-7. Field TPH concentrations ranged from 70.4 mg/kg in SC-4 up to 304 mg/kg in SC-1. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Table 1. Soil Field Screening VOCs and TPH Results
San Juan 27-4 Com #137 Initial Release Assessment and Final Excavation
October 2012 and May 2013

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>Field TPH (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>100</i>	<i>1,000</i>
TH-1	10/23/12	4	100	143
		9	93.3	140
TH-2	10/23/12	1	7.4	NA
		5	13.2	NA
		6	310	NA
		8.5	4,736	104
		10	4,599	NA
		11	4,689	NA
		13	4,474	NA
		14.5	4,009	NA
TH-3	10/23/12	15.5	4,617	107
		1.5	5.9	NA
		7	9.6	NA
		9	6.0	NA
TH-4	10/23/12	14	15.4	NA
		2	6.0	NA
		4	3,925	NA
		9	4,383	1,140
		10.5	2,410	NA
		12	392	NA
TH-5	10/23/12	14	242	NA
		2	9.1	NA
TH-6	10/23/12	6.5	8.8	NA
		5.5	32.4	NA
		6.5	12.2	NA

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>Field TPH (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>100</i>	<i>1,000</i>
TH-7	10/23/12	4.5	4,022	NA
		9	4,105	NA
		11.5	44.6	282
TH-8	10/23/12	3	8.6	NA
		7	42.4	NA
		9	5.4	NA
		12	15.3	NA
		14.5	24.0	NA
TH-9	10/23/12	4	9.7	NA
		7.5	7.2	NA
		10	54.3	NA
		12	32.2	NA
		13	10.0	NA
TH-10	10/23/12	4	4.3	NA
		9	6.3	NA
		10	3.2	NA
SC-1	5/9/13	1 to 12	743	304
SC-2	5/9/13	1 to 17	91.5	135
SC-3	5/9/13	1 to 12	7.7	87.5
SC-4	5/9/13	1 to 17	4.4	70.4
SC-5	5/9/13	1 to 12	65.3	83.3
SC-6	5/9/13	1 to 17	8.2	83.8
SC-7	5/9/13	12 to 17	746	98.5

NA – Not Analyzed

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

Laboratory analyses for TH-2, TH-4, and TH-7 were used to confirm field screening results from the initial assessment. Benzene concentrations ranged from below laboratory detection limits in TH-2 and TH-7 to 0.19 mg/kg in TH-4, and total BTEX concentrations ranged from 63 mg/kg in TH-2 up to 127 mg/kg in TH-4. TPH

concentrations (as GRO/DRO) ranged from 1,070 mg/kg in TH-4 up to 2,800 mg/kg in TH-2.

During final clearance in May 2013, laboratory analyses for SC-1 and SC-7 were used to confirm field screening during excavation activities. Benzene concentrations were reported below laboratory detection limits of 0.25 mg/kg (SC-1) and 0.050 mg/kg (SC-7). Total BTEX concentrations were reported as 0.65 mg/kg (SC-1) and 0.67 mg/kg (SC-7). Results are presented in Table 2 and on Figures 3 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
San Juan 27-4 Com #137 Initial Release Assessment and Final Excavation
October 2012 and May 2013

<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>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>
NMOCD Action Level*			10	50	1,000	
TH-2	10/23/12	8.5	<0.50	63	1,200	1,600
TH-4	10/23/12	9	0.19	127	930	140
TH-7	10/23/12	9	<0.20	105	1,500	310
SC-1	5/9/13	1 to 12	<0.25	0.65	NA	NA
SC-7	5/9/13	12 to 17	<0.050	0.67	NA	NA

NA – Not Analyzed

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

3.0 Conclusions and Recommendations

On October 23, 2012, AES conducted an initial assessment associated with a historical release from the former condensate tank at the San Juan 27-4 Com #137. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a ranking score of 10. Field screening showed concentrations above the NMOCD action levels of 100 ppm VOCs in TH-2, TH-4, and TH-7, with the highest VOC concentration reported in TH-2 with 4,736 ppm. Field screening also showed TPH concentrations above the NMOCD action level of 1,000 mg/kg in TH-4 with a concentration of 1,140 mg/kg. Laboratory analytical results from October 23, 2012, reported total BTEX above the applicable NMOCD action levels in TH-2, TH-4, and TH-7. TPH concentrations as GRO/DRO exceeded the NMOCD action level of 1,000 mg/kg in TH-2 (2,800 mg/kg), TH-4 (1,070 mg/kg), and TH-7 (1,810 mg/kg).

On May 9, 2013, final assessment of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were reported below applicable NMOCD action levels for all of the final four walls of the excavation, except the northeast corner which had a VOC concentration of 743 ppm (SC-1). The base of the excavation (SC-7), which was terminated on sandstone, also had a VOC concentration above the NMOCD action level (746 ppm). However, laboratory analytical results for benzene and total BTEX in SC-1 and SC-7 were reported below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively. Field screening results for each of the final four walls and base of the excavation reported TPH concentrations below the NMOCD action level of 1,000 mg/kg.

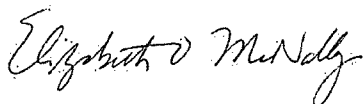
Based on excavation of petroleum contaminated soils, field screening, and laboratory analytical results for VOCs, benzene, total BTEX, and TPH, no further work is recommended at the San Juan 27-4 Com #137.

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

Sincerely,



Landrea Cupps
Environmental Scientist



Elizabeth McNally, PE

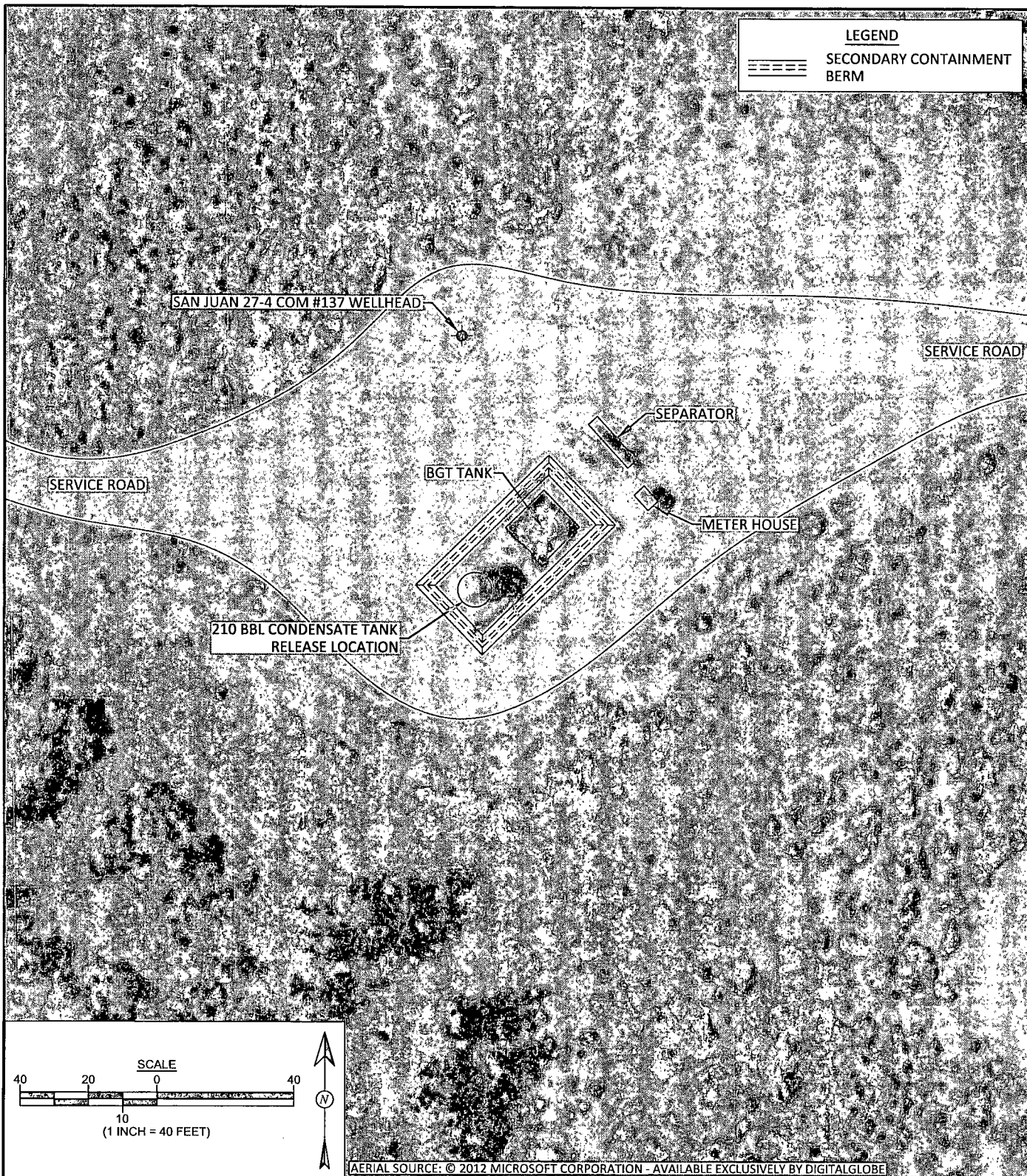
Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map
- Figure 3. Initial Assessment Soil Sample Locations and Results, October 2012
- Figure 4. Final Excavation Soil Sample Locations and Results, May 2013
- AES Field Screening Report 102312
- AES Field Screening Report 050913
- Hall Laboratory Analytical Report 1210B43
- Hall Laboratory Analytical Report 1305408



DRAWN BY: C. Lameman	DATE DRAWN: October 24, 2012
REVISIONS BY: C. Lameman	DATE REVISED: October 24, 2012
CHECKED BY: D. Watson	DATE CHECKED: June 17, 2013
APPROVED BY: E. McNally	DATE APPROVED: June 17, 2013

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
SAN JUAN 27-4 COM #137
RIO ARriba COUNTY, NEW MEXICO
NE¼ NE¼, SECTION 34, T27N, R4W
N36.53483, W107.23351



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: October 24, 2012
REVISIONS BY: C. Lameman	DATE REVISED: October 24, 2012
CHECKED BY: D. Watson	DATE CHECKED: June 17, 2013
APPROVED BY: E. McNally	DATE APPROVED: June 17, 2013

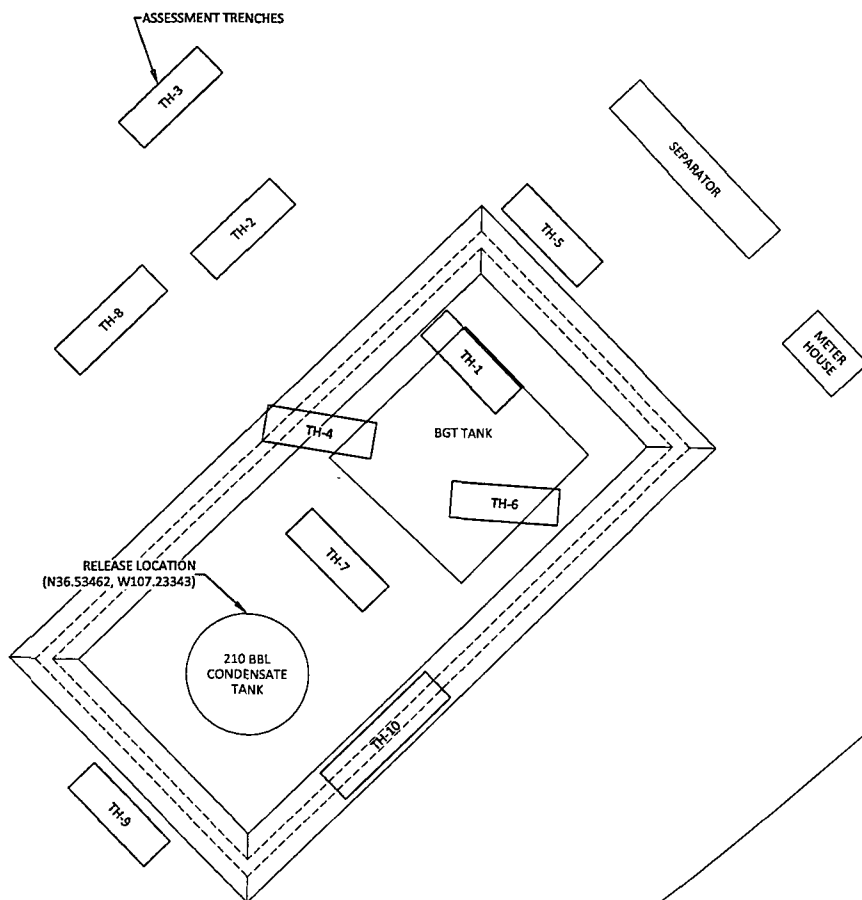
FIGURE 2

**AERIAL SITE MAP
 OCTOBER 2012**
 ConocoPhillips
 SAN JUAN 27-4 COM #137
 RIO ARriba COUNTY, NEW MEXICO
 NE¼ NE¼, SECTION 34, T27N, R4W
 N36.53483, W107.23351

SAN JUAN 27-4 COM #137
WELL MONUMENT

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
TH-2	10/23/12	8.5	<0.50	63	1,200	1,600
TH-4	10/23/12	9	0.19	127	930	140
TH-7	10/23/12	9	<0.20	105	1,500	310

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



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
TH-1	10/23/12	4	100	143
		9	93.3	140
TH-2	10/23/12	1	7.4	NA
		5	13.2	NA
		6	310	NA
		8.5	4,736	104
		10	4,599	NA
		11	4,689	NA
		13	4,474	NA
		14.5	4,009	NA
		15.5	4,617	107
		1.5	5.9	NA
TH-3	10/23/12	7	9.6	NA
		9	6.0	NA
		14	15.4	NA
		2	6.0	NA
TH-4	10/23/12	4	3,925	NA
		9	4,383	1,140
		10.5	2,410	NA
		12	392	NA
		14	242	NA
TH-5	10/23/12	2	9.1	NA
TH-6	10/23/12	6.5	8.8	NA
		5.5	32.4	NA
TH-7	10/23/12	6.5	12.2	NA
		4.5	4,022	NA
		9	4,105	NA
TH-8	10/23/12	11.5	44.6	282
		3	8.6	NA
		7	42.4	NA
		9	5.4	NA
		12	15.3	NA
TH-9	10/23/12	14.5	24.0	NA
		4	9.7	NA
		7.5	7.2	NA
		10	54.3	NA
TH-10	10/23/12	12	32.2	NA
		13	10.0	NA
		4	4.3	NA
		9	6.3	NA
TH-10	10/23/12	10	3.2	NA
		10	3.2	NA

NA - NOT ANALYZED

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS OCTOBER 2012

ConocoPhillips
SAN JUAN 27-4 COM #137
RIO ARriba COUNTY, NEW MEXICO
NE¼ NE¼, SECTION 34, T27N, R4W
N36.53483, W107.23351



Animas Environmental Services, LLC

DRAWN BY: C. Lameman **DATE DRAWN:** October 24, 2012

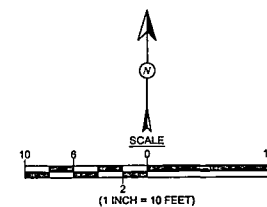
REVISIONS BY: C. Lameman **DATE REVISED:** October 24, 2012

CHECKED BY: D. Watson **DATE CHECKED:** June 17, 2013

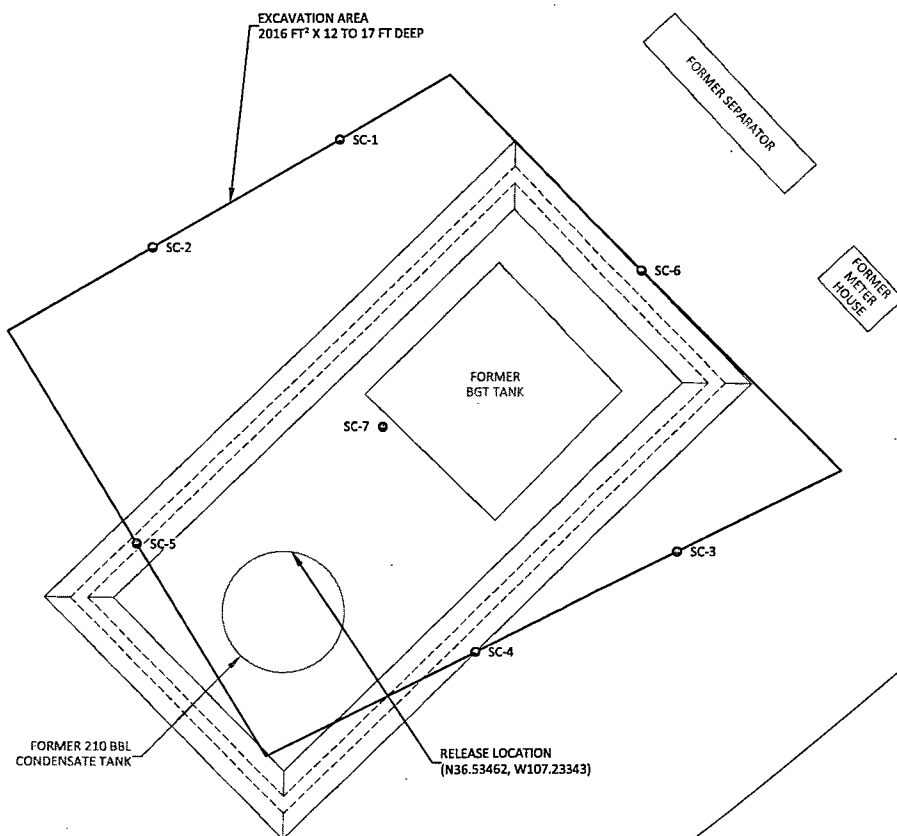
APPROVED BY: E. McNally **DATE APPROVED:** June 17, 2013

LEGEND

===== SECONDARY CONTAINMENT BERM



SAN JUAN 27-4 COM #137 WELL MONUMENT



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	5/9/13	1 to 12	743	304
SC-2	5/9/13	1 to 17	91.5	135
SC-3	5/9/13	1 to 12	7.7	87.5
SC-4	5/9/13	1 to 17	4.4	70.4
SC-5	5/9/13	1 to 12	65.3	83.8
SC-6	5/9/13	1 to 17	8.2	83.8
SC-7	5/9/13	12 to 17	746	98.5

ALL SAMPLES WERE COMPOSITE SAMPLES.

Laboratory Analytical Results (PRELIMS)				
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)
NMOCD ACTION LEVEL			10	50
SC-1	5/9/13	1 to 12	<0.25	0.65
SC-7	5/9/13	12 to 17	<0.050	0.67

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8260B.

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS MAY 2013
 ConocoPhillips
 SAN JUAN 27-4 COM #137
 RIO ARriba COUNTY, NEW MEXICO
 NE¼ NE¼, SECTION 34, T27N, R4W
 N36.53483, W107.23351

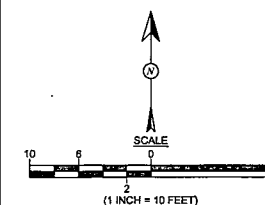


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: May 10, 2013
REVISIONS BY: C. Lameman	DATE REVISED: May 10, 2013
CHECKED BY: D. Watson	DATE CHECKED: June 17, 2013
APPROVED BY: E. McNally	DATE APPROVED: June 17, 2013

LEGEND

===== FORMER SECONDARY CONTAINMENT BERM



AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: San Juan 27-4 Com #137

Date: 10/23/2012

Matrix: Soil

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

Durango, Colorado
970-403-3084

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 4'	10/23/2012	12:25	100	13:27	143	40.0	1	HMW
TH-1 @ 9'	10/23/2012	12:30	93.3	13:24	140	40.0	1	HMW
TH-2 @ 1'	10/23/2012	12:31	7.4	Not Analyzed for TPH				
TH-2 @ 5'	10/23/2012	12:34	13.2	Not Analyzed for TPH				
TH-2 @ 6'	10/23/2012	12:37	310	Not Analyzed for TPH				
TH-2 @ 8.5'	10/23/2012	12:40	4,736	13:48	104	40.0	1	HMW
TH-2 @ 10'	10/23/2012	12:43	4,599	Not Analyzed for TPH				
TH-2 @ 11'	10/23/2012	12:46	4,689	Not Analyzed for TPH				
TH-2 @ 13'	10/23/2012	12:49	4,474	Not Analyzed for TPH				
TH-2 @ 14.5'	10/23/2012	12:53	4,009	Not Analyzed for TPH				
TH-2 @ 15.5'	10/23/2012	12:56	4,617	13:51	107	40.0	1	HMW
TH-3 @ 1.5'	10/23/2012	13:58	5.9	Not Analyzed for TPH				
TH-3 @ 7'	10/23/2012	14:21	9.6	Not Analyzed for TPH				
TH-3 @ 9'	10/23/2012	14:25	6.0	Not Analyzed for TPH				
TH-3 @ 14'	10/23/2012	14:29	15.4	Not Analyzed for TPH				
TH-4 @ 2'	10/23/2012	14:33	6.0	Not Analyzed for TPH				
TH-4 @ 4'	10/23/2012	14:36	3,925	Not Analyzed for TPH				
TH-4 @ 9'	10/23/2012	14:46	4,383	16:33	1,140	20.0	1	HMW
TH-4 @ 10.5'	10/23/2012	14:48	2,410	Not Analyzed for TPH				
TH-4 @ 12'	10/23/2012	14:50	392	Not Analyzed for TPH				
TH-4 @ 14'	10/23/2012	14:55	242	Not Analyzed for TPH				
TH-5 @ 2'	10/23/2012	15:04	9.1	Not Analyzed for TPH				

CoP San Juan 27-4 Com #137

Page 1

Report Finalized: 10/23/12

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-5 @ 6.5'	10/23/2012	15:08	8.8	Not Analyzed for TPH				
TH-6 @ 5.5'	10/23/2012	15:10	32.4	Not Analyzed for TPH				
TH-6 @ 6.5'	10/23/2012	15:12	12.2	Not Analyzed for TPH				
TH-7 @ 4.5'	10/23/2012	15:15	4,022	Not Analyzed for TPH				
TH-7 @ 9'	10/23/2012	15:20	4,105	Not Analyzed for TPH				
TH-7 @ 11.5'	10/23/2012	15:24	44.6	16:35	282	20.0	1	HMW
TH-8 @ 3'	10/23/2012	15:29	8.6	Not Analyzed for TPH				
TH-8 @ 7'	10/23/2012	15:32	42.4	Not Analyzed for TPH				
TH-8 @ 9'	10/23/2012	15:34	5.4	Not Analyzed for TPH				
TH-8 @ 12'	10/23/2012	15:36	15.3	Not Analyzed for TPH				
TH-8 @ 14.5'	10/23/2012	15:40	24.0	Not Analyzed for TPH				
TH-9 @ 4'	10/23/2012	15:47	9.7	Not Analyzed for TPH				
TH-9 @ 7.5'	10/23/2012	15:49	7.2	Not Analyzed for TPH				
TH-9 @ 10'	10/23/2012	15:51	54.3	Not Analyzed for TPH				
TH-9 @ 12'	10/23/2012	15:54	32.2	Not Analyzed for TPH				
TH-9 @ 13'	10/23/2012	15:56	10.0	Not Analyzed for TPH				
TH-10 @ 4'	10/23/2012	16:06	4.3	Not Analyzed for TPH				
TH-10 @ 9'	10/23/2012	16:09	6.3	Not Analyzed for TPH				
TH-10 @ 10'	10/23/2012	16:11	3.2	Not Analyzed for TPH				

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst:

Heather M. Woods

AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: San Juan 27-4 Com #137

Date: 5/9/2013

Matrix: Soil

624 E. Comanche

Farmington, NM 87401

505-564-2281

Durango, Colorado

970-403-3084

Sample ID	Collection Date	Collection Time	Location	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	5/9/2013	12:10	Northeast Wall	743	13:03	304	20.0	1	DAW
SC-2	5/9/2013	12:25	Northwest Wall	91.5	13:06	135	20.0	1	DAW
SC-3	5/9/2013	12:17	Southeast Wall	7.7	13:10	87.5	20.0	1	DAW
SC-4	5/9/2013	12:20	Southwest Wall	4.4	13:07	70.4	20.0	1	DAW
SC-5	5/9/2013	12:15	West Wall	65.3	12:57	83.8	20.0	1	DAW
SC-6	5/9/2013	12:22	East Wall	8.2	13:29	83.3	20.0	1	DAW
SC-7	5/9/2013	14:45	Base	746	14:45	98.5	20.0	1	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

Analyst:

Debrah Wata



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

October 31, 2012

Debbie Watson

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: COP San Juan 27-4 #137

OrderNo.: 1210B43

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/25/2012 for the analyses presented in the following report.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1210B43

Date Reported: 10/31/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** TH-2 @ 8.5'**Project:** COP San Juan 27-4 #137**Collection Date:** 10/23/2012 12:40:00 PM**Lab ID:** 1210B43-001**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1600	100		mg/Kg	10	10/25/2012 1:00:46 PM
Surr: DNOP	0	77.6-140	S	%REC	10	10/25/2012 1:00:46 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1200	50		mg/Kg	10	10/25/2012 2:34:38 PM
Surr: BFB	507	84-116	S	%REC	10	10/25/2012 2:34:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		mg/Kg	10	10/25/2012 2:34:38 PM
Toluene	ND	0.50		mg/Kg	10	10/25/2012 2:34:38 PM
Ethylbenzene	4.3	0.50		mg/Kg	10	10/25/2012 2:34:38 PM
Xylenes, Total	59	1.0		mg/Kg	10	10/25/2012 2:34:38 PM
Surr: 4-Bromofluorobenzene	185	80-120	S	%REC	10	10/25/2012 2:34:38 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1210B43

Date Reported: 10/31/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: TH-4 @ 9'

Project: COP San Juan 27-4 #137

Collection Date: 10/23/2012 2:46:00 PM

Lab ID: 1210B43-002

Matrix: MEOH (SOIL)

Received Date: 10/25/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	140	10		mg/Kg	1	10/25/2012 12:17:14 PM
Surr: DNOP	101	77.6-140		%REC	1	10/25/2012 12:17:14 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	930	250		mg/Kg	50	10/25/2012 11:40:48 PM
Surr: BFB	192	84-116	S	%REC	50	10/25/2012 11:40:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	0.19	0.10		mg/Kg	2	10/25/2012 3:03:31 PM
Toluene	10	2.5		mg/Kg	50	10/25/2012 11:40:48 PM
Ethylbenzene	7.0	2.5		mg/Kg	50	10/25/2012 11:40:48 PM
Xylenes, Total	110	5.0		mg/Kg	50	10/25/2012 11:40:48 PM
Surr: 4-Bromofluorobenzene	115	80-120		%REC	50	10/25/2012 11:40:48 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1210B43

Date Reported: 10/31/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** TH-7 @ 9'**Project:** COP San Juan 27-4 #137**Collection Date:** 10/23/2012 3:20:00 PM**Lab ID:** 1210B43-003**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	310	10		mg/Kg	1	10/25/2012 12:39:00 PM
Surr: DNOP	101	77.6-140		%REC	1	10/25/2012 12:39:00 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1500	250		mg/Kg	50	10/26/2012 12:09:32 AM
Surr: BFB	251	84-116	S	%REC	50	10/26/2012 12:09:32 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.20		mg/Kg	4	10/25/2012 3:32:14 PM
Toluene	5.6	2.5		mg/Kg	50	10/26/2012 12:09:32 AM
Ethylbenzene	6.5	2.5		mg/Kg	50	10/26/2012 12:09:32 AM
Xylenes, Total	93	5.0		mg/Kg	50	10/26/2012 12:09:32 AM
Surr: 4-Bromofluorobenzene	117	80-120		%REC	50	10/26/2012 12:09:32 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210B43

31-Oct-12

Client: Animas Environmental Services

Project: COP San Juan 27-4 #137

Sample ID	MB-4517	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	4517	RunNo:	6441					
Prep Date:	10/24/2012	Analysis Date:	10/25/2012	SeqNo:	186402	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		101	77.6	140			

Sample ID	LCS-4517	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	4517	RunNo:	6441					
Prep Date:	10/24/2012	Analysis Date:	10/25/2012	SeqNo:	186419	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	84.3	52.6	130			
Surr: DNOP	4.5		5.000		90.8	77.6	140			

Sample ID	1210A51-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	4517	RunNo:	6441					
Prep Date:	10/24/2012	Analysis Date:	10/25/2012	SeqNo:	186977	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.8	49.02	0	81.6	57.2	146			
Surr: DNOP	4.4		4.902		90.3	77.6	140			

Sample ID	1210A51-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	4517	RunNo:	6441					
Prep Date:	10/24/2012	Analysis Date:	10/25/2012	SeqNo:	186978	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.9	49.70	0	85.9	57.2	146	6.54	24.5	
Surr: DNOP	4.5		4.970		91.1	77.6	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210B43

31-Oct-12

Client: Animas Environmental Services

Project: COP San Juan 27-4 #137

Sample ID	MB-4474	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	4474	RunNo:	6487					
Prep Date:	10/23/2012	Analysis Date:	10/25/2012	SeqNo:	187625	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		95.0	84	116			

Sample ID	LCS-4474	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	4474	RunNo:	6487					
Prep Date:	10/23/2012	Analysis Date:	10/25/2012	SeqNo:	187626	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	102	74	117			
Surr: BFB	1000		1000		100	84	116			

Sample ID	1210A08-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	4474	RunNo:	6487					
Prep Date:	10/23/2012	Analysis Date:	10/25/2012	SeqNo:	187638	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.34	11.22	90.8	70	130			
Surr: BFB	1100		973.7		117	84	116			S

Sample ID	1210A08-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	4474	RunNo:	6487					
Prep Date:	10/23/2012	Analysis Date:	10/25/2012	SeqNo:	187639	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.39	11.22	89.9	70	130	0.479	22.1	
Surr: BFB	1100		975.6		115	84	116	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210B43

31-Oct-12

Client: Animas Environmental Services

Project: COP San Juan 27-4 #137

Sample ID	MB-4474		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS		Batch ID:	4474		RunNo:	6487				
Prep Date:	10/23/2012		Analysis Date:	10/25/2012		SeqNo:	187651		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		102	80	120				

Sample ID	LCS-4474		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 4474		RunNo: 6487					
Prep Date:	10/23/2012		Analysis Date: 10/25/2012		SeqNo: 187652		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	105	76.3	117			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	77	116			
Xylenes, Total	3.2	0.10	3.000	0	106	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

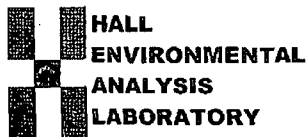
Sample ID	1210A21-001AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	BatchQC		Batch ID:	4474		RunNo:	6487				
Prep Date:	10/23/2012		Analysis Date:	10/25/2012		SeqNo:	187719		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.94	0.048	0.9653	0	97.3	67.2	113				
Toluene	0.96	0.048	0.9653	0	99.1	62.1	116				
Ethylbenzene	0.97	0.048	0.9653	0	101	67.9	127				
Xylenes, Total	2.9	0.097	2.896	0	101	60.6	134				
Surr: 4-Bromofluorobenzene	1.0		0.9653		106	80	120				

Sample ID	1210A21-001AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	BatchQC		Batch ID:	4474		RunNo:	6487				
Prep Date:	10/23/2012		Analysis Date:	10/25/2012		SeqNo:	187720		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.99	0.048	0.9653	0	102	67.2	113	5.00	14.3		
Toluene	1.0	0.048	0.9653	0	104	62.1	116	5.16	15.9		
Ethylbenzene	1.0	0.048	0.9653	0	108	67.9	127	6.85	14.4		
Xylenes, Total	3.1	0.097	2.896	0	109	60.6	134	7.20	12.6		
Surr: 4-Bromofluorobenzene	1.0		0.9653		106	80	120	0	0		

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1210B43

Received by/date: 

10/25/12

Logged By: Ashley Gallegos

10/25/2012 10:05:00 AM



Completed By: Ashley Gallegos

10/25/2012 10:10:37 AM



Reviewed By: 

10/25/12

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: Date:

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

Regarding:

Client Instructions:

18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
2	1.0	Good	Yes			

[illegible]

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

May 14, 2013

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

RE: CoP SJ 27-4 Com #137

OrderNo.: 1305408

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/10/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. 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.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical ReportLab Order **1305408**Date Reported: **5/14/2013****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-1**Project:** CoP SJ 27-4 Com #137**Collection Date:** 5/9/2013 12:10:00 PM**Lab ID:** 1305408-001**Matrix:** MEOH (SOIL)**Received Date:** 5/10/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	5/10/2013 11:46:37 AM
Toluene	ND	0.25		mg/Kg	5	5/10/2013 11:46:37 AM
Ethylbenzene	ND	0.25		mg/Kg	5	5/10/2013 11:46:37 AM
Xylenes, Total	0.65	0.50		mg/Kg	5	5/10/2013 11:46:37 AM
Surr: 1,2-Dichloroethane-d4	84.2	70-130		%REC	5	5/10/2013 11:46:37 AM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	5	5/10/2013 11:46:37 AM
Surr: Dibromofluoromethane	91.2	70-130		%REC	5	5/10/2013 11:46:37 AM
Surr: Toluene-d8	88.0	70-130		%REC	5	5/10/2013 11:46:37 AM

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
	P	Sample pH greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1305408

Date Reported: 5/14/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental**Client Sample ID:** SC-7**Project:** CoP SJ 27-4 Com #137**Collection Date:** 5/9/2013 2:45:00 PM**Lab ID:** 1305408-002**Matrix:** MEOH (SOIL)**Received Date:** 5/10/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	5/10/2013 12:14:57 PM
Toluene	ND	0.050		mg/Kg	1	5/10/2013 12:14:57 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2013 12:14:57 PM
Xylenes, Total	0.67	0.10		mg/Kg	1	5/10/2013 12:14:57 PM
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	5/10/2013 12:14:57 PM
Surr: 4-Bromofluorobenzene	115	70-130		%REC	1	5/10/2013 12:14:57 PM
Surr: Dibromofluoromethane	93.9	70-130		%REC	1	5/10/2013 12:14:57 PM
Surr: Toluene-d8	92.3	70-130		%REC	1	5/10/2013 12:14:57 PM

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	Page 2 of 4
	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	
	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#: 1305408

14-May-13

Client: Animas Environmental

Project: CoP SJ 27-4 Com #137

Sample ID	mb-7366		SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles Short List			
Client ID:	PBS		Batch ID:	R10546		RunNo:	10546			
Prep Date:	5/9/2013		Analysis Date:	5/10/2013		SeqNo:	298232		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.2	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.2	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		91.3	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Sample ID	lcs-7366		SampType:	LCS		TestCode:	EPA Method 8260B: Volatiles Short List			
Client ID:	LCSS		Batch ID:	R10546		RunNo:	10546			
Prep Date:	5/9/2013		Analysis Date:	5/10/2013		SeqNo:	298233		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.050	1.000	0	93.5	70	130			
Toluene	1.0	0.050	1.000	0	104	80	120			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.2	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.8	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.5	70	130			
Surr: Toluene-d8	0.48		0.5000		95.5	70	130			

Sample ID	1305408-001AMS		SampType:	MS		TestCode:	EPA Method 8260B: Volatiles Short List			
Client ID:	SC-1		Batch ID:	R10546		RunNo:	10546			
Prep Date:			Analysis Date:	5/10/2013		SeqNo:	298234		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.050	1.000	0.01652	89.0	67.5	124			
Toluene	0.92	0.050	1.000	0	92.1	55.8	142			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.9	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.0	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		91.8	70	130			
Surr: Toluene-d8	0.42		0.5000		84.5	70	130			

Sample ID	1305408-001AMSD		SampType:	MSD		TestCode:	EPA Method 8260B: Volatiles Short List			
Client ID:	SC-1		Batch ID:	R10546		RunNo:	10546			
Prep Date:			Analysis Date:	5/10/2013		SeqNo:	298235		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0.01652	88.3	67.5	124	0.698	20	
Toluene	0.88	0.050	1.000	0	87.8	55.8	142	4.85	20	
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.2	70	130	0	0	

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 |
| 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#: 1305408

14-May-13

Client: Animas Environmental

Project: CoP SJ 27-4 Com #137

Sample ID	1305408-001AMSD	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-1	Batch ID:	R10546	RunNo:	10546					
Prep Date:		Analysis Date:	5/10/2013	SeqNo:	298235	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.0	70	130	0	0	
Surr: Dibromofluoromethane	0.46		0.5000		91.4	70	130	0	0	
Surr: Toluene-d8	0.42		0.5000		84.3	70	130	0	0	

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 |
| 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
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4101
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1305408

RcptNo: 1

Received by/date:

[Signature] 05/10/13

Logged By: Michelle Garcia

5/10/2013 10:00:00 AM

Michelle Garcia

Completed By: Michelle Garcia

5/10/2013 10:06:18 AM

Michelle Garcia

Reviewed By:

[Signature]

05/10/13

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 $>0^{\circ}\text{C}$ 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			

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) _____

☐ Standard ☒ Rush same day

CoP SJ 27-4ⁿ #137

Project Manager:

Sampler: Stephanie Lynn

On Ice: ☒ Yes ☐ No

Sample Temperature: 180

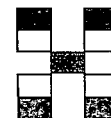
[illegible]

Received by:	Date	Time
--------------	------	------

Armin Waeber 5/10/13 6:15

Received by:	Date	Time
--------------	------	------

05/10/13 1000



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

				X	BTEX + VOCs + SVOCs (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)

Date:	Time:	Relinquished by:	Received by:	Date	Time
-------	-------	------------------	--------------	------	------

5/10/13	615	Alphani Gym	Armin Walter	5/10/13	615
---------	-----	-------------	--------------	---------	-----

Date:	Time:	Relinquished by:	Received by:	Date	Time
-------	-------	------------------	--------------	------	------

5/10/13 645 Phot Wale  05/10/13 1000

Remarks: D-11 to C-11

URL: 9537702 UserID: K Ganea

Act code: D150

Supernum: Mike Smith

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.