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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **ConocoPhillips Company**	Contact **Crystal Tafoya**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 326-9837
Facility Name: **San Juan 29-6 Unit 11**	Facility Type: **Gas Well**

Surface Owner **Fee**	Mineral Owner **Fee**	API No.**30-039-07640**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	**7**	**29N**	**6W**	**850**	**South**	**850**	**West**	**Rio Arriba**

Latitude 36.7354088 Longitude 107.51020

NATURE OF RELEASE

Type of Release **Produced Fluids**	Volume of Release **Unknown**	Volume Recovered **25 cubic yds**
Source of Release **Below Grade Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **September 10, 2012**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

RCVD MAR 21 '13
OIL CONS. DIV.
DIST. 3

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

Describe Area Affected and Cleanup Action Taken.*
Historical hydrocarbon impacted soil was found during the BGT closure for the subject well. The excavation was 15'x 15' x 3' and 25 yds of soil was transported to IEI landfarm and 25 yds of clean soil was transported and placed in the excavation site. Samples were collected and analytical restuls for 8021, 8015, and chlorides. The results were below NMOCD Guidelines for Remediation of Leaks, Spills and Releases for all sample sites, except SC-6 for TPH concentrations exceeding NMOCD action levels. On 2/13/13 Brandon Powell approved the excavation for risk based closure with an alternative closure limit due to SC-6 exceeding the 1000ppm threshold with a result of 1240ppm TPH. The subject well is located on a ridge with groundwater being over 230' in depth. The results indicated a high DRO which has a minimized risk of migrating. 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: Crystal L. Tafoya	OIL CONSERVATION DIVISION Approved by Environmental Specialist: Jonathan D. Kelly
Printed Name: **Crystal Tafoya**	
Title: **Field Environmental Specialist**	Approval Date: 4/25/2013 Expiration Date:
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval: Attached ☐
Date: 3/20/2013 Phone: (505) 326-9837	

* Attach Additional Sheets If Necessary

nJK1311548314

40

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

February 18, 2013

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

RE: Initial Release Assessment and Final Excavation Report
San Juan 29-6 #11
Rio Arriba County, New Mexico

Dear Ms. Tafoya:

On September 10 and October 4, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 29-6 #11, located in Rio Arriba County, New Mexico. A historical release was discovered while CoP contractors were resetting a below grade tank (BGT) at the location. Removal of the BGT was completed by CoP contractors while AES was on site, and the initial release assessment was also completed by AES on September 10, 2012. The final excavation was completed by CoP contractors while AES was on location on October 4, 2012.

Site Information

1.1 Location

Site Name – San Juan 29-6 #11
Legal Description – SW¼ SW¼, Section 7, T29N, R6W, Rio Arriba County, New Mexico
Well Latitude/Longitude – N36.73524 and W107.51042, respectively
BGT Latitude/Longitude – N36.73545 and W107.51055, respectively
Land Jurisdiction – Private
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, September 2012

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Cathodic Protection Report dated May 1994 for the San Juan 29-6 #11 reported the depth to groundwater beneath the location as greater than 100 feet below

ground surface (bgs). 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 bgs. The nearest surface water body, an unnamed wash draining to Romine Canyon, is located approximately 250 feet southeast 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* (August 1993).

1.3 Assessments

AES was initially contacted by Bruce Ashcroft, CoP representative, on September 7, 2012, and on September 10, Heather Woods of AES met with Bruce Ashcroft at the location. Following BGT removal, AES conducted an initial release assessment at the location. The assessment included collection of 23 samples from 12 test holes (TH-1 through TH-12) from in and around the BGT footprint. A 5-point composite sample (BGT SC-1) was collected from within the BGT footprint (TH-1 through TH-5 at 3 feet). Based on the field screening and laboratory analytical results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On October 4, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-1 through SC-5) of the walls and base of the main excavation, which measured approximately 820 square feet by 12 feet in depth. An additional confirmation sample (SC-6) was collected from an excavation (east) measuring approximately 12 feet by 6 feet by 11.75 feet in depth in the vicinity of TH-9. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 23 soil samples (TH-1 through TH-12) and 7 composite samples (BGT SC-1 and SC-1 through SC-6) were collected during the assessments. Selected soil samples were field screened for VOCs and analyzed for total petroleum hydrocarbons (TPH). Five of the soil samples (TH-1, TH-8, TH-9, TH-10, and BGT-SC-1) collected during the initial assessment and five composite samples (SC-1 through SC-4, and SC-6) collected during the excavation 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 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. Soil samples TH-1, TH-8, TH-9, TH-10, and SC-6 were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B/8260B; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B.

Note that BGT SC-1 was analyzed for chlorides only per USEPA 300.0. Samples SC-1 through SC-4 were analyzed for BTEX only per USEPA 8260B.

2.3 Field Screening and Laboratory Analytical Results

On September 10, 2012, initial assessment field screening results for VOCs via OVM ranged from 11.6 ppm in TH-6 up to 8,307 ppm in TH-9. Field TPH concentrations ranged from 71.7 mg/kg in TH-6 up to 2,150 mg/kg in TH-1.

On October 4, 2012, final excavation field screening results for VOCs via OVM concentrations ranged from 57.0 ppm in SC-5 up to 3,235 ppm in SC-1. Field TPH concentrations ranged from 61.4 mg/kg in SC-4 up to 1,240 mg/kg in SC-6. Field screening 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 OVM and TPH Results
San Juan 29-6 #11 Release Assessment and Final Excavation
September and October 2012

Sample ID	*Date Sampled*	*Sample Depth (ft)*	*VOCs OVM Reading (ppm)*	*Field TPH (mg/kg)*
NMOCD Action Level*			*100*	*1,000*
TH-1	9/10/12	3	**4,568**	**2,150**
		6	**4,760**	NA
		8	**5,103**	512
		10	**6,105**	NA
		11	**7,634**	734
		12	**4,681**	979
TH-2	9/10/12	3	**5,146**	NA
TH-3	9/10/12	3	**4,868**	NA
TH-4	9/10/12	3	**5,146**	NA
TH-5	9/10/12	6	**203**	NA
TH-6	9/10/12	6	11.6	NA
		8	14.8	NA
		10	35.2	71.7
TH-7	9/10/12	10	26.3	75.8
TH-8	9/10/12	8	24.2	NA
		10	**7,664**	486
		11.5	**3,811**	NA
TH-9	9/10/12	8	**8,307**	NA
		11.5	**7,810**	NA
TH-10	9/10/12	4	83.5	NA
		10.5	**4,925**	NA
TH-11	9/10/12	11	20.1	78.5
TH-12	9/10/12	9.5	23.0	86.8

Sample ID	Date Sampled	Sample Depth (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)
NMOCD Action Level*			100	1,000
SC-1	10/4/12	12	**3,235**	460
SC-2	10/4/12	1 to 12	**1,046**	78.9
SC-3	10/4/12	1 to 12	**273**	74.9
SC-4	10/4/12	1 to 12	**104**	61.4
SC-5	10/4/12	1 to 12	57.0	78.9
SC-6	10/4/12	11.75	**1,536**	**1,240**

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)
NA – not analyzed

Laboratory analyses for TH-1, TH-8, TH-9, and TH-10 were used to confirm field screening results from the initial assessment. Benzene concentrations ranged from less than 0.12 mg/kg up to 0.30 mg/kg. Total BTEX concentrations ranged from 2.4 mg/kg in TH-10 to 53 mg/kg in TH-9. TPH concentrations as GRO/DRO ranged from 580 mg/kg in TH-10 to 1,720 mg/kg in TH-9. The chloride concentration in BGT SC-1 was reported at 57 mg/kg.

Laboratory analytical results of SC-1 through SC-4 and SC-6 were used to confirm field screening results during excavation activities. Benzene concentrations were reported below laboratory detection limits in each sample. Total BTEX concentrations ranged from 0.10 mg/kg in SC-3 up to 17 mg/kg in SC-6. TPH concentrations as GRO/DRO were reported as 1,150 mg/kg in SC-6. 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, TPH, and Chloride
San Juan 29-6 #11 Release Assessment and Final Excavation
September and October 2012

Sample ID	Date	Sample Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Chloride* (mg/kg)
NMOCD Action Level**			10	50	1,000		250
TH-1	9/10/12	12	0.30	40.4	800	80	NA
TH-8	9/10/12	10	<0.50	3.7	**490**	**800**	NA

Sample ID	Date	Sample Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Chloride* (mg/kg)
NMOCD Action Level**			10	50	1,000		250
TH-9	9/10/12	11.5	<0.50	**53**	**1,200**	**520**	NA
TH-10	9/10/12	10.5	<0.12	2.4	250	330	NA
BGT SC-1	9/10/12	3	NA	NA	NA	NA	57
SC-1	10/4/12	12	<0.25	15	NA	NA	NA
SC-2	10/4/12	1 to 12	<0.050	<0.25	NA	NA	NA
SC-3	10/4/12	1 to 12	<0.050	0.10	NA	NA	NA
SC-4	10/4/12	1 to 12	<0.050	0.40	NA	NA	NA
SC-6	10/4/12	11.75	<0.25	17	**450**	**700**	NA

*Action level determined by NMAC 19.15.17.13E
**Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)
NA – not analyzed

3.0 Conclusions and Recommendations

On September 10, 2012, AES conducted an initial assessment associated with a release discovered during a BGT reset at the San Juan 29-6 #11. 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 of 10. Field screening results above the NMOCD action level of 100 ppm VOCs were reported in TH-1 through TH-5 and TH-8 through TH-10, with the highest VOC concentration reported in TH-9 with 8,307 ppm. Field screening TPH results above the NMOCD action level of 1,000 mg/kg were reported in TH-1 with 2,150 mg/kg. Laboratory analytical results from September 10, 2012, reported benzene concentrations below the applicable NMOCD action level in TH-1, TH-8, TH-9, and TH-10. Total BTEX concentrations were reported below the applicable NMOCD action level in TH-1, TH-8, and TH-10 but exceeded the NMOCD action level of 50 mg/kg in TH-9 with 53 mg/kg. TPH concentrations as GRO/DRO in TH-8 and TH-9 exceeded the NMOCD action level with 1,290 mg/kg and 1,720 mg/kg, respectively. Composite sample BGT SC-1 had a reported chloride concentration of 57 mg/kg, below the NMOCD action level of 250 mg/kg for BGT closures per NMAC 19.15.17.13E.

On October 4, 2012, final assessment of the excavation areas was completed. Field TPH concentrations were reported below the NMOCD action level along the base and walls

of the main excavation, but were above the NMOCD action level in SC-6 (east excavation). Field VOCs were reported above the NMOCD action level in SC-1 through SC-4 and SC-6. However, laboratory analytical results showed that benzene and total BTEX concentrations were below the NMOCD action levels in each sample. Laboratory analytical results for TPH as GRO/DRO in SC-6 were reported above the NMOCD action level of 1,000 mg/kg with 1,150 mg/kg.

Based on final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 29-6 #11, benzene, total, BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the final sidewalls and base of the main excavation (SC-1 through SC-5), except for soils near TH-9/SC-6 which had TPH concentrations which exceeded the NMOCD action level. CoP consulted with Brandon Powell of NMOCD on February 13, 2013, and he concurred with allowing the backfilled east excavation area (SC-6) to remain in place. No further work is recommended.

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

Sincerely,

Landrea R. Cupps

Landrea Cupps
Environmental Scientist

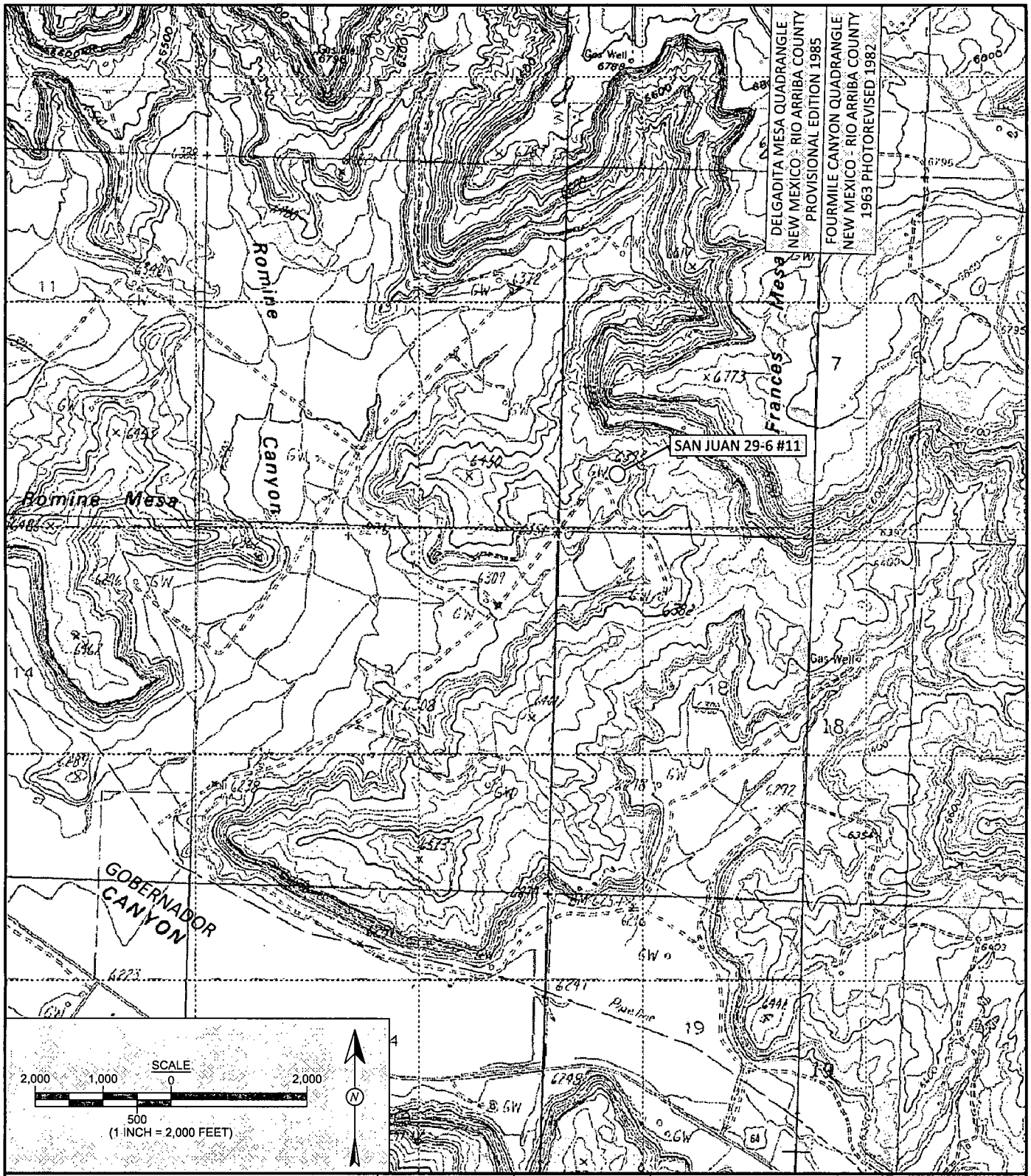
Elizabeth McNally

Elizabeth McNally, P.E.

Attachments:

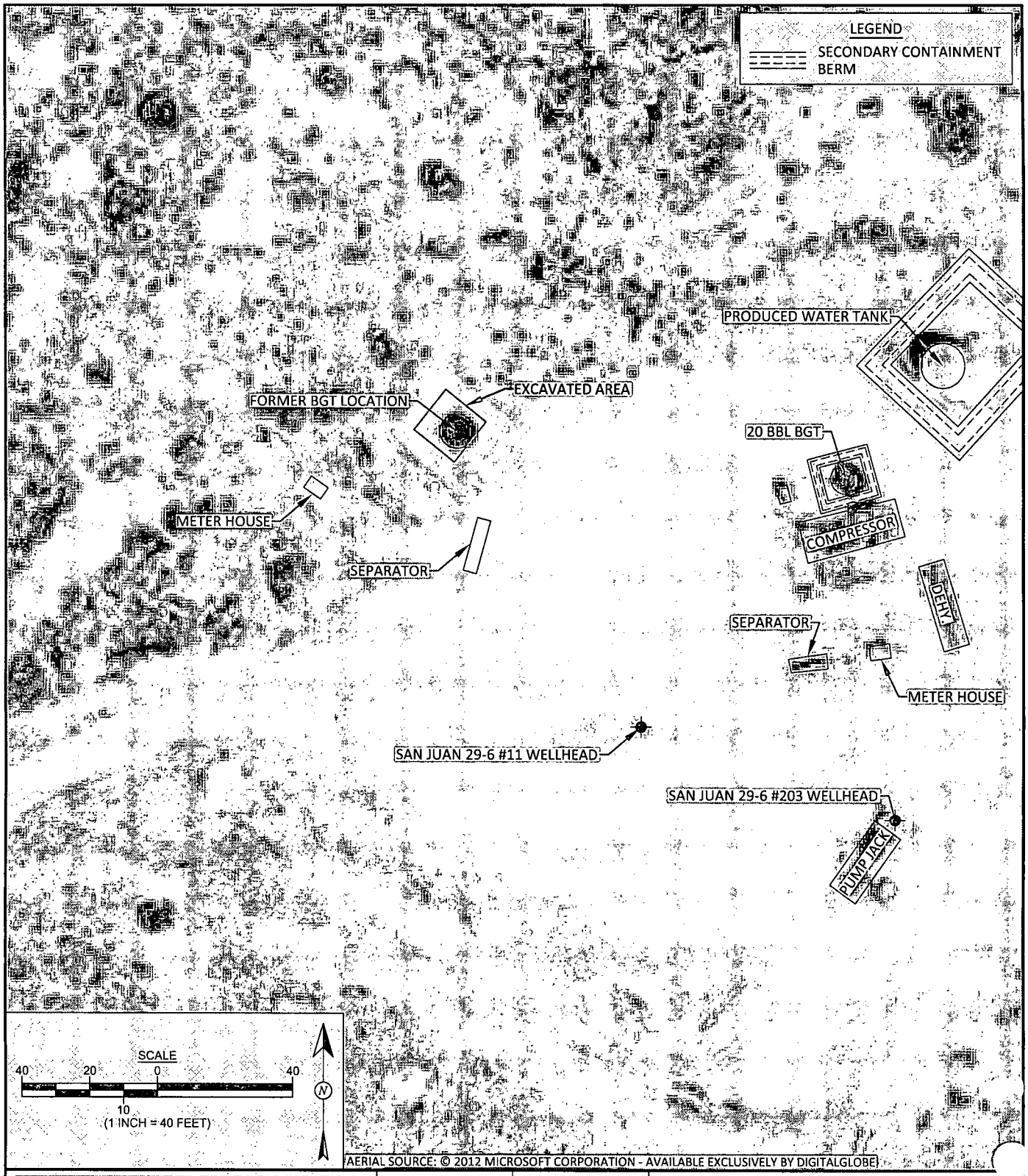
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, September 2012
Figure 3. Initial Assessment Sample Locations and Results, September 2012
Figure 4. Final Excavation Sample Locations and Results, October 2012
AES Field Screening Reports 091012 and 100412
Hall Analytical Reports 1209358 and 1210343

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\SJ 29-6 #11\San Juan 29-6 #11 BGT Closure, Release, and Excavation Report 021813.docx



DRAWN BY: C. Lameman	**DATE DRAWN:** September 11, 2012	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** September 11, 2012	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: D. Watson	**DATE CHECKED:** September 11, 2012	ConocoPhillips SAN JUAN 29-6 #11 RIO ARRIBA COUNTY, NEW MEXICO SW¼ SW¼, SECTION 7, T29N, R6W N36.73524, W107.51042
APPROVED BY: E. McNally	**DATE APPROVED:** September 11, 2012	

AES
Animas Environmental Services, LLC



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 11, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** September 11, 2012
CHECKED BY: D. Watson	**DATE CHECKED:** September 11, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** September 11, 2012

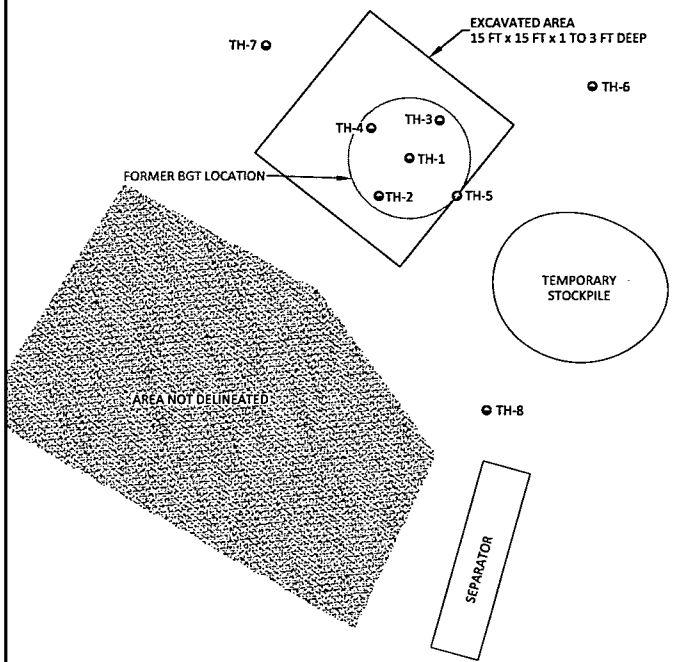
FIGURE 2

AERIAL SITE MAP
SEPTEMBER 2012
ConocoPhillips
SAN JUAN 29-6 #11
RIO ARRIBA COUNTY, NEW MEXICO
SW¼ SW¼, SECTION 7, T29N, R6W
N36.73524, W107.51042

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS SEPTEMBER 2012

ConocoPhillips
SAN JUAN 29-6 #11
RIO ARRIBA COUNTY, NEW MEXICO
SW¼ SW¼, SECTION 7, T29N, R6W
N36.73524, W107.51042



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-1	9/10/12	12	0.30	40.4	800	80
TH-8	9/10/12	10	<0.50	3.7	490	800
TH-9	9/10/12	11.5	<0.50	53	1,200	520
TH-10	9/10/12	10.5	<0.12	2.4	250	330
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	9/10/12	3	4,568	2,150
		6	4,760	NA
		8	5,103	512
		10	6,105	NA
		11	7,634	734
		12	4,681	979
TH-2	9/10/12	3	5,146	NA
TH-3	9/10/12	3	4,868	NA
TH-4	9/10/12	3	5,146	NA
TH-5	9/10/12	6	203	NA
TH-6	9/10/12	6	11.6	NA
		8	14.8	NA
		10	35.2	71.7
TH-7	9/10/12	10	26.3	75.8
TH-8	9/10/12	8	24.2	NA
		10	7,664	486
		11.5	3,811	NA
TH-9	9/10/12	8	8,307	NA
		11.5	7,810	NA
TH-10	9/10/12	4	83.5	NA
		10.5	4,925	NA
TH-11	9/10/12	11	20.1	78.5
TH-12	9/10/12	9.5	23.0	86.8
NA - NOT ANALYZED				

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	September 11, 2012
REVISIONS BY:	**DATE REVISED:**
C. Lameman	September 11, 2012
CHECKED BY:	**DATE CHECKED:**
D. Watson	September 11, 2012
APPROVED BY:	**DATE APPROVED:**
E. McNally	September 11, 2012

LEGEND

- TEST HOLE LOCATIONS
- SECONDARY CONTAINMENT BERM

N

SCALE

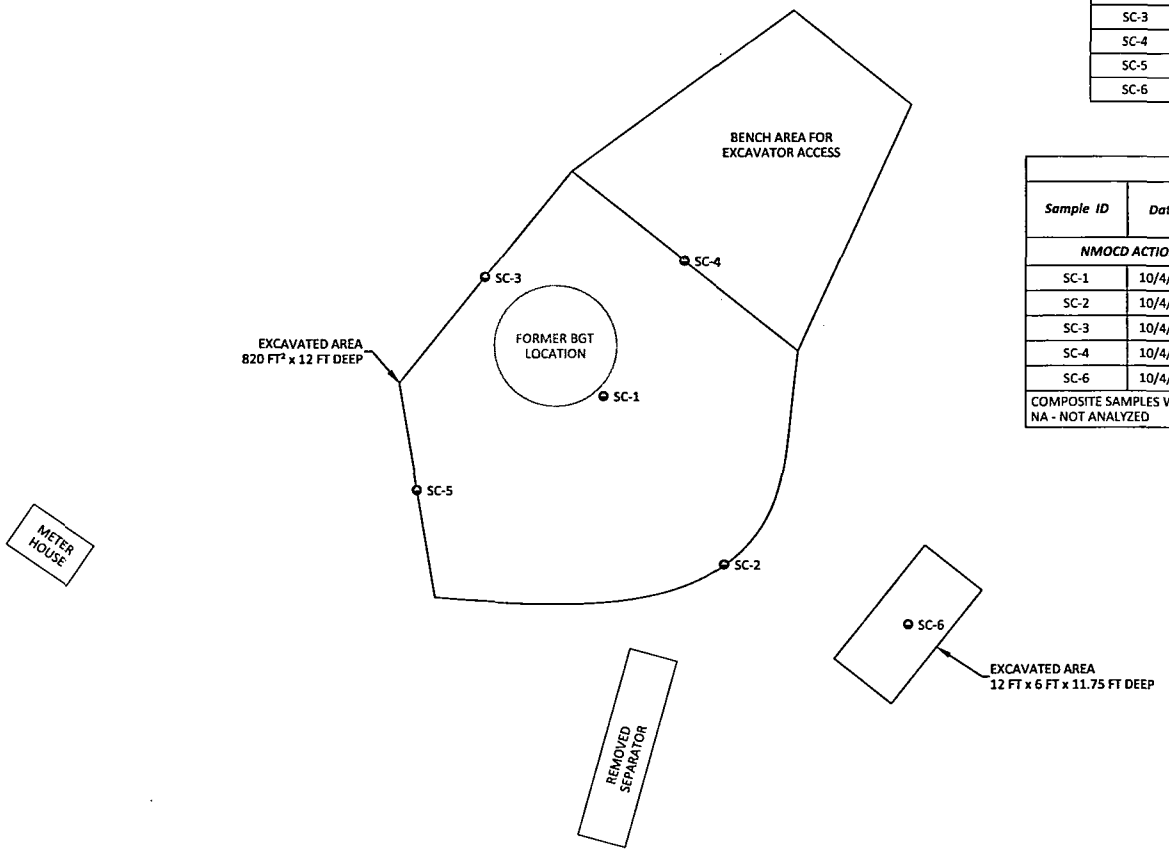
10 6 0 10

2

(1 INCH = 10 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
OCTOBER 2012
ConocoPhillips
SAN JUAN 29-6 #11
RIO ARRIBA COUNTY, NEW MEXICO
SW¼ SW¼, SECTION 7, T29N, R6W
N36.73524, W107.51042



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	10/4/12	12	3,235	460
SC-2	10/4/12	1 to 12	1,046	78.9
SC-3	10/4/12	1 to 12	273	74.9
SC-4	10/4/12	1 to 12	104	61.4
SC-5	10/4/12	1 to 12	57.0	78.9
SC-6	10/4/12	11.75	1,536	1,240

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
SC-1	10/4/12	12	<0.25	15	NA	NA
SC-2	10/4/12	1 to 12	<0.050	<0.25	NA	NA
SC-3	10/4/12	1 to 12	<0.050	0.10	NA	NA
SC-4	10/4/12	1 to 12	<0.050	0.40	NA	NA
SC-6	10/4/12	11.75	<0.25	17	450	700

COMPOSITE SAMPLES WERE ANALYZED PER EPA METHOD 8260B AND 8015B.
NA - NOT ANALYZED

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	October 8, 2012
REVISIONS BY:	DATE REVISED:
C. Lameman	October 8, 2012
CHECKED BY:	DATE CHECKED:
D. Watson	October 8, 2012
APPROVED BY:	DATE APPROVED:
E. McNally	October 8, 2012

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM

SCALE
10 6 0 10
2
(1 INCH = 10 FEET)

AES Field Screening Report

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

Client: ConocoPhillips

Project Location: San Juan 29-6 #11

Date: 9/10/2012

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 3'	9/10/2012	9:10	4,568	9:51	2,150	100	1	HMW
TH-1 @ 6'	9/10/2012	9:12	4,760	*Not Analyzed for TPH*				
TH-1 @ 8'	9/10/2012	9:14	5,103	9:54	512	20.0	1	HMW
TH-1 @10'	9/10/2012	10:11	6,105	*Not Analyzed for TPH*				
TH-1 @ 11'	9/10/2012	10:15	7,634	10:33	734	20.0	1	HMW
TH-1 @ 12'	9/10/2012	10:40	4,681	10:56	979	20.0	1	HMW
TH-2 @ 3'	9/10/2012	9:16	5,146	*Not Analyzed for TPH*				
TH-3 @ 3'	9/10/2012	9:18	4,868	*Not Analyzed for TPH*				
TH-4 @ 3'	9/10/2012	9:20	5,146	*Not Analyzed for TPH*				
TH-5 @ 6'	9/10/2012	11:05	203	*Not Analyzed for TPH*				
TH-6 @ 6'	9/10/2012	11:09	11.6	*Not Analyzed for TPH*				
TH-6 @ 8'	9/10/2012	11:20	14.8	*Not Analyzed for TPH*				
TH-6 @ 10'	9/10/2012	11:24	35.2	12:40	71.1	20.0	1	HMW
TH-7 @ 10'	9/10/2012	11:34	26.3	12:01	75.8	20.0	1	HMW
TH-8 @ 8'	9/10/2012	11:43	24.2	*Not Analyzed for TPH*				
TH-8 @ 10'	9/10/2012	11:47	7,664	12:32	486	20.0	1	HMW
TH-8 @ 11.5'	9/10/2012	12:00	3,811	*Not Analyzed for TPH*				
TH-9 @ 8'	9/10/2012	12:06	8,307	*Not Analyzed for TPH*				
TH-9 @ 11.5'	9/10/2012	12:10	7,810	*Not Analyzed for TPH*				

Sample ID	Collection Date	Time of Sample Collection	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-10 @ 4'	9/10/2012	12:17	83.5	*Not Analyzed for TPH*				
TH-10 @ 10.5'	9/10/2012	12:25	4,925	*Not Analyzed for TPH*				
TH-11 @ 11'	9/10/2012	12:35	20.1	13:12	78.5	20.0	1	HMW
TH-12 @ 9.5'	9/10/2012	12:47	23.0	13:15	86.8	20.0	1	HMW

PQL	Practical Quantitation Limit	Total Petroleum Hydrocarbons - USEPA 418.1
ND	Not Detected at the Reporting Limit	
NA	Not Analyzed	
DF	Dilution Factor	Analyst: Heather M. Woods

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

AES Field Screening Report

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

Client: ConocoPhillips

Project Location: San Juan 29-6 #11

Date: 10/4/2012

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	10/4/2012	13:30	Base	3,235	NA	14:42	460	20.0	1	HMW
SC-2	10/4/2012	13:34	South Wall	1,046	NA	14:45	78.9	20.0	1	HMW
SC-3	10/4/2012	13:36	North Wall	273	NA	14:50	74.9	20.0	1	HMW
SC-4	10/4/2012	13:40	East Wall	104	NA	14:54	61.4	20.0	1	HMW
SC-5	10/4/2012	13:42	West Wall	57.0	NA	14:57	78.9	20.0	1	HMW
SC-6	10/4/2012	14:02	Near TH-9	1,536	NA	15:02	1,240	20.0	1	HMW

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

NA Not Analyzed

DF Dilution Factor

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

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Heather M. Woods

Report Finalized: 10/04/12

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 12, 2012

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

RE: CoP SJ 29-6 #11 OrderNo.: 1209358

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/11/2012 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1209358**
Date Reported: **9/12/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: CoP SJ 29-6 #11
Lab ID: 1209358-001

Client Sample ID: TH-1 @ 12'
Collection Date: 9/10/2012 10:40:00 AM
Matrix: MEOH (SOIL)
Received Date: 9/11/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	80	10		mg/Kg	1	9/11/2012 11:41:44 AM
Surr: DNOP	114	77.6-140		%REC	1	9/11/2012 11:41:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	800	25		mg/Kg	5	9/11/2012 12:32:18 PM
Surr: BFB	615	84-116	S	%REC	5	9/11/2012 12:32:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.30	0.25		mg/Kg	5	9/11/2012 12:32:18 PM
Toluene	5.4	0.25		mg/Kg	5	9/11/2012 12:32:18 PM
Ethylbenzene	2.7	0.25		mg/Kg	5	9/11/2012 12:32:18 PM
Xylenes, Total	32	0.50		mg/Kg	5	9/11/2012 12:32:18 PM
Surr: 4-Bromofluorobenzene	136	80-120	S	%REC	5	9/11/2012 12:32:18 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: TH-8 @ 10'
Project: CoP SJ 29-6 #11
Collection Date: 9/10/2012 11:47:00 AM
Lab ID: 1209358-002
Matrix: MEOH (SOIL)
Received Date: 9/11/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	800	10		mg/Kg	1	9/11/2012 12:03:36 PM
Surr: DNOP	116	77.6-140		%REC	1	9/11/2012 12:03:36 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	490	100		mg/Kg	20	9/11/2012 1:01:05 PM
Surr: BFB	238	84-116	S	%REC	20	9/11/2012 1:01:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		mg/Kg	20	9/11/2012 1:01:05 PM
Toluene	ND	1.0		mg/Kg	20	9/11/2012 1:01:05 PM
Ethylbenzene	ND	1.0		mg/Kg	20	9/11/2012 1:01:05 PM
Xylenes, Total	3.7	2.0		mg/Kg	20	9/11/2012 1:01:05 PM
Surr: 4-Bromofluorobenzene	108	80-120		%REC	20	9/11/2012 1:01:05 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: TH-9 @ 11.5'
Project: CoP SJ 29-6 #11
Collection Date: 9/10/2012 12:10:00 PM
Lab ID: 1209358-003
Matrix: MEOH (SOIL)
Received Date: 9/11/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	520	9.6		mg/Kg	1	9/11/2012 12:25:18 PM
Surr: DNOP	117	77.6-140		%REC	1	9/11/2012 12:25:18 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1200	100		mg/Kg	20	9/11/2012 1:29:47 PM
Surr: BFB	478	84-116	S	%REC	20	9/11/2012 1:29:47 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		mg/Kg	20	9/11/2012 1:29:47 PM
Toluene	1.9	1.0		mg/Kg	20	9/11/2012 1:29:47 PM
Ethylbenzene	4.1	1.0		mg/Kg	20	9/11/2012 1:29:47 PM
Xylenes, Total	47	2.0		mg/Kg	20	9/11/2012 1:29:47 PM
Surr: 4-Bromofluorobenzene	121	80-120	S	%REC	20	9/11/2012 1:29:47 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: CoP SJ 29-6 #11
Lab ID: 1209358-004
Client Sample ID: TH-10@ 10.5'
Collection Date: 9/10/2012 12:25:00 PM
Matrix: MEOH (SOIL)
Received Date: 9/11/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	330	10		mg/Kg	1	9/11/2012 12:47:06 PM
Surr: DNOP	114	77.6-140		%REC	1	9/11/2012 12:47:06 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	250	25		mg/Kg	5	9/11/2012 1:58:37 PM
Surr: BFB	575	84-116	S	%REC	5	9/11/2012 1:58:37 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.12		mg/Kg	5	9/11/2012 1:58:37 PM
Toluene	ND	0.25		mg/Kg	5	9/11/2012 1:58:37 PM
Ethylbenzene	ND	0.25		mg/Kg	5	9/11/2012 1:58:37 PM
Xylenes, Total	2.4	0.50		mg/Kg	5	9/11/2012 1:58:37 PM
Surr: 4-Bromofluorobenzene	120	80-120		%REC	5	9/11/2012 1:58:37 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: CoP SJ 29-6 #11
Lab ID: 1209358-005 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 9/10/2012 9:25:00 AM
Received Date: 9/11/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	57	30		mg/Kg	20	9/11/2012 12:55:06 PM

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
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#: **1209358**

12-Sep-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **MB-3697**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **3697**	RunNo: **5443**							
Prep Date: **9/11/2012**	Analysis Date: **9/11/2012**	SeqNo: **155449**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-3697**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **3697**	RunNo: **5443**							
Prep Date: **9/11/2012**	Analysis Date: **9/11/2012**	SeqNo: **155450**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	90	110			

Sample ID **1209288-001BMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **BatchQC**	Batch ID: **3697**	RunNo: **5443**							
Prep Date: **9/11/2012**	Analysis Date: **9/11/2012**	SeqNo: **155453**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	60	7.5	15.00	54.73	32.5	64.4	117			S

Sample ID **1209288-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **BatchQC**	Batch ID: **3697**	RunNo: **5443**							
Prep Date: **9/11/2012**	Analysis Date: **9/11/2012**	SeqNo: **155454**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	63	7.5	15.00	54.73	53.1	64.4	117	5.06	20	S

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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209358**

12-Sep-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **MB-3695**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3695**	RunNo: **5416**
Prep Date: **9/11/2012**	Analysis Date: **9/11/2012**	SeqNo: **154863** 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	11		10.00		111	77.6	140			

Sample ID **LCS-3695**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3695**	RunNo: **5416**
Prep Date: **9/11/2012**	Analysis Date: **9/11/2012**	SeqNo: **154873** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	34	10	50.00	0	68.2	52.6	130			
Surr: DNOP	4.5		5.000		89.8	77.6	140			

Sample ID **1209327-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **3695**	RunNo: **5450**
Prep Date: **9/11/2012**	Analysis Date: **9/12/2012**	SeqNo: **155758** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	10	50.51	0	69.5	57.2	146			
Surr: DNOP	4.3		5.051		84.4	77.6	140			

Sample ID **1209327-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **3695**	RunNo: **5450**
Prep Date: **9/11/2012**	Analysis Date: **9/12/2012**	SeqNo: **155774** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	9.6	48.03	0	72.7	57.2	146	0.597	24.5	
Surr: DNOP	3.1		4.803		65.5	77.6	140	0	0	S

Sample ID **MB-3724**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3724**	RunNo: **5450**
Prep Date: **9/12/2012**	Analysis Date: **9/12/2012**	SeqNo: **156055** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		113	77.6	140			

Sample ID **LCS-3724**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3724**	RunNo: **5450**
Prep Date: **9/12/2012**	Analysis Date: **9/12/2012**	SeqNo: **156114** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.4	77.6	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209358**

12-Sep-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **MB-3683**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3683**	RunNo: **5433**
Prep Date: **9/10/2012**	Analysis Date: **9/11/2012**	SeqNo: **155778** 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	980		1000		97.7	84	116			

Sample ID **LCS-3683**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3683**	RunNo: **5433**
Prep Date: **9/10/2012**	Analysis Date: **9/11/2012**	SeqNo: **155779** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	106	74	117			
Surr: BFB	1000		1000		104	84	116			

Sample ID **1209250-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **3683**	RunNo: **5433**
Prep Date: **9/10/2012**	Analysis Date: **9/11/2012**	SeqNo: **155789** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	24.02	0	105	70	130			
Surr: BFB	990		960.6		103	84	116			

Sample ID **1209250-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **3683**	RunNo: **5433**
Prep Date: **9/10/2012**	Analysis Date: **9/11/2012**	SeqNo: **155790** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	24.25	0	101	70	130	2.88	22.1	
Surr: BFB	1000		969.9		103	84	116	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
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209358**

12-Sep-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **MB-3683**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **3683**	RunNo: **5433**
Prep Date: **9/10/2012**	Analysis Date: **9/11/2012**	SeqNo: **155835** Units: **mg/Kg**

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

Sample ID **LCS-3683**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **3683**	RunNo: **5433**
Prep Date: **9/10/2012**	Analysis Date: **9/11/2012**	SeqNo: **155838** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	95.4	76.3	117			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	77	116			
Xylenes, Total	3.0	0.10	3.000	0	101	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID **1209288-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **3683**	RunNo: **5433**
Prep Date: **9/10/2012**	Analysis Date: **9/12/2012**	SeqNo: **155845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.048	0.9524	0.004429	103	67.2	113			
Toluene	1.0	0.048	0.9524	0	105	62.1	116			
Ethylbenzene	1.0	0.048	0.9524	0	107	67.9	127			
Xylenes, Total	3.1	0.095	2.857	0	108	60.6	134			
Surr: 4-Bromofluorobenzene	1.0		0.9524		105	80	120			

Sample ID **1209288-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **3683**	RunNo: **5433**
Prep Date: **9/10/2012**	Analysis Date: **9/12/2012**	SeqNo: **155847** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.046	0.9200	0.004429	97.4	67.2	113	9.26	14.3	
Toluene	0.95	0.046	0.9200	0	103	62.1	116	5.41	15.9	
Ethylbenzene	0.97	0.046	0.9200	0	105	67.9	127	5.28	14.4	
Xylenes, Total	3.0	0.092	2.760	0	107	60.6	134	4.59	12.6	
Surr: 4-Bromofluorobenzene	0.96		0.9200		104	80	120	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
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209358**

12-Sep-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **1209259-001ams**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **3683**	RunNo: **5436**
Prep Date: **9/10/2012**	Analysis Date: **9/11/2012**	SeqNo: **155516** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.41		0.4757		86.2	70	130			
Surr: 4-Bromofluorobenzene	0.40		0.4757		84.8	70	130			
Surr: Dibromofluoromethane	0.42		0.4757		87.3	70	130			
Surr: Toluene-d8	0.36		0.4757		74.9	70	130			

Sample ID **1209259-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **3683**	RunNo: **5436**
Prep Date: **9/10/2012**	Analysis Date: **9/11/2012**	SeqNo: **155517** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.40		0.4826		83.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.38		0.4826		77.8	70	130	0	0	
Surr: Dibromofluoromethane	0.43		0.4826		88.7	70	130	0	0	
Surr: Toluene-d8	0.35		0.4826		73.5	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental — Work Order Number: 1209358

Received by/date: MG 09/11/12

Logged By: Michelle Garcia 9/11/2012 10:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 9/11/2012 10:17:38 AM Michelle Garcia

Reviewed By: IO 09/11/12

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° 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 ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
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 ☐

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

Adjusted? _____

Checked by: _____

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

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 1624 E. Comanche
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush Same Day

Project Name:
CoP SJ 29-6 # 11

Project #:

Project Manager:
D. Watson

Sampler: H. Woods

On Ice: ☐ Yes ☐ No

Sample Temperature: 1.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1209358	BTEX + MTBE + TPH (Gas only) (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel) (Gas only)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
9/10/12	1040	Soil	TH-1@12'	MeOH Kit / 4oz Jar	MeOH / NA	-001	X		X									
9/10/12	1147	Soil	TH-8@10'	MeOH Kit / 4oz Jar	MeOH / NA	-002	X		X									
9/10/12	1210	Soil	TH-9@11.5'	MeOH Kit / 4oz Jar	MeOH / NA	-003	X		X									
9/10/12	1225	Soil	TH-10@10.5'	MeOH Kit / 4oz Jar	MeOH / NA	-004	X		X									
9/10/12	925	Soil	SC-1	4 oz Jar	NA	-005								X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/10/12	1647	Heather M. Woods	Christine Walters	9/10/12	1647
9/10/12	1710	Christine Walters	Mark Gan	09/11/12	10:00

Remarks: Bill to Conocophillips

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 25, 2012

Debbie Watson

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

RE: CoP SJ 29-6 #11 OrderNo.: 1210343

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/5/2012 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1210343**
Date Reported: **10/25/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-1
Project: CoP SJ 29-6 #11
Collection Date: 10/4/2012 1:30:00 PM
Lab ID: 1210343-001
Matrix: MEOH (SOIL)
Received Date: 10/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	0.25		mg/Kg	5	10/5/2012 5:50:37 PM
Toluene	1.0	0.25		mg/Kg	5	10/5/2012 5:50:37 PM
Ethylbenzene	0.74	0.25		mg/Kg	5	10/5/2012 5:50:37 PM
Xylenes, Total	13	0.50		mg/Kg	5	10/5/2012 5:50:37 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	5	10/5/2012 5:50:37 PM
Surr: 4-Bromofluorobenzene	49.8	70-130	S	%REC	5	10/5/2012 5:50:37 PM
Surr: Dibromofluoromethane	93.4	70-130		%REC	5	10/5/2012 5:50:37 PM
Surr: Toluene-d8	97.8	70-130		%REC	5	10/5/2012 5:50:37 PM

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, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-2
Project: CoP SJ 29-6 #11
Collection Date: 10/4/2012 1:34:00 PM
Lab ID: 1210343-002
Matrix: MEOH (SOIL)
Received Date: 10/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**
Benzene	ND	0.050		mg/Kg	1	10/10/2012 5:03:21 PM
Toluene	ND	0.050		mg/Kg	1	10/10/2012 5:03:21 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/10/2012 5:03:21 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/10/2012 5:03:21 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	10/10/2012 5:03:21 PM
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	1	10/10/2012 5:03:21 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/10/2012 5:03:21 PM
Surr: Toluene-d8	96.0	70-130		%REC	1	10/10/2012 5:03:21 PM

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, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-3
Project: CoP SJ 29-6 #11
Collection Date: 10/4/2012 1:36:00 PM
Lab ID: 1210343-003
Matrix: MEOH (SOIL)
Received Date: 10/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	0.050		mg/Kg	1	10/5/2012 1:12:59 PM
Toluene	ND	0.050		mg/Kg	1	10/5/2012 1:12:59 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/5/2012 1:12:59 PM
Xylenes, Total	0.10	0.10		mg/Kg	1	10/5/2012 1:12:59 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/5/2012 1:12:59 PM
Surr: 4-Bromofluorobenzene	85.4	70-130		%REC	1	10/5/2012 1:12:59 PM
Surr: Dibromofluoromethane	96.6	70-130		%REC	1	10/5/2012 1:12:59 PM
Surr: Toluene-d8	97.1	70-130		%REC	1	10/5/2012 1:12:59 PM

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 **1210343**
Date Reported: **10/25/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-4
Project: CoP SJ 29-6 #11
Collection Date: 10/4/2012 1:40:00 PM
Lab ID: 1210343-004
Matrix: MEOH (SOIL)
Received Date: 10/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	0.050		mg/Kg	1	10/5/2012 1:41:14 PM
Toluene	0.055	0.050		mg/Kg	1	10/5/2012 1:41:14 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/5/2012 1:41:14 PM
Xylenes, Total	0.34	0.10		mg/Kg	1	10/5/2012 1:41:14 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	10/5/2012 1:41:14 PM
Surr: 4-Bromofluorobenzene	82.2	70-130		%REC	1	10/5/2012 1:41:14 PM
Surr: Dibromofluoromethane	93.1	70-130		%REC	1	10/5/2012 1:41:14 PM
Surr: Toluene-d8	98.0	70-130		%REC	1	10/5/2012 1:41:14 PM

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, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-6
Project: CoP SJ 29-6 #11
Collection Date: 10/4/2012 2:02:00 PM
Lab ID: 1210343-005
Matrix: MEOH (SOIL)
Received Date: 10/5/2012 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	700	9.7		mg/Kg	1	10/5/2012 12:21:43 PM
Surr: DNOP	102	77.6-140		%REC	1	10/5/2012 12:21:43 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **MMS**
Benzene	ND	0.25		mg/Kg	5	10/5/2012 9:35:33 PM
Toluene	ND	0.25		mg/Kg	5	10/5/2012 9:35:33 PM
Ethylbenzene	ND	0.25		mg/Kg	5	10/5/2012 9:35:33 PM
Xylenes, Total	17	0.50		mg/Kg	5	10/5/2012 9:35:33 PM
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%REC	5	10/5/2012 9:35:33 PM
Surr: 4-Bromofluorobenzene	321000	70-130	S	%REC	5	10/5/2012 9:35:33 PM
Surr: Dibromofluoromethane	91.0	70-130		%REC	5	10/5/2012 9:35:33 PM
Surr: Toluene-d8	96.0	70-130		%REC	5	10/5/2012 9:35:33 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **MMS**
Gasoline Range Organics (GRO)	450	25		mg/Kg	5	10/5/2012 9:35:33 PM
Surr: BFB	321000	70-130	S	%REC	5	10/5/2012 9:35:33 PM

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#: **1210343**

25-Oct-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **1210279-012CMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **4138**	RunNo: **6027**
Prep Date: **10/5/2012**	Analysis Date: **10/7/2012**	SeqNo: **173631** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	51.28	0	80.5	57.2	146			
Surr: DNOP	4.1		5.128		79.6	77.6	140			

Sample ID **1210279-012CMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **4138**	RunNo: **6027**
Prep Date: **10/5/2012**	Analysis Date: **10/7/2012**	SeqNo: **173633** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.97	0	77.2	57.2	146	4.84	24.5	
Surr: DNOP	4.0		5.097		77.7	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#: **1210343**

25-Oct-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **R6012**	RunNo: **6012**
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **180797** 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	0.48		0.5000		96.6	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.9	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.2	70	130			
Surr: Toluene-d8	0.48		0.5000		95.3	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **R6012**	RunNo: **6012**
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **180798** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	113	70	130			
Toluene	1.0	0.050	1.000	0	105	80	120			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.9	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.9	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.5	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID **1210343-001ams**	SampType: **MS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **SC-1**	Batch ID: **R6012**	RunNo: **6012**
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **181264** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.4	0.25	3.236	0.04149	105	80.9	118			
Toluene	4.3	0.25	3.236	1.009	101	69.5	119			
Surr: 1,2-Dichloroethane-d4	1.6		1.618		96.8	70	130			
Surr: 4-Bromofluorobenzene	1.3		1.618		78.3	70	130			
Surr: Dibromofluoromethane	1.4		1.618		89.0	70	130			
Surr: Toluene-d8	1.5		1.618		93.9	70	130			

Sample ID **1210343-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **SC-1**	Batch ID: **R6012**	RunNo: **6012**
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **181265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.1	0.25	3.236	0.04149	94.0	80.9	118	11.2	20	
Toluene	4.0	0.25	3.236	1.009	91.3	69.5	119	7.80	20	
Surr: 1,2-Dichloroethane-d4	1.6		1.618		99.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.88		1.618		54.3	70	130	0	0	S

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#: **1210343**

25-Oct-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **1210343-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **SC-1**	Batch ID: **R6012**	RunNo: **6012**
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **181265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	1.5		1.618		91.4	70	130	0	0	
Surr: Toluene-d8	1.6		1.618		96.4	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1210343**

25-Oct-12

Client: Animas Environmental Services

Project: CoP SJ 29-6 #11

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **R6012**	RunNo: **6012**
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **175741** 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	480		500.0		96.9	70	130			

Sample ID **2.5 gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015B Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R6012**	RunNo: **6012**
Prep Date:	Analysis Date: **10/5/2012**	SeqNo: **175742** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.3	85	115			
Surr: BFB	470		500.0		94.4	70	130			

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name:	Animas Environmental	Work Order Number:	1210343
Received by/date:	LM 10/05/12		
Logged By:	Michelle Garcia	10/5/2012 9:50:00 AM	Michelle Garcia
Completed By:	Michelle Garcia	10/5/2012 10:28:04 AM	Michelle Garcia
Reviewed By:		10/05/12	

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° 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 ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
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 ☐

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

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche
Farmington NM 87401

Phone #: 505-564-2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush Same Day

Project Name:

Project #:
CoP SJ 29-6 #11

Project Manager:
D. Watson

Sampler: H. Woods

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1210343	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	BTEX + MTBE (8021)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
10/4/12	1330	Soil	SC-1	MeOH Kit / 4oz	MeOH / Non	-001	X											
10/4/12	1334	Soil	SC-2	MeOH Kit / 4oz	MeOH / Non	-002	X											
10/4/12	1336	Soil	SC-3	MeOH Kit / 4oz	MeOH / Non	-003	X											
10/4/12	1340	Soil	SC-4	MeOH Kit / 4oz	MeOH / Non	-004	X											
10/4/12	1402	Soil	SC-6	MeOH Kit / 4oz	MeOH / Non	-005	X	X										

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/4/12	1736	Heather M. Woods		10/05/12	0950
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Bill to Conocophillips
WO: 9190896
Activity: D150
Super: Kendell Bassing
User ID: KAITLW

Work ordered by: Eric Smith
Area: 7

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.