

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 CONS. DIV DIST. 3

NOV 23 2015

Form C-141  
Revised August 8, 2011

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

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 Co.	Contact Lisa Hunter
Address 3401 East 30 <sup>th</sup> St, Farmington, NM	Telephone No.(505) 258-1607
Facility Name: San Juan 28-7 #216	Facility Type: Gas Well

Surface Owner: Federal	Mineral Owner: Federal (SF078569)	API No. 30-045-20875
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	8	27N	7W	2290	North	980	East	Rio Arriba

Latitude 36.58945 Longitude -107.59163

**NATURE OF RELEASE**

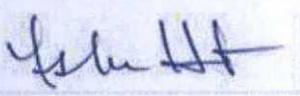
Type of Release Historic Contamination	Volume of Release Unknown	Volume Recovered 52 yds
Source of Release Below Grade Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery September 8, 2014
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

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

Describe Cause of Problem and Remedial Action Taken.\*  
**Historic contamination discovered while completing site activities**

Describe Area Affected and Cleanup Action Taken.\*  
Historical hydrocarbon impacted soil was found while completing site activities for the subject well. The excavation was app. 15' dia x 8' in depth and 52 yds of soil was transported to IEI land farm and 52 yds of clean soil from an approved source was 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>OIL CONSERVATION DIVISION</u>	
Printed Name: Lisa Hunter	Approved by Enviro	<b>DENIED</b>
Title: Field Environmental Specialist	Approval Date:	BY: Vanessa Fields DATE: <u>12/24/15</u> (505) 334-6178 Ext. 119 <small>Expiration Date.</small>
E-mail Address: Lisa.Hunter@cop.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11/18/2015 Phone: (505) 258-1607	<i>In Correct API Number</i>	

\* Attach Additional Sheets If Necessary



June 29, 2015

Lindsay Dumas  
ConocoPhillips  
San Juan Business Unit  
(505) 599-4089

*Via electronic mail to:*  
[SJBUE-Team@ConocoPhillips.com](mailto:SJBUE-Team@ConocoPhillips.com)

**RE: Release Assessment and Final Excavation Report  
San Juan 28-7 #216  
Rio Arriba County, New Mexico**

Dear Ms. Dumas:

On September 17 and on October 7, 21, and 23, 2014, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 28-7 #216, located in Rio Arriba County, New Mexico. The release consisted of an unknown quantity of produced water and condensate and occurred due to overflow of the below grade tank (BGT), and in addition, historic contamination was also encountered while completing the site activities. The initial release assessment was completed by AES on September 17, 2014, and the final excavation was completed by CoP contractors prior to AES' arrival at the location on October 23, 2014.

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## 1.0 Site Information

### 1.1 Location

Site Name – San Juan 28-7 #216

Location – SE¼ NE¼, Section 8, T27N, R7W, Rio Arriba County, New Mexico

Well Head Latitude/Longitude – N36.58939, W107.59195

Release Location Latitude/Longitude – N36.58943, W107.59233

Land Jurisdiction – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, September 2014

604 W. Piñon St.  
Farmington, NM 87401  
505-564-2281

1911 Main, Ste 280  
Durango, CO  
970-403-3084

## 1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** Based on elevation, topographic interpretation and visual reconnaissance, depth to groundwater is interpreted to be greater than 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** Approximately 400 feet west is a small unnamed wash that drains to Martin Canyon then Carrizo Canyon. (10 points)

## 1.3 Assessment

AES was initially contacted by Lindsay Dumas of CoP on September 8, 2014, and on September 17, 2014, Corwin Lameman and Sam Glasses of AES completed the release assessment field work. The assessment included collection and field sampling of 28 soil samples from 10 borings and 1 composite soil sample (SC-1) in and around the release area. Soil borings were terminated between 8 and 11.5 feet bgs. Based on laboratory analytical results of SC-1, AES recommended further release assessment work. On October 7, 2014, AES returned to the location to collect confirmation soil samples from the north half (SC-2) and south half (SC-3) of the release location. Based on field sampling results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On October 21 and 23, 2014, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of six confirmation soil samples (SC-4 through SC-9) from the walls and base of the excavation. The area of the final excavation consisted of the 15-ft diameter footprint below the BGT to a total depth of 8 feet bgs. A final confirmation soil sample (Soil) was collected from the northeast wall by CoP personnel on October 31, 2014, following application of potassium permanganate. Sample locations and final excavation extents are presented on Figure 4.

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## 2.0 Soil Sampling

A total of 36 soil samples from 10 borings (SB-1 through SB-10) and 9 composite samples (SC-1 through SC-9) were collected during the assessment field work. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Seven discrete samples (SB-1, SB-3, and

SB-6 through SB-10) and one composite sample (SC-1) collected during the initial assessment, and six composite samples (SC-4 through SC-9) collected during the excavation clearance were submitted for confirmation laboratory analysis.

## **2.1 Field Sampling**

### **2.1.1 Volatile Organic Compounds**

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

### **2.1.2 Total Petroleum Hydrocarbons**

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. All soil samples were laboratory analyzed for:

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

In addition, all samples except SB-7, SB-9, and SB-10 were laboratory analyzed for:

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

## **2.3 Field and Laboratory Analytical Results**

On September 17 and October 7, 2014, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.1 ppm in SB-10 up to 3,417 ppm in SB-2. Field TPH concentrations ranged from less than 20.0 mg/kg in SB-4 and SB-6 through SB-10 up to 2,250 mg/kg in SC-3.

On October 21 and 23, 2014, final excavation field screening results for VOCs via OVM ranged from 1,833 ppm in SC-5 up to 4,595 ppm in SC-7. Field TPH concentrations ranged

from 239 mg/kg in SC-6 up to 1,430 mg/kg in SC-9. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Soil Field VOCs and TPH Results  
 San Juan 28-7 #216 Initial Release Assessment and Final Excavation  
 September and October 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)
<i>NMOCD Action Level*</i>			100	1,000
SB-1	9/17/14	4	1.9	24.2
		6	21.6	31.1
		8	<b>3,261</b>	538
SB-2	9/17/14	4	<b>3,417</b>	NA
		6	<b>1,370</b>	NA
		8	<b>1,379</b>	139
SB-3	9/17/14	4	1.2	NA
		6	<b>3,325</b>	NA
		8	<b>1,901</b>	<b>1,660</b>
		9.75	<b>2,390</b>	841
SB-4	9/17/14	4	<b>2,761</b>	NA
		6	<b>2,618</b>	NA
		8	<b>252</b>	<20.0
SB-5	9/17/14	4	<b>3,084</b>	NA
		6	<b>3,277</b>	NA
		8	<b>2,618</b>	847
SB-6	9/17/14	6.5	14.5	<20.0
		10	<b>740</b>	578
SB-7	9/17/14	6	3.9	<20.0
		9.5	69.0	51.8
SB-8	9/17/14	6	15.5	<20.0
		10	<b>811</b>	NA
		11.5	<b>2,992</b>	608
SB-9	9/17/14	6	1.3	NA
		10.25	0.6	<20.0

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>VOCs via OVM (ppm)</b>	<b>TPH 418.1 (mg/kg)</b>
<i>NMOCD Action Level*</i>			100	1,000
SB-10	9/17/14	6	0.1	NA
		9.75	0.2	<20.0
SC-1	9/17/14	4	NA	NA
SC-2	10/7/14	4.5	3,349	2,240
SC-3	10/7/14	4.5	3,353	2,250
SC-4	10/21/14	4 to 8	3,911	849
SC-5	10/21/14	4 to 8	1,833	627
SC-6	10/21/14	8	2,330	239
SC-7	10/23/14	8	4,595	983
SC-8	10/23/14	4 to 8	3,862	383
SC-9	10/23/14	4 to 8	3,872	1,430

NA - not analyzed

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

Laboratory analyses for SB-1, SB-3, SB-6 through SB-10, and SC-1 were used to confirm field sampling results of the initial release assessment. Benzene concentrations were reported below laboratory detection limits in each sample. Total BTEX concentrations were reported from 0.15 mg/kg in SB-6 to 49 mg/kg in SC-1. TPH concentrations as GRO/DRO varied from below laboratory detection limits in SB-9 and SB-10 up to 1,590 mg/kg in SC-1.

Laboratory analyses for SC-4 through SC-9 were used to confirm field sampling results from the final excavation. Benzene concentrations ranged from below laboratory detection limits in SB-5, SB-8, and SB-9 up to 0.22 mg/kg in SC-7. Total BTEX concentrations ranged from 3.25 mg/kg in SC-8 up to 46.7 mg/kg in SC-4. TPH concentrations as GRO/DRO ranged from 251 mg/kg in SC-8 up to 1,040 mg/kg in SC-9. Results are presented in Table 2 and on Figure 4. The laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH  
 San Juan 28-7 #216 Initial Release Assessment and Final Excavation  
 September and October 2014

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>10</i>	<i>50</i>	<i>1,000</i>	
SB-1	9/17/14	8	<0.24	4.81	180	350
SB-3	9/19/14	8	<0.46	37.8	370	340
SB-6	9/17/14	10	<0.048	0.15	32	260
SB-7	9/17/14	9.25	NA	NA	6.2	11
SB-8	9/17/14	11.5	<0.048	0.36	28	150
SB-9	9/17/14	10.25	NA	NA	<4.9	<9.9
SC-1	9/19/14	4	<0.24	49	<b>590</b>	<b>1,000</b>
SC-4	10/21/14	4 to 8	0.37	46.7	660	200
SC-5	10/21/14	4 to 8	<0.12	13.9	250	260
SC-6	10/21/14	8	0.16	8.77	240	100
SC-7	10/23/14	8	0.22	11.8	330	310
SC-8	10/23/14	4 to 8	<0.080	3.25	91	160
SC-9	10/23/14	4 to 8	<0.16	16.1	<b>390</b>	<b>650</b>

NA - not analyzed

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

### 3.0 Conclusions and Recommendations

On September 17 and October 7, 2014, AES conducted an initial assessment of petroleum contaminated soils associated with a BGT overflow of produced water and condensate at the San Juan 28-7 #216. Note that additional historic contamination was also encountered during site activities. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 10.

In September 2014, initial assessment field sampling results above the NMOCD action level of 100 ppm VOCs and 1,000 mg/kg TPH were reported in all samples except SB-9 and SB-10. The highest VOC concentration was reported in SB-2 with 3,417 ppm, and the highest TPH concentration was reported in SC-3 with 2,250 mg/kg. Laboratory analyses for SB-1, SB-3, SB-6 through SB-10, and SC-1 were used to confirm field sampling results. Benzene and

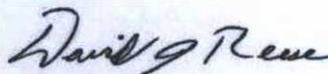
total BTEX concentrations were reported below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively, in each sample. However, TPH concentrations as GRO/DRO exceeded the NMOCD action level of 1,000 mg/kg in SC-1 (1,590 mg/kg).

On October 23, 2014, final excavation of the impacted area was completed. Field sampling results of the excavation extents showed that VOC concentrations were above applicable NMOCD action levels for the final walls and base of the excavation. In contrast, field TPH concentrations were below the applicable NMOCD action level of 1,000 mg/kg for the final walls and base of the excavation, with the exception of SC-9 (northeast wall) which had a TPH concentration of 1,430 mg/kg. Laboratory analytical results reported benzene and total BTEX concentrations in all samples below NMOCD action levels, and TPH concentrations as GRO/DRO were reported below the applicable NMOCD action level in all samples except SC-9 (1,040 mg/kg). Potassium permanganate was applied to the northeast wall of the excavation (near SC-9), and an additional confirmation sample (Soil) was collected by CoP personnel on October 31, 2014.

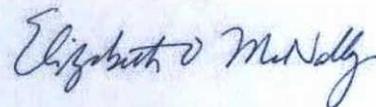
Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 28-7 #216, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for the final sidewalls and the base of the excavation. No further work is recommended.

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

Sincerely,



David J. Reese  
Environmental Scientist



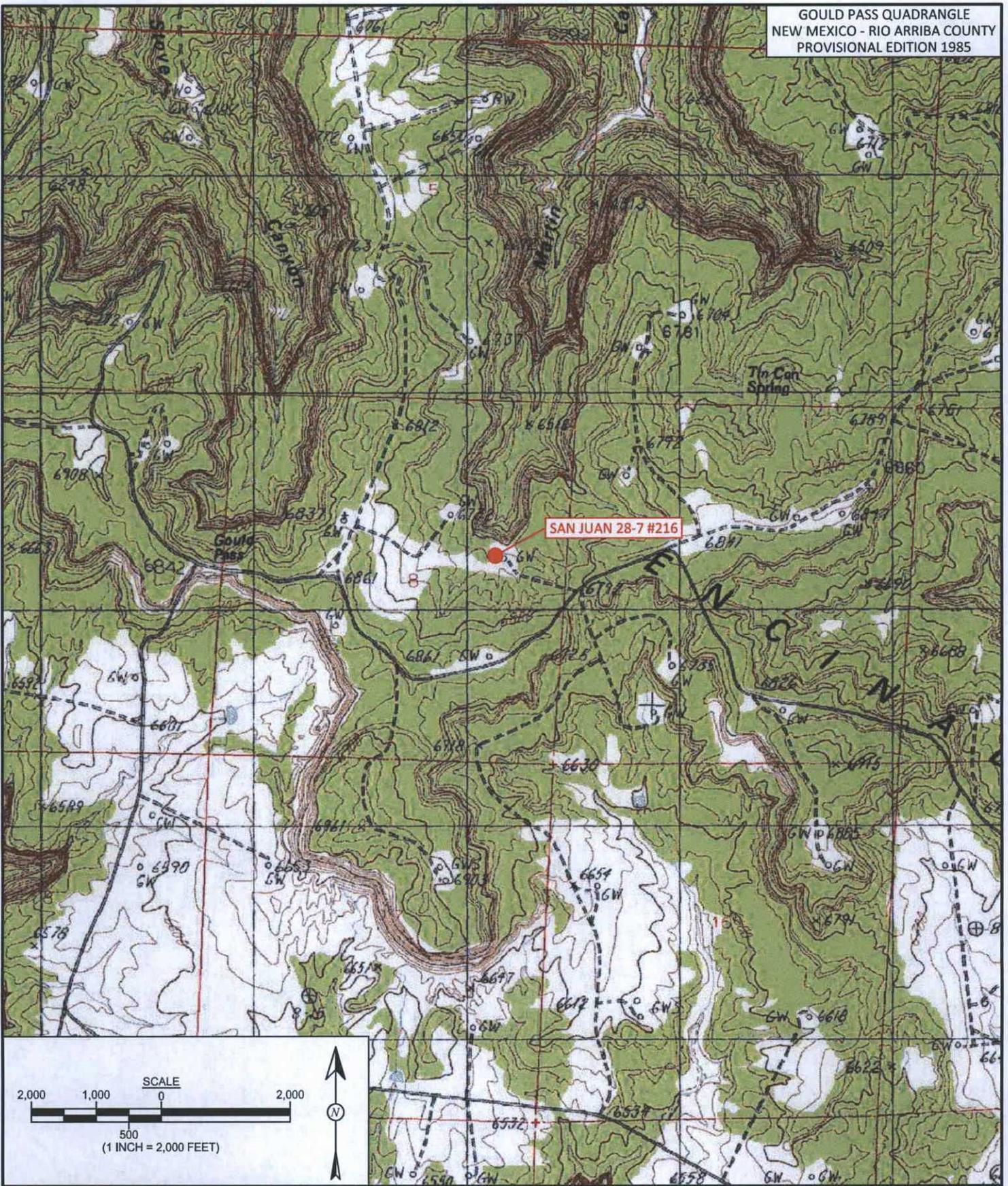
Elizabeth McNally, PE

Attachments:

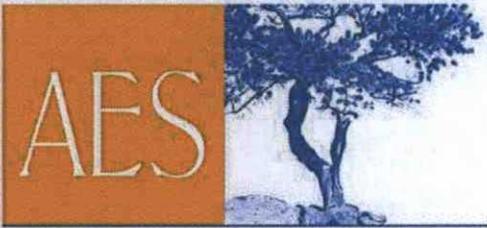
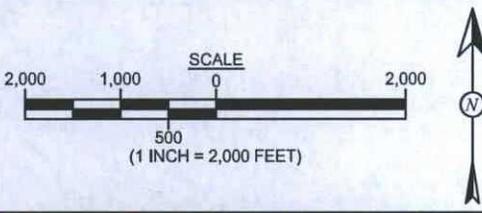
- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, September 2014
- Figure 3. Initial Assessment Sample Locations and Results, September 2014
- Figure 4. Excavation Clearance Sample Locations and Results, October 2014
- AES Field Sampling Report 091714

AES Field Sampling Report 100714  
AES Field Sampling Report 102114  
AES Field Sampling Report 102314  
Hall Laboratory Analytical Report 1409A75  
Hall Laboratory Analytical Report 1409880  
Hall Laboratory Analytical Report 1410A19  
Hall Laboratory Analytical Report 1410B52

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Projects\ConocoPhillips\SJ 28-7 #216\CoP San Juan 28-7 #216 Release and Final Excavation Report rev  
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SAN JUAN 28-7 #216



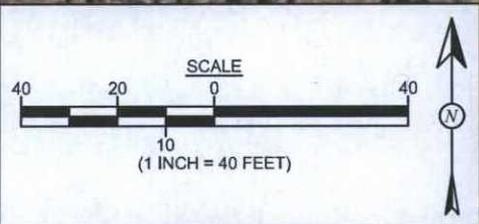
Animas Environmental Services, LLC

<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> September 17, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> September 17, 2014
<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> September 17, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> September 17, 2014

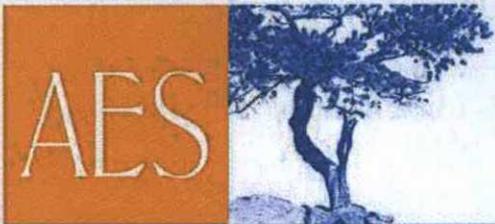
**FIGURE 1**  
**TOPOGRAPHIC SITE LOCATION MAP**  
 ConocoPhillips  
 SAN JUAN 28-7 #216  
 SE¼ NE¼, SECTION 8, T27N, R7W  
 RIO ARriba COUNTY, NEW MEXICO  
 N36.58939, W107.59195

**LEGEND**

 SECONDARY CONTAINMENT  
 BERM  
 FENCE



AERIAL SOURCE: © 2014 GOOGLE EARTH PRO, AERIAL DATE: MAY 2, 2013.

 <b>Animas Environmental Services, LLC</b>	<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> September 17, 2014	<p align="center"><b>FIGURE 2</b></p> <p align="center"><b>AERIAL SITE MAP</b> <b>SEPTEMBER 2014</b> ConocoPhillips SAN JUAN 28-7 #216 SE¼ NE¼, SECTION 8, T27N, R7W RIO ARriba COUNTY, NEW MEXICO N36.58939, W107.59195</p>
	<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 26, 2015	
	<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> June 26, 2015	
	<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 26, 2015	

**FIGURE 3**

**INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS SEPTEMBER 2014**  
 ConocoPhillips  
 SAN JUAN 28-7 #216  
 SE¼ NE¼, SECTION 8, T27N, R7W  
 RIO ARRIBA COUNTY, NEW MEXICO  
 N36.58939, W107.59195

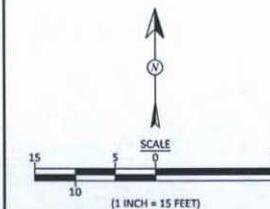


Animas Environmental Services, LLC

<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> September 18, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 26, 2015
<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> June 26, 2015
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 26, 2015

**LEGEND**

- SOIL BORING LOCATIONS
- ==== SECONDARY CONTAINMENT BERM
- x- FENCE

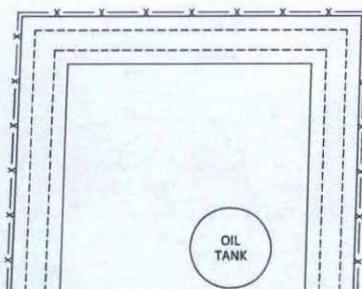
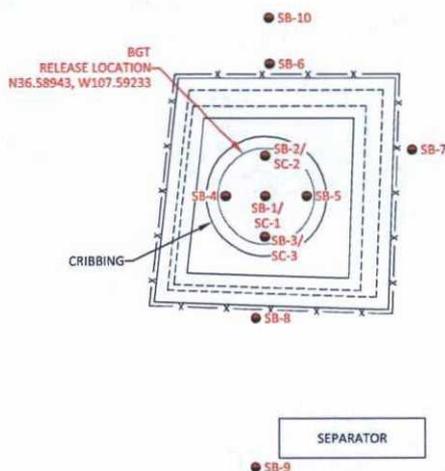


Field Sampling Results				
Sample ID	Date	Depth (ft)	OVMPID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>				
			100	1,000
SB-1	9/17/14	4	1.9	24.2
		6	21.6	31.1
		8	3,261	538
SB-2	9/17/14	4	3,417	NA
		6	1,370	NA
		8	1,379	139
SB-3	9/17/14	4	1.2	NA
		6	3,325	NA
		8	1,901	1,660
		9.75	2,390	841
SB-4	9/17/14	4	2,761	NA
		6	2,618	NA
		8	252	<20.0
SB-5	9/17/14	4	3,084	NA
		6	3,277	NA
		8	2,618	847
SB-6	9/17/14	6.5	14.5	<20.0
		10	740	578
SB-7	9/17/14	6	3.9	<20.0
		9.5	69.0	51.8
SB-8	9/17/14	6	15.5	<20.0
		10	811	NA
		11.5	2,992	608
SB-9	9/17/14	6	1.3	NA
SB-10	9/17/14	10.25	0.6	<20.0
		6	0.1	NA
SC-2	10/7/14	4.5	3,349	2,240
		4.5	3,353	2,250

NA - NOT ANALYZED

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
<b>NMOC ACTION LEVEL</b>						
			10	50	1,000	
SB-1	9/17/14	8	<0.24	4.81	180	350
SB-3	9/17/14	8	<0.46	37.8	370	340
SB-6	9/17/14	10	<0.048	0.15	32	260
SB-7	9/17/14	9.25	NA	NA	6.2	11
SB-8	9/17/14	11.5	<0.048	0.36	28	150
SB-9	9/17/14	10.25	NA	NA	<4.9	<9.9
SB-10	9/17/14	9.75	NA	NA	<4.8	<10
SC-1	9/17/14	4	<0.24	49	590	1,000

SC-1 IS A 5 POINT COMPOSITE OF SB-1 THROUGH SB-5 AT 4 FEET BELOW GROUND SURFACE. ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D. NA - NOT ANALYZED



SAN JUAN 29-7 #216 WELLHEAD

METER HOUSE

**FIGURE 4**

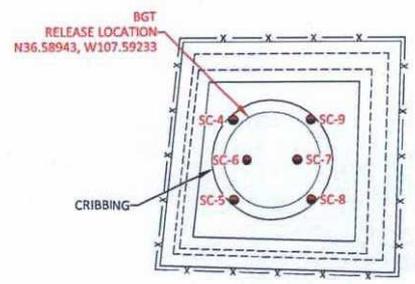
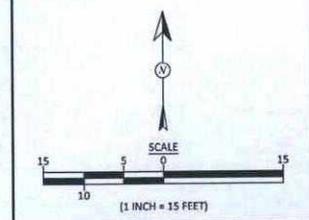
**EXCAVATION CLEARANCE SAMPLE LOCATIONS AND RESULTS OCTOBER 2014**  
 ConocoPhillips  
 SAN JUAN 28-7 #216  
 SE¼ NE¼, SECTION 8, T27N, R7W  
 RIO ARRIBA COUNTY, NEW MEXICO  
 N36.58943, W107.59195



<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> September 18, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 26, 2015
<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> June 26, 2015
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 26, 2015

**LEGEND**

- SOIL BORING LOCATIONS
- ==== SECONDARY CONTAINMENT BERM
- x- FENCE



SAN JUAN 29-7 #216 WELLHEAD

**Field Sampling Results**

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>100</b>	<b>1,000</b>
SC-4	10/21/14	4 to 8	3,911	849
SC-5	10/21/14	4 to 8	1,833	627
SC-6	10/21/14	8	2,330	239
SC-7	10/23/14	8	4,595	983
SC-8	10/23/14	4 to 8	3,862	383
SC-9	10/23/14	4 to 8	3,872	1,430

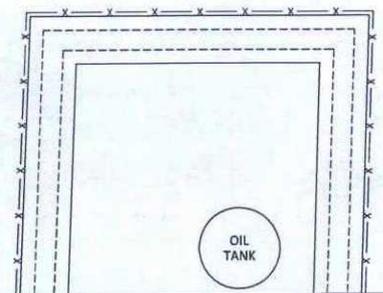
ALL SAMPLES WERE COMPOSITE SAMPLES.

**Laboratory Analytical Results**

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>1,000</b>	
SC-4	10/21/14	4 to 8	0.37	46.7	660	200
SC-5	10/21/14	4 to 8	<0.12	13.9	250	260
SC-6	10/21/14	8	0.16	8.77	240	100
SC-7	10/23/14	8	0.22	11.8	330	310
SC-8	10/23/14	4 to 8	<0.080	3.25	91	160
SC-9	10/23/14	4 to 8	<0.16	16.1	390	650

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

METER HOUSE



# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: San Juan 28-7 #216

Date: 9/17/2014

Matrix: Soil

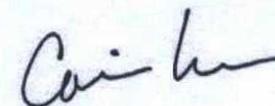
Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 4'	9/17/2014	11:55	1.9	24.2	12:38	20.0	1	CL
SB-1 @ 6'	9/17/2014	11:59	21.6	31.1	12:41	20.0	1	CL
SB-1 @ 8'	9/17/2014	12:03	3,261	538	12:44	20.0	1	CL
SB-2 @ 4'	9/17/2014	12:05	3,417	Not Analyzed for TPH				
SB-2 @ 6'	9/17/2014	12:09	1,370	Not Analyzed for TPH				
SB-2 @ 8'	9/17/2014	12:11	1,379	139	13:30	20.0	1	CL
SB-3 @ 4'	9/17/2014	12:15	1.2	Not Analyzed for TPH				
SB-3 @ 6'	9/17/2014	12:19	3,325	Not Analyzed for TPH				
SB-3 @ 8'	9/17/2014	12:23	1,901	1,665	13:34	20.0	1	CL
SB-3 @ 9.75'	9/17/2014	15:15	2,390	841	14:33	20.0	1	CL
SB-4 @ 4'	9/17/2014	12:36	2,761	Not Analyzed for TPH				
SB-4 @ 6'	9/17/2014	12:41	2,618	Not Analyzed for TPH				
SB-4 @ 8'	9/17/2014	12:45	252	14.6	13:38	20.0	1	CL

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-5 @ 4'	9/17/2014	12:58	3,084	Not Analyzed for TPH				
SB-5 @ 6'	9/17/2014	13:04	3,277	Not Analyzed for TPH				
SB-5 @ 8'	9/17/2014	13:09	2,618	847	13:42	20.0	1	CL
SB-6 @ 6.5'	9/17/2014	15:30	14.5	7.7	15:15	20.0	1	CL
SB-6 @ 10'	9/17/2014	15:35	740	578	15:32	20.0	1	CL
SB-7 @ 6'	9/17/2014	15:40	3.9	10.4	15:37	20.0	1	CL
SB-7 @ 9.5'	9/17/2014	15:45	69.0	51.8	15:43	20.0	1	CL
SB-8 @ 6'	9/17/2014	15:55	15.5	14.6	15:59	20.0	1	CL
SB-8 @ 10'	9/17/2014	16:05	811	Not Analyzed for TPH				
SB-8 @ 11.5'	9/17/2014	16:15	2,992	608	16:24	20.0	1	CL
SB-9 @ 6'	9/17/2014	16:21	1.3	Not Analyzed for TPH				
SB-9 @ 10.25'	9/17/2014	16:30	0.6	3.6	16:55	20.0	1	CL
SB-10 @ 6'	9/17/2014	17:26	0.1	Not Analyzed for TPH				
SB-10 @ 9.75'	9/17/2014	17:46	0.2	7.7	8:52**	20.0	1	CL

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:



\*Field TPH concentrations recorded may be below PQL.  
 \*\*Analyzed at AES office in Farmington, NM on 9/18/2014.

# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: San Juan 28-7 #216

Date: 10/7/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-2	10/7/2014	9:40	3,349	2,240	10:11	20.0	1	EMS
SC-3	10/7/2014	9:45	3,353	2,250	10:13	20.0	1	EMS

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Eric Skelton*

# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: San Juan 28-7 #216

Date: 10/21/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-4	10/21/2014	11:10	3,911	849	11:58	20.0	1	EMS
SC-5	10/21/2014	11:20	1,833	627	12:02	20.0	1	EMS
SC-6	10/21/2014	12:35	2,330	239	12:53	20.0	1	EMS

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Eric Skelton*

# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: San Juan 28-7 #216

Date: 10/23/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-7	10/23/2014	13:35	4,595	983	14:08	20.0	1	EMS
SC-8	10/23/2014	12:40	3,862	383	13:08	20.0	1	EMS
SC-9	10/23/2014	13:40	3,872	1,426	14:05	20.0	1	EMS

DF Dilution Factor

NA Not Analyzed

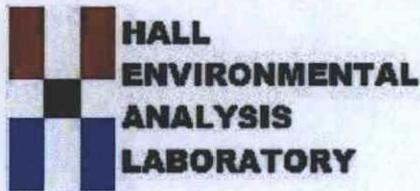
PQL Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Eric Skelton*



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

September 27, 2014

Emilee Skyles

Animas Environmental  
604 Pinon Street

Farmington, NM 87401

TEL: (505) 564-2281

FAX

RE: CoP San Juan 28-7 #216

OrderNo.: 1409A75

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 9/20/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409A75

Date Reported: 9/27/2014

**CLIENT:** Animas Environmental  
**Project:** CoP San Juan 28-7 #216  
**Lab ID:** 1409A75-001

**Matrix:** SOIL

**Client Sample ID:** SB-1 @ 8'  
**Collection Date:** 9/17/2014 12:03:00 PM  
**Received Date:** 9/20/2014 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	350	10		mg/Kg	1	9/24/2014 3:08:29 PM	15419
Surr: DNOP	110	57.9-140		%REC	1	9/24/2014 3:08:29 PM	15419
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	180	48		mg/Kg	10	9/24/2014 12:21:52 PM	15453
Surr: BFB	128	80-120	S	%REC	10	9/24/2014 12:21:52 PM	15453
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.24		mg/Kg	10	9/24/2014 12:21:52 PM	15453
Toluene	ND	0.48		mg/Kg	10	9/24/2014 12:21:52 PM	15453
Ethylbenzene	0.81	0.48		mg/Kg	10	9/24/2014 12:21:52 PM	15453
Xylenes, Total	4.0	0.95		mg/Kg	10	9/24/2014 12:21:52 PM	15453
Surr: 4-Bromofluorobenzene	105	80-120		%REC	10	9/24/2014 12:21:52 PM	15453

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

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

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409A75

Date Reported: 9/27/2014

**CLIENT:** Animas Environmental  
**Project:** CoP San Juan 28-7 #216  
**Lab ID:** 1409A75-002

**Matrix:** SOIL

**Client Sample ID:** SB-3 @ 8'  
**Collection Date:** 9/19/2014 12:15:00 PM  
**Received Date:** 9/20/2014 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	340	9.9		mg/Kg	1	9/24/2014 3:53:38 PM	15419
Surr: DNOP	97.6	57.9-140		%REC	1	9/24/2014 3:53:38 PM	15419
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	370	93		mg/Kg	20	9/25/2014 6:22:10 PM	15453
Surr: BFB	121	80-120	S	%REC	20	9/25/2014 6:22:10 PM	15453
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.46		mg/Kg	20	9/25/2014 6:22:10 PM	15453
Toluene	8.0	0.93		mg/Kg	20	9/25/2014 6:22:10 PM	15453
Ethylbenzene	1.8	0.93		mg/Kg	20	9/25/2014 6:22:10 PM	15453
Xylenes, Total	28	1.9		mg/Kg	20	9/25/2014 6:22:10 PM	15453
Surr: 4-Bromofluorobenzene	99.6	80-120		%REC	20	9/25/2014 6:22:10 PM	15453

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

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

Analytical Report

Lab Order 1409A75

Date Reported: 9/27/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SB-8 @ 11.5'

Project: CoP San Juan 28-7 #216

Collection Date: 9/17/2014 4:15:00 PM

Lab ID: 1409A75-003

Matrix: SOIL

Received Date: 9/20/2014 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	150	9.9		mg/Kg	1	9/24/2014 4:23:53 PM	15419
Surr: DNOP	101	57.9-140		%REC	1	9/24/2014 4:23:53 PM	15419
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	28	4.8		mg/Kg	1	9/25/2014 2:26:32 AM	15453
Surr: BFB	236	80-120	S	%REC	1	9/25/2014 2:26:32 AM	15453
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/25/2014 2:26:32 AM	15453
Toluene	ND	0.048		mg/Kg	1	9/25/2014 2:26:32 AM	15453
Ethylbenzene	0.15	0.048		mg/Kg	1	9/25/2014 2:26:32 AM	15453
Xylenes, Total	0.21	0.097		mg/Kg	1	9/25/2014 2:26:32 AM	15453
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	9/25/2014 2:26:32 AM	15453

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental

Client Sample ID: SC-1 @ 4'

Project: CoP San Juan 28-7 #216

Collection Date: 9/19/2014 12:11:00 PM

Lab ID: 1409A75-004

Matrix: SOIL

Received Date: 9/20/2014 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	1000	99		mg/Kg	10	9/25/2014 12:55:21 PM	15419
Surr: DNOP	0	57.9-140	S	%REC	10	9/25/2014 12:55:21 PM	15419
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	590	48		mg/Kg	10	9/24/2014 1:52:44 PM	15453
Surr: BFB	286	80-120	S	%REC	10	9/24/2014 1:52:44 PM	15453
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.24		mg/Kg	10	9/24/2014 1:52:44 PM	15453
Toluene	3.7	0.48		mg/Kg	10	9/24/2014 1:52:44 PM	15453
Ethylbenzene	3.3	0.48		mg/Kg	10	9/24/2014 1:52:44 PM	15453
Xylenes, Total	42	0.96		mg/Kg	10	9/24/2014 1:52:44 PM	15453
Surr: 4-Bromofluorobenzene	126	80-120	S	%REC	10	9/24/2014 1:52:44 PM	15453

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1409A75

27-Sep-14

**Client:** Animas Environmental  
**Project:** CoP San Juan 28-7 #216

Sample ID <b>MB-15419</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>15419</b>		RunNo: <b>21359</b>							
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/23/2014</b>		SeqNo: <b>623850</b>	Units: <b>mg/Kg</b>						
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		99.6	57.9	140			

Sample ID <b>LCS-15419</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>15419</b>		RunNo: <b>21359</b>							
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/23/2014</b>		SeqNo: <b>623855</b>	Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.1	68.6	130			
Surr: DNOP	4.8		5.000		96.5	57.9	140			

Sample ID <b>1409854-001AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>15363</b>		RunNo: <b>21369</b>							
Prep Date: <b>9/18/2014</b>	Analysis Date: <b>9/22/2014</b>		SeqNo: <b>624223</b>	Units: <b>%REC</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		4.931		90.7	57.9	140			

Sample ID <b>1409854-001AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>15363</b>		RunNo: <b>21369</b>							
Prep Date: <b>9/18/2014</b>	Analysis Date: <b>9/22/2014</b>		SeqNo: <b>624224</b>	Units: <b>%REC</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		4.970		96.5	57.9	140	0	0	

Sample ID <b>1409946-002AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>15397</b>		RunNo: <b>21369</b>							
Prep Date: <b>9/19/2014</b>	Analysis Date: <b>9/23/2014</b>		SeqNo: <b>624251</b>	Units: <b>%REC</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		4.965		99.8	57.9	140			

Sample ID <b>1409946-002AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>15397</b>		RunNo: <b>21369</b>							
Prep Date: <b>9/19/2014</b>	Analysis Date: <b>9/23/2014</b>		SeqNo: <b>624424</b>	Units: <b>%REC</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		4.970		97.5	57.9	140	0	0	

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1409A75

27-Sep-14

Client: Animas Environmental  
Project: CoP San Juan 28-7 #216

Sample ID	1409A62-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15419	RunNo:	21392					
Prep Date:	9/23/2014	Analysis Date:	9/24/2014	SeqNo:	625420	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	49.75	0	97.9	40.1	152			
Surr: DNOP	4.5		4.975		90.8	57.9	140			

Sample ID	1409A62-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15419	RunNo:	21392					
Prep Date:	9/23/2014	Analysis Date:	9/24/2014	SeqNo:	625421	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.25	0	92.2	40.1	152	4.96	32.1	
Surr: DNOP	4.6		5.025		91.8	57.9	140	0	0	

Sample ID	1409A81-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15459	RunNo:	21392					
Prep Date:	9/23/2014	Analysis Date:	9/24/2014	SeqNo:	626700	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		4.980		91.4	57.9	140			

Sample ID	1409A81-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15459	RunNo:	21392					
Prep Date:	9/23/2014	Analysis Date:	9/24/2014	SeqNo:	626701	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.6		5.015		72.3	57.9	140	0	0	

Sample ID	MB-15459	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	15459	RunNo:	21392					
Prep Date:	9/23/2014	Analysis Date:	9/24/2014	SeqNo:	626708	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.7		10.00		97.3	57.9	140			

Sample ID	LCS-15459	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	15459	RunNo:	21392					
Prep Date:	9/23/2014	Analysis Date:	9/24/2014	SeqNo:	626709	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		111	57.9	140			

### Qualifiers:

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409A75

27-Sep-14

**Client:** Animas Environmental  
**Project:** CoP San Juan 28-7 #216

Sample ID <b>MB-15453</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>15453</b>	RunNo: <b>21428</b>								
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/24/2014</b>	SeqNo: <b>626061</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	800		1000		80.5	80	120			

Sample ID <b>LCS-15453</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>15453</b>	RunNo: <b>21428</b>								
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/24/2014</b>	SeqNo: <b>626062</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.4	65.8	139			
Surr: BFB	930		1000		93.2	80	120			

Sample ID <b>1409A62-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>15453</b>	RunNo: <b>21428</b>								
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/24/2014</b>	SeqNo: <b>626068</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.7	23.41	0	85.9	71.8	132			
Surr: BFB	790		936.3		84.8	80	120			

Sample ID <b>1409A62-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>15453</b>	RunNo: <b>21428</b>								
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/24/2014</b>	SeqNo: <b>626069</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.43	0	93.7	71.8	132	8.78	20	
Surr: BFB	890		937.2		94.9	80	120	0	0	

Sample ID <b>MB-15490 MK</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>R21449</b>	RunNo: <b>21449</b>								
Prep Date:	Analysis Date: <b>9/25/2014</b>	SeqNo: <b>627596</b>	Units: <b>%REC</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	880		1000		87.7	80	120			

Sample ID <b>LCS-15490 MK</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>R21449</b>	RunNo: <b>21449</b>								
Prep Date:	Analysis Date: <b>9/25/2014</b>	SeqNo: <b>627597</b>	Units: <b>%REC</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		98.0	80	120			

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409A75

27-Sep-14

**Client:** Animas Environmental  
**Project:** CoP San Juan 28-7 #216

Sample ID <b>MB-15453</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>15453</b>	RunNo: <b>21428</b>								
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/24/2014</b>	SeqNo: <b>626133</b>			Units: <b>mg/Kg</b>					
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	0.96		1.000		96.0	80	120			

Sample ID <b>LCS-15453</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>15453</b>	RunNo: <b>21428</b>								
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/24/2014</b>	SeqNo: <b>626134</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	92.7	80	120			
Toluene	0.91	0.050	1.000	0	91.2	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID <b>1409A62-002AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>15453</b>	RunNo: <b>21428</b>								
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/24/2014</b>	SeqNo: <b>626142</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.047	0.9479	0	82.7	77.4	142			
Toluene	0.77	0.047	0.9479	0.02282	79.2	77	132			
Ethylbenzene	0.79	0.047	0.9479	0	83.2	77.6	134			
Xylenes, Total	2.6	0.095	2.844	0.03835	89.9	77.4	132			
Surr: 4-Bromofluorobenzene	0.91		0.9479		96.2	80	120			

Sample ID <b>1409A62-002AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>15453</b>	RunNo: <b>21428</b>								
Prep Date: <b>9/23/2014</b>	Analysis Date: <b>9/24/2014</b>	SeqNo: <b>626143</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.047	0.9479	0	88.8	77.4	142	7.10	20	
Toluene	0.83	0.047	0.9479	0.02282	85.6	77	132	7.51	20	
Ethylbenzene	0.85	0.047	0.9479	0	89.8	77.6	134	7.67	20	
Xylenes, Total	2.8	0.095	2.844	0.03835	95.9	77.4	132	6.32	20	
Surr: 4-Bromofluorobenzene	0.95		0.9479		100	80	120	0	0	

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409A75

27-Sep-14

Client: Animas Environmental  
Project: CoP San Juan 28-7 #216

Sample ID	MB-15490 MK	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R21449	RunNo:	21449					
Prep Date:		Analysis Date:	9/25/2014	SeqNo:	627632	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		91.4	80	120			

Sample ID	LCS-15490 MK	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R21449	RunNo:	21449					
Prep Date:		Analysis Date:	9/25/2014	SeqNo:	627633	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

## Qualifiers:

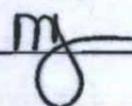
- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank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

# Sample Log-In Check List

Client Name: **Animas Environmental**

Work Order Number: **1409A75**

RcptNo: **1**

Received by/date:		<b>09/20/14</b>	
Logged By:	<b>Ashley Gallegos</b>	<b>9/20/2014 2:00:00 PM</b>	
Completed By:	<b>Ashley Gallegos</b>	<b>9/22/2014 5:03:00 PM</b>	
Reviewed By:		<b>09/23/14</b>	

### Chain of Custody

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

### Log In

- Was an attempt made to cool the samples? Yes  No  NA
- Were all samples received at a temperature of >0° C to 6.0° C? Yes  No  NA
- Sample(s) in proper container(s)? Yes  No
- Sufficient sample volume for indicated test(s)? Yes  No
- Are samples (except VOA and ONG) properly preserved? Yes  No
- Was preservative added to bottles? Yes  No  NA
- VOA vials have zero headspace? Yes  No  No VOA Vials
- Were any sample containers received broken? Yes  No
- Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes  No
- Are matrices correctly identified on Chain of Custody? Yes  No
- Is it clear what analyses were requested? Yes  No
- 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)

- Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	6.0	Good	Yes			

# Chain-of-Custody Record

Client: Animas Environmental Services  
 Mailing Address: 604 E Pinon St  
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

Project Name:

CoP San Juan 28-7 # 216

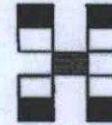
Project #:

Project Manager:

Sampler:

On Ice:  Yes  No

Sample Temperature: 14°C



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

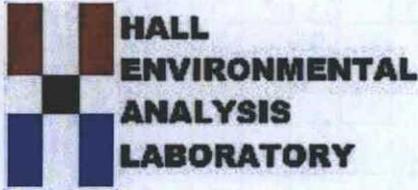
Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBEs (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Ruthless (Y or N)	
9-17-14	1203	Soil	SB-1 @ 8'	1-4oz jar	Cool	-001	X	X											
9-19-14	1215		SB-3 @ 8'			-002	X	X											
9-17-14	1415		SB-8 @ 11.5			-003	X	X											
9-19-14	1211		SC-1 @ 4'			-004	X	X											

Date: 9/19/14 Time: 1545 Relinquished by: [Signature]  
 Received by: Christine Waletz Date: 9/19/14 Time: 1545 Remarks: Bill to Conoco Phillips  
 Date: 9/19/14 Time: 1756 Relinquished by: Christine Waletz  
 Received by: [Signature] Date: 09/20/14 Time: 1400 Supervisor: Garry Nelson user: VILLAJ  
 ordered by: Lindsay Dumas

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](http://www.hallenvironmental.com)

October 23, 2014

Emilee Skyles  
Animas Environmental  
604 Pinon Street  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX

RE: CoP SJ 28-7 #216

OrderNo.: 1410A19

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/22/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue grid background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410A19

Date Reported: 10/23/2014

CLIENT: Animas Environmental

Client Sample ID: SC-4

Project: CoP SJ 28-7 #216

Collection Date: 10/21/2014 11:10:00 AM

Lab ID: 1410A19-001

Matrix: MEOH (SOIL)

Received Date: 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	200	9.9		mg/Kg	1	10/22/2014 11:37:52 AM	16022
Surr: DNOP	103	63.5-128		%REC	1	10/22/2014 11:37:52 AM	16022
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	660	28		mg/Kg	10	10/22/2014 10:45:50 AM	R22067
Surr: BFB	398	80-120	S	%REC	10	10/22/2014 10:45:50 AM	R22067
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	0.37	0.28		mg/Kg	10	10/22/2014 10:45:50 AM	R22067
Toluene	0.81	0.28		mg/Kg	10	10/22/2014 10:45:50 AM	R22067
Ethylbenzene	3.5	0.28		mg/Kg	10	10/22/2014 10:45:50 AM	R22067
Xylenes, Total	42	0.55		mg/Kg	10	10/22/2014 10:45:50 AM	R22067
Surr: 4-Bromofluorobenzene	125	80-120	S	%REC	10	10/22/2014 10:45:50 AM	R22067

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

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

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410A19

Date Reported: 10/23/2014

CLIENT: Animas Environmental

Client Sample ID: SC-5

Project: CoP SJ 28-7 #216

Collection Date: 10/21/2014 11:20:00 AM

Lab ID: 1410A19-002

Matrix: MEOH (SOIL)

Received Date: 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	260	10		mg/Kg	1	10/22/2014 12:08:01 PM	16022
Surr: DNOP	102	63.5-128		%REC	1	10/22/2014 12:08:01 PM	16022
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	250	24		mg/Kg	10	10/22/2014 11:14:29 AM	R22067
Surr: BFB	259	80-120	S	%REC	10	10/22/2014 11:14:29 AM	R22067
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	10	10/22/2014 11:14:29 AM	R22067
Toluene	ND	0.24		mg/Kg	10	10/22/2014 11:14:29 AM	R22067
Ethylbenzene	0.93	0.24		mg/Kg	10	10/22/2014 11:14:29 AM	R22067
Xylenes, Total	13	0.48		mg/Kg	10	10/22/2014 11:14:29 AM	R22067
Surr: 4-Bromofluorobenzene	111	80-120		%REC	10	10/22/2014 11:14:29 AM	R22067

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

<b>Qualifiers:</b>	* 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	Page 2 of 6
	O RSD is greater than RSDlimit	P Sample pH greater than 2.	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental

**Client Sample ID:** SC-6

**Project:** CoP SJ 28-7 #216

**Collection Date:** 10/21/2014 12:35:00 PM

**Lab ID:** 1410A19-003

**Matrix:** MEOH (SOIL)

**Received Date:** 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	100	10		mg/Kg	1	10/22/2014 12:38:20 PM	16022
Surr: DNOP	99.6	63.5-128		%REC	1	10/22/2014 12:38:20 PM	16022
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	240	3.4		mg/Kg	1	10/22/2014 11:42:59 AM	R22067
Surr: BFB	1230	80-120	S	%REC	1	10/22/2014 11:42:59 AM	R22067
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	0.16	0.034		mg/Kg	1	10/22/2014 11:42:59 AM	R22067
Toluene	0.74	0.034		mg/Kg	1	10/22/2014 11:42:59 AM	R22067
Ethylbenzene	0.77	0.034		mg/Kg	1	10/22/2014 11:42:59 AM	R22067
Xylenes, Total	7.1	0.068		mg/Kg	1	10/22/2014 11:42:59 AM	R22067
Surr: 4-Bromofluorobenzene	166	80-120	S	%REC	1	10/22/2014 11:42:59 AM	R22067

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410A19

23-Oct-14

Client: Animas Environmental

Project: CoP SJ 28-7 #216

Sample ID	MB-16022	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	16022	RunNo:	22059					
Prep Date:	10/22/2014	Analysis Date:	10/22/2014	SeqNo:	648870	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	9.3		10.00		92.9	63.5	128			

Sample ID	LCS-16022	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	16022	RunNo:	22059					
Prep Date:	10/22/2014	Analysis Date:	10/22/2014	SeqNo:	648872	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.9	68.6	130			
Surr: DNOP	4.8		5.000		96.8	63.5	128			

## Qualifiers:

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410A19

23-Oct-14

Client: Animas Environmental

Project: CoP SJ 28-7 #216

Sample ID	MB-16008 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R22067	RunNo:	22067					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649563	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	910		1000		90.7	80	120			

Sample ID	LCS-16008 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R22067	RunNo:	22067					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649564	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	121	65.8	139			
Surr: BFB	1100		1000		115	80	120			

Sample ID	MB-16008	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	16008	RunNo:	22067					
Prep Date:	10/21/2014	Analysis Date:	10/22/2014	SeqNo:	649565	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.7	80	120			

Sample ID	LCS-16008	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	16008	RunNo:	22067					
Prep Date:	10/21/2014	Analysis Date:	10/22/2014	SeqNo:	649566	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		115	80	120			

### Qualifiers:

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410A19

23-Oct-14

Client: Animas Environmental

Project: CoP SJ 28-7 #216

Sample ID	MB-16008 MK	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R22067	RunNo:	22067					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649639	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	0.94		1.000		94.5	80	120			

Sample ID	LCS-16008 MK	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R22067	RunNo:	22067					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649640	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	99.1	80	120			
Toluene	1.0	0.050	1.000	0	99.9	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	MB-16008	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	16008	RunNo:	22067					
Prep Date:	10/21/2014	Analysis Date:	10/22/2014	SeqNo:	649641	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.94		1.000		94.5	80	120			

Sample ID	LCS-16008	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	16008	RunNo:	22067					
Prep Date:	10/21/2014	Analysis Date:	10/22/2014	SeqNo:	649642	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

### Qualifiers:

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

**Sample Log-In Check List**

Client Name: Animas Environmental

Work Order Number: 1410A19

RcptNo: 1

Received by/date: [Signature] 10/22/14

Logged By: Ashley Gallegos 10/22/2014 8:00:00 AM [Signature]

Completed By: Ashley Gallegos 10/22/2014 8:48:53 AM [Signature]

Reviewed By: [Signature] 10/22/14

**Chain of Custody**

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

**Log In**

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

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

**Special Handling (If applicable)**

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

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

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





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

October 27, 2014

Emilee Skyles

Animas Environmental  
604 Pinon Street  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX

RE: COP SJ 28-7 # 216

OrderNo.: 1410B52

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/24/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410B52

Date Reported: 10/27/2014

CLIENT: Animas Environmental

Client Sample ID: SC-7

Project: COP SJ 28-7 # 216

Collection Date: 10/23/2014 1:35:00 PM

Lab ID: 1410B52-001

Matrix: MEOH (SOIL)

Received Date: 10/24/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	310	9.8		mg/Kg	1	10/24/2014 9:49:30 AM	16081
Surr: DNOP	86.8	63.5-128		%REC	1	10/24/2014 9:49:30 AM	16081
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	330	6.9		mg/Kg	2	10/24/2014 12:32:16 PM	R22129
Surr: BFB	797	80-120	S	%REC	2	10/24/2014 12:32:16 PM	R22129
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	0.22	0.069		mg/Kg	2	10/24/2014 12:32:16 PM	R22129
Toluene	1.9	0.069		mg/Kg	2	10/24/2014 12:32:16 PM	R22129
Ethylbenzene	0.78	0.069		mg/Kg	2	10/24/2014 12:32:16 PM	R22129
Xylenes, Total	8.9	0.14		mg/Kg	2	10/24/2014 12:32:16 PM	R22129
Surr: 4-Bromofluorobenzene	147	80-120	S	%REC	2	10/24/2014 12:32:16 PM	R22129

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

<b>Qualifiers:</b>	* 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	Page 1 of 6
	O RSD is greater than RSDlimit	P Sample pH greater than 2.	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410B52

Date Reported: 10/27/2014

CLIENT: Animas Environmental

Client Sample ID: SC-8

Project: COP SJ 28-7 # 216

Collection Date: 10/23/2014 12:40:00 PM

Lab ID: 1410B52-002

Matrix: MEOH (SOIL)

Received Date: 10/24/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	160	10		mg/Kg	1	10/24/2014 10:10:57 AM	16081
Surr: DNOP	93.6	63.5-128		%REC	1	10/24/2014 10:10:57 AM	16081
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	91	16		mg/Kg	5	10/24/2014 1:00:54 PM	R22129
Surr: BFB	186	80-120	S	%REC	5	10/24/2014 1:00:54 PM	R22129
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.080		mg/Kg	5	10/24/2014 1:00:54 PM	R22129
Toluene	ND	0.16		mg/Kg	5	10/24/2014 1:00:54 PM	R22129
Ethylbenzene	0.25	0.16		mg/Kg	5	10/24/2014 1:00:54 PM	R22129
Xylenes, Total	3.0	0.32		mg/Kg	5	10/24/2014 1:00:54 PM	R22129
Surr: 4-Bromofluorobenzene	109	80-120		%REC	5	10/24/2014 1:00:54 PM	R22129

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

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

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
 Lab Order 1410B52  
 Date Reported: 10/27/2014

CLIENT: Animas Environmental

Client Sample ID: SC-9

Project: COP SJ 28-7 # 216

Collection Date: 10/23/2014 1:40:00 PM

Lab ID: 1410B52-003

Matrix: MEOH (SOIL)

Received Date: 10/24/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	650	9.9		mg/Kg	1	10/24/2014 10:32:20 AM	16081
Surr: DNOP	88.7	63.5-128		%REC	1	10/24/2014 10:32:20 AM	16081
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	390	31		mg/Kg	10	10/24/2014 1:29:32 PM	R22129
Surr: BFB	320	80-120	S	%REC	10	10/24/2014 1:29:32 PM	R22129
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.16		mg/Kg	10	10/24/2014 1:29:32 PM	R22129
Toluene	ND	0.31		mg/Kg	10	10/24/2014 1:29:32 PM	R22129
Ethylbenzene	1.1	0.31		mg/Kg	10	10/24/2014 1:29:32 PM	R22129
Xylenes, Total	15	0.62		mg/Kg	10	10/24/2014 1:29:32 PM	R22129
Surr: 4-Bromofluorobenzene	117	80-120		%REC	10	10/24/2014 1:29:32 PM	R22129

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

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410B52

27-Oct-14

Client: Animas Environmental

Project: COP SJ 28-7 # 216

Sample ID	MB-16081	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	16081	RunNo:	22124					
Prep Date:	10/24/2014	Analysis Date:	10/24/2014	SeqNo:	651178	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	7.8		10.00		77.7	63.5	128			

Sample ID	LCS-16081	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	16081	RunNo:	22124					
Prep Date:	10/24/2014	Analysis Date:	10/24/2014	SeqNo:	651179	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.9	68.6	130			
Surr: DNOP	3.6		5.000		71.3	63.5	128			

Sample ID	1410B52-003AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	SC-9	Batch ID:	16081	RunNo:	22124					
Prep Date:	10/24/2014	Analysis Date:	10/24/2014	SeqNo:	651345	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	800	10	49.80	646.2	310	40.1	152			S
Surr: DNOP	4.8		4.980		95.9	63.5	128			

Sample ID	1410B52-003AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	SC-9	Batch ID:	16081	RunNo:	22124					
Prep Date:	10/24/2014	Analysis Date:	10/24/2014	SeqNo:	651346	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	830	10	49.80	646.2	363	40.1	152	3.28	32.1	S
Surr: DNOP	4.7		4.980		94.5	63.5	128	0	0	

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410B52

27-Oct-14

Client: Animas Environmental

Project: COP SJ 28-7 # 216

Sample ID	MB-16037 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R22129	RunNo:	22129					
Prep Date:		Analysis Date:	10/24/2014	SeqNo:	651505	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	900		1000		89.9	80	120			

Sample ID	LCS-16037 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R22129	RunNo:	22129					
Prep Date:		Analysis Date:	10/24/2014	SeqNo:	651506	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	65.8	139			
Surr: BFB	1000		1000		102	80	120			

Sample ID	MB-16059	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	16059	RunNo:	22129					
Prep Date:	10/23/2014	Analysis Date:	10/24/2014	SeqNo:	651513	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		92.3	80	120			

Sample ID	LCS-16059	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	16059	RunNo:	22129					
Prep Date:	10/23/2014	Analysis Date:	10/24/2014	SeqNo:	651514	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		101	80	120			

### Qualifiers:

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410B52

27-Oct-14

Client: Animas Environmental

Project: COP SJ 28-7 # 216

Sample ID	MB-16037 MK	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R22129	RunNo:	22129					
Prep Date:		Analysis Date:	10/24/2014	SeqNo:	651540	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	0.93		1.000		93.1	80	120			

Sample ID	LCS-16037 MK	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R22129	RunNo:	22129					
Prep Date:		Analysis Date:	10/24/2014	SeqNo:	651541	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.050	1.000	0	91.9	80	120			
Toluene	0.92	0.050	1.000	0	92.2	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID	MB-16059	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	16059	RunNo:	22129					
Prep Date:	10/23/2014	Analysis Date:	10/24/2014	SeqNo:	651544	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		92.1	80	120			

Sample ID	LCS-16059	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	16059	RunNo:	22129					
Prep Date:	10/23/2014	Analysis Date:	10/24/2014	SeqNo:	651545	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

### Qualifiers:

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

**Sample Log-In Check List**

Client Name: **Animas Environmental** Work Order Number: **1410B52** RcptNo: **1**

Received by/date: *[Signature]* 10/24/12

Logged By: **Lindsay Mangin** 10/24/2014 7:30:00 AM *[Signature]*

Completed By: **Lindsay Mangin** 10/24/2014 8:07:30 AM *[Signature]*

Reviewed By: AT 10/24/14

**Chain of Custody**

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

**Log In**

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

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

**Special Handling (if applicable)**

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

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

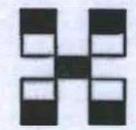
**18. Cooler Information**

Cooler No.	Temp °C	Condition	Seal Intact	Seal No.	Seal Date	Signed By
1	2.6	Good	Yes			

# Chain-of-Custody Record

Client: Animas Environmental Services, LLC  
 Mailing Address: 604 Pinon  
Farmington, NM 87401  
 Phone #: 505-564-2281

Turn-Around Time:  
 Standard  Rush same day  
 Project Name: Cop SJ 28-7 #216  
 Project #:



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

email or Fax#: \_\_\_\_\_  
 QA/QC Package:  
 Standard  Level 4 (Full Validation)  
 Accreditation  
 NELAP  Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Project Manager: E. Skyles  
 Sampler: E. Skyles  
 On Site: \_\_\_\_\_  
 Sample Temperature: \_\_\_\_\_

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TPH (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO/DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
10/23/14	13:35	Soil	SC-7	1-152 MedKit	cool MeOH	-001	X		X									
10/23/14	12:40	Soil	SC-8	1-152 MedKit	cool MeOH	-002	X		X									
10/23/14	13:40	Soil	SC-9	1-152 MedKit	cool MeOH	-003	X		X									

Date: 10/23/14 Time: 1754 Relinquished by: E. Skyles  
 Date: 10/23/14 Time: 1830 Relinquished by: Christi White

Received by: Christi White Date: 10/23/14 Time: 1754  
 Received by: [Signature] Date: 10/24/14 Time: 0730

Remarks: Ball to Conoco Phillips  
WO # 20378283  
Area: 23  
Supervisor: Garry Nelson  
User ID: VillaJJ  
Analyst: Lindsay James

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](http://www.hallenvironmental.com)

September 26, 2014

Emilee Skyles  
Animas Environmental  
604 Pinon Street  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX

RE: CoP San Juan 28-7 #216

OrderNo.: 1409880

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 9/18/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409880

Date Reported: 9/26/2014

CLIENT: Animas Environmental  
 Project: CoP San Juan 28-7 #216  
 Lab ID: 1409880-001

Matrix: SOIL

Client Sample ID: SB-6@10'  
 Collection Date: 9/17/2014 3:35:00 PM  
 Received Date: 9/18/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	260	9.9		mg/Kg	1	9/22/2014 7:21:06 PM	15369
Surr: DNOP	123	57.9-140		%REC	1	9/22/2014 7:21:06 PM	15369
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	32	4.8		mg/Kg	1	9/23/2014 1:15:22 AM	15378
Surr: BFB	432	80-120	S	%REC	1	9/23/2014 1:15:22 AM	15378
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	9/23/2014 1:15:22 AM	15378
Toluene	ND	0.048		mg/Kg	1	9/23/2014 1:15:22 AM	15378
Ethylbenzene	ND	0.048		mg/Kg	1	9/23/2014 1:15:22 AM	15378
Xylenes, Total	0.15	0.096		mg/Kg	1	9/23/2014 1:15:22 AM	15378
Surr: 4-Bromofluorobenzene	120	80-120		%REC	1	9/23/2014 1:15:22 AM	15378

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental

Client Sample ID: SB-7 @ 9.25'

Project: CoP San Juan 28-7 #216

Collection Date: 9/17/2014 3:45:00 PM

Lab ID: 1409880-002

Matrix: SOIL

Received Date: 9/18/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	9/22/2014 7:51:06 PM	15369
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/22/2014 7:51:06 PM	15369
Surr: DNOP	103	57.9-140		%REC	1	9/22/2014 7:51:06 PM	15369
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	6.2	4.8		mg/Kg	1	9/22/2014 7:03:19 PM	15378
Surr: BFB	161	80-120	S	%REC	1	9/22/2014 7:03:19 PM	15378

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

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

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental

**Client Sample ID:** SB-9 @10.25'

**Project:** CoP San Juan 28-7 #216

**Collection Date:** 9/17/2014 4:30:00 PM

**Lab ID:** 1409880-003

**Matrix:** SOIL

**Received Date:** 9/18/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/22/2014 8:21:11 PM	15369
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/22/2014 8:21:11 PM	15369
Surr: DNOP	124	57.9-140		%REC	1	9/22/2014 8:21:11 PM	15369
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/22/2014 7:31:54 PM	15378
Surr: BFB	96.8	80-120		%REC	1	9/22/2014 7:31:54 PM	15378

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

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

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409880

Date Reported: 9/26/2014

**CLIENT:** Animas Environmental

**Client Sample ID:** SB-10 @9.75'

**Project:** CoP San Juan 28-7 #216

**Collection Date:** 9/17/2014 5:46:00 PM

**Lab ID:** 1409880-004

**Matrix:** SOIL

**Received Date:** 9/18/2014 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/22/2014 8:51:31 PM	15369
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/22/2014 8:51:31 PM	15369
Surr: DNOP	104	57.9-140		%REC	1	9/22/2014 8:51:31 PM	15369
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/22/2014 8:00:28 PM	15378
Surr: BFB	96.1	80-120		%REC	1	9/22/2014 8:00:28 PM	15378

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

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409880

26-Sep-14

Client: Animas Environmental  
Project: CoP San Juan 28-7 #216

Sample ID	MB-15363	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	15363	RunNo:	21269					
Prep Date:	9/18/2014	Analysis Date:	9/18/2014	SeqNo:	620601	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		100	57.9	140			

Sample ID	LCS-15363	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	15363	RunNo:	21269					
Prep Date:	9/18/2014	Analysis Date:	9/18/2014	SeqNo:	620602	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		104	57.9	140			

Sample ID	LCS-15369	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	15369	RunNo:	21309					
Prep Date:	9/18/2014	Analysis Date:	9/19/2014	SeqNo:	622110	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	105	68.6	130			
Surr: DNOP	5.0		5.000		100	57.9	140			

Sample ID	MB-15369	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	15369	RunNo:	21309					
Prep Date:	9/18/2014	Analysis Date:	9/19/2014	SeqNo:	622115	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		89.3	57.9	140			

Sample ID	1409878-002AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15369	RunNo:	21309					
Prep Date:	9/18/2014	Analysis Date:	9/19/2014	SeqNo:	623164	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	93	10	49.75	19.20	149	40.1	152			
Surr: DNOP	5.1		4.975		103	57.9	140			

Sample ID	1409878-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15369	RunNo:	21309					
Prep Date:	9/18/2014	Analysis Date:	9/19/2014	SeqNo:	623165	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	9.9	49.55	19.20	162	40.1	152	6.79	32.1	S

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1409880

26-Sep-14

Client: Animas Environmental  
Project: CoP San Juan 28-7 #216

Sample ID	1409878-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15369	RunNo:	21309					
Prep Date:	9/18/2014	Analysis Date:	9/19/2014	SeqNo:	623165	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.1		4.955		143	57.9	140	0	0	S

Sample ID	1409854-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15363	RunNo:	21369					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	624223	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		4.931		90.7	57.9	140			

Sample ID	1409854-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	15363	RunNo:	21369					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	624224	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		4.970		96.5	57.9	140	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               |
| O RSD is greater than RSDlimit                    | P Sample pH greater than 2.                          |
| R RPD outside accepted recovery limits            | RL Reporting Detection Limit                         |
| S Spike Recovery outside accepted recovery limits |  |

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409880

26-Sep-14

Client: Animas Environmental  
Project: CoP San Juan 28-7 #216

Sample ID	MB-15378	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	15378	RunNo:	21342					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	623292	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	940		1000		94.2	80	120			

Sample ID	LCS-15378	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	15378	RunNo:	21342					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	623293	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	103	65.8	139			
Surr: BFB	1000		1000		101	80	120			

Sample ID	1409874-006AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC	Batch ID:	15378	RunNo:	21342					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	623304	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.6	23.08	0	101	71.8	132			
Surr: BFB	1000		923.4		110	80	120			

Sample ID	1409874-006AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC	Batch ID:	15378	RunNo:	21342					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	623305	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.6	23.15	0	96.5	71.8	132	4.58	20	
Surr: BFB	1000		925.9		108	80	120	0	0	

### Qualifiers:

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409880

26-Sep-14

Client: Animas Environmental  
Project: CoP San Juan 28-7 #216

Sample ID	MB-15378	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	15378	RunNo:	21342					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	623326	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		104	80	120			

Sample ID	LCS-15378	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	15378	RunNo:	21342					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	623327	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	90.6	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.6	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	1409878-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	BatchQC	Batch ID:	15378	RunNo:	21342					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	623339	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.76	0.049	0.9843	0	77.0	77.4	142			S
Toluene	0.83	0.049	0.9843	0	84.8	77	132			
Ethylbenzene	0.88	0.049	0.9843	0	89.5	77.6	134			
Xylenes, Total	2.7	0.098	2.953	0	89.9	77.4	132			
Surr: 4-Bromofluorobenzene	1.1		0.9843		108	80	120			

Sample ID	1409878-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	BatchQC	Batch ID:	15378	RunNo:	21342					
Prep Date:	9/18/2014	Analysis Date:	9/22/2014	SeqNo:	623340	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.049	0.9881	0	89.5	77.4	142	15.3	20	
Toluene	0.90	0.049	0.9881	0	91.2	77	132	7.62	20	
Ethylbenzene	0.91	0.049	0.9881	0	92.1	77.6	134	3.28	20	
Xylenes, Total	2.7	0.099	2.964	0	91.7	77.4	132	2.39	20	
Surr: 4-Bromofluorobenzene	1.1		0.9881		109	80	120	0	0	

**Qualifiers:**

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

Sample Log-In Check List

Client Name: Animas Environmental

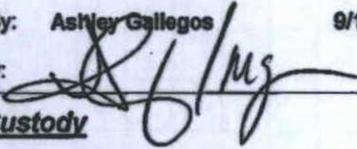
Work Order Number: 1409880

RcptNo: 1

Received by/date: AT 09/18/14

Logged By: Ashley Gallegos 9/18/2014 7:30:00 AM 

Completed By: Ashley Gallegos 9/18/2014 9:17:56 AM 

Reviewed By:  09/18/14

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

18. Cooler Information

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

# Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: Loop Pinnon  
Farmington Nm 87401

Phone #: 505 564-2281

email or Fax#: 505 324-2022

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

Accreditation  
 NELAP  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard  Rush

Project Name: Cop San Juan 28-7 #216

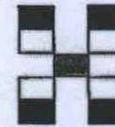
Project #: \_\_\_\_\_

Project Manager: Emilee Skyles

Sampler: CL/SJ

On Ice:  Yes  No

Sample Temperature: 1.8



## 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	BTEX + MTBE's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
1/17/14	8:55	Soil	SB-6 @ 10'	2.4oz jar	Cool	-001	X	X										
	1545		SB-7 @ 9.25'			-002		X										
	1630		SB-9 @ 10.25'	1-4oz		-003		X										
	1746	+	SB-10 @ 9.75'	1-4oz	+	-004		X										

Date: 1/17/14 Time: 2015 Relinquished by: [Signature]  
 Date: 1/17/14 Time: 0730 Received by: [Signature]

Remarks: Bill to Crocco a  
Bill to Crocco a

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.