

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

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

**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report ☒ Final Report

Name of Company <b>ConocoPhillips Company</b>	Contact <b>Lisa Hunter</b>	
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 326-9786</b>	
Facility Name: <b>San Juan 29-6 Unit 84</b>	Facility Type: <b>Gas Well</b>	
Surface Owner <b>BLM</b>	Mineral Owner <b>BLM</b>	API No. <b>3003907623</b>

**LOCATION OF RELEASE**

Unit Letter <b>G</b>	Section <b>14</b>	Township <b>29N</b>	Range <b>06W</b>	Feet from the <b>1635'</b>	North/South Line <b>North</b>	Feet from the <b>1745'</b>	East/West Line <b>East</b>	County <b>Rio Arriba</b>
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Latitude **36.7284088** Longitude **-107.42859**

**NATURE OF RELEASE**

Type of Release <b>Historic Contamination</b>	Volume of Release <b>Unknown</b>	Volume Recovered <b>396 c/yds</b>
Source of Release <b>Production Tank</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>01-22-14</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? <b>n/a</b>	
By Whom? <b>n/a</b>	Date and Hour <b>n/a</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>n/a</b>	
If a Watercourse was Impacted, Describe Fully.* <b>n/a</b>		
Describe Cause of Problem and Remedial Action Taken.* <b>Historical hydrocarbon impacted soil was found during removal of a leaking tank.</b>		
Describe Area Affected and Cleanup Action Taken.* <b>Historical hydrocarbon impacted soil was found during removal of a leaking tank. The excavation was 25' x 30' x 12' in depth and 396 c/yds of soil was transported to IEI land farm and 396 c/yds of clean soil was transported from Aztec Machine Company and placed in the excavation site. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review.</b>		
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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Lisa Hunter</b>	Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>11/4/14</b>	Expiration Date:
E-mail Address: <b>Lisa.Hunter@cop.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>August 18, 2014</b>	Phone: <b>(505) 326-9786</b>	

\* Attach Additional Sheets If Necessary

#NCS 1430842934

(67)



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3084

OIL CONS. DIV DIST. 3  
AUG 19 2014

July 25, 2014

Lisa Hunter  
ConocoPhillips  
San Juan Business Unit  
Office 214-04  
5525 Hwy 64  
Farmington, New Mexico 87401

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

**RE: Initial Release Assessment and Final Excavation Report  
San Juan 29-6 #84  
Rio Arriba County, New Mexico**

Dear Ms. Hunter:

During January, April, May, and June 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 29-6 #84, located in Rio Arriba County, New Mexico. The initial release consisted of an unknown quantity of produced water and while investigating the release, historical contamination was encountered. The initial release assessment was completed by AES on January 23, 2014. The final excavation extents were completed by CoP contractors prior to AES' arrival at the location in April and May 2014, with final environmental clearance completed on June 3, 2014.

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## 1.0 Site Information

### 1.1 Location

Location – SW¼ NE¼, Section 14, T29N, R6W, Rio Arriba County, New Mexico  
Well Head Latitude/Longitude – N36.72859 and W107.42938, respectively  
Release Location Latitude/Longitude – N36.72832 and W107.42957, respectively  
Land Jurisdiction – Bureau of Land Management (BLM)  
Figure 1. Topographic Site Location Map  
Figure 2. Aerial Site Map, January 2014

## 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 20 based on the following factors:

- **Depth to Groundwater:** A cathodic protection report form dated February 1992 for this location reported the depth to groundwater at 90 feet below ground surface (bgs). (10 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** Approximately 840 feet south-southeast is an unnamed drainage that flows to Navajo Pasture and eventually to Gobernador Canyon. (10 points)

## 1.3 Assessment

AES was initially contacted by Lisa Hunter of CoP on January 9, 2014, and on January 23, 2014, Deborah Watson, Emilee Skyles, and Sam Glasses of AES completed the release assessment field work. The assessment included collection and field screening of 16 soil samples from 7 borings in and around the release area. Several borings were terminated at the surface or near the surface due to frozen soil conditions. Based on the field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On April 9, 2014, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities on April 9, 2014, included collection of five confirmation soil samples (SC-1 through SC-5) from the walls and base of the excavation. The area of the final excavation measured approximately 26 feet by 23 feet by 10 feet in depth. The depth of the excavation was limited by a confining layer of sandstone at 10 feet bgs.

Samples collected from the sandstone base of the excavation did not meet NMOCD action levels, and at the direction of BLM, the excavation remained open during April through early June while additional remedial activities and sampling events continued. Additional remedial activities included two applications of Quantum Growth™ (April and May 2014) and one application of potassium permanganate (June 2014). AES returned to the location in April, May, and June 2014 to resample the base and collect an additional six confirmation samples (SC-6 through SC-11). Sample locations and final excavation extents are presented on Figure 4.

## 2.0 Soil Sampling

A total of 16 soil samples from 7 borings (SB-1 through SB-7) and 11 composite samples (SC-1 through SC-11) were collected during the assessments and clearance activities. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). All composite samples, except SC-8 and SC-10, collected during the excavation clearance were submitted for confirmation laboratory analysis.

### 2.1 Field Sampling

#### 2.1.1 Volatile Organic Compounds

Field sampling for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field sampling, 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, soil samples SC-1, SC-5, SC-6, SC-7, SC-9, and SC-11 were laboratory analyzed for:

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

### 2.3 Field and Laboratory Analytical Results

On January 23, 2014, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 1.2 ppm in SB-6 up to 4,924 ppm in SB-5. Field TPH concentrations ranged from 38.8 mg/kg in SB-7 up to 8,440 mg/kg in SB-1.

Final excavation field screening results for VOCs via OVM ranged from 1.1 ppm in SC-3 up to 3,888 ppm in SC-5. Field TPH concentrations ranged from 15.1 mg/kg in SC-4 up to 2,210 mg/kg in SC-8. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Soil Field Sampling VOCs and TPH Results  
San Juan 29-6 #84 Initial Release Assessment and Final Excavation  
January and April through June 2014

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>VOCs via OVM (ppm)</b>	<b>Field TPH (mg/kg)</b>
<b>NMOCD Action Level*</b>			<b>100</b>	<b>100</b>
SB-1	1/23/14	Surface	4,623	NA
		1.5	4,723	7,260
		4	4,842	NA
		6	3,855	987
		9	4,451	NA
		9.5	4,714	8,440
SB-2	1/23/14	Surface	10.6	NA
SB-3	1/23/14	Surface	2.9	NA
SB-4	1/23/14	0.5	11.5	NA
SB-5	1/23/14	1	4,676	>2,500
		4	4,680	NA
		8	4,924	1,980
SB-6	1/23/14	1	1.2	NA
SB-7	1/23/14	1	3,870	NA
		4	76.1	NA
		8	137	38.8
SC-1	4/9/14	1 to 10	407	27.8
SC-2	4/9/14	1 to 10	9.1	26.5

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>VOCs via OVM (ppm)</b>	<b>Field TPH (mg/kg)</b>
<i>NMOCD Action Level*</i>			100	100
SC-3	4/9/14	1 to 10	1.1	<20.0
SC-4	4/9/14	1 to 10	5.1	<20.0
SC-5	4/9/14	10	3,888	NA
SC-6	4/14/14	10	2,356	2,100
SC-7	4/23/14	10	575	650
SC-8	5/7/14	10	2,506	2,210
SC-9	5/21/14	10	412	408
SC-10	5/30/14	10	843	463
SC-11	6/3/14	10	11.7	57.5

NA – not analyzed

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

Laboratory analyses for SC-1 through SC-7, SC-9, and SC-11 were used to confirm field sampling results from the final excavation. Benzene concentrations were reported below laboratory detection limits in SC-1, SC-5, SC-6, SC-9, and SC-11. Total BTEX concentrations ranged from less than 0.17 mg/kg (SC-1) up to 111 mg/kg (SC-5). TPH concentrations as GRO/DRO ranged from 12 mg/kg in SC-11 up to 2,370 mg/kg in SC-5. 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 29-6 #84 Final Excavation Clearance  
April, May and June 2014

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>Benzene (mg/kg)</b>	<b>Total BTEX (mg/kg)</b>	<b>GRO (mg/kg)</b>	<b>DRO (mg/kg)</b>
<i>NMOCD Action Level*</i>			10	50	100	
SC-1	4/9/14	1 to 10	<0.034	<0.17	<4.7	16
SC-2	4/9/14	1 to 10	NA	NA	<4.9	<10.0
SC-3	4/9/14	1 to 10	NA	NA	<4.7	<10.0
SC-4	4/9/14	1 to 10	NA	NA	<4.8	<10.0
SC-5	4/9/14	10	<0.34	111	1,500	870

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>Benzene (mg/kg)</b>	<b>Total BTEX (mg/kg)</b>	<b>GRO (mg/kg)</b>	<b>DRO (mg/kg)</b>
SC-6	4/14/14	10	<0.79	87.4	940	800
SC-7	4/23/14	10	<0.19	1.5	130	250
SC-9	5/21/14	10	<0.039	0.21	20	260
SC-11	6/3/14	10	<0.024	0.42	12	<9.9

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 January 23, 2014, AES conducted an initial assessment of petroleum contaminated soils associated with a historic release at the San Juan 29-6 #84. 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 20.

Initial assessment field sampling results above the NMOCD action level of 100 ppm VOCs and 100 mg/kg TPH were reported in SB-1, SB-5, and SB-7. The highest VOC concentration was reported in SB-5 with 4,924 ppm, and the highest TPH concentration was reported in SB-1 with 8,440 mg/kg.

On April 9, 2014, final clearance of the sidewalls of the excavation area was completed. Field sampling results of the excavation extents showed that VOC and TPH concentrations were below applicable NMOCD action levels of 100 mg/kg for the final walls of the excavation, except the VOC concentration of the north wall (SC-1). The base of the excavation (SC-5) also exceeded the applicable NMOCD action levels for VOCs and TPH. Laboratory analytical results reported benzene and total BTEX in SC-1 below NMOCD action levels, and TPH concentrations as GRO/DRO were reported below the NMOCD action level of 100 mg/kg in SC-1 through SC-4.

In April and May 2014, Quantum Growth<sup>TM</sup> was applied to the base of the excavation, and samples SC-6 through SC-10 were collected. On June 2, 2014, potassium permanganate was also applied to the base of the excavation, and a final sample SC-11 was collected on June 3, 2014. Field sampling results for SC-11 reported VOC and TPH concentrations below applicable NMOCD action levels for the base of the excavation. Laboratory analytical results for SC-11 reported benzene, total BTEX, and TPH as GRO/DRO below applicable NMOCD action levels.

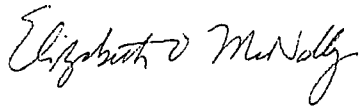
Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils and subsequent applications of Quantum Growth™ and potassium permanganate at the San Juan 29-6 #84, VOCs, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for each of the sidewalls and 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 Deborah Watson at (505) 564-2281.

Sincerely,



Emilee Skyles  
Staff Geologist



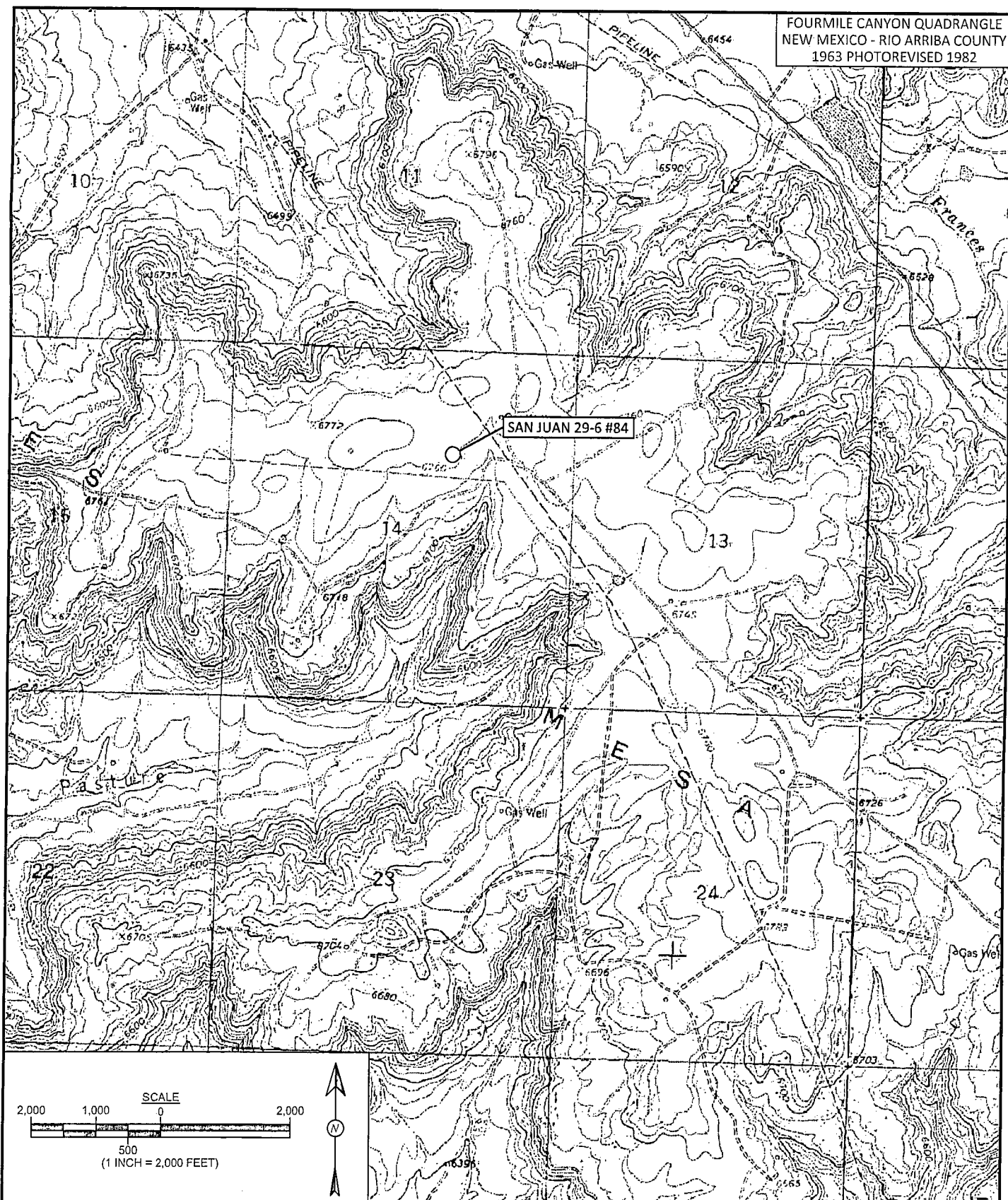
Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, January 2014
- Figure 3. Initial Assessment Sample Locations and Results, January 2014
- Figure 4. Final Excavation Sample Locations and Results, April-June 2014
- AES Field Sampling Report 012314
- AES Field Sampling Report 040914
- AES Field Sampling Report 041414
- AES Field Sampling Report 042314
- AES Field Sampling Report 050714
- AES Field Sampling Report 052114
- AES Field Sampling Report 053014
- AES Field Sampling Report 060314
- Hall Laboratory Analytical Report 1404480
- Hall Laboratory Analytical Report 1404570
- Hall Laboratory Analytical Report 1404663
- Hall Laboratory Analytical Report 1404A06
- Hall Laboratory Analytical Report 1405955
- Hall Laboratory Analytical Report 1406153



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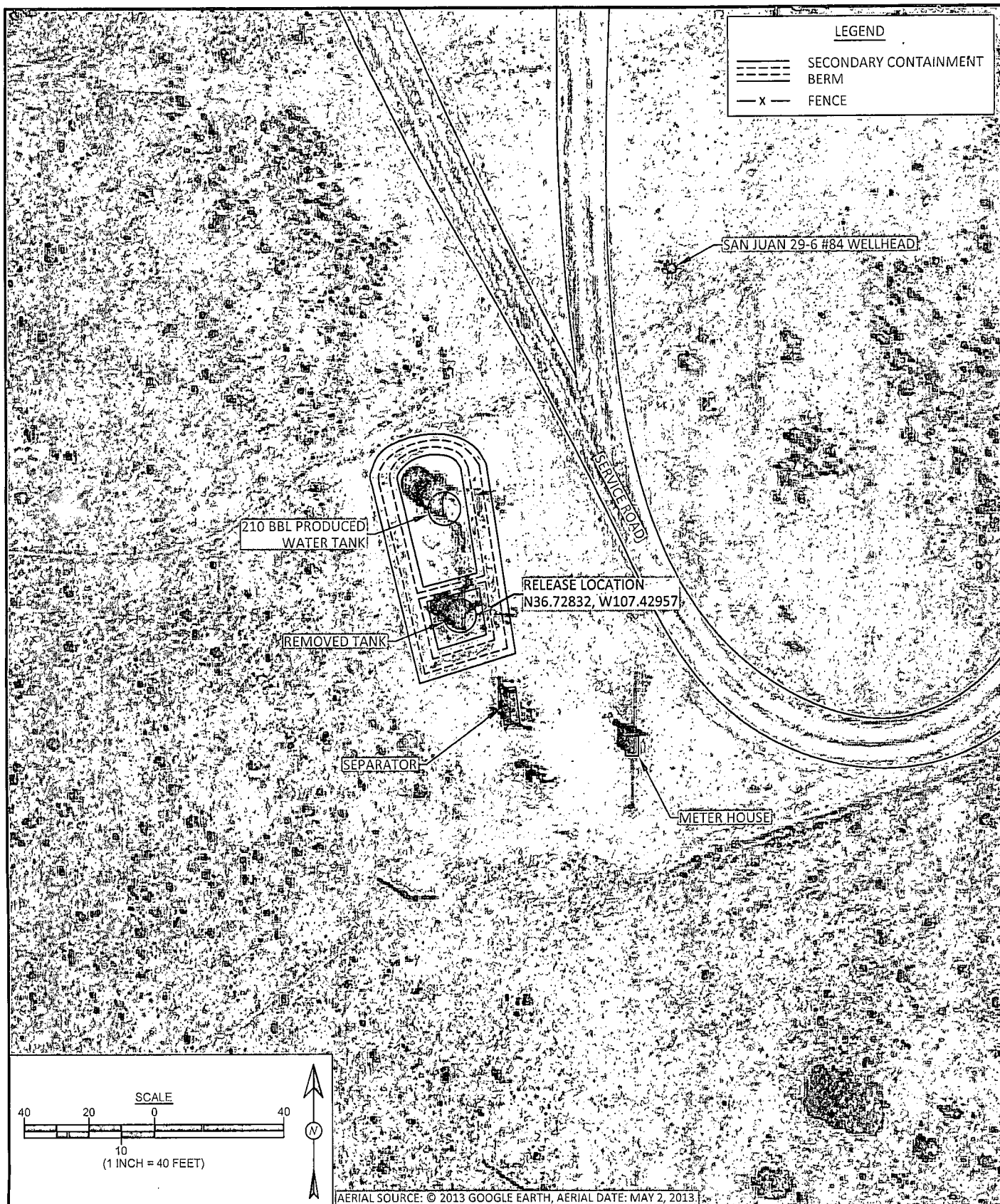
Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> January 24, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> January 24, 2014
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> January 24, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> January 24, 2014

## FIGURE 1

### TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips  
SAN JUAN 29-6 #84  
SW¼ NE¼, SECTION 14, T29N, R6W  
RIO ARriba COUNTY, NEW MEXICO  
N36.72859, W107.42938



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> January 24, 2014	<b>FIGURE 2</b>  <b>AERIAL SITE MAP JANUARY 2014</b> ConocoPhillips SAN JUAN 29-6 #84 SW¼ NE¼, SECTION 14, T29N, R6W RIO ARriba COUNTY, NEW MEXICO N36.72859, W107.42938
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> January 24, 2014	
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> January 24, 2014	
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> January 24, 2014	

**FIGURE 3**

**INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS JANUARY 2014**

ConocoPhillips  
SAN JUAN 29-6 #84  
SW¼, NE¼, SECTION 14, T29N, R6W  
RIO ARRIBA COUNTY, NEW MEXICO  
N36.72859, W107.42938



Animas Environmental Services, LLC

**DRAWN BY:** C. Lameman **DATE DRAWN:** January 24, 2014

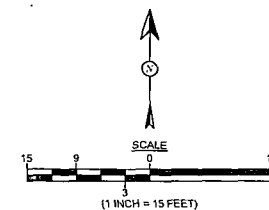
**REVISIONS BY:** C. Lameman **DATE REVISED:** June 23, 2014

**CHECKED BY:** D. Watson **DATE CHECKED:** June 23, 2014

**APPROVED BY:** E. McNally **DATE APPROVED:** June 23, 2014

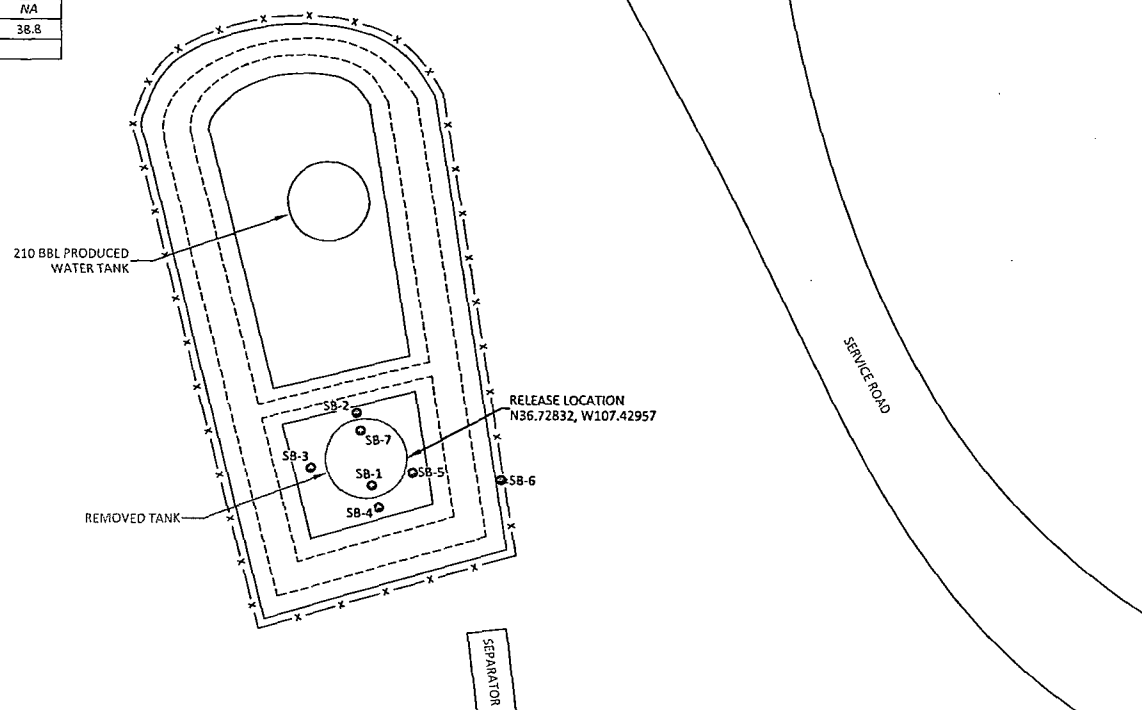
**LEGEND**

- SAMPLE LOCATIONS
- ===== SECONDARY CONTAINMENT BERM
- x- FENCE



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SB-1	1/23/14	Surface	4,623	NA
		1.5	4,723	7,260
		4	4,842	NA
		6	3,855	987
		9	4,451	NA
		9.5	4,714	8,440
SB-2	1/23/14	Surface	10.6	NA
SB-3	1/23/14	Surface	2.9	NA
SB-4	1/23/14	0.5	11.5	NA
SB-5	1/23/14	1	4,676	>2,500
		4	4,680	NA
		8	4,924	1,980
SB-6	1/23/14	1	1.2	NA
		1	3,870	NA
SB-7	1/23/14	4	76.1	NA
		8	137	38.8

NA - NOT ANALYZED



# FIGURE 4

**FINAL EXCAVATION SAMPLE  
LOCATIONS AND RESULTS  
APRIL THROUGH JUNE 2014**  
ConocoPhillips  
SAN JUAN 29-6 #84  
SW¼ NE¼, SECTION 14, T29N, R6W  
RIO ARriba COUNTY, NEW MEXICO  
N36.72859, W107.42938

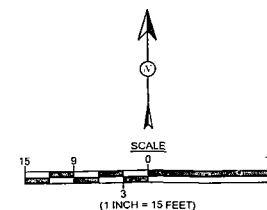


Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 23, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 23, 2014
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> June 23, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 23, 2014

## LEGEND

- SAMPLE LOCATIONS
- ===== SECONDARY CONTAINMENT BERM
- x — FENCE

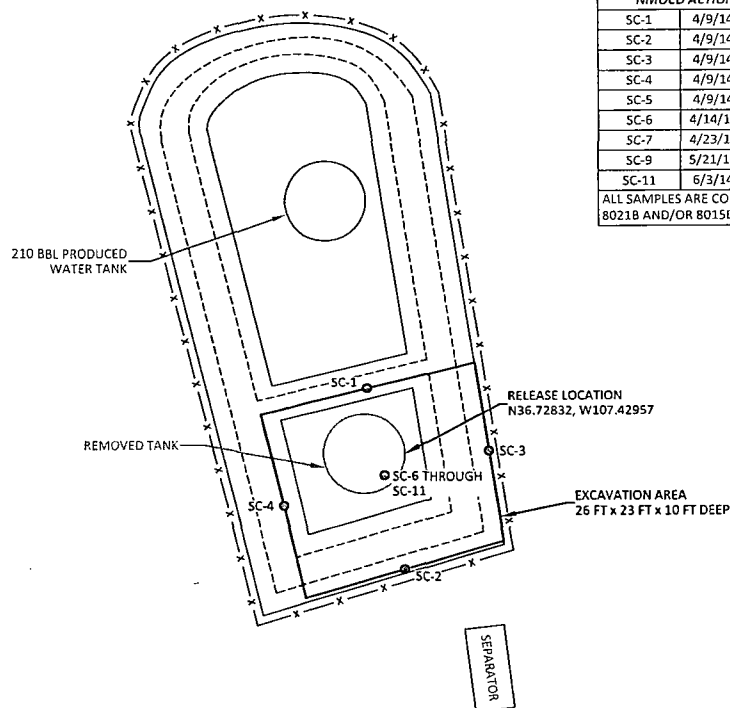


Field Sampling Results				
Sample ID	Date	Depth (ft)	OVIM-PID (ppm)	TPH (mg/kg)
NMOC ACTION LEVEL			100	100
SC-1	4/9/14	1 to 10	407	27.8
SC-2	4/9/14	1 to 10	9.1	26.5
SC-3	4/9/14	1 to 10	1.1	<20.0
SC-4	4/9/14	1 to 10	5.1	<20.0
SC-5	4/9/14	10	3,888	NA
SC-6	4/14/14	10	2,356	2,100
SC-7	4/23/14	10	575	650
SC-8	5/7/14	10	2,506	2,210
SC-9	5/21/14	10	412	408
SC-10	5/30/14	10	843	463
SC-11	6/3/14	10	11.7	57.5

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)
NMOC ACTION LEVEL			10	50		100
SC-1	4/9/14	1 to 10	<0.034	<0.17	<4.7	16
SC-2	4/9/14	1 to 10	NA	NA	<4.9	<10
SC-3	4/9/14	1 to 10	NA	NA	<4.7	<10
SC-4	4/9/14	1 to 10	NA	NA	<4.8	<10
SC-5	4/9/14	10	<0.34	111	1,500	870
SC-6	4/14/14	10	<0.79	87.4	940	800
SC-7	4/23/14	10	<0.19	1.5	130	250
SC-9	5/21/14	10	<0.039	0.21	20	260
SC-11	6/3/14	10	<0.024	0.42	12	<9.9

ALL SAMPLES ARE COMPOSITE SAMPLES AND ANALYZED PER EPA METHOD 8021B AND/OR 8015D. NA - NOT ANALYZED



SAN JUAN 29-6 #84 WELLHEAD

# AES Field Sampling Report



Animas Environmental Services, L

www.animasenvironmental.co

Client: ConocoPhillips

Project Location: San Juan 29-6 #84

Date: 1/23/2014

Matrix: Soil

624 E. Comanc  
Farmington, NM 874  
505-564-22

Durango, Colora  
970-403-301

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ surface	1/23/2014	11:46	4,623	Not Analyzed for TPH				
SB-1 @ 1.5'	1/23/2014	11:55	4,723	7,260	12:32	200	10	EMS
SB-1 @ 4'	1/23/2014	12:05	4,842	Not Analyzed for TPH				
SB-1 @ 6'	1/23/2014	12:33	3,855	987	12:51	20.0	1	EMS
SB-1 @ 9'	1/23/2014	12:55	4,451	Not Analyzed for TPH				
SB-1 @ 9.5'	1/23/2014	13:05	4,714	8,440	13:22	200	10	EMS
SB-2 @ surface	1/23/2014	13:15	10.6	Not Analyzed for TPH				
SB-3 @ surface	1/23/2014	13:25	2.9	Not Analyzed for TPH				
SB-4 @ 0.5'	1/23/2014	13:31	11.5	Not Analyzed for TPH				
SB-5 @ 1'	1/23/2014	13:35	4,676	>2,500	13:46	20.0	1	EMS
SB-5 @ 4'	1/23/2014	13:42	4,680	Not Analyzed for TPH				
SB-5 @ 8'	1/23/2014	14:08	4,924	1,980	14:23	20.0	1	EMS
SB-6 @ 1'	1/23/2014	13:10	1.2	Not Analyzed for TPH				
SB-7 @ 1'	1/23/2014	14:22	3,870	Not Analyzed for TPH				
SB-7 @ 4'	1/23/2014	14:35	76.1	Not Analyzed for TPH				
SB-7 @ 8'	1/23/2014	14:48	137	38.8	15:12	20.0	1	EMS

DF Dilution Factor  
 NA Not Analyzed  
 ND Not Detected at the Reporting Limit  
 PQL Practical Quantitation Limit  
 \*TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: *Erin Skelton*

# AES Field Sampling Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: San Juan 29-6 #84

Date: 4/9/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OMV (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	4/9/2014	13:25	North Wall	407	27.8	14:17	20.0	1	DAW
SC-2	4/9/2014	13:28	South Wall	9.1	26.5	14:25	20.0	1	DAW
SC-3	4/9/2014	14:35	East Wall	1.1	17.0	14:50	20.0	1	DAW
SC-4	4/9/2014	13:35	West Wall	5.1	15.1	14:21	20.0	1	DAW
SC-5	4/9/2014	13:38	Base	3,888	Not Analyzed for TPH				

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

PQL Practical Quantitation Limit

\* TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Debrah Wata*

# AES Field Sampling Report



Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

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

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: San Juan 29-6 #84

Date: 4/14/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	4/14/2014	10:00	Base	2,356	2,100	10:25	20.0	1	DR

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

PQL Practical Quantitation Limit

\*TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analysts:

*David R. Ruse*



# AES Field Sampling Report



Animas Environmental Services, LLC

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

Durango, Colorado  
370-403-3084

Client: ConocoPhillips

Project Location: San Juan 29-6 #84

Date: 4/23/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-7	4/23/2014	9:10	Base	575	650	9:33	20.0	1	SL

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

PQL Practical Quantitation Limit

\* TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analysts:

# AES Field Sampling Report



Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

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

Durango, Colorado  
370-403-3084

Client: ConocoPhillips

Project Location: San Juan 29-6 #84

Date: 5/7/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-8	5/7/2014	10:50	Base	2,506	2,210	11:05	20.0	1	SL

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

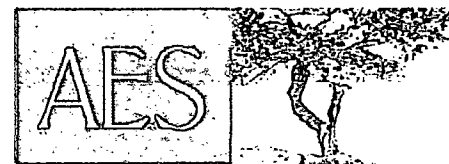
PQL Practical Quantitation Limit

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analysts:

# AES Field Sampling Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: San Juan 29-6 #84

Date: 5/21/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-9	5/21/2014	10:32	Base	412	408	10:52	20.0	1	SL

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

PQL Practical Quantitation Limit

\*TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analysts:

# AES Field Sampling Report



Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

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

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: San Juan 29-6 #84

Date: 5/30/14

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-10	5/30/2014	12:00	Base	843	463	12:14	20.0	1	SL

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

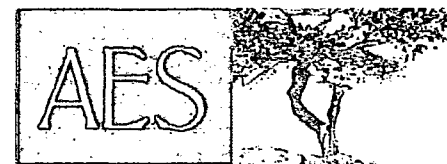
PQL Practical Quantitation Limit

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analysts:

# AES Field Sampling Report



Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

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

Durango, Colorado  
370-403-3084

Client: ConocoPhillips

Project Location: San Juan 29-6 #84

Date: 6/3/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-11	6/3/2014	9:25	Base	11.7	57.5	9:49	20.0	1	SL

DF Dilution Factor

NA Not Analyzed

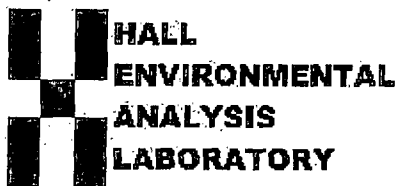
ND Not Detected at the Reporting Limit

PQL Practical Quantitation Limit

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analysts:



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)

April 14, 2014

Debbie Watson

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

RE: CoP San Juan 29-6 #84

OrderNo.: 1404480

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/10/2014 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,

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order 1404480

Date Reported: 4/14/2014

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-1**Project:** CoP San Juan 29-6 #84**Collection Date:** 4/9/2014 1:25:00 PM**Lab ID:** 1404480-001**Matrix:** MEOH (SOIL)**Received Date:** 4/10/2014 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.034		mg/Kg	1	4/10/2014 11:13:19 AM	R17906
Toluene	ND	0.034		mg/Kg	1	4/10/2014 11:13:19 AM	R17906
Ethylbenzene	ND	0.034		mg/Kg	1	4/10/2014 11:13:19 AM	R17906
Xylenes, Total	ND	0.068		mg/Kg	1	4/10/2014 11:13:19 AM	R17906
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	4/10/2014 11:13:19 AM	R17906

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 **1404480**Date Reported: **4/14/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-5**Project:** CoP San Juan 29-6 #84**Collection Date:** 4/9/2014 1:38:00 PM**Lab ID:** 1404480-002**Matrix:** MEOH (SOIL)**Received Date:** 4/10/2014 10:05:00 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)	870	100		mg/Kg	10	4/10/2014 1:12:31 PM	12644
Surr: DNOP	0	66-131	S	%REC	10	4/10/2014 1:12:31 PM	12644
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	1500	67		mg/Kg	20	4/10/2014 11:41:59 AM	R17906
Surr: BFB	521	74.5-129	S	%REC	20	4/10/2014 11:41:59 AM	R17906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.34		mg/Kg	20	4/10/2014 11:41:59 AM	R17906
Toluene	6.4	0.67		mg/Kg	20	4/10/2014 11:41:59 AM	R17906
Ethylbenzene	6.3	0.67		mg/Kg	20	4/10/2014 11:41:59 AM	R17906
Xylenes, Total	98	1.3		mg/Kg	20	4/10/2014 11:41:59 AM	R17906
Surr: 4-Bromofluorobenzene	140	80-120	S	%REC	20	4/10/2014 11:41:59 AM	R17906

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#: 1404480

14-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12644	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12644	RunNo:	17898					
Prep Date:	4/10/2014	Analysis Date:	4/10/2014	SeqNo:	516499	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	7.5		10.00		74.9	66	131			

Sample ID	LCS-12644	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12644	RunNo:	17898					
Prep Date:	4/10/2014	Analysis Date:	4/10/2014	SeqNo:	516503	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.6	60.8	145			
Surr: DNOP	3.8		5.000		75.5	66	131			

Sample ID	MB-12624	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12624	RunNo:	17898					
Prep Date:	4/9/2014	Analysis Date:	4/10/2014	SeqNo:	516973	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		95.4	66	131			

Sample ID	LCS-12624	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12624	RunNo:	17898					
Prep Date:	4/9/2014	Analysis Date:	4/10/2014	SeqNo:	516974	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.9	66	131			

## Qualifiers:

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404480

14-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12623 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R17906	RunNo:	17906					
Prep Date:		Analysis Date:	4/10/2014	SeqNo:	517068	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	870		1000		86.6	74.5	129			

Sample ID	LCS-12623 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R17906	RunNo:	17906					
Prep Date:		Analysis Date:	4/10/2014	SeqNo:	517069	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	71.7	134			
Surr: BFB	920		1000		92.2	74.5	129			

Sample ID	MB-12623	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	12623	RunNo:	17906					
Prep Date:	4/9/2014	Analysis Date:	4/10/2014	SeqNo:	517100	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	870		1000		86.6	74.5	129			

Sample ID	LCS-12623	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	12623	RunNo:	17906					
Prep Date:	4/9/2014	Analysis Date:	4/10/2014	SeqNo:	517101	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		92.2	74.5	129			

## Qualifiers:

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404480

14-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12623 MK		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: R17906		RunNo: 17906					
Prep Date:			Analysis Date: 4/10/2014		SeqNo: 517134		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		105	80	120			

Sample ID	LCS-12623 MK		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: R17906		RunNo: 17906					
Prep Date:			Analysis Date: 4/10/2014		SeqNo: 517135		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	109	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	1404480-001AMS			SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	SC-1			Batch ID:	R17906		RunNo:	17906			
Prep Date:				Analysis Date:	4/10/2014		SeqNo:	517137		Units:	mg/Kg
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.78	0.034	0.6826	0	114	67.4	135				
Toluene	0.73	0.034	0.6826	0.007625	105	72.6	135				
Ethylbenzene	0.73	0.034	0.6826	0.006498	106	69.4	143				
Xylenes, Total	2.1	0.068	2.048	0.02008	104	70.8	144				
Surr: 4-Bromofluorobenzene	0.74		0.6826		108	80	120				

Sample ID	1404480-001AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	SC-1		Batch ID: R17906		RunNo: 17906					
Prep Date:			Analysis Date: 4/10/2014		SeqNo: 517138		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.034	0.6826	0	116	67.4	135	1.67	20	
Toluene	0.74	0.034	0.6826	0.007625	107	72.6	135	1.49	20	
Ethylbenzene	0.73	0.034	0.6826	0.006498	107	69.4	143	1.10	20	
Xylenes, Total	2.2	0.068	2.048	0.02008	105	70.8	144	1.20	20	
Surr: 4-Bromofluorobenzene	0.73		0.6826		106	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#: 1404480

14-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12623	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	12623	RunNo:	17906					
Prep Date:	4/9/2014	Analysis Date:	4/10/2014	SeqNo:	517142	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID	LCS-12623	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	12623	RunNo:	17906					
Prep Date:	4/9/2014	Analysis Date:	4/10/2014	SeqNo:	517143	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	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



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

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1404480

RcptNo: 1

Received by/date:	<u>AS</u>	<u>04/10/14</u>
Logged By:	Michelle Garcia	4/10/2014 10:05:00 AM
Completed By:	Michelle Garcia	4/10/2014 10:11:25 AM
Reviewed By:	<u>[Signature]</u>	<u>04/10/14</u>

### Chain of Custody

- |  |   |                             |   |
|--|---|-----------------------------|---|
| 1. Custody seals intact on sample bottles? | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 2. Is Chain of Custody complete?           | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| 3. How was the sample delivered?           | Courier                                 |                             |   |

### Log In

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

# 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 <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
|---|------------------------------|-----------------------------|--|

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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

**Turn-Around Time:**

Client: Animas Environmental  
Services LLC

Mailing Address: 624 E. Comanche  
Farmington NM 87401

Phone #: 505.542.2281

Email or Fax#:

DA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

## Accreditation

☒ NELAP      ☐ Other

EDD (Type)

[illegible]

Date:	Time:	Relinquished by:
4/9/14	1:33	Deborah Watson

Date:	Time:	Relinquished by:
9/14	1750	Christ Walz

Remarks: Bul to Conoco Phillips  
 WO: 20021657  
 Area: 7  
 supervisor: Mike Smith  
 user: KGARCIA  
 ordered by: Ernie Smith  
 act code: D15D

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)

April 22, 2014

Debbie Watson

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

RE: CoP San Juan 29-6 #84

OrderNo.: 1404570

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/11/2014 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 horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**Lab Order **1404570**Date Reported: **4/22/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-1**Project:** CoP San Juan 29-6 #84**Collection Date:** 4/9/2014 1:25:00 PM**Lab ID:** 1404570-001**Matrix:** SOIL**Received Date:** 4/11/2014 10:05:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Batch</b>
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	16	10		mg/Kg	1	4/14/2014 10:49:10 PM	12664
Surr: DNOP	105	66-131		%REC	1	4/14/2014 10:49:10 PM	12664
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/14/2014 6:29:50 PM	12675
Surr: BFB	94.5	74.5-129		%REC	1	4/14/2014 6:29:50 PM	12675

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

<b>Qualifiers:</b>	<b>*</b>	Value exceeds Maximum Contaminant Level.	<b>B</b>	Analyte detected in the associated Method Blank	Page 1 of 6
	<b>E</b>	Value above quantitation range	<b>H</b>	Holding times for preparation or analysis exceeded	
	<b>J</b>	Analyte detected below quantitation limits	<b>ND</b>	Not Detected at the Reporting Limit	
	<b>O</b>	RSD is greater than RSDlimit	<b>P</b>	Sample pH greater than 2.	
	<b>R</b>	RPD outside accepted recovery limits	<b>RL</b>	Reporting Detection Limit	
	<b>S</b>	Spike Recovery outside accepted recovery limits			



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1404570

Date Reported: 4/22/2014

CLIENT: Animas Environmental

Client Sample ID: SC-2

Project: CoP San Juan 29-6 #84

Collection Date: 4/9/2014 1:28:00 PM

Lab ID: 1404570-002

Matrix: SOIL

Received Date: 4/11/2014 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/14/2014 11:19:11 PM	12664
Surr: DNOP	103	66-131		%REC	1	4/14/2014 11:19:11 PM	12664
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/14/2014 6:58:30 PM	12675
Surr: BFB	85.6	74.5-129		%REC	1	4/14/2014 6:58:30 PM	12675

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

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

# Analytical Report

Lab Order 1404570

Date Reported: 4/22/2014

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-3

Project: CoP San Juan 29-6 #84

Collection Date: 4/9/2014 2:35:00 PM

Lab ID: 1404570-003

Matrix: SOIL

Received Date: 4/11/2014 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/14/2014 11:49:27 PM	12664
Surr: DNOP	105	66-131		%REC	1	4/14/2014 11:49:27 PM	12664
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/14/2014 7:27:08 PM	12675
Surr: BFB	84.3	74.5-129		%REC	1	4/14/2014 7:27:08 PM	12675

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 6
	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 1404570

Date Reported: 4/22/2014

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-4**Project:** CoP San Juan 29-6 #84**Collection Date:** 4/9/2014 1:35:00 PM**Lab ID:** 1404570-004**Matrix:** SOIL**Received Date:** 4/11/2014 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/15/2014 12:19:36 AM	12664
Surr: DNOP	109	66-131		%REC	1	4/15/2014 12:19:36 AM	12664
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/14/2014 7:55:43 PM	12675
Surr: BFB	86.5	74.5-129		%REC	1	4/14/2014 7:55:43 PM	12675

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#: 1404570

22-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12664	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12664	RunNo:	17928					
Prep Date:	4/11/2014	Analysis Date:	4/11/2014	SeqNo:	517366	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	7.1		10.00		71.1	66	131			

Sample ID	LCS-12664	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12664	RunNo:	17928					
Prep Date:	4/11/2014	Analysis Date:	4/11/2014	SeqNo:	517367	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.0	60.8	145			
Surr: DNOP	3.4		5.000		68.0	66	131			

Sample ID	MB-12686	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12686	RunNo:	17962					
Prep Date:	4/14/2014	Analysis Date:	4/14/2014	SeqNo:	518408	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	66	131			

Sample ID	LCS-12686	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12686	RunNo:	17962					
Prep Date:	4/14/2014	Analysis Date:	4/14/2014	SeqNo:	518409	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	66	131			

## Qualifiers:

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404570

22-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12675	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	12675	RunNo:	17995					
Prep Date:	4/11/2014	Analysis Date:	4/14/2014	SeqNo:	519242	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	850		1000		84.5	74.5	129			

Sample ID	LCS-12675	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	12675	RunNo:	17995					
Prep Date:	4/11/2014	Analysis Date:	4/14/2014	SeqNo:	519243	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.6	71.7	134			
Surr: BFB	930		1000		93.4	74.5	129			

## Qualifiers:

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

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



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87106  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1404570

RcptNo: 1

Received by/date:

CS 04/11/14

Logged By: Lindsay Mangin

4/11/2014 10:05:00 AM

*[Signature]*

Completed By: Lindsay Mangin

4/11/2014 1:15:04 PM

*[Signature]*

Reviewed By:

mg 04/11/14

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

# MAIL-IN-CLUSTERY REVIEW

Client: Animas Environmental

Services LLC

Mailing Address: 624 E. Concha

Farmington NM 87401

Phone #: 505 504 2281

Email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

☒ Standard ☐ Rush

Project Name:

Cap San Juan 29-6 #84

Project #:

Project Manager:

D. Watson

Sampler: D. Watson

Office: Yes ☐ No

Sample Temperature: 22.1°

Container Type and #

Preservative Type

HEAL NO

14015740

1-402

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*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)*

April 22, 2014

Debbie Watson

Animas Environmental

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: CoP San Juan 29-6 #84

OrderNo.: 1404663

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/15/2014 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 horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



**Analytical Report**Lab Order **1404663**Date Reported: **4/22/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-6**Project:** CoP San Juan 29-6 #84**Collection Date:** 4/14/2014 10:00:00 AM**Lab ID:** 1404663-001**Matrix:** SOIL**Received Date:** 4/15/2014 9:56:00 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)	800	10		mg/Kg	1	4/15/2014 12:39:46 PM	12708
Surr: DNOP	82.9	66-131		%REC	1	4/15/2014 12:39:46 PM	12708
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	940	160		mg/Kg	50	4/15/2014 1:06:42 PM	R17997
Surr: BFB	192	74.5-129	S	%REC	50	4/15/2014 1:06:42 PM	R17997
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.79		mg/Kg	50	4/15/2014 1:06:42 PM	R17997
Toluene	4.1	1.6		mg/Kg	50	4/15/2014 1:06:42 PM	R17997
Ethylbenzene	4.3	1.6		mg/Kg	50	4/15/2014 1:06:42 PM	R17997
Xylenes, Total	79	3.1		mg/Kg	50	4/15/2014 1:06:42 PM	R17997
Surr: 4-Bromofluorobenzene	115	80-120		%REC	50	4/15/2014 1:06:42 PM	R17997

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404663

22-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12708	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12708	RunNo:	17986					
Prep Date:	4/15/2014	Analysis Date:	4/15/2014	SeqNo:	519232	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	7.2		10.00		72.3	66	131			

Sample ID	LCS-12708	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12708	RunNo:	17986					
Prep Date:	4/15/2014	Analysis Date:	4/15/2014	SeqNo:	519398	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	89.0	60.8	145			
Surr: DNOP	3.4		5.000		67.8	66	131			

Sample ID	MB-12726	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12726	RunNo:	18017					
Prep Date:	4/15/2014	Analysis Date:	4/17/2014	SeqNo:	521794	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.4		10.00		84.4	57.9	140			

Sample ID	LCS-12726	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12726	RunNo:	18017					
Prep Date:	4/15/2014	Analysis Date:	4/17/2014	SeqNo:	521795	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.4	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#: 1404663

22-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12692 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R17997	RunNo:	17997					
Prep Date:	4/14/2014	Analysis Date:	4/15/2014	SeqNo:	519604	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	870		1000		86.9	74.5	129			

Sample ID	LCS-12692 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R17997	RunNo:	17997					
Prep Date:	4/14/2014	Analysis Date:	4/15/2014	SeqNo:	519605	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.3	71.7	134			
Surr: BFB	920		1000		91.9	74.5	129			

## Qualifiers:

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404663

22-Apr-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-12692 MK	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R17997	RunNo:	17997					
Prep Date:		Analysis Date:	4/15/2014	SeqNo:	519629	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			

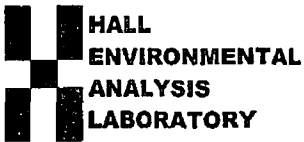
Sample ID	LCS-12692 MK	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R17997	RunNo:	17997					
Prep Date:	4/14/2014	Analysis Date:	4/15/2014	SeqNo:	519630	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Benzene	1.1	0.050	1.000	0	110	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	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



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

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1404663

RcptNo: 1

Received by/date:

Logged By: Anne Thorne

4/15/2014 9:56:00 AM

Completed By: Anne Thorne

4/15/2014

Reviewed By:

### Chain of Custody

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

### Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record				Turn-Around Time: <span style="float: right;">4/11/14</span>		
Client: Animas Environmental Services				<input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>Same Day</u>		
Mailing Address: 624 E Comanche Farmington NM 87401				Project Name: CoP San Juan 29-6 #84		
Phone #: 505-564-2281				Project #:		
email or Fax#: 505-324-2022				Project Manager:		
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)				Debbie Watson		
Accreditation: <input type="checkbox"/> NELAP <input type="checkbox"/> Other _____				Sampler: E. Skyles On-site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<input type="checkbox"/> EDD (Type) _____				Sample Temperature: _____		
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No
4/14/2014	10:00	Soil	SC-6	MeOH kit 1-4 oz. Jar	MeOH non	1404663-001
Date: 4/14/14		Time: 17:50		Relinquished by: <u>Erik Skyles</u>		Received by: <u>[Signature]</u>
Date:		Time:		Relinquished by:		Date: <u>4/11/14</u> Time: <u>0954</u>

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

4901 Hawkins NE - Albuquerque, NM 87109

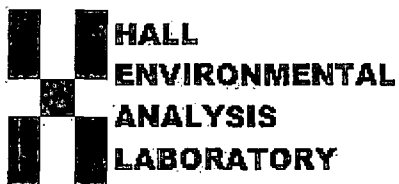
Tel. 505-345-3975      Fax 505-345-4107

## Analysis Reques

[illegible]

Bill To: Conoco Phillips

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)

April 30, 2014

Debbie Watson

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

RE: CoP SJ 29-6 #84

OrderNo.: 1404A06

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/24/2014 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,

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order 1404A06

Date Reported: 4/30/2014

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-7**Project:** CoP SJ 29-6 #84**Collection Date:** 4/23/2014 9:10:00 AM**Lab ID:** 1404A06-001**Matrix:** MEOH (SOIL)**Received Date:** 4/24/2014 10:00:00 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)	250	9.8		mg/Kg	1	4/24/2014 1:14:41 PM	12862
Surr: DNOP	101	57.9-140		%REC	1	4/24/2014 1:14:41 PM	12862
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	130	19		mg/Kg	5	4/24/2014 12:07:42 PM	R18182
Surr: BFB	244	74.5-129	S	%REC	5	4/24/2014 12:07:42 PM	R18182
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.19		mg/Kg	5	4/24/2014 12:07:42 PM	R18182
Toluene	ND	0.19		mg/Kg	5	4/24/2014 12:07:42 PM	R18182
Ethylbenzene	ND	0.19		mg/Kg	5	4/24/2014 12:07:42 PM	R18182
Xylenes, Total	1.5	0.38		mg/Kg	5	4/24/2014 12:07:42 PM	R18182
Surr: 4-Bromofluorobenzene	110	80-120		%REC	5	4/24/2014 12:07:42 PM	R18182

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#: 1404A06

30-Apr-14

Client: Animas Environmental

Project: CoP SJ 29-6 #84

Sample ID	MB-12862	SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	12862		RunNo:	18177				
Prep Date:	4/24/2014	Analysis Date:	4/24/2014		SeqNo:	524869	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.9		10.00		89.4	57.9	140			

Sample ID	LCS-12862		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 12862		RunNo: 18177					
Prep Date:	4/24/2014		Analysis Date: 4/24/2014		SeqNo: 524871		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.3	60.8	145			
Surr: DNOP	4.4		5.000		87.3	57.9	140			

Sample ID	1404A06-001AMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	SC-7		Batch ID: 12862		RunNo: 18177					
Prep Date:	4/24/2014		Analysis Date: 4/24/2014		SeqNo: 524894		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	320	10	50.00	246.9	143	47.4	148			
Surr: DNOP	4.9		5.000		97.8	57.9	140			

Sample ID	1404A06-001AMSD		SampType: MSD		TestCode: EPA Method 8015D: Diesel Range Organics						
Client ID:	SC-7		Batch ID: 12862		RunNo: 18177						
Prep Date:	4/24/2014		Analysis Date: 4/24/2014		SeqNo: 524895		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	370	10	50.35	246.9	245	47.4	148	15.0	22.7	S	
Surr: DNOP	5.0		5.035		100	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#: 1404A06

30-Apr-14

Client: Animas Environmental

Project: CoP SJ 29-6 #84

Sample ID	MB-12823 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R18182	RunNo:	18182					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525360	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	830		1000		82.9	74.5	129			

Sample ID	LCS-12823 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R18182	RunNo:	18182					
Prep Date:		Analysis Date:	4/24/2014	SeqNo:	525361	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.9	71.7	134			
Surr: BFB	910		1000		91.1	74.5	129			

## Qualifiers:

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404A06

30-Apr-14

Client: Animas Environmental

Project: CoP SJ 29-6 #84

Sample ID	MB-12823 MK		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R18182		RunNo:	18182			
Prep Date:			Analysis Date:	4/24/2014		SeqNo:	525380		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	0.98		1.000		97.7	80	120			

Sample ID	LCS-12823 MK		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R18182		RunNo:	18182			
Prep Date:			Analysis Date:	4/24/2014		SeqNo:	525381		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	100	80	120			
Toluene	0.97	0.050	1.000	0	96.9	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	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

WorkOrder Number: 1404A06

ReptNo: 1

Received by/date

*Sum* 04/24/14

Logged By: Ashley Gallegos

4/24/2014 10:00:00 AM

*AG*

Completed By: Ashley Gallegos

4/24/2014 10:25:21 AM

*AG*

Reviewed By:

CS

04/24/14

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

Client: Annas Environmental Services

Mailing Address: 624 E. Comanche  
Farmington, NM 87401

Phone #: (505) 564-2281

Email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Project Name:

CoP SJ 29-6 #84

Project #:

**Project Manager:**

O. Watson

Sampler: S. Lynch

On Ice: ☒ Yes ☐ No


Sample Temperature: 17

[illegible]

Date:	Time:	Relinquished by:
1/23/14	1655	Stephanie Hym

Received by:	Date	Time
Christine Weber	4/23/14	16:55

Date:	Time:	Relinquished by:
13/14	1724	Alanta Wells

Received by:  Date: 04/24/14 Time: 1000


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

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Remarks: Bill to Conoco Phillips

WO: 20021657

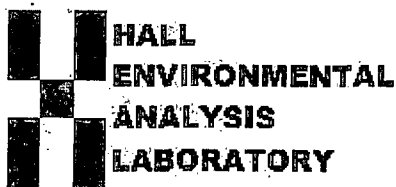
Area: 7

ordered by: Eric Smith

Supervisor: Mike Smith

Activity Code: 0150

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)

May 23, 2014

Debbie Watson

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

RE: CoP SJ 29-6 #84

OrderNo.: 1405955

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/22/2014 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 horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1405955

Date Reported: 5/23/2014

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-9

Project: CoP SJ 29-6 #84

Collection Date: 5/21/2014 10:32:00 AM

Lab ID: 1405955-001

Matrix: MEOH (SOIL)

Received Date: 5/22/2014 10:00:00 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)	260	10		mg/Kg	1	5/22/2014 12:23:09 PM	13310
Surr: DNOP	80.0	57.9-140		%REC	1	5/22/2014 12:23:09 PM	13310
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	20	3.9		mg/Kg	1	5/22/2014 11:18:28 AM	R18795
Surr: BFB	203	80-120	S	%REC	1	5/22/2014 11:18:28 AM	R18795
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.039		mg/Kg	1	5/22/2014 11:18:28 AM	R18795
Toluene	ND	0.039		mg/Kg	1	5/22/2014 11:18:28 AM	R18795
Ethylbenzene	ND	0.039		mg/Kg	1	5/22/2014 11:18:28 AM	R18795
Xylenes, Total	0.21	0.079		mg/Kg	1	5/22/2014 11:18:28 AM	R18795
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	5/22/2014 11:18:28 AM	R18795

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1405955

23-May-14

Client: Animas Environmental

Project: CoP SJ 29-6 #84

Sample ID	MB-13310	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	13310	RunNo:	18788					
Prep Date:	5/22/2014	Analysis Date:	5/22/2014	SeqNo:	542553	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	7.4		10.00		73.9	57.9	140			

Sample ID	LCS-13310	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	13310	RunNo:	18788					
Prep Date:	5/22/2014	Analysis Date:	5/22/2014	SeqNo:	542555	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.4	60.8	145			
Surr: DNOP	3.9		5.000		78.1	57.9	140			

Sample ID	1405955-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	SC-9	Batch ID:	13310	RunNo:	18788					
Prep Date:	5/22/2014	Analysis Date:	5/22/2014	SeqNo:	542702	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	390	10	50.10	257.4	259	40.1	152			S
Surr: DNOP	5.2		5.010		104	57.9	140			

Sample ID	1405955-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	SC-9	Batch ID:	13310	RunNo:	18788					
Prep Date:	5/22/2014	Analysis Date:	5/22/2014	SeqNo:	542711	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	330	10	49.95	257.4	149	40.1	152	15.4	32.1	
Surr: DNOP	5.5		4.995		110	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#: 1405955

23-May-14

Client: Animas Environmental

Project: CoP SJ 29-6 #84

Sample ID	MB-13281 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R18795	RunNo:	18795					
Prep Date:		Analysis Date:	5/22/2014	SeqNo:	543110	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	830		1000		83.0	80	120			

Sample ID	LCS-13281 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R18795	RunNo:	18795					
Prep Date:		Analysis Date:	5/22/2014	SeqNo:	543111	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.4	71.7	134			
Surr: BFB	910		1000		90.7	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#: 1405955

23-May-14

Client: Animas Environmental

Project: CoP SJ 29-6 #84

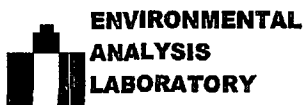
Sample ID	MB-13281 MK	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R18795	RunNo:	18795					
Prep Date:		Analysis Date:	5/22/2014	SeqNo:	543178	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.5	80	120			

Sample ID	LCS-13281 MK	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R18795	RunNo:	18795					
Prep Date:		Analysis Date:	5/22/2014	SeqNo:	543180	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	103	80	120			
Toluene	0.96	0.050	1.000	0	95.7	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.6	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	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



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

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1405955

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

5/22/2014 10:00:00 AM

Completed By: Lindsay Mangin

5/22/2014 10:15:45 AM

Reviewed By:

CS

05/22/14

*Judy H. Hays*

*Judy H. Hays*

### Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

### Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ?

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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

Client: <u>Animas Environmental Services, LLC</u>	<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>Same Day</u>
Mailing Address: <u>624 E. Comanche</u>	Project Name: <u>CoP SJ 29-6#84</u>
<u>Farmington, NM 87401</u>	Project #:
Phone #: <u>505-564-2281</u>	Project Manager:
email or Fax#:	<u>D. Watson</u>
QA/QC Package:	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	
Accreditation	Sampler: <u>E. Skyles</u>
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Sample Temperature: _____
<input type="checkbox"/> EDD (Type)	

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/14	1637	[Signature]	Christie White	5/21/14	1437
Date:	Time:	Relinquished by:	Received by:	Date	Time
2/1/14	1860	Christie White	[Signature]	2/1/14	1000



10-11-1964



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)

June 05, 2014

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

RE: CoP San Juan 29-6 #84

OrderNo.: 1406153

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/4/2014 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 1406153

Date Reported: 6/5/2014

CLIENT: Animas Environmental

Client Sample ID: Basc

Project: CoP San Juan 29-6 #84

Collection Date: 6/3/2014 9:25:00 AM

Lab ID: 1406153-001

Matrix: MEOH (SOIL)

Received Date: 6/4/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/4/2014 11:46:55 AM	13510
Surr: DNOP	89.8	57.9-140		%REC	1	6/4/2014 11:46:55 AM	13510
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	12	2.4		mg/Kg	1	6/4/2014 1:30:02 PM	R19040
Surr: BFB	204	80-120	S	%REC	1	6/4/2014 1:30:02 PM	R19040
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/4/2014 1:30:02 PM	R19040
Toluene	ND	0.024		mg/Kg	1	6/4/2014 1:30:02 PM	R19040
Ethylbenzene	ND	0.024		mg/Kg	1	6/4/2014 1:30:02 PM	R19040
Xylenes, Total	0.42	0.048		mg/Kg	1	6/4/2014 1:30:02 PM	R19040
Surr: 4-Bromofluorobenzene	117	80-120		%REC	1	6/4/2014 1:30:02 PM	R19040

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406153

05-Jun-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-13510		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	13510		RunNo:	19030				
Prep Date:	6/4/2014		Analysis Date:	6/4/2014		SeqNo:	550025		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	8.2		10.00		81.9	57.9	140				

Sample ID	LCS-13510		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 13510		RunNo: 19030					
Prep Date:	6/4/2014		Analysis Date: 6/4/2014		SeqNo: 550027		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.7	60.8	145			
Surr: DNOP	4.5		5.000		90.5	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#: 1406153

05-Jun-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-13489 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R19040	RunNo:	19040					
Prep Date:		Analysis Date:	6/4/2014	SeqNo:	550213	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	870		1000		86.6	80	120			

Sample ID	LCS-13489 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R19040	RunNo:	19040					
Prep Date:		Analysis Date:	6/4/2014	SeqNo:	550214	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	71.7	134			
Surr: BFB	1000		1000		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



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406153

05-Jun-14

Client: Animas Environmental

Project: CoP San Juan 29-6 #84

Sample ID	MB-13489 MK		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R19040		RunNo:	19040			
Prep Date:			Analysis Date:	6/4/2014		SeqNo:	550232		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	LCS-13489 MK		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R19040		RunNo:	19040			
Prep Date:			Analysis Date:	6/4/2014		SeqNo:	550233		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	118	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

## Qualifiers:

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

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

# Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1406153

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

6/4/2014 10:00:00 AM

Completed By: Lindsay Mangin

6/4/2014 10:18:58 AM

Reviewed By:

## 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	1.6	Good	Yes			

# Chain-of-Custody Record

Client: Animas Environmental Services LLC  
 Mailing Address: 624 E Comanche Farmington NM 87401  
 Phone #: 505-564-2881  
 email or Fax#:  
 QA/QC Package:  
☒ Standard ☐ Level 4 (Full Validation)  
 Accreditation  
☐ NELAP ☐ Other \_\_\_\_\_  
☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:

☐ Standard ☒ Rush same day

Project Name:

CoP Sanduan 29-6 #84

Project #:

Project Manager:

D Watson

Sampler: S. Lynn

On Ice: ☒ Yes ☐ No

Sample Temperature: 16

Container Type and #

And H ket  
4oz jar

Preservative Type

MeOH  
cold

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### Analysis Request

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