

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

JUN 03 2015

Form C-141  
Revised August 8, 2011

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

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

### Release Notification and Corrective Action

#### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company <b>Burlington Resources Oil &amp; Gas Company</b>	Contact <b>Lindsay Dumas</b>
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 599-4089</b>
Facility Name: <b>San Juan 28-6 207M</b>	Facility Type: <b>Gas</b>

Surface Owner: <b>Public</b>	Mineral Owner: <b>Fee</b>	API No. <b>3003925612</b>
------------------------------	---------------------------	---------------------------

#### LOCATION OF RELEASE

Unit Letter <b>F</b>	Section <b>10</b>	Township <b>27N</b>	Range <b>06W</b>	Feet from the <b>1450</b>	North/South Line <b>FNL</b>	Feet from the <b>1575</b>	East/West Line <b>FWL</b>	County <b>Rio Arriba</b>
-------------------------	----------------------	------------------------	---------------------	------------------------------	--------------------------------	------------------------------	------------------------------	-----------------------------

Latitude **36.59178** Longitude **-107.45723**

#### NATURE OF RELEASE

Type of Release <b>Hydrocarbon/Produced Water</b>	Volume of Release <b>44/32.78 bbls</b>	Volume Recovered <b>12/0 bbls</b>
Source of Release <b>Production Tank</b>	Date and Hour of Occurrence <b>12/29/2014</b>	Date and Hour of Discovery <b>12/29/2014 11:00 AM</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Cory Smith</b>	
By Whom? <b>Lindsay Dumas</b>	Date and Hour <b>11/29/2014 4:15 pm</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

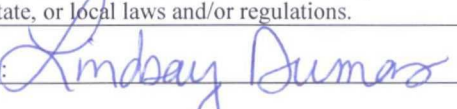
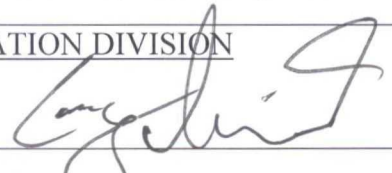
Describe Cause of Problem and Remedial Action Taken.\*

Found corrosion on bottom of tank and fluid coming out of tank. The well was shut in, dikes were built to control release, fluid truck was contacted to pull remaining oil and recover any free standing fluids.

Describe Area Affected and Cleanup Action Taken.\*

**Excavation was 38' x 50' x 9' Deep. 876 c/yds of soil was transported to IEI Land Farm and 876 c/yds of clean soil was transported from Twin Peaks Ranch, and placed in the excavation site. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Lindsay Dumas</b>	Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>7/10/15</b>	Expiration Date:
E-mail Address: <b>Lindsay.Dumas@conocophillips.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>5/21/2015</b>	Phone: <b>(505) 599-4089</b>	

\* Attach Additional Sheets If Necessary

#HCS 1507240705



March 23, 2015

Lindsay Dumas  
ConocoPhillips  
San Juan Business Unit  
Office 214-07  
5525 Hwy 64  
Farmington, New Mexico 87401

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

**RE: Release Assessment and Final Excavation Report  
San Juan 28-6 #207M  
Rio Arriba County, New Mexico**

Dear Ms. Dumas:

On January 6 and February 3, 2015, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 28-6 #207M, located in Rio Arriba County, New Mexico. The release consisted of approximately 76 barrels (bbls) of produced water and condensate. The initial release assessment was completed by AES on January 6, 2015, and the final excavation was completed by CoP contractors while AES was at the location on February 3, 2015.

## 1.0 Site Information

### 1.1 Location

Site Name – San Juan 28-6 #207M  
Location – SE¼ NW¼, Section 10, T27N, R6W, Rio Arriba County, New Mexico  
Well Head Latitude/Longitude – N36.59189 and W107.45776,  
respectively  
Release Location Latitude/Longitude – N36.59209 and  
W107.45753, respectively  
Land Jurisdiction – Private  
Figure 1. Topographic Site Location Map  
Figure 2. Aerial Site Map, January 2015

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

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



## 1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 20 based on the following factors:

- **Depth to Groundwater:** Based on elevation, topographic interpretation, and visual reconnaissance, depth to groundwater is interpreted to be 50 to 100 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 450 feet to the southeast is a livestock pond. Carrizo Canyon wash is approximately 600 feet southwest. Discharge is ultimately to the San Juan River. (10 points)

## 1.3 Assessment

AES was initially contacted by Lindsay Dumas of CoP on December 30, 2014, and on January 6, 2015, Emilee Skyles and Dylan Davis of AES completed the release assessment field work. The assessment included collection and field sampling of 15 soil samples from eight borings in and around the release area. Soil borings were terminated between 0.5 and 6 feet due to auger refusal. An additional sample was composited from three samples in the immediate vicinity of the release. Based on field sampling results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On February 3, 2015, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of six confirmation soil samples (SC-1 through SC-6) from the walls and base of the excavation. The area of the final excavation measured approximately 66 feet by 41.5 feet by 3 to 12 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

---

## 2.0 Soil Sampling

A total of 22 soil samples from eight borings (SB-1 through SB-8) and seven composite samples (Chlorides and SC-1 through SC-6) were collected during the assessment and excavation clearance. All soil samples except chlorides were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Three samples (SB-2, SB-4, and chlorides) collected during the initial assessment and six composite samples (SC-1 through SC-6) collected during the excavation clearance were submitted for confirmation laboratory analysis.

## 2.1 Field Sampling

### 2.1.1 Volatile Organic Compounds

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

### 2.1.2 Total Petroleum Hydrocarbons

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, except Chlorides, were laboratory analyzed for:

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

In addition, soil samples SB-2 and SC-1 through SC-6 were laboratory analyzed for:

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

Soil samples SC-1 through SC-6 were laboratory analyzed for:

- TPH for motor oil range organics (MRO) per USEPA Method 8015D.

Composite soil sample Chlorides was laboratory analyzed for

- Chloride per USEPA Method 300.0.

## 2.3 Field and Laboratory Analytical Results

On January 6, 2015, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.8 ppm in SB-3 up to 2,991 ppm in SB-2. Field TPH concentrations ranged from 29.4 mg/kg in SB-1 up to greater than 2,500 mg/kg in SB-1, SB-2, and SB-5.



On February 3, 2015, final excavation field screening results for VOCs via OVM ranged from 6.2 ppm in SC-6 up to 83.5 ppm in SC-5. Field TPH concentrations ranged from less than 20.0 mg/kg in SC-1, SC-2, SC-4, and SC-6 up to 28.8 mg/kg in SC-3. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Field Sampling VOCs and TPH Results  
San Juan 28-6 #207M Initial Release Assessment and Final Excavation  
January and February 2015

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>TPH 418.1 (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>100</i>	<i>100</i>
SB-1	1/6/15	0.5	2,367	>2,500
		2	214	29.4
		4	147	70.8
SB-2	1/6/15	0.5	1,667	>2,500
		2	311	79.6
		4	2,991	>2,500
		6	2,445	183
SB-3	1/6/15	0.5	0.8	41.9
		2	1.1	NA
		4	1.0	43.2
SB-4	1/6/15	0.5	15.8	140
SB-5	1/6/15	0.5	1,780	>2,500
SB-6	1/6/15	0.5	2.5	NA
SB-7	1/6/15	0.5	2.6	NA
SB-8	1/6/15	0.5	0.9	NA
SC-1	2/3/15	1 to 12	38.9	<20.0
SC-2	2/3/15	1 to 12	6.3	<20.0
SC-3	2/3/15	1 to 12	9.4	28.8
SC-4	2/3/15	1 to 3	9.9	<20.0
SC-5	2/3/15	10 to 12	83.5	26.4
SC-6	2/3/15	3 to 5	6.2	<20.0

NA - not analyzed

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

Laboratory analyses for SB-2, SB-4, and Chlorides were used to confirm field sampling results of the initial release assessment. Benzene and total BTEX concentrations were reported at 0.49 mg/kg and 37.99 mg/kg, respectively, in SB-2. TPH concentrations as GRO/DRO were reported in SB-2 (489 mg/kg) and SB-4 (36 mg/kg). The chloride concentration was reported at 190 mg/kg.

Laboratory analyses for SC-1 through SC-6 were used to confirm field sampling results from the final excavation. Benzene concentrations in SC-1 through SC-6 were reported below laboratory detection limits in all samples. Total BTEX concentrations were reported below laboratory detection limits in all samples except SC-5 (0.22 mg/kg). TPH concentrations as GRO/DRO/MRO in SC-1 through SC-6 were also reported below laboratory detection limits in all samples. Results are presented in Table 2 and on Figure 4. The laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chlorides  
San Juan 28-6 #207M Initial Release Assessment and Final Excavation  
January and February 2015

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>	<i>MRO (mg/kg)</i>	<i>Chlorides (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>10</i>	<i>50</i>		<i>100</i>		<i>NE</i>
SB-2	1/6/15	6	0.49	37.99	390	99	NA	NA
SB-4	1/6/15	0.5	NA	NA	<4.8	36	NA	NA
Chlorides	1/6/15	0.5	NA	NA	NA	NA	NA	190
SC-1	2/3/15	1 to 12	<0.047	<0.235	<4.7	<10	<51	NA
SC-2	2/3/15	1 to 12	<0.050	<0.249	<5.0	<9.8	<49	NA
SC-3	2/3/15	1 to 12	<0.049	<0.245	<4.9	<9.9	<50	NA
SC-4	2/3/15	1 to 3	<0.048	<0.240	<4.8	<9.9	<50	NA
SC-5	2/3/15	10 to 12	<0.049	0.22	<4.9	<9.8	<49	NA
SC-6	2/3/15	3 to 5	<0.047	<0.235	<4.7	<10	<50	NA

NA - not analyzed

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

### 3.0 Conclusions and Recommendations

On January 6, 2015, AES conducted an initial assessment of petroleum contaminated soils associated with a release of produced water and condensate at the San Juan 28-6 #207M. 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-2, and SB-5. The highest VOC concentration was reported in SB-2 with 2,991 ppm, and the highest TPH concentration was reported in SB-1, SB-2, and SB-5 with greater than 2,500 mg/kg.


Laboratory analyses for SB-2, SB-4, and Chlorides were used to confirm field sampling results. Benzene and total BTEX concentrations were reported below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively, in SB-2. TPH concentrations as GRO/DRO exceeded the NMOCD action level of 100 mg/kg in SB-2 (489 mg/kg). Chloride concentrations were reported at 190 mg/kg.

On February 3, 2015, final excavation of the impacted area was completed. Field sampling results of the excavation extents showed that VOC and field TPH concentrations were below applicable NMOCD action levels for the final walls and base of the excavation. Laboratory analytical results reported benzene, total BTEX, and TPH concentrations as GRO/DRO/MRO below applicable NMOCD action levels in all samples.

Based on final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 28-6 #207M, VOC, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls and base of the excavation. No further work is recommended.

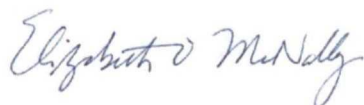
If you have any questions about this report or site conditions, please do not hesitate to contact Emilee Skyles at (505) 564-2281.

Sincerely,



David J. Reese  
Environmental Scientist





Elizabeth McNally, PE

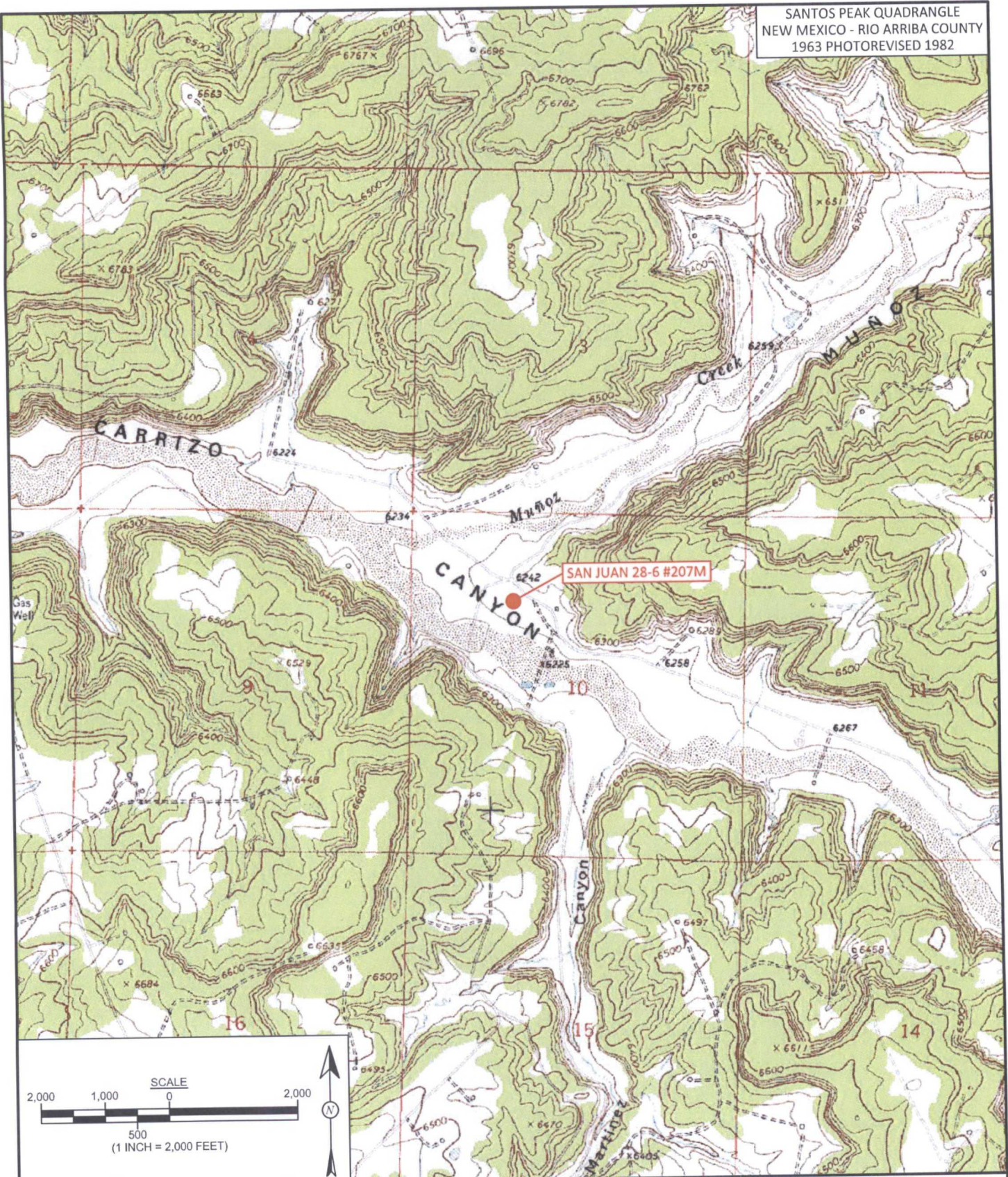
Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, January 2015
- Figure 3. Initial Assessment Sample Locations and Results, January 2015
- Figure 4. Final Excavation Sample Locations and Results, February 2015
- AES Field Sampling Report 010615
- AES Field Sampling Report 020315
- Hall Laboratory Analytical Report 1501128
- Hall Laboratory Analytical Report 1502143

C:\Users\emcnally\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2015  
Projects\ConocoPhillips\SJ 28-6 #207M\San Juan 28-6 #207M Release and Final Excavation Report  
032315.docx

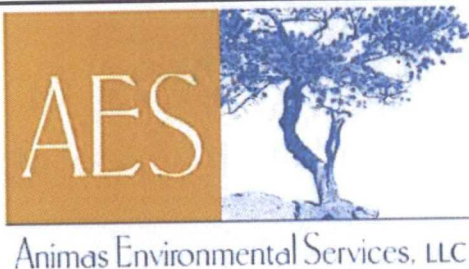


SANTOS PEAK QUADRANGLE  
NEW MEXICO - RIO ARriba COUNTY  
1963 PHOTOREVISED 1982



**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**  
ConocoPhillips  
SAN JUAN 28-6 #207M  
SE¼ NW¼, SECTION 10, T27N, R6W  
RIO ARriba COUNTY, NEW MEXICO  
N36.59189, W107.45776



<b>DRAWN BY:</b> S. Jones	<b>DATE DRAWN:</b> January 9, 2015
<b>REVISIONS BY:</b> S. Jones	<b>DATE REVISED:</b> January 9, 2015
<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> January 9, 2015
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> January 9, 2015





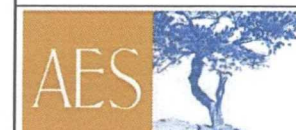
 <p><b>AES</b></p> <p>Animas Environmental Services, LLC</p>	<b>DRAWN BY:</b> S. Jones	<b>DATE DRAWN:</b> January 9, 2015	<p><b>FIGURE 2</b></p> <p><b>AERIAL SITE MAP JANUARY 2015</b></p> <p>ConocoPhillips SAN JUAN 28-6 #207M SE¼ NW¼, SECTION 10, T27N, R6W RIO ARriba COUNTY, NEW MEXICO N36.59189, W107.45776</p>
	<b>REVISIONS BY:</b> S. Jones	<b>DATE REVISED:</b> January 9, 2015	
	<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> January 9, 2015	
	<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> January 9, 2015	



# FIGURE 3

## INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS JANUARY 2015

ConocoPhillips  
SAN JUAN 28-6 #207M  
SE¼ NW¼, SECTION 10, T27N, R6W  
RIO ARriba COUNTY, NEW MEXICO  
N36.59189, W107.45776

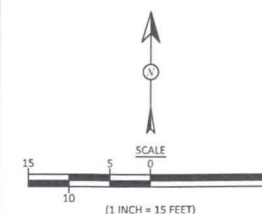


Animas Environmental Services, LLC

<b>DRAWN BY:</b> S. Jones	<b>DATE DRAWN:</b> January 7, 2015
<b>REVISIONS BY:</b> S. Jones	<b>DATE REVISED:</b> January 21, 2015
<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> January 21, 2015
<b>APPROVED BY:</b> R. Kennermer	<b>DATE APPROVED:</b> January 21, 2015

### LEGEND

- SAMPLE LOCATIONS
- ===== SECONDARY CONTAINMENT BERM
- x - FENCE
- [Hatched Box] VISIBLY STAINED SOILS
- [Blue Box] PUDDLE OF SNOWMELT AND CONDENSATE



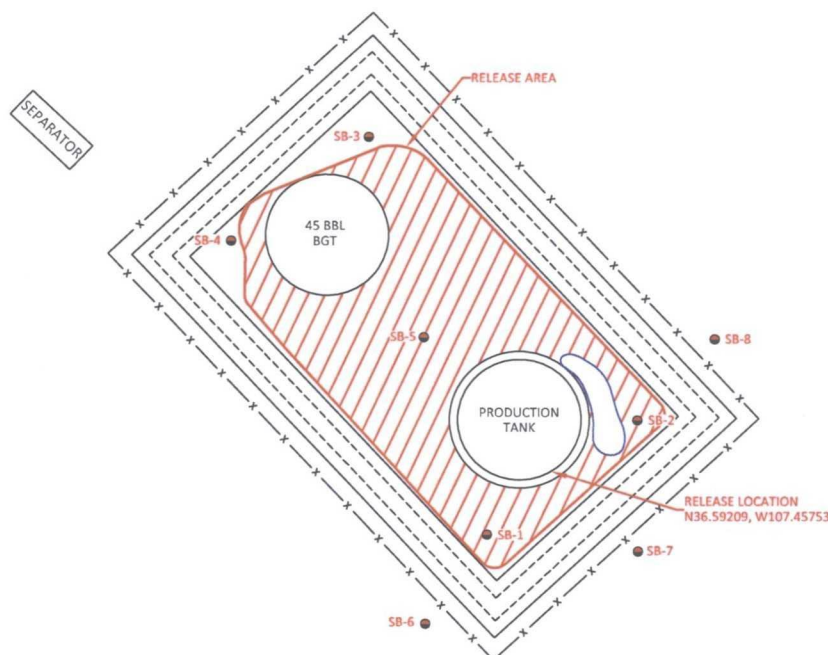
Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>100</b>	<b>100</b>
SB-1	1/6/15	0.5	2,367	>2,500
		2	214	29.4
		4	147	70.8
SB-2	1/6/15	0.5	1,667	>2,500
		2	311	79.6
		4	2,991	>2,500
		6	2,445	183
SB-3	1/6/15	0.5	0.8	41.9
		2	1.1	NA
		4	1.0	43.2
SB-4	1/6/15	0.5	15.8	140
SB-5	1/6/15	0.5	1,780	>2,500
SB-6	1/6/15	0.5	2.5	NA
SB-7	1/6/15	0.5	2.6	NA
SB-8	1/6/15	0.5	0.9	NA

NA - NOT ANALYZED

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>100</b>	<b>NE</b>
SB-2	1/6/15	6	0.49	37.99	390	99
SB-4	1/6/15	0.5	NA	NA	<4.8	36
CHLORIDES	1/6/15	0.5	NA	NA	NA	190

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

NA - NOT ANALYZED. NE - NOT ESTABLISHED. SAMPLE CHLORIDES IS A THREE POINT COMPOSITE OF SB-1, SB-2 AND SB-5 AT 0.5 FEET BGS AND WAS ANALYZED PER USEPA METHOD 300.0.



# FIGURE 4

## FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS FEBRUARY 2015

ConocoPhillips  
SAN JUAN 28-6 #207M  
SE¼, NW¼, SECTION 10, T27N, R6W  
RIO ARriba COUNTY, NEW MEXICO  
N36.59189, W107.45776

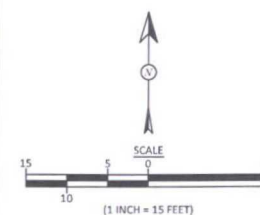


Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> February 10, 2015
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> February 10, 2015
<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> February 10, 2015
<b>APPROVED BY:</b> R. Kennemer	<b>DATE APPROVED:</b> February 10, 2015

### LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- x- FENCE

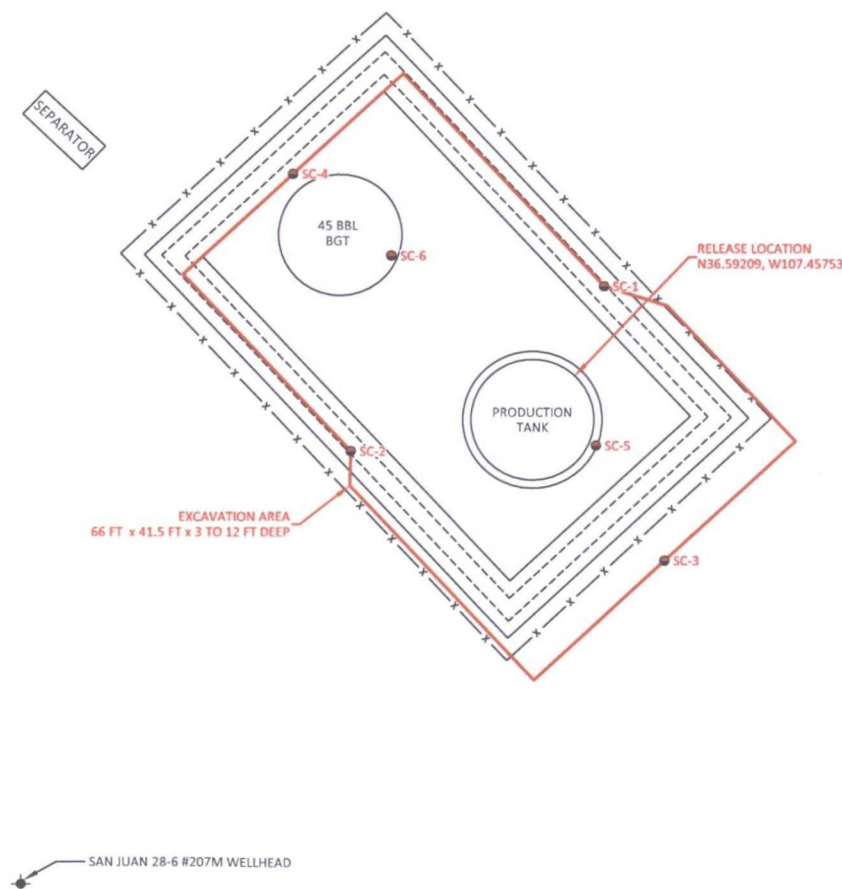


Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SC-1	2/3/15	1 to 12	38.9	<20.0
SC-2	2/3/15	1 to 12	6.3	<20.0
SC-3	2/3/15	1 to 12	9.4	28.8
SC-4	2/3/15	1 to 3	9.9	<20.0
SC-5	2/3/15	10 to 12	83.5	26.4
SC-6	2/3/15	3 to 5	6.2	<20.0

SC-1 THROUGH SC-6 WERE COMPOSITE SAMPLES.

Laboratory Analytical Results							
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)
NMOCD ACTION LEVEL			10	50	100		
SC-1	2/3/15	1 to 12	<0.047	<0.235	<4.7	<10	<51
SC-2	2/3/15	1 to 12	<0.050	<0.249	<5.0	<9.8	<49
SC-3	2/3/15	1 to 12	<0.049	<0.245	<4.9	<9.9	<50
SC-4	2/3/15	1 to 3	<0.048	<0.240	<4.8	<9.9	<50
SC-5	2/3/15	10 to 12	<0.049	0.22	<4.9	<9.8	<49
SC-6	2/3/15	3 to 5	<0.047	<0.235	<4.7	<10	<50

ALL SAMPLES WERE ANALYZED PER USEPA METHODS 8021B AND 8015D.



# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: San Juan 28-6 #207M

Date: 1/6/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 0.5'	1/6/2015	11:10	2,367	>2,500	12:12	20.0	1	EMS
SB-1 @ 2'	1/6/2015	11:19	214	29.4	12:09	20.0	1	EMS
SB-1 @ 4'	1/6/2015	11:30	147	70.8	12:07	20.0	1	EMS
SB-2 @ 0.5'	1/6/2015	12:12	1,667	>2,500	12:45	20.0	1	EMS
SB-2 @ 2'	1/6/2015	12:15	311	79.6	12:47	20.0	1	EMS
SB-2 @ 4'	1/6/2015	12:19	2,991	>2,500	12:56	20.0	1	EMS
SB-2 @ 6'	1/6/2015	13:50	2,445	183	14:29	20.0	1	EMS
SB-3 @ 0.5'	1/6/2015	12:21	0.8	41.9	13:40	20.0	1	EMS
SB-3 @ 2'	1/6/2015	12:25	1.1	Not Analyzed for TPH				
SB-3 @ 4'	1/6/2015	12:30	1.0	43.2	13:42	20.0	1	EMS
SB-4 @ 0.5'	1/6/2015	13:10	15.8	140	13:45	20.0	1	EMS
SB-5 @ 0.5'	1/6/2015	13:38	1,780	>2,500	14:11	20.0	1	EMS
SB-6 @ 0.5'	1/6/2015	14:03	2.5	Not Analyzed for TPH				
SB-7 @ 0.5'	1/6/2015	14:25	2.6	Not Analyzed for TPH				



Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-8 @ 0.5'	1/6/2015	14:40	0.9	Not Analyzed for TPH				

DF Dilution Factor

Total Petroleum Hydrocarbons - USEPA 418.1

NA Not Analyzed

PQL Practical Quantitation Limit

Analyst:

*Smith SGL*

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

# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: San Juan 28-6 #207M

Date: 2/3/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	2/3/2015	9:10	North Wall	38.9	12.8	9:43	20.0	1	EMS
SC-2	2/3/2015	8:12	South Wall	6.3	14.1	9:04	20.0	1	EMS
SC-3	2/3/2015	8:18	East Wall	9.4	28.8	9:07	20.0	1	EMS
SC-4	2/3/2015	8:15	West Wall	9.9	16.5	9:10	20.0	1	EMS
SC-5	2/3/2015	9:15	Base (East)	83.5	26.4	9:59	20.0	1	EMS
SC-6	2/3/2015	8:22	Base (West)	6.2	14.1	9:15	20.0	1	EMS

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

\*TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

Emil SkL





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)

January 14, 2015

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

RE: CoP SJ 28-6 #207M

OrderNo.: 1501128

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/7/2015 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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1501128

Date Reported: 1/14/2015

CLIENT: Animas Environmental

Client Sample ID: SB-2@6'

Project: CoP SJ 28-6 #207M

Collection Date: 1/6/2015 1:50:00 PM

Lab ID: 1501128-001

Matrix: SOIL

Received Date: 1/7/2015 7:00:00 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)	99	10		mg/Kg	1	1/8/2015 11:52:40 AM	17105
Surr: DNOP	93.0	63.5-128		%REC	1	1/8/2015 11:52:40 AM	17105
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	390	96		mg/Kg	20	1/8/2015 11:52:04 AM	17107
Surr: BFB	133	80-120	S	%REC	20	1/8/2015 11:52:04 AM	17107
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	0.49	0.48		mg/Kg	20	1/8/2015 11:52:04 AM	17107
Toluene	6.7	0.96		mg/Kg	20	1/8/2015 11:52:04 AM	17107
Ethylbenzene	2.8	0.96		mg/Kg	20	1/8/2015 11:52:04 AM	17107
Xylenes, Total	28	1.9		mg/Kg	20	1/8/2015 11:52:04 AM	17107
Surr: 4-Bromofluorobenzene	114	80-120		%REC	20	1/8/2015 11:52:04 AM	17107

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 1501128

Date Reported: 1/14/2015

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SB-4@0.5'**Project:** CoP SJ 28-6 #207M**Collection Date:** 1/6/2015 1:10:00 PM**Lab ID:** 1501128-002**Matrix:** SOIL**Received Date:** 1/7/2015 7:00:00 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)	36	9.9		mg/Kg	1	1/8/2015 1:23:29 PM	17105
Surr: DNOP	96.1	63.5-128		%REC	1	1/8/2015 1:23:29 PM	17105
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/8/2015 12:46:13 PM	17107
Surr: BFB	93.0	80-120		%REC	1	1/8/2015 12:46:13 PM	17107

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	Page 2 of 8
	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 1501128

Date Reported: 1/14/2015

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** Chlorides**Project:** CoP SJ 28-6 #207M**Collection Date:** 1/6/2015 2:35:00 PM**Lab ID:** 1501128-003**Matrix:** SOIL**Received Date:** 1/7/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: lgp
Chloride	190	7.5		mg/Kg	5	1/12/2015 3:06:54 PM	17174

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#: 1501128

14-Jan-15

Client: Animas Environmental

Project: CoP SJ 28-6 #207M

Sample ID	MB-17174	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	17174	RunNo:	23623					
Prep Date:	1/12/2015	Analysis Date:	1/12/2015	SeqNo:	697460	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-17174	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	17174	RunNo:	23623					
Prep Date:	1/12/2015	Analysis Date:	1/12/2015	SeqNo:	697461	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

## 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#: 1501128

14-Jan-15

Client: Animas Environmental

Project: CoP SJ 28-6 #207M

Sample ID	MB-17105	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	17105	RunNo:	23536					
Prep Date:	1/7/2015	Analysis Date:	1/8/2015	SeqNo:	695364	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.5		10.00		94.5	63.5	128			

Sample ID	LCS-17105	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	17105	RunNo:	23536					
Prep Date:	1/7/2015	Analysis Date:	1/8/2015	SeqNo:	695365	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	63	10	50.00	0	125	67.8	130			
Surr: DNOP	4.7		5.000		94.4	63.5	128			

Sample ID	MB-17136	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	17136	RunNo:	23562					
Prep Date:	1/8/2015	Analysis Date:	1/9/2015	SeqNo:	695950	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		89.4	63.5	128			

Sample ID	LCS-17136	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	17136	RunNo:	23562					
Prep Date:	1/8/2015	Analysis Date:	1/9/2015	SeqNo:	695951	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.2	63.5	128			

Sample ID	1501128-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	SB-2@6'	Batch ID:	17105	RunNo:	23536					
Prep Date:	1/7/2015	Analysis Date:	1/8/2015	SeqNo:	695962	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	120	9.9	49.65	98.82	50.3	29.2	176			
Surr: DNOP	4.7		4.965		94.6	63.5	128			

Sample ID	1501128-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	SB-2@6'	Batch ID:	17105	RunNo:	23536					
Prep Date:	1/7/2015	Analysis Date:	1/8/2015	SeqNo:	695963	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	160	9.9	49.26	98.82	125	29.2	176	25.8	23	R
Surr: DNOP	4.9		4.926		100	63.5	128	0	0	

### Qualifiers:

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

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



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1501128

14-Jan-15

Client: Animas Environmental

Project: CoP SJ 28-6 #207M

Sample ID	MB-17169	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	17169	RunNo:	23580					
Prep Date:	1/12/2015	Analysis Date:	1/12/2015	SeqNo:	696520	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		86.2	63.5	128			

## Qualifiers:

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1501128

14-Jan-15

Client: Animas Environmental

Project: CoP SJ 28-6 #207M

Sample ID	MB-17107	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	17107	RunNo:	23541					
Prep Date:	1/7/2015	Analysis Date:	1/8/2015	SeqNo:	695642	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	920		1000		92.4	80	120			

Sample ID	LCS-17107	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	17107	RunNo:	23541					
Prep Date:	1/7/2015	Analysis Date:	1/8/2015	SeqNo:	695643	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	82.1	65.8	139			
Surr: BFB	1000		1000		101	80	120			

Sample ID	1501128-002AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SB-4@0.5'	Batch ID:	17107	RunNo:	23541					
Prep Date:	1/7/2015	Analysis Date:	1/8/2015	SeqNo:	695648	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.13	0	90.2	47.9	144			
Surr: BFB	820		965.3		85.2	80	120			

Sample ID	1501128-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SB-4@0.5'	Batch ID:	17107	RunNo:	23541					
Prep Date:	1/7/2015	Analysis Date:	1/8/2015	SeqNo:	695649	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.08	0	94.1	47.9	144	4.06	29.9	
Surr: BFB	950		963.4		99.0	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#: 1501128

14-Jan-15

Client: Animas Environmental

Project: CoP SJ 28-6 #207M

Sample ID	MB-17107		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 17107		RunNo: 23541					
Prep Date:	1/7/2015		Analysis Date: 1/8/2015		SeqNo: 695657		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	LCS-17107		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 17107		RunNo: 23541					
Prep Date:	1/7/2015		Analysis Date: 1/8/2015		SeqNo: 695658		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.050	1.000	0	91.2	80	120			
Toluene	0.93	0.050	1.000	0	93.1	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		126	80	120			S

### Qualifiers:

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

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



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: 1501128

RcptNo: 1

Received by/date:

Am

01/07/15

Logged By: Ashley Gallegos

1/7/2015 7:00:00 AM

Ag

Completed By: Ashley Gallegos

1/7/2015 8:40:13 AM

Ag

Reviewed By:

IO

01/07/15

### 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 ☐ # of preserved bottles checked for pH: ☐ ( $<2$  or  $>12$  unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? ☐
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 ☐ 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	1.3	Good	Yes			

Client: Animas Environmental Services, LLC

Mailing Address: 604 W. Pison St.

Farminaton, NM 87401

Phone #: 505-564-2281

email or Fax#: [estyles@animasenvironmental.com](mailto:estyles@animasenvironmental.com)

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

## Accreditation

☐ NELAP      ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

CoP SJ 28-6 #207M

Project #:

Project Manager:

E. Skyles

Sampler: *E.S.*

On Ice: ☒ Yes ☐ No

Sample Temperature: 13

[illegible]

Date:	Time:	Relinquished by:
6/5	1730	Guthrie

Date:	Time:	Relinquished by:
6/1/8	1735	M. Walt

Received by:	Date	Time
Anthony Walt	1/6/15	1730

Received by:	Date	Time
<i>[Signature]</i>	01/07/15	0700

Remarks: Drill to Conaco Phillips:  
WD#: 2553696 AREA: 24  
Supervisor: Bobby Spearman ordered by: Lindsay Dumas  
USER: BRADLEY

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)

February 10, 2015

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

RE: CoP SJ 28-6 #207M

OrderNo.: 1502143

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 6 sample(s) on 2/4/2015 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 1502143

Date Reported: 2/10/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-1

Project: CoP SJ 28-6 #207M

Collection Date: 2/3/2015 9:10:00 AM

Lab ID: 1502143-001

Matrix: SOIL

Received Date: 2/4/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/6/2015 5:04:21 PM	17564
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	2/6/2015 5:04:21 PM	17564
Surr: DNOP	98.6	63.5-128		%REC	1	2/6/2015 5:04:21 PM	17564
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/5/2015 11:07:26 PM	17567
Surr: BFB	101	80-120		%REC	1	2/5/2015 11:07:26 PM	17567
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	2/5/2015 11:07:26 PM	17567
Toluene	ND	0.047		mg/Kg	1	2/5/2015 11:07:26 PM	17567
Ethylbenzene	ND	0.047		mg/Kg	1	2/5/2015 11:07:26 PM	17567
Xylenes, Total	ND	0.094		mg/Kg	1	2/5/2015 11:07:26 PM	17567
Surr: 4-Bromofluorobenzene	118	80-120		%REC	1	2/5/2015 11:07:26 PM	17567

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 1502143

Date Reported: 2/10/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-2

Project: CoP SJ 28-6 #207M

Collection Date: 2/3/2015 8:12:00 AM

Lab ID: 1502143-002

Matrix: SOIL

Received Date: 2/4/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/6/2015 5:26:09 PM	17564
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/6/2015 5:26:09 PM	17564
Surr: DNOP	99.6	63.5-128		%REC	1	2/6/2015 5:26:09 PM	17564
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/5/2015 11:36:05 PM	17567
Surr: BFB	99.8	80-120		%REC	1	2/5/2015 11:36:05 PM	17567
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	2/5/2015 11:36:05 PM	17567
Toluene	ND	0.050		mg/Kg	1	2/5/2015 11:36:05 PM	17567
Ethylbenzene	ND	0.050		mg/Kg	1	2/5/2015 11:36:05 PM	17567
Xylenes, Total	ND	0.099		mg/Kg	1	2/5/2015 11:36:05 PM	17567
Surr: 4-Bromofluorobenzene	115	80-120		%REC	1	2/5/2015 11:36:05 PM	17567

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 1502143

Date Reported: 2/10/2015

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-3**Project:** CoP SJ 28-6 #207M**Collection Date:** 2/3/2015 8:18:00 AM**Lab ID:** 1502143-003**Matrix:** SOIL**Received Date:** 2/4/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/6/2015 5:47:42 PM	17564
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/6/2015 5:47:42 PM	17564
Surr: DNOP	98.7	63.5-128		%REC	1	2/6/2015 5:47:42 PM	17564
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/6/2015 12:04:44 AM	17567
Surr: BFB	99.6	80-120		%REC	1	2/6/2015 12:04:44 AM	17567
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	2/6/2015 12:04:44 AM	17567
Toluene	ND	0.049		mg/Kg	1	2/6/2015 12:04:44 AM	17567
Ethylbenzene	ND	0.049		mg/Kg	1	2/6/2015 12:04:44 AM	17567
Xylenes, Total	ND	0.098		mg/Kg	1	2/6/2015 12:04:44 AM	17567
Surr: 4-Bromofluorobenzene	112	80-120		%REC	1	2/6/2015 12:04:44 AM	17567

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 1502143

Date Reported: 2/10/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-4

Project: CoP SJ 28-6 #207M

Collection Date: 2/3/2015 8:15:00 AM

Lab ID: 1502143-004

Matrix: SOIL

Received Date: 2/4/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/6/2015 6:09:23 PM	17564
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/6/2015 6:09:23 PM	17564
Surr: DNOP	96.8	63.5-128		%REC	1	2/6/2015 6:09:23 PM	17564
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/6/2015 12:33:29 AM	17567
Surr: BFB	101	80-120		%REC	1	2/6/2015 12:33:29 AM	17567
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	2/6/2015 12:33:29 AM	17567
Toluene	ND	0.048		mg/Kg	1	2/6/2015 12:33:29 AM	17567
Ethylbenzene	ND	0.048		mg/Kg	1	2/6/2015 12:33:29 AM	17567
Xylenes, Total	ND	0.096		mg/Kg	1	2/6/2015 12:33:29 AM	17567
Surr: 4-Bromofluorobenzene	117	80-120		%REC	1	2/6/2015 12:33:29 AM	17567

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 1502143

Date Reported: 2/10/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-5

Project: CoP SJ 28-6 #207M

Collection Date: 2/3/2015 9:15:00 AM

Lab ID: 1502143-005

Matrix: SOIL

Received Date: 2/4/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/6/2015 6:30:50 PM	17564
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/6/2015 6:30:50 PM	17564
Surr: DNOP	101	63.5-128		%REC	1	2/6/2015 6:30:50 PM	17564
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/6/2015 1:02:10 AM	17567
Surr: BFB	106	80-120		%REC	1	2/6/2015 1:02:10 AM	17567
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	2/6/2015 1:02:10 AM	17567
Toluene	ND	0.049		mg/Kg	1	2/6/2015 1:02:10 AM	17567
Ethylbenzene	ND	0.049		mg/Kg	1	2/6/2015 1:02:10 AM	17567
Xylenes, Total	0.22	0.099		mg/Kg	1	2/6/2015 1:02:10 AM	17567
Surr: 4-Bromofluorobenzene	116	80-120		%REC	1	2/6/2015 1:02:10 AM	17567

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 1502143

Date Reported: 2/10/2015

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-6

Project: CoP SJ 28-6 #207M

Collection Date: 2/3/2015 8:22:00 AM

Lab ID: 1502143-006

Matrix: SOIL

Received Date: 2/4/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/6/2015 6:52:23 PM	17564
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/6/2015 6:52:23 PM	17564
Surr: DNOP	97.2	63.5-128		%REC	1	2/6/2015 6:52:23 PM	17564
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/6/2015 1:30:53 AM	17567
Surr: BFB	101	80-120		%REC	1	2/6/2015 1:30:53 AM	17567
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	2/6/2015 1:30:53 AM	17567
Toluene	ND	0.047		mg/Kg	1	2/6/2015 1:30:53 AM	17567
Ethylbenzene	ND	0.047		mg/Kg	1	2/6/2015 1:30:53 AM	17567
Xylenes, Total	ND	0.094		mg/Kg	1	2/6/2015 1:30:53 AM	17567
Surr: 4-Bromofluorobenzene	115	80-120		%REC	1	2/6/2015 1:30:53 AM	17567

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#: 1502143

10-Feb-15

Client: Animas Environmental

Project: CoP SJ 28-6 #207M

Sample ID	MB-17564		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 17564		RunNo: 24136					
Prep Date:	2/4/2015		Analysis Date: 2/6/2015		SeqNo: 712630		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.7	63.5	128			

Sample ID	LCS-17564		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 17564		RunNo: 24136					
Prep Date:	2/4/2015		Analysis Date: 2/6/2015		SeqNo: 712631		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.8	67.8	130			
Surr: DNOP	4.9		5.000		98.2	63.5	128			

Sample ID	1502134-001AMS		SampType: MS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 17564		RunNo: 24136					
Prep Date:	2/4/2015		Analysis Date: 2/6/2015		SeqNo: 712633		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	77	10	50.51	16.58	120	29.2	176			
Surr: DNOP	7.3		5.051		144	63.5	128			S

Sample ID	1502134-001AMSD		SampType: MSD		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 17564		RunNo: 24136					
Prep Date:	2/4/2015		Analysis Date: 2/6/2015		SeqNo: 712634		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	130	10	50.30	16.58	231	29.2	176	53.0	23	RS
Surr: DNOP	6.1		5.030		120	63.5	128	0	0	

### Qualifiers:

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1502143

10-Feb-15

Client: Animas Environmental

Project: CoP SJ 28-6 #207M

Sample ID	MB-17567		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	17567		RunNo:	24122				
Prep Date:	2/4/2015		Analysis Date:	2/5/2015		SeqNo:	711439		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	940		1000		94.1	80	120				

Sample ID	LCS-17567		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 17567		RunNo: 24122					
Prep Date:	2/4/2015		Analysis Date: 2/5/2015		SeqNo: 711440		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	105	64	130			
Surr: BFB	1100		1000		106	80	120			

Sample ID	1502134-001AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC		Batch ID: 17567		RunNo: 24122					
Prep Date:	2/4/2015		Analysis Date: 2/5/2015		SeqNo: 711445		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	35	4.8	24.20	2.871	134	47.9	144			
Surr: BFB	1700		968.1		176	80	120			S

Sample ID	1502134-001AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC		Batch ID: 17567		RunNo: 24122					
Prep Date:	2/4/2015		Analysis Date: 2/5/2015		SeqNo: 711446		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	4.9	24.27	2.871	117	47.9	144	11.9	29.9	
Surr: BFB	1300		970.9		136	80	120	0	0	S

### Qualifiers:

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

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



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1502143

10-Feb-15

Client: Animas Environmental

Project: CoP SJ 28-6 #207M

Sample ID	MB-17567		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 17567		RunNo: 24122					
Prep Date:	2/4/2015		Analysis Date: 2/5/2015		SeqNo: 711478		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		108	80	120			

Sample ID	LCS-17567		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 17567		RunNo: 24122					
Prep Date:	2/4/2015		Analysis Date: 2/5/2015		SeqNo: 711479		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	112	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	112	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		122	80	120			S

Sample ID	1502134-002AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	BatchQC		Batch ID: 17567		RunNo: 24122					
Prep Date:	2/4/2015		Analysis Date: 2/5/2015		SeqNo: 711486		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.048	0.9634	0	114	69.2	126			
Toluene	1.1	0.048	0.9634	0.01067	110	65.6	128			
Ethylbenzene	1.1	0.048	0.9634	0	116	65.5	138			
Xylenes, Total	3.3	0.096	2.890	0.01633	115	63	139			
Surr: 4-Bromofluorobenzene	1.2		0.9634		123	80	120			S

Sample ID	1502134-002AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	BatchQC		Batch ID: 17567		RunNo: 24122					
Prep Date:	2/4/2015		Analysis Date: 2/5/2015		SeqNo: 711487		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.048	0.9643	0	121	69.2	126	5.75	18.5	
Toluene	1.1	0.048	0.9643	0.01067	114	65.6	128	3.34	20.6	
Ethylbenzene	1.2	0.048	0.9643	0	121	65.5	138	4.35	20.1	
Xylenes, Total	3.4	0.096	2.893	0.01633	118	63	139	2.90	21.1	
Surr: 4-Bromofluorobenzene	1.2		0.9643		121	80	120	0	0	S

### Qualifiers:

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

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



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: 1502143

RcptNo: 1

Received by/date:

*Am* 02/04/15

Logged By: Ashley Gallegos

2/4/2015 8:30:00 AM

*AG*

Completed By: Ashley Gallegos

2/4/2015 11:07:17 AM

*AG*

Reviewed By:

*AT 02/04/15*

### 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  $\geq 0^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ? 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	2.4	Good	Yes			



# Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Vailing Address: 604 W. Pinon St

Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

CoP SJ 28-6 #207M

Project #:

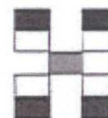
Project Manager:

E. Skyles

Sampler: E. Skyles / C. Lememan

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.4



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMBE (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
3/15	9:10	sm	SC-1	1-4oz.	cool	-001	X	X										
3/15	8:12	sm	SC-2	1-4oz.	cool	-002	X	X										
3/15	8:18	sm	SC-3	1-4oz.	cool	-003	X	X										
3/15	8:15	sm	SC-4	1-4oz.	cool	-004	X	X										
3/15	9:15	sm	SC-5	1-4oz.	cool	-005	X	X										
3/15	8:22	sm	SC-6	1-4oz.	cool	-006	X	X										

Date: 3/15 Time: 1635 Relinquished by: E. Skyles

Received by: Christine Walter Date: 3/15 Time: 1635

Remarks: Bill to Conoco Phillips  
WD# 205 5369  
Super: Bobby Spearman  
USER: BRADLEY  
area: 24  
ordered by: Lindsay Annas

Date: 3/15 Time: 1747 Relinquished by: Christine Walter

Received by: [Signature] Date: 02/04/15 Time: 0830

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 noted on the analytical report.