

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., 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

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 in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

*Revised*

**OPERATOR**

☐ Initial Report ☒ Final Report

Name of Company <b>Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company</b>	Contact <b>Ashley Maxwell</b>
Address <b>3401 E. 30th St., Farmington, NM 87402</b>	Telephone No. <b>505-324-5169</b>
Facility Name <b>San Juan 32-9 Unit 100</b>	Facility Type <b>Gas Well</b> Lease # <b>SF-078389A</b>
Surface Owner <b>Federal</b>	Mineral Owner <b>Federal</b> API No. <b>3004523275</b>

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>L</b>	<b>12</b>	<b>31N</b>	<b>10W</b>	<b>1560'</b>	<b>South</b>	<b>800'</b>	<b>West</b>	<b>San Juan County</b>

Latitude **36.90935 N** Longitude **-107.83946 W**

**NATURE OF RELEASE**

Type of Release <b>Produced Fluids</b>	Volume of Release <b>888 yds<sup>3</sup></b>	Volume Recovered <b>888 yds<sup>3</sup></b>
Source of Release <b>Unknown Production Equipment</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>6/6/2012</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour <b>RCVD JAN 15 '14</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>OIL CONS. DIV. DIST. 3</b>	

If a Watercourse was Impacted, Describe Fully.\*

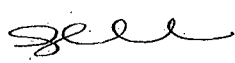
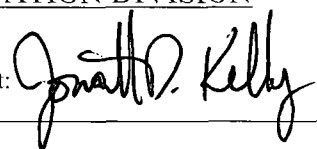
Describe Cause of Problem and Remedial Action Taken.\*

**Discovery of historical hydrocarbon impacted soil.**

Describe Area Affected and Cleanup Action Taken.\*

**Excavation was required based on NMOCD Guidelines for Remediation of Leaks, Spills and Releases. The excavation was 45'X50'X10' and 888 yds<sup>3</sup> of soil was transported to a third party land farm. Excavation and confirmation sampling occurred. Analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases; therefore no further action is needed.**

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>Ashley Maxwell</b>	Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>1/17/2014</b>	Expiration Date:
E-mail Address: <b>ashley.p.wethington@conocophillips.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>November 12, 2012</b> Phone: <b>505-324-5169</b>		

\* Attach Additional Sheets If Necessary

*15X1401726927*

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**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report ☒ Final Report

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Address <b>3401 E. 30th St., Farmington, NM 87402</b>	Telephone No. <b>505-324-5169</b>
Facility Name <b>San Juan 32-9 Unit 100</b>	Facility Type <b>Gas Well</b> Lease # <b>SF-078389A</b>

Surface Owner <b>Federal</b>	Mineral Owner <b>Federal</b>	API No. <b>3004523275</b>
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>L</b>	<b>12</b>	<b>31N</b>	<b>10W</b>	<b>1560'</b>	<b>South</b>	<b>800'</b>	<b>West</b>	<b>San Juan County</b>

Latitude **36.90935 N** Longitude **-107.83946 W**

**NATURE OF RELEASE**

Type of Release <b>Produced Fluids</b>	Volume of Release <b>888 yds<sup>3</sup></b>	Volume Recovered <b>888 yds<sup>3</sup></b>
Source of Release <b>Unknown Production Equipment</b>	Date and Hour of Occurrence <b>6/6/2012</b>	Date and Hour of Discovery
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? <b>RCVD NOV 16 '12 OIL CONS. DIV.</b>	
By Whom?	Date and Hour <b>DIST. 3</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.\*

**Discovery of historical hydrocarbon impacted soil.**

Describe Area Affected and Cleanup Action Taken.\*

**Excavation was required based on NMOCD Guidelines for Remediation of Leaks, Spills and Releases. The excavation was 45'X50'X10' and 888 yds<sup>3</sup> of soil was transported to a third party land farm. Excavation and confirmation sampling occurred. Analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases; therefore no further action is needed.**

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>Ashley Maxwell</b>	Approved by Environmental Specialist:		
Title: <b>Field Environmental Specialist</b>	Approval Date:	Expiration Date:	
E-mail Address: <b>ashley.p.wethington@conocophillips.com</b>	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <b>November 12, 2012</b> Phone: <b>505-324-5169</b>			

\* Attach Additional Sheets If Necessary



Animas Environmental Services, LLC

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

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

Durango, Colorado  
970-403-3274

November 1, 2012

Crystal Tafoya  
ConocoPhillips  
San Juan Business Unit  
Office 214-5  
5525 Hwy 64  
Farmington, New Mexico 87401

**RE: Initial Release Assessment and Final Excavation Report  
San Juan 32-9 #100  
San Juan County, New Mexico**

**OIL CONS. DIV DIST. 3**

**NOV 16 2012**

Dear Ms. Tafoya:

On May 18, May 23, and June 6, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 32-9 #100, located in San Juan County, New Mexico. The initial release assessment was completed by AES on May 18, 2012. The final excavation was completed by CoP contractors while AES was on location on June 6, 2012. The historical release was discovered while installing containment for a below grade tank at the location.

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## 1.0 Site Information

### 1.1 Location

Location - NW¼ SW¼, Section 12, T31N, R10W, San Juan County, New Mexico  
Well Head Latitude/Longitude - N36.90948 and W107.84006, respectively  
Release Location Latitude/Longitude – N36.90959 and W107.84005, respectively  
Land Jurisdiction – Bureau of Land Management (BLM)  
Figure 1. Topographic Site Location Map  
Figure 2. Aerial Site Map, May 2012

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Cathodic Protection Report dated January 1996 for the San Juan 32-9 #100 reported the depth to groundwater as 50 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum

Recovery Research Center online mapping tool (<http://ford.nmt.edu/react/project.html>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs. An unnamed wash which discharges into Miller Canyon is located approximately 900 feet north-northwest of the location. Based on this information, the location was assessed a ranking score of 10 per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993).

### 1.3 Initial Release Assessment

AES was initially contacted by Ashley Maxwell of CoP on May 18, 2012, and on the same day, Tami Ross and Zachary Trujillo of AES completed the release assessment field work. The assessment included the collection and field screening of 13 samples from eight test holes (TH-1 through TH-8) collected near the former below grade tank and production tank. Five discrete samples (S-1 through S-5) were also collected from the newly constructed below grade tank containment at a depth of approximately 4 feet bgs. Based on the field screening and laboratory analytical results, AES recommended an area of excavation. Sample locations and results are shown on Figure 3.

### 1.4 Final Excavation Confirmation Sampling

On May 23, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-1 through SC-5) of the walls and base of the excavation. Based on field screening and laboratory analytical results, AES recommended further excavation of the release area. On June 6, 2012, AES returned to the location to collect additional confirmation soil samples (SC-6 through SC-10) of the expanded excavation. The June 2012 soil sampling included collection of five confirmation soil samples of the walls and base of the excavation. The area of the final excavation was approximately 1,458 square feet and 13 to 14 feet in depth. Sample locations, results, and final excavation extents are shown on Figure 4.

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## 2.0 Soil Sampling

A total of 18 soil samples and 10 composite soil samples were collected during the initial assessment and confirmation sampling. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Nine of the soil samples collected from TH-1, TH-2 and TH-5 through Th-8 during the initial assessment and 10 composite soil samples (SC-1

through SC-10) collected during the excavation clearance were submitted for laboratory analysis.

## **2.1 Field Screening**

### **2.1.1 Volatile Organic Compounds**

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

### **2.1.2 Total Petroleum Hydrocarbons**

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

## **2.2 Laboratory Analyses**

The 19 soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Soil samples were laboratory analyzed for:

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

Note samples collected on June 6, 2012, were submitted only for laboratory analysis of BTEX per 8260B.

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

On May 18, 2012, initial assessment field screening readings for VOCs via OVM ranged from 0.7 ppm in S-4 up to 6,887 ppm in TH-1. Field TPH concentrations ranged from 89.1 mg/kg in TH-7 up to 4,990 mg/kg in TH-2.

On May 23 and June 6, 2012, excavation field screening readings for VOCs via OVM ranged from 199 ppm in SC-3 up 4,262 ppm in SC-2. Field TPH concentrations ranged from 74.6 mg/kg in SC-3 up to 1,910 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. The AES field screening reports are attached.

Table 1. Soil Field Screening VOCs and TPH Results  
San Juan 32-9 #100 Release Assessment and Final Excavation  
May and June 2012

<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	1,000
S-1	5/18/12	4	4,554	126
S-2	5/18/12	4	4.0	96.0
S-3	5/18/12	4	7.2	173
S-4	5/18/12	4	0.7	178
S-5	5/18/12	4	0.8	NA
TH-1	5/18/12	6	6,887	1,200
TH-2	5/18/12	3	4,689	899
		8	3,092	4,990
TH-3	5/18/12	5	14.6	93.3
TH-4	5/18/12	4 to 8	4.2	210
TH-5	5/18/12	2	13.3	NA
		6	4,670	551
		12	3,388	2,250
TH-6	5/18/12	2	3,415	1,790
		8	3,192	1,340
TH-7	5/18/12	3	34.1	89.1
		10	4,305	911
TH-8	5/18/12	4	NA	NA
SC-1	5/23/12	1 to 8	3,407	396
SC-2	5/23/12	1 to 8	4,262	991
SC-3	5/23/12	1 to 8	199	74.6
SC-4	5/23/12	8	4,070	996
SC-5	5/23/12	1 to 8	4,027	1,910
SC-6	6/6/12	1 to 14	848	166
SC-7	6/6/12	1 to 14	1,946	306

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>Field TPH (mg/kg)</i>
<i>NMOCD Action Level*</i>			<b>100</b>	<b>1,000</b>
SC-8	6/6/12	1 to 14	<b>2,633</b>	768
SC-9	6/6/12	14	<b>1,949</b>	305
SC-10	6/6/12	1 to 14	<b>964</b>	187

NA – Not Analyzed

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

Laboratory analyses for TH-1, TH-2, and TH-5 through TH-8 were used to confirm field screening results from the initial assessment on May 18, 2012. Benzene concentrations ranged from below laboratory detection limits up to 0.27 mg/kg in TH-2. Total BTEX concentrations ranged from less than 1.1 mg/kg in TH-8 up to 36.1 mg/kg in TH-2. TPH concentrations (as GRO/DRO) ranged from 370 mg/kg in TH-8 up to 2,040 mg/kg in TH-2.

Laboratory analyses for SC-1 through SC-10 were used to confirm field screening results during excavation activities on May 23 and June 6, 2012. Benzene concentrations ranged from below laboratory detection limits up to 0.48 mg/kg in SC-4. Total BTEX concentrations ranged from less than 0.22 mg/kg in SC-3 up to 59.9 mg/kg in SC-4. TPH concentrations (as GRO/DRO) ranged from 1,610 mg/kg in SC-5 up to 2,210 in SC-2. Results are presented in Table 2 and on Figures 3 and 4.

Table 2. Laboratory Analytical Results – Benzene, BTEX and TPH  
San Juan 32-9 #100 Release Assessment and Final Excavation, May and June 2012

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>BTEX (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>
<i>NMOCD Action Level*</i>			<b>10</b>	<b>50</b>	<b>1,000</b>	
TH-1	5/18/12	6	<0.020	5.2	310	87
TH-2	5/18/12	3	<0.10	4.0	NA	NA
		8	0.27	36.1	<b>1,500</b>	<b>540</b>
TH-5	5/18/12	6	<0.10	1.9	NA	NA
		12	0.079	4.8	560	360
TH-6	5/18/12	2	<0.20	9.6	<b>770</b>	<b>250</b>
		8	<0.10	4.7	520	180

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>BTEX (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>
<b>NMOCD Action Level*</b>			<b>10</b>	<b>50</b>	<b>1,000</b>	
TH-7	5/18/12	10	<0.20	1.5	NA	NA
TH-8	5/18/12	4	<0.10	<1.1	170	200
SC-1	5/23/12	1 to 8	<0.10	5.2	NA	NA
SC-2	5/23/12	1 to 8	<0.50	<b>51.5</b>	<b>1,300</b>	<b>910</b>
SC-3	5/23/12	1 to 8	<0.020	<0.22	NA	NA
SC-4	5/23/12	8	0.48	<b>59.9</b>	<b>1,500</b>	<b>410</b>
SC-5	5/23/12	1 to 8	<0.10	5.3	<b>900</b>	<b>710</b>
SC-6	6/6/12	1 to 14	<0.25	<1.25	NA	NA
SC-7	6/6/12	1 to 14	<0.25	5.6	NA	NA
SC-8	6/6/12	1 to 14	<0.25	34.3	NA	NA
SC-9	6/6/12	14	<0.50	8.9	NA	NA
SC-10	6/6/12	1 to 14	<0.50	<2.5	NA	NA

NA – Not Analyzed

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

### 3.0 Conclusions and Recommendations

On May 18, 2012, AES conducted an initial assessment of petroleum contaminated soils associated with a historical release at the San Juan 32-9 #100, located in San Juan County, New Mexico. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the release was assigned a rank of 10. Field screening results above the NMOCD action levels of 100 ppm VOCs and 1,000 mg/kg TPH were reported in S-1, TH-1, TH-2, TH-5, TH-6, and TH-7. The highest VOC concentration was 6,887 ppm in TH-1, and the highest TPH concentration was 4,990 mg/kg in TH-2.

Laboratory analyses of samples collected during the initial assessment on May 18, 2012, showed that benzene and total BTEX concentrations were below the NMOCD action levels of 10 mg/kg benzene and 50 mg/kg total BTEX. TPH concentrations were above the applicable NMOCD thresholds in TH-2 with 2,040 mg/kg and in TH-6 with 1,020 mg/kg. Based on field screening and laboratory results, excavation of the release area was recommended for the location.



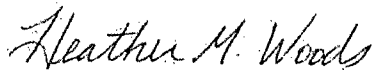
On May 23, 2012, assessment of the excavation area was completed, and field screening results of the excavation extents reported VOC concentrations above the NMOCD action level in SC-1 through SC-5. Field TPH concentrations were below the NMOCD action level of 1,000 mg/kg in all samples, except SC-5 with 1,910 mg/kg. Further excavation was completed, and confirmation sampling was conducted on June 6, 2012. Field screening results showed that VOC concentrations were above the action level of 100 ppm in SC-6 through SC-10. However field TPH concentrations were below the action level of 1,000 mg/kg in each sample (SC-6 through SC-10).

Benzene concentrations in SC-1 through SC-10 were reported below the NMOCD action level of 10 mg/kg in all samples. Total BTEX concentrations from final excavation sampling on June 6, 2012, showed concentrations were below NMOCD action levels in all samples (SC-6 through SC-10).

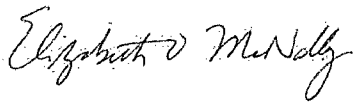
Based on the field screening and laboratory analytical results of the final excavation of petroleum contaminated soils at the San Juan 32-9 #100, benzene, total BTEX, VOCs, and TPH concentrations were below the applicable NMOCD action levels. No further work is recommended.

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

Sincerely,



Heather M. Woods  
Staff Geologist



Elizabeth McNally, PE

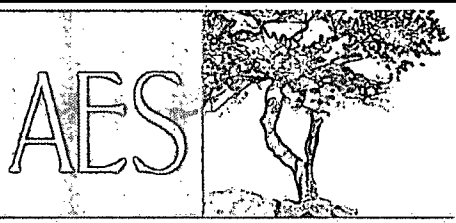
Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, May 2012
- Figure 3. Initial Assessment Soil Sample Locations and Results, May 2012
- Figure 4. Final Excavation Soil Sample Locations and Results, June 2012
- AES Field Screening Report 051812
- AES Field Screening Report 052312

AES Field Screening Report 060612  
Hall Laboratory Analytical Report 1205885  
Hall Laboratory Analytical Report 1205A09  
Hall Laboratory Analytical Report 1206268

R:\Animas 2000\2012 Projects\Conoco Phillips\SJ 32-9 Unit #100\SJ 32-9 #100 Release and Final  
Excavation Report 110112.docx

MOUNT NEBO QUADRANGLE  
NEW MEXICO COLORADO  
PROVISIONAL EDITION 1985



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> May 21, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 19, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> October 19, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> November 1, 2012

**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**

ConocoPhillips  
SAN JUAN 32-9 #100  
SAN JUAN COUNTY, NEW MEXICO  
NW¼ SW¼, SECTION 12, T31N, R10W  
N36.90948, W107.84006



AERIAL SOURCE: © 2012, PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL DATE: MARCH 20, 2011.



Animas Environmental Services, LLC

**DRAWN BY:**  
C. Lameman

**DATE DRAWN:**  
May 21, 2012

**REVISIONS BY:**  
C. Lameman  
**CHECKED BY:**  
October 19, 2012

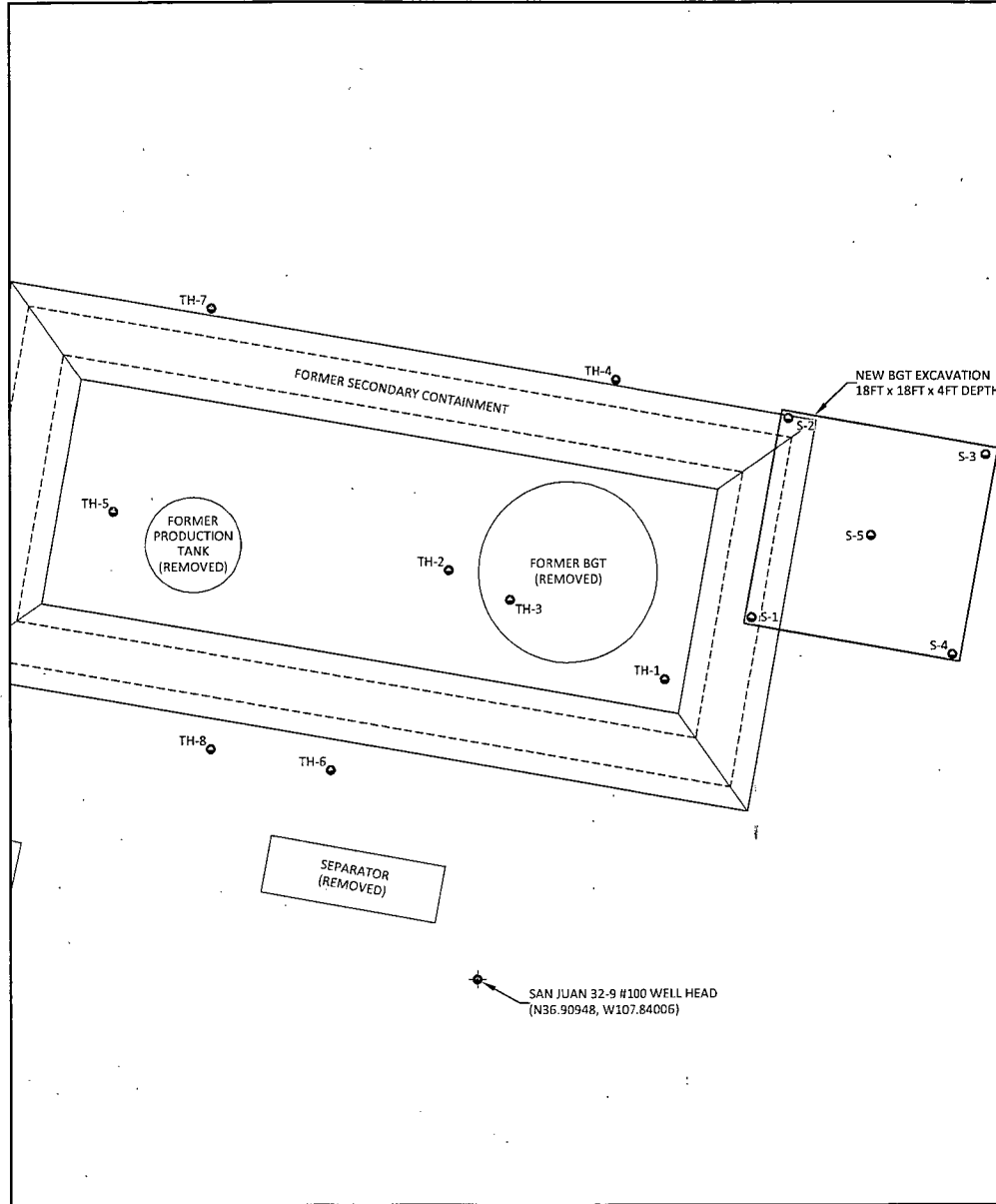
**DATE REVISED:**  
October 19, 2012  
**DATE CHECKED:**  
October 19, 2012

**APPROVED BY:**  
E. McNally

**DATE APPROVED:**  
November 1, 2012

## FIGURE 2

**AERIAL SITE MAP**  
ConocoPhillips  
SAN JUAN 32-9 #100  
SAN JUAN COUNTY, NEW MEXICO  
NW¼ SW¼, SECTION 12, T31N, R10W  
N36.90948, W107.84006



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH 418.1 (mg/kg)
NMOCD ACTION LEVEL			100	1,000
S-1	5/18/12	4	4,554	126
S-2	5/18/12	4	4.0	96.0
S-3	5/18/12	4	7.2	173
S-4	5/18/12	4	0.7	178
S-5	5/18/12	4	0.8	NA
TH-1	5/18/12	6	6,887	1,200
TH-2	5/18/12	3	4,689	899
		8	3,092	4,990
TH-3	5/18/12	5	14.6	93.3
TH-4	5/18/12	4 to 8	4.2	210
		2	13.3	NA
TH-5	5/18/12	6	4,670	551
		12	3,388	2,250
TH-6	5/18/12	2	3,415	1,790
		8	3,192	1,340
TH-7	5/18/12	3	34.1	89.1
		10	4,305	911
TH-8	5/18/12	4	NA	NA
NA - NOT ANALYZED				

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRD (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
TH-1	5/18/12	6	<0.020	5.2	310	87
		3	<0.10	4.0	NA	NA
TH-2	5/18/12	8	0.27	36.1	1,500	540
		6	<0.10	1.9	NA	NA
TH-5	5/18/12	12	0.079	4.8	560	360
		2	<0.20	9.6	770	250
TH-6	5/18/12	8	<0.10	4.7	520	180
		10	<0.20	1.5	NA	NA
TH-7	5/18/12	4	<0.10	<1.1	170	200
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8260B AND/OR 8015B. NA- NOT ANALYZED						

**FIGURE 3**

**INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS MAY 2012**

ConocoPhillips  
SAN JUAN 32-9 #100  
SAN JUAN COUNTY, NEW MEXICO  
NW¼ SW¼, SECTION 12, T31N, R10W  
N36.90948, W107.84006



Animes Environmental Services, LLC

**DRAWN BY:**  
C. Lameman

**DATE DRAWN:**  
May 21, 2012

**REVISIONS BY:**  
C. Lameman

**DATE REVISED:**  
October 19, 2012

**CHECKED BY:**  
D. Watson

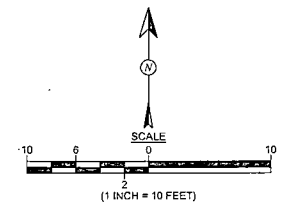
**DATE CHECKED:**  
October 19, 2012

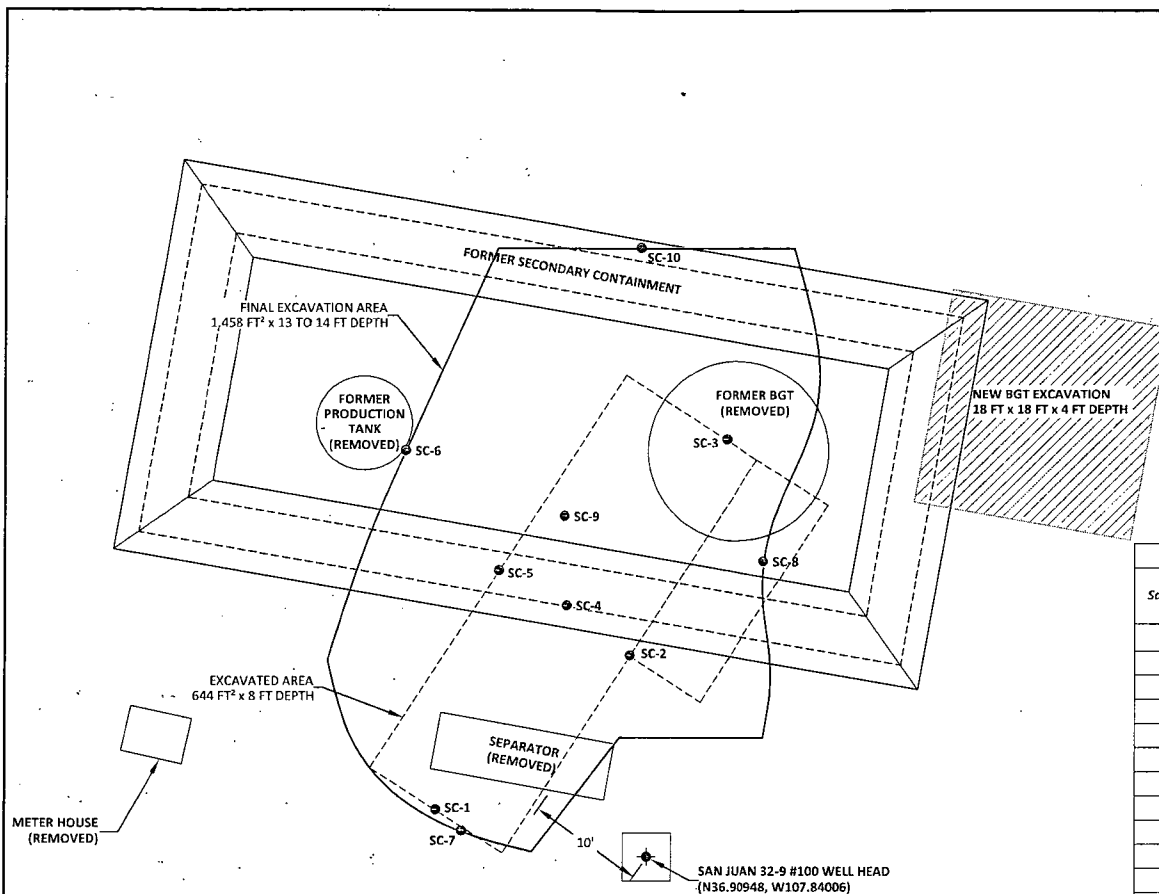
**APPROVED BY:**  
E. McNally

**DATE APPROVED:**  
November 1, 2012

**LEGEND**

● SAMPLE LOCATIONS





Field Screening Results				
Sample ID	Date	Depth (ft)	OVMPID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	5/23/12	1 to 8	3,407	396
SC-2	5/23/12	1 to 8	4,262	991
SC-3	5/23/12	1 to 8	199	74.6
SC-4	5/23/12	8	4,070	994
SC-5	5/23/12	1 to 8	4,027	1,910
SC-6	6/6/12	1 to 14	848	166
SC-7	6/6/12	1 to 14	1,946	306
SC-8	6/6/12	1 to 14	2,633	768
SC-9	6/6/12	14	1,949	305
SC-10	6/6/12	1 to 14	964	187
NA - NOT ANALYZED				

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
SC-1	5/23/12	1 to 8	<0.10	8.0	NA	NA
SC-2	5/23/12	1 to 8	<1.2	83	2,200	910
SC-3	5/23/12	1 to 8	<0.25	<1.25	NA	NA
SC-4	5/23/12	8	0.67	80	2,000	410
SC-5	5/23/12	1 to 8	<0.25	7.8	1,300	710
SC-6	6/6/12	1 to 14	<0.25	<1.25	NA	NA
SC-7	6/6/12	1 to 14	<0.25	5.6	NA	NA
SC-8	6/6/12	1 to 14	<0.25	34	NA	NA
SC-9	6/6/12	14	<0.50	8.9	NA	NA
SC-10	6/6/12	1 to 14	<0.50	<2.5	NA	NA
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8260B.						

**FIGURE 4**

**FINAL EXCAVATION, SAMPLE LOCATIONS, AND RESULTS**  
JUNE 2012  
ConocoPhillips  
SAN JUAN 32-9 #100  
SAN JUAN COUNTY, NEW MEXICO  
NW¼, SW¼, SECTION 12, T31N, R10W  
N36.90948, W107.84006

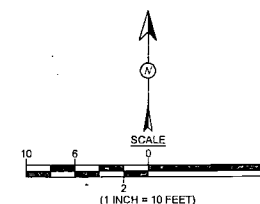


Arimas Environmental Services, LLC

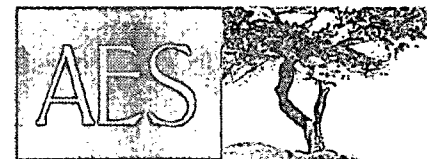
<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> July 23, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 19, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> October 19, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> November 1, 2012

**LEGEND**

- 5-POINT COMPOSITE SAMPLE LOCATIONS MAY 2012
- 5-POINT COMPOSITE SAMPLE LOCATIONS JUNE 2012



# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3274

Client: ConocoPhillips

Project Location: San Juan 32-9 #100

Date: 5/18/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	5/18/2012	11:00	4,554	11:43	126	20.0	1	TRC
S-2	5/18/2012	11:05	4.0	11:49	96.0	20.0	1	TRC
S-3	5/18/2012	11:10	7.2	12:00	173	20.0	1	TRC
S-4	5/18/2012	11:15	0.7	12:38	178	20.0	1	TRC
S-5	5/18/2012	11:20	0.8	Not Analyzed for TPH				
TH-1 @ 6'	5/18/2012	12:20	6,887	12:41	1,200	20.0	1	TRC
TH-2 @ 3'	5/18/2012	12:50	4,689	13:36	899	20.0	1	TRC
TH-2 @ 8'	5/18/2012	13:00	3,092	14:01	4,990	20.0	1	TRC
TH-3 @ 5'	5/18/2012	13:31	14.6	14:05	93.3	20.0	1	TRC
TH-4 @ 4' to 8'	5/18/2012	13:55	4.2	14:29	210	20.0	1	TRC
TH-5 @ 2'	5/18/2012	14:15	13.3	Not Analyzed for TPH				
TH-5 @ 6'	5/18/2012	14:20	4,670	15:15	551	20.0	1	TRC
TH-5 @ 12'	5/18/2012	14:24	3,388	15:28	2,250	20.0	1	TRC

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-6 @ 2'	5/18/2012	14:30	3,415	15:35	1,790	20.0	1	TRC
TH-6 @ 8'	5/18/2012	14:35	3,192	15:40	1,340	20.0	1	TRC
TH-7 @ 3'	5/18/2012	14:50	34.1	15:45	89.1	20.0	1	TRC
TH-7 @ 10'	5/18/2012	14:55	4,305	15:49	911	20.0	1	TRC
TH-8 @ 4'	5/18/2012	16:15	NA	Not Analyzed for TPH				

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

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

Analyst:

*Jami Ross*



# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: San Juan 32-9 #100

Date: 5/23/2012

Matrix: Soil

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

Durango, Colorado  
970-403-3274

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	5/23/2012	13:00	South Wall	3,407	13:48	396	20.0	1	TRC
SC-2	5/23/2012	13:15	East Wall	4,262	13:58	991	20.0	1	TRC
SC-3	5/23/2012	13:25	North Wall	199	14:02	74.6	20.0	1	TRC
SC-4	5/23/2012	14:00	Base	4,070	14:08	996	20.0	1	TRC
SC-5	5/23/2012	14:15	West Wall	4,027	14:48	1,910	20.0	1	TRC

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

\*Field TPH concentrations recorded may be below PQL.

Analyst:

*Ami Ross*

# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3274

Client: ConocoPhillips

Project Location: San Juan 32-9 #100

Date: 6/6/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	6/6/2012	13:58	West Wall	848	14:18	166	20.0	1	DAW
SC-7	6/6/2012	13:32	South Wall	1,946	13:56	306	20.0	1	DAW
SC-8	6/6/2012	13:32	East Wall	2,633	14:01	768	20.0	1	DAW
SC-9	6/6/2012	11:32	Base	1,949	12:32	305	20.0	1	DAW
SC-10	6/6/2012	12:33	North Wall	964	12:49	187	20.0	1	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

\*Field TPH concentrations recorded may be below PQL.

Analyst:

Debrah Wata



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

May 23, 2012

Tami Ross

Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 793-2072  
FAX

RE: SJ 32-9 Unit #100

OrderNo.: 1205885

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 9 sample(s) on 5/22/2012 for the analyses presented in the following report.

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1205885

Date Reported: 5/23/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: TH-1 @ 6'

Project: SJ 32-9 Unit #100

Collection Date: 5/18/2012 12:20:00 PM

Lab ID: 1205885-001

Matrix: SOIL

Received Date: 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	87	10		mg/Kg	1	5/22/2012 10:05:56 AM
Surr: DNOP	96.7	82.1-121		%REC	1	5/22/2012 10:05:56 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.020		mg/Kg	1	5/22/2012 4:01:12 PM
Toluene	ND	0.050		mg/Kg	1	5/22/2012 4:01:12 PM
Ethylbenzene	0.24	0.050		mg/Kg	1	5/22/2012 4:01:12 PM
Xylenes, Total	5.0	0.10		mg/Kg	1	5/22/2012 4:01:12 PM
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	5/22/2012 4:01:12 PM
Surr: 4-Bromofluorobenzene	129	70-130		%REC	1	5/22/2012 4:01:12 PM
Surr: Dibromofluoromethane	112	71.7-132		%REC	1	5/22/2012 4:01:12 PM
Surr: Toluene-d8	87.4	70-130		%REC	1	5/22/2012 4:01:12 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: BDH
Gasoline Range Organics (GRO)	310	120		mg/Kg	25	5/22/2012 11:13:27 AM
Surr: BFB	91.1	70-130		%REC	25	5/22/2012 11:13:27 AM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 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  
 RL Reporting Detection Limit

**Analytical Report**

Lab Order 1205885

Date Reported: 5/23/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** TH-2 @ 3'**Project:** SJ 32-9 Unit #100**Collection Date:** 5/18/2012 12:50:00 PM**Lab ID:** 1205885-002**Matrix:** SOIL**Received Date:** 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.10		mg/Kg	5	5/22/2012 11:16:24 AM
Toluene	ND	0.25		mg/Kg	5	5/22/2012 11:16:24 AM
Ethylbenzene	ND	0.25		mg/Kg	5	5/22/2012 11:16:24 AM
Xylenes, Total	4.0	0.50		mg/Kg	5	5/22/2012 11:16:24 AM
Surr: 1,2-Dichloroethane-d4	85.6	70-130		%REC	5	5/22/2012 11:16:24 AM
Surr: 4-Bromofluorobenzene	40.6	70-130	S	%REC	5	5/22/2012 11:16:24 AM
Surr: Dibromofluoromethane	82.9	71.7-132		%REC	5	5/22/2012 11:16:24 AM
Surr: Toluene-d8	99.8	70-130		%REC	5	5/22/2012 11:16:24 AM

**Qualifiers:**   \*/X   Value exceeds Maximum Contaminant Level.  
                  E    Value above quantitation range  
                  J    Analyte detected below quantitation limits  
                  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  
RL  Reporting Detection Limit

**Analytical Report**

Lab Order 1205885

Date Reported: 5/23/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** TH-2 @ 8'**Project:** SJ 32-9 Unit #100**Collection Date:** 5/18/2012 1:00:00 PM**Lab ID:** 1205885-003**Matrix:** SOIL**Received Date:** 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	540	100		mg/Kg	10	5/22/2012 11:29:38 AM
Surr: DNOP	0	82.1-121	S	%REC	10	5/22/2012 11:29:38 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	0.27	0.20		mg/Kg	10	5/22/2012 11:43:26 AM
Toluene	ND	0.50		mg/Kg	10	5/22/2012 11:43:26 AM
Ethylbenzene	2.8	0.50		mg/Kg	10	5/22/2012 11:43:26 AM
Xylenes, Total	33	1.0		mg/Kg	10	5/22/2012 11:43:26 AM
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	10	5/22/2012 11:43:26 AM
Surr: 4-Bromofluorobenzene	127	70-130		%REC	10	5/22/2012 11:43:26 AM
Surr: Dibromofluoromethane	102	71.7-132		%REC	10	5/22/2012 11:43:26 AM
Surr: Toluene-d8	90.8	70-130		%REC	10	5/22/2012 11:43:26 AM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: BDH
Gasoline Range Organics (GRO)	1,500	50		mg/Kg	10	5/22/2012 11:43:26 AM
Surr: BFB	127	70-130		%REC	10	5/22/2012 11:43:26 AM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

**Analytical Report**

Lab Order 1205885

Date Reported: 5/23/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** TH-5 @ 6'**Project:** SJ 32-9 Unit #100**Collection Date:** 5/18/2012 2:20:00 PM**Lab ID:** 1205885-004**Matrix:** SOIL**Received Date:** 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.10		mg/Kg	5	5/22/2012 11:44:28 AM
Toluene	ND	0.25		mg/Kg	5	5/22/2012 11:44:28 AM
Ethylbenzene	ND	0.25		mg/Kg	5	5/22/2012 11:44:28 AM
Xylenes, Total	1.9	0.50		mg/Kg	5	5/22/2012 11:44:28 AM
Surr: 1,2-Dichloroethane-d4	84.9	70-130		%REC	5	5/22/2012 11:44:28 AM
Surr: 4-Bromofluorobenzene	65.8	70-130	S	%REC	5	5/22/2012 11:44:28 AM
Surr: Dibromofluoromethane	82.6	71.7-132		%REC	5	5/22/2012 11:44:28 AM
Surr: Toluene-d8	94.7	70-130		%REC	5	5/22/2012 11:44:28 AM

**Qualifiers:**   \*/X   Value exceeds Maximum Contaminant Level.  
                  E    Value above quantitation range  
                  J    Analyte detected below quantitation limits  
                  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  
RL   Reporting Detection Limit

## Analytical Report

Lab Order 1205885

Date Reported: 5/23/2012

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: TH-5 @ 12'

Project: SJ 32-9 Unit #100

Collection Date: 5/18/2012 2:24:00 PM

Lab ID: 1205885-005

Matrix: SOIL

Received Date: 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	360	10		mg/Kg	1	5/22/2012 10:56:42 AM
Surr: DNOP	105	82.1-121		%REC	1	5/22/2012 10:56:42 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	0.079	0.020		mg/Kg	1	5/22/2012 12:11:00 PM
Toluene	ND	0.050		mg/Kg	1	5/22/2012 12:11:00 PM
Ethylbenzene	0.34	0.050		mg/Kg	1	5/22/2012 12:11:00 PM
Xylenes, Total	4.4	0.10		mg/Kg	1	5/22/2012 12:11:00 PM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	5/22/2012 12:11:00 PM
Surr: 4-Bromofluorobenzene	133	70-130	S	%REC	1	5/22/2012 12:11:00 PM
Surr: Dibromofluoromethane	116	71.7-132		%REC	1	5/22/2012 12:11:00 PM
Surr: Toluene-d8	93.2	70-130		%REC	1	5/22/2012 12:11:00 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: BDH
Gasoline Range Organics (GRO)	560	50		mg/Kg	10	5/22/2012 3:05:59 PM
Surr: BFB	113	70-130		%REC	10	5/22/2012 3:05:59 PM

**Qualifiers:**

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



**Analytical Report**

Lab Order 1205885

Date Reported: 5/23/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** TH-6 @ 2'**Project:** SJ 32-9 Unit #100**Collection Date:** 5/18/2012 2:30:00 PM**Lab ID:** 1205885-006**Matrix:** SOIL**Received Date:** 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	250	10		mg/Kg	1	5/22/2012 10:46:09 AM
Surr: DNOP	105	82.1-121		%REC	1	5/22/2012 10:46:09 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>BDH</b>
Benzene	ND	0.20		mg/Kg	10	5/22/2012 12:40:53 PM
Toluene	ND	0.50		mg/Kg	10	5/22/2012 12:40:53 PM
Ethylbenzene	ND	0.50		mg/Kg	10	5/22/2012 12:40:53 PM
Xylenes, Total	9.6	1.0		mg/Kg	10	5/22/2012 12:40:53 PM
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%REC	10	5/22/2012 12:40:53 PM
Surr: 4-Bromofluorobenzene	123	70-130		%REC	10	5/22/2012 12:40:53 PM
Surr: Dibromofluoromethane	73.6	71.7-132		%REC	10	5/22/2012 12:40:53 PM
Surr: Toluene-d8	91.5	70-130		%REC	10	5/22/2012 12:40:53 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: <b>BDH</b>
Gasoline Range Organics (GRO)	770	50		mg/Kg	10	5/22/2012 12:40:53 PM
Surr: BFB	123	70-130		%REC	10	5/22/2012 12:40:53 PM

**Qualifiers:** \*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205885

Date Reported: 5/23/2012

CLIENT: Animas Environmental Services

Client Sample ID: TH-6 @ 8'

Project: SJ 32-9 Unit #100

Collection Date: 5/18/2012 2:35:00 PM

Lab ID: 1205885-007

Matrix: SOIL

Received Date: 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	180	9.8		mg/Kg	1	5/22/2012 11:07:43 AM
Surr: DNOP	108	82.1-121		%REC	1	5/22/2012 11:07:43 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.10		mg/Kg	5	5/22/2012 1:10:54 PM
Toluene	ND	0.25		mg/Kg	5	5/22/2012 1:10:54 PM
Ethylbenzene	0.37	0.25		mg/Kg	5	5/22/2012 1:10:54 PM
Xylenes, Total	4.3	0.50		mg/Kg	5	5/22/2012 1:10:54 PM
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%REC	5	5/22/2012 1:10:54 PM
Surr: 4-Bromofluorobenzene	125	70-130		%REC	5	5/22/2012 1:10:54 PM
Surr: Dibromofluoromethane	91.8	71.7-132		%REC	5	5/22/2012 1:10:54 PM
Surr: Toluene-d8	92.4	70-130		%REC	5	5/22/2012 1:10:54 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: BDH
Gasoline Range Organics (GRO)	520	25		mg/Kg	5	5/22/2012 1:10:54 PM
Surr: BFB	125	70-130		%REC	5	5/22/2012 1:10:54 PM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

**Analytical Report**

Lab Order 1205885

Date Reported: 5/23/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** TH-7 @ 10'**Project:** SJ 32-9 Unit #100**Collection Date:** 5/18/2012 2:55:00 PM**Lab ID:** 1205885-008**Matrix:** SOIL**Received Date:** 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.20		mg/Kg	10	5/22/2012 12:12:35 PM
Toluene	ND	0.50		mg/Kg	10	5/22/2012 12:12:35 PM
Ethylbenzene	ND	0.50		mg/Kg	10	5/22/2012 12:12:35 PM
Xylenes, Total	1.5	1.0		mg/Kg	10	5/22/2012 12:12:35 PM
Surr: 1,2-Dichloroethane-d4	82.2	70-130		%REC	10	5/22/2012 12:12:35 PM
Surr: 4-Bromofluorobenzene	74.7	70-130		%REC	10	5/22/2012 12:12:35 PM
Surr: Dibromofluoromethane	79.1	71.7-132		%REC	10	5/22/2012 12:12:35 PM
Surr: Toluene-d8	95.5	70-130		%REC	10	5/22/2012 12:12:35 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1205885

Date Reported: 5/23/2012

CLIENT: Animas Environmental Services

Client Sample ID: TH-8 @ 4'

Project: SJ 32-9 Unit #100

Collection Date: 5/18/2012 4:15:00 PM

Lab ID: 1205885-009

Matrix: SOIL

Received Date: 5/22/2012 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	200	10		mg/Kg	1	5/22/2012 11:22:04 AM
Surr: DNOP	103	82.1-121		%REC	1	5/22/2012 11:22:04 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.10		mg/Kg	5	5/22/2012 1:40:57 PM
Toluene	ND	0.25		mg/Kg	5	5/22/2012 1:40:57 PM
Ethylbenzene	ND	0.25		mg/Kg	5	5/22/2012 1:40:57 PM
Xylenes, Total	ND	0.50		mg/Kg	5	5/22/2012 1:40:57 PM
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%REC	5	5/22/2012 1:40:57 PM
Surr: 4-Bromofluorobenzene	116	70-130		%REC	5	5/22/2012 1:40:57 PM
Surr: Dibromofluoromethane	95.6	71.7-132		%REC	5	5/22/2012 1:40:57 PM
Surr: Toluene-d8	94.6	70-130		%REC	5	5/22/2012 1:40:57 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: BDH
Gasoline Range Organics (GRO)	170	25		mg/Kg	5	5/22/2012 1:40:57 PM
Surr: BFB	116	70-130		%REC	5	5/22/2012 1:40:57 PM

Qualifiers: \* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205885

23-May-12

Client: Animas Environmental Services

Project: SJ 32-9 Unit #100

Sample ID	MB-2024		SampType:	MBLK		TestCode:	EPA Method 8015B: Diesel Range Organics			
Client ID:	PBS		Batch ID:	2024		RunNo:	2934			
Prep Date:	5/21/2012		Analysis Date:	5/22/2012		SeqNo:	81538		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		97.6	82.1	121			

Sample ID	LCS-2024		SampType:	LCS		TestCode:	EPA Method 8015B: Diesel Range Organics			
Client ID:	LCSS		Batch ID:	2024		RunNo:	2934			
Prep Date:	5/21/2012		Analysis Date:	5/22/2012		SeqNo:	81539		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.3	82.1	121			

Sample ID	MB-2055		SampType:	MBLK		TestCode:	EPA Method 8015B: Diesel Range Organics			
Client ID:	PBS		Batch ID:	2055		RunNo:	2935			
Prep Date:	5/22/2012		Analysis Date:	5/22/2012		SeqNo:	81541		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		101	82.1	121			

Sample ID	LCS-2055		SampType:	LCS		TestCode:	EPA Method 8015B: Diesel Range Organics			
Client ID:	LCSS		Batch ID:	2055		RunNo:	2935			
Prep Date:	5/22/2012		Analysis Date:	5/22/2012		SeqNo:	81590		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	52.6	130			
Surr: DNOP	4.7		5.000		94.1	82.1	121			

## Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205885

23-May-12

Client: Animas Environmental Services

Project: SJ 32-9 Unit #100

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R2946	RunNo:	2946					
Prep Date:		Analysis Date:	5/22/2012	SeqNo:	81871	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.4	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.4	70	130			
Surr: Dibromofluoromethane	0.41		0.5000		82.7	71.7	132			
Surr: Toluene-d8	0.46		0.5000		92.5	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R2946	RunNo:	2946					
Prep Date:		Analysis Date:	5/22/2012	SeqNo:	81873	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.2	70.7	123			
Toluene	0.93	0.050	1.000	0	93.3	80	120			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.5	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.4	70	130			
Surr: Dibromofluoromethane	0.42		0.5000		84.8	71.7	132			
Surr: Toluene-d8	0.44		0.5000		88.3	70	130			

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R2947	RunNo:	2947					
Prep Date:		Analysis Date:	5/22/2012	SeqNo:	82079	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.2	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.9	70	130			
Surr: Dibromofluoromethane	0.41		0.5000		82.5	71.7	132			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R2947	RunNo:	2947					
Prep Date:		Analysis Date:	5/22/2012	SeqNo:	82081	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	104	70.7	123			
Toluene	1.0	0.050	1.000	0	102	80	120			

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205885

23-May-12

Client: Animas Environmental Services

Project: SJ 32-9 Unit #100

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R2947	RunNo:	2947					
Prep Date:		Analysis Date:	5/22/2012	SeqNo:	82081	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.41		0.5000		82.8	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.7	70	130			
Surr: Dibromofluoromethane	0.39		0.5000		77.6	71.7	132			
Surr: Toluene-d8	0.49		0.5000		97.7	70	130			

Sample ID	1205885-002a ms	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	TH-2 @ 3'	Batch ID:	R2947	RunNo:	2947					
Prep Date:		Analysis Date:	5/22/2012	SeqNo:	82082	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.9	0.25	3.036	0.03027	95.7	81.3	119			
Toluene	3.1	0.25	3.036	0	103	75	121			
Surr: 1,2-Dichloroethane-d4	1.3		1.518		85.4	70	130			
Surr: 4-Bromofluorobenzene	0.61		1.518		40.3	70	130			S
Surr: Dibromofluoromethane	1.2		1.518		79.3	71.7	132			
Surr: Toluene-d8	1.5		1.518		98.8	70	130			

Sample ID	1205885-002a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	TH-2 @ 3'	Batch ID:	R2947	RunNo:	2947					
Prep Date:		Analysis Date:	5/22/2012	SeqNo:	82083	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.3	0.25	3.036	0.03027	108	81.3	119	11.6	15.7	
Toluene	3.0	0.25	3.036	0	98.8	75	121	3.72	16.2	
Surr: 1,2-Dichloroethane-d4	1.3		1.518		82.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.63		1.518		41.5	70	130	0	0	S
Surr: Dibromofluoromethane	1.2		1.518		81.3	71.7	132	0	0	
Surr: Toluene-d8	1.5		1.518		97.2	70	130	0	0	

## Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205885

23-May-12

Client: Animas Environmental Services

Project: SJ 32-9 Unit #100

Sample ID	5ml rb	SampType	MBLK	TestCode	EPA Method 8015B Mod: Gasoline Range					
Client ID	PBS	Batch ID	R2946	RunNo	2946					
Prep Date:		Analysis Date	5/22/2012	SeqNo	81878	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	470		500.0		93.4	70	130			

Sample ID	2.5ug lcs_b	SampType	LCS	TestCode	EPA Method 8015B Mod: Gasoline Range					
Client ID	LCSS	Batch ID	R2946	RunNo	2946					
Prep Date:		Analysis Date	5/22/2012	SeqNo	82027	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	85	115			S
Surr: BFB	460		500.0		91.7	70	130			

## Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit





Hall Environmental Analysis Laboratory  
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: 1205885

Received by/date: MG 05/22/12

Logged By: Anne Thorne

5/22/2012 8:50:00 AM

*Anne Thorne*

Completed By: Anne Thorne

5/22/2012

*Anne Thorne*

Reviewed By: *[Signature]*

05/02/12

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (If applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

18. Additional remarks:

### 19. Cooler Information

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

<h1>Chain-of-Custody Record</h1>		Turn-Around Time:	
Client: <u>Animas Environmental</u>		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> <u>Rush</u> <u>SAME DAY</u>	
Mailing Address: <u>624 E Comanche</u> <u>Farmington NM 87401</u>		Project Name: <u>ST 32-9 Unit #100</u>	
Phone #: <u>505 564 2281</u>		Project #:	
email or Fax#: <u>tross@animasenvironmental.com</u>		Project Manager: <u>Tami Ross</u>	
QA/QC Package:		Sampler:	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation		Sample Temperature: <u>14.0</u>	
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____			
<input type="checkbox"/> EDD (Type) _____			

☒ Rush SAME DAY

SJ 32-9 Unit #100

**Project Manager:**

Tami Ross

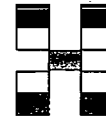
On Ice ☒ Yes ☐ No

Sample Temperature: 110

## HEALING

120588

Date: 5/18/12	Time: 1107	Relinquished by: Jami Ross	Received by: Christine Walker	Date: 5/12	Time: 1107	Remarks: BILL TO CONOCO PHILLIPS
Date: 5/21/12	Time: 1110	Relinquished by: Christine Walker	Received by: Michelle Carter	Date: 05/22/12	Time: 0850	



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

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Air Bubbles (Y or N)

Remarks: BILL TO CONOCO PHILLIPS



*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 25, 2012

Tami Ross

Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 793-2072  
FAX

RE: SJ 32-9 Unit #100

OrderNo.: 1205A09

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/24/2012 for the analyses presented in the following report.

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order 1205A09

Date Reported: 5/25/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SC-1**Project:** SJ 32-9 Unit #100**Collection Date:** 5/23/2012 1:00:00 PM**Lab ID:** 1205A09-001**Matrix:** MEOH (SOIL)**Received Date:** 5/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.10		mg/Kg	5	5/24/2012 11:32:34 AM
Toluene	ND	0.25		mg/Kg	5	5/24/2012 11:32:34 AM
Ethylbenzene	ND	0.25		mg/Kg	5	5/24/2012 11:32:34 AM
Xylenes, Total	5.2	0.50		mg/Kg	5	5/24/2012 11:32:34 AM
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	5	5/24/2012 11:32:34 AM
Surr: 4-Bromofluorobenzene	113	70-130		%REC	5	5/24/2012 11:32:34 AM
Surr: Dibromofluoromethane	99.9	71.7-132		%REC	5	5/24/2012 11:32:34 AM
Surr: Toluene-d8	95.8	70-130		%REC	5	5/24/2012 11:32:34 AM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

# Analytical Report

Lab Order 1205A09

Date Reported: 5/25/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-2

Project: SJ 32-9 Unit #100

Collection Date: 5/23/2012 2:00:00 PM

Lab ID: 1205A09-002

Matrix: MEOH (SOIL)

Received Date: 5/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	910	10		mg/Kg	1	5/24/2012 11:34:27 AM
Surr: DNOP	110	82.1-121		%REC	1	5/24/2012 11:34:27 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.50		mg/Kg	25	5/24/2012 12:02:20 PM
Toluene	3.7	1.2		mg/Kg	25	5/24/2012 12:02:20 PM
Ethylbenzene	1.8	1.2		mg/Kg	25	5/24/2012 12:02:20 PM
Xylenes, Total	46	2.5		mg/Kg	25	5/24/2012 12:02:20 PM
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	25	5/24/2012 12:02:20 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	25	5/24/2012 12:02:20 PM
Surr: Dibromofluoromethane	85.6	71.7-132		%REC	25	5/24/2012 12:02:20 PM
Surr: Toluene-d8	91.1	70-130		%REC	25	5/24/2012 12:02:20 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: BDH
Gasoline Range Organics (GRO)	1,300	120		mg/Kg	25	5/24/2012 12:02:20 PM
Surr: BFB	107	70-130		%REC	25	5/24/2012 12:02:20 PM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

**Analytical Report**

Lab Order 1205A09

Date Reported: 5/25/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SC-3**Project:** SJ 32-9 Unit #100**Collection Date:** 5/23/2012 1:25:00 AM**Lab ID:** 1205A09-003**Matrix:** MEOH (SOIL)**Received Date:** 5/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.020		mg/Kg	1	5/24/2012 1:59:28 PM
Toluene	ND	0.050		mg/Kg	1	5/24/2012 1:59:28 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/24/2012 1:59:28 PM
Xylenes, Total	ND	0.10		mg/Kg	1	5/24/2012 1:59:28 PM
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	5/24/2012 1:59:28 PM
Surr: 4-Bromofluorobenzene	88.7	70-130		%REC	1	5/24/2012 1:59:28 PM
Surr: Dibromofluoromethane	89.6	71.7-132		%REC	1	5/24/2012 1:59:28 PM
Surr: Toluene-d8	92.5	70-130		%REC	1	5/24/2012 1:59:28 PM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

## Analytical Report

Lab Order 1205A09

Date Reported: 5/25/2012

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: SC-4

Project: SJ 32-9 Unit #100

Collection Date: 5/23/2012 2:00:00 PM

Lab ID: 1205A09-004

Matrix: MEOH (SOIL)

Received Date: 5/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	410	10		mg/Kg	1	5/24/2012 11:59:56 AM
Surr: DNOP	100	82.1-121		%REC	1	5/24/2012 11:59:56 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>BDH</b>
Benzene	0.48	0.10		mg/Kg	5	5/24/2012 1:01:58 PM
Toluene	8.1	0.25		mg/Kg	5	5/24/2012 1:01:58 PM
Ethylbenzene	3.3	0.25		mg/Kg	5	5/24/2012 1:01:58 PM
Xylenes, Total	48	1.0		mg/Kg	10	5/24/2012 2:29:22 PM
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%REC	5	5/24/2012 1:01:58 PM
Surr: 4-Bromofluorobenzene	139	70-130	S	%REC	5	5/24/2012 1:01:58 PM
Surr: Dibromofluoromethane	118	71.7-132		%REC	5	5/24/2012 1:01:58 PM
Surr: Toluene-d8	94.2	70-130		%REC	5	5/24/2012 1:01:58 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: <b>BDH</b>
Gasoline Range Organics (GRO)	1,500	50		mg/Kg	10	5/24/2012 2:29:22 PM
Surr: BFB	117	70-130		%REC	10	5/24/2012 2:29:22 PM

Qualifiers: \* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 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  
 RL Reporting Detection Limit

## Analytical Report

Lab Order 1205A09

Date Reported: 5/25/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-5

Project: SJ 32-9 Unit #100

Collection Date: 5/23/2012 2:15:00 PM

Lab ID: 1205A09-005

Matrix: MEOH (SOIL)

Received Date: 5/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JMP
Diesel Range Organics (DRO)	710	10		mg/Kg	1	5/24/2012 12:25:18 PM
Surr: DNOP	101	82.1-121		%REC	1	5/24/2012 12:25:18 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.10		mg/Kg	5	5/24/2012 1:31:54 PM
Toluene	ND	0.25		mg/Kg	5	5/24/2012 1:31:54 PM
Ethylbenzene	ND	0.25		mg/Kg	5	5/24/2012 1:31:54 PM
Xylenes, Total	5.3	0.50		mg/Kg	5	5/24/2012 1:31:54 PM
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%REC	5	5/24/2012 1:31:54 PM
Surr: 4-Bromofluorobenzene	168	70-130	S	%REC	5	5/24/2012 1:31:54 PM
Surr: Dibromofluoromethane	109	71.7-132		%REC	5	5/24/2012 1:31:54 PM
Surr: Toluene-d8	97.9	70-130		%REC	5	5/24/2012 1:31:54 PM
<b>EPA METHOD 8015B MOD: GASOLINE RANGE</b>						Analyst: BDH
Gasoline Range Organics (GRO)	900	25		mg/Kg	5	5/24/2012 1:31:54 PM
Surr: BFB	168	70-130	S	%REC	5	5/24/2012 1:31:54 PM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 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  
 RL Reporting Detection Limit



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205A09

25-May-12

Client: Animas Environmental Services

Project: SJ 32-9 Unit #100

Sample ID	MB-2090		SampType:	MBLK		TestCode:	EPA Method 8015B: Diesel Range Organics				
Client ID:	PBS		Batch ID:	2090		RunNo:	3000				
Prep Date:	5/24/2012		Analysis Date:	5/24/2012		SeqNo:	83454		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	10		10.00		99.7	82.1	121				

Sample ID	LCS-2090		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2090		RunNo: 3000					
Prep Date:	5/24/2012		Analysis Date: 5/24/2012		SeqNo: 83455		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	96.7	52.6	130			
Surr: DNOP	4.6		5.000		91.5	82.1	121			

Sample ID	1205851-001AMS		SampType:	MS		TestCode:	EPA Method 8015B: Diesel Range Organics				
Client ID:	BatchQC		Batch ID:	2090		RunNo:	3022				
Prep Date:	5/24/2012		Analysis Date:	5/25/2012		SeqNo:	84109		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	310	10	51.60	336.4	-48.7	57.2	146			S	
Surr: DNOP	5.4		5.160		105	82.1	121				

Sample ID	1205851-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015B: Diesel Range Organics				
Client ID:	BatchQC		Batch ID:	2090		RunNo:	3022				
Prep Date:	5/24/2012		Analysis Date:	5/25/2012		SeqNo:	84110		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	300	10	50.71	336.4	-77.7	57.2	146	4.70	24.5	S	
Surr: DNOP	5.2		5.071		103	82.1	121	0	0		

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205A09

25-May-12

Client: Animas Environmental Services

Project: SJ 32-9 Unit #100

Sample ID	5ml rb	SampType	MBLK	TestCode	EPA Method 8260B: Volatiles Short List					
Client ID	PBS	Batch ID	R3010	RunNo	3010					
Prep Date:		Analysis Date	5/24/2012	SeqNo	83487	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.3	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.5	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.1	71.7	132			
Surr: Toluene-d8	0.44		0.5000		88.9	70	130			

Sample ID	100ng lcs	SampType	LCS	TestCode	EPA Method 8260B: Volatiles Short List					
Client ID	LCSS	Batch ID	R3010	RunNo	3010					
Prep Date:		Analysis Date	5/24/2012	SeqNo	83489	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	101	70.7	123			
Toluene	0.96	0.050	1.000	0	95.7	80	120			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.4	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		87.4	71.7	132			
Surr: Toluene-d8	0.46		0.5000		91.4	70	130			

Sample ID	1205a10-001ams	SampType	MS	TestCode	EPA Method 8260B: Volatiles Short List					
Client ID	BatchQC	Batch ID	R3010	RunNo	3010					
Prep Date:		Analysis Date	5/24/2012	SeqNo	83755	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	108	81.3	119			
Toluene	0.99	0.050	1.000	0.007693	98.7	75	121			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		89.0	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.9	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.2	71.7	132			
Surr: Toluene-d8	0.46		0.5000		91.1	70	130			

Sample ID	1205a10-001amsd	SampType	MSD	TestCode	EPA Method 8260B: Volatiles Short List					
Client ID	BatchQC	Batch ID	R3010	RunNo	3010					
Prep Date:		Analysis Date	5/24/2012	SeqNo	83756	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	108	81.3	119	0.654	15.7	
Toluene	1.0	0.050	1.000	0.007693	99.0	75	121	0.276	16.2	
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.43		0.5000		85.3	70	130	0	0	

## Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1205A09

25-May-12

Client: Animas Environmental Services

Project: SJ 32-9 Unit #100

Sample ID	1205a10-001amsd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	R3010	RunNo:	3010					
Prep Date:		Analysis Date:	5/24/2012	SeqNo:	83756	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.48		0.5000		95.2	71.7	132	0	0	
Surr: Toluene-d8	0.45		0.5000		90.2	70	130	0	0	

## Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1205A09

25-May-12

Client: Animas Environmental Services

Project: SJ 32-9 Unit #100

Sample ID	5ml rb	SampType	MBLK	TestCode	EPA Method 8015B Mod: Gasoline Range					
Client ID	PBS	Batch ID	R3010	RunNo	3010					
Prep Date:		Analysis Date:	5/24/2012	SeqNo	83457	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	480		500.0		96.5	70	130			

Sample ID	2.5ug gro lcs	SampType	LCS	TestCode	EPA Method 8015B Mod: Gasoline Range					
Client ID	LCSS	Batch ID	R3010	RunNo	3010					
Prep Date:		Analysis Date:	5/24/2012	SeqNo	83458	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	85	115			
Surr: BFB	440		500.0		87.5	70	130			

Sample ID	1205a10-003ams	SampType	MS	TestCode	EPA Method 8015B Mod: Gasoline Range					
Client ID	BatchQC	Batch ID	R3010	RunNo	3010					
Prep Date:		Analysis Date:	5/24/2012	SeqNo	83864	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	122	70	130			
Surr: BFB	430		500.0		86.8	70	130			

Sample ID	1205a10-003amsd	SampType	MSD	TestCode	EPA Method 8015B Mod: Gasoline Range					
Client ID	BatchQC	Batch ID	R3010	RunNo	3010					
Prep Date:		Analysis Date:	5/24/2012	SeqNo	83865	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	120	70	130	0.860	20	
Surr: BFB	430		500.0		85.5	70	130	0	0	

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87106  
TEL: 505-345-3975 FAX: 505-345-4103  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1205A09

Received by/date: mg 05/24/12

Logged By: Michelle Garcia 5/24/2012 10:00:00 AM

*Mirrell Garcia*

Completed By: Michelle Garcia 5/24/2012 10:03:17 AM

*Mirrell Garcia*

Reviewed By: AS 05/24/12

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

18. Additional remarks:

### 19. Cooler Information

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

#### □ EDD (Type)

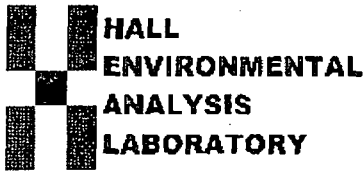
Sample Temperature: 42 / 70

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

## Air Bubbles (V or N)

Remarks: BILL TO CONOCO Phillips  
Verified collection time for -002 with Tamj-  
11/5/8

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.



*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 11, 2012

Ross Kennemer  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 486-1776  
FAX (505) 324-2022

RE: COP San Juan 32-9 #100

OrderNo.: 1206268

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/7/2012 for the analyses presented in the following report.

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

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

Sincerely,

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1206268

Date Reported: 6/11/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: ~~SC-1~~ SC-6 (lm)

Project: COP San Juan 32-9 #100

Collection Date: 6/6/2012 1:40:00 PM

Lab ID: 1206268-001

Matrix: MEOH (SOIL)

Received Date: 6/7/2012 9:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	6/7/2012 11:16:48 AM
Toluene	ND	0.25		mg/Kg	5	6/7/2012 11:16:48 AM
Ethylbenzene	ND	0.25		mg/Kg	5	6/7/2012 11:16:48 AM
Xylenes, Total	0.60	0.50		mg/Kg	5	6/7/2012 11:16:48 AM
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%REC	5	6/7/2012 11:16:48 AM
Surr: 4-Bromofluorobenzene	83.9	70-130		%REC	5	6/7/2012 11:16:48 AM
Surr: Dibromofluoromethane	98.8	71.7-132		%REC	5	6/7/2012 11:16:48 AM
Surr: Toluene-d8	93.0	70-130		%REC	5	6/7/2012 11:16:48 AM

Qualifiers: \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit



## Analytical Report

Lab Order 1206268

Date Reported: 6/11/2012

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Services

Client Sample ID: ~~SC-2~~ SC-7 (en)

Project: COP San Juan 32-9 #100

Collection Date: 6/6/2012 1:22:00 PM

Lab ID: 1206268-002

Matrix: MEOH (SOIL)

Received Date: 6/7/2012 9:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	6/7/2012 11:44:54 AM
Toluene	ND	0.25		mg/Kg	5	6/7/2012 11:44:54 AM
Ethylbenzene	0.48	0.25		mg/Kg	5	6/7/2012 11:44:54 AM
Xylenes, Total	5.1	0.50		mg/Kg	5	6/7/2012 11:44:54 AM
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%REC	5	6/7/2012 11:44:54 AM
Surr: 4-Bromofluorobenzene	71.9	70-130		%REC	5	6/7/2012 11:44:54 AM
Surr: Dibromofluoromethane	96.2	71.7-132		%REC	5	6/7/2012 11:44:54 AM
Surr: Toluene-d8	95.0	70-130		%REC	5	6/7/2012 11:44:54 AM

Qualifiers: \* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

**Analytical Report**

Lab Order 1206268

Date Reported: 6/11/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** ~~SC-3~~ SC-8 *em***Project:** COP San Juan 32-9 #100**Collection Date:** 6/6/2012 1:15:00 PM**Lab ID:** 1206268-003**Matrix:** MEOH (SOIL) **Received Date:** 6/7/2012 9:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.25		mg/Kg	5	6/7/2012 12:12:59 PM
Toluene	ND	0.25		mg/Kg	5	6/7/2012 12:12:59 PM
Ethylbenzene	1.3	0.25		mg/Kg	5	6/7/2012 12:12:59 PM
Xylenes, Total	33	5.0		mg/Kg	50	6/7/2012 2:06:55 PM
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	5	6/7/2012 12:12:59 PM
Surr: 4-Bromofluorobenzene	87.2	70-130		%REC	50	6/7/2012 2:06:55 PM
Surr: Dibromofluoromethane	100	71.7-132		%REC	5	6/7/2012 12:12:59 PM
Surr: Toluene-d8	84.3	70-130		%REC	5	6/7/2012 12:12:59 PM

**Qualifiers:** \* / X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit


# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206268

Date Reported: 6/11/2012

CLIENT: Animas Environmental Services

Client Sample ID: ~~SC-4~~ SC-9 

Project: COP San Juan 32-9 #100

Collection Date: 6/6/2012 11:32:00 AM

Lab ID: 1206268-004

Matrix: MEOH (SOIL)

Received Date: 6/7/2012 9:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	0.50		mg/Kg	10	6/7/2012 2:35:10 PM
Toluene	ND	0.50		mg/Kg	10	6/7/2012 2:35:10 PM
Ethylbenzene	1.0	0.50		mg/Kg	10	6/7/2012 2:35:10 PM
Xylenes, Total	7.9	1.0		mg/Kg	10	6/7/2012 2:35:10 PM
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	10	6/7/2012 2:35:10 PM
Surr: 4-Bromofluorobenzene	84.6	70-130		%REC	10	6/7/2012 2:35:10 PM
Surr: Dibromofluoromethane	98.2	71.7-132		%REC	10	6/7/2012 2:35:10 PM
Surr: Toluene-d8	93.3	70-130		%REC	10	6/7/2012 2:35:10 PM

Qualifiers: \*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

**Hall Environmental Analysis Laboratory, Inc.****Analytical Report**

Lab Order 1206268

Date Reported: 6/11/2012

**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-5 SC-10 (ln)**Project:** COP San Juan 32-9 #100**Collection Date:** 6/6/2012 12:31:00 PM**Lab ID:** 1206268-005**Matrix:** MEOH (SOIL)**Received Date:** 6/7/2012 9:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.50		mg/Kg	10	6/7/2012 1:09:15 PM
Toluene	ND	0.50		mg/Kg	10	6/7/2012 1:09:15 PM
Ethylbenzene	ND	0.50		mg/Kg	10	6/7/2012 1:09:15 PM
Xylenes, Total	ND	1.0		mg/Kg	10	6/7/2012 1:09:15 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	10	6/7/2012 1:09:15 PM
Surr: 4-Bromofluorobenzene	84.4	70-130		%REC	10	6/7/2012 1:09:15 PM
Surr: Dibromofluoromethane	98.8	71.7-132		%REC	10	6/7/2012 1:09:15 PM
Surr: Toluene-d8	94.0	70-130		%REC	10	6/7/2012 1:09:15 PM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
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  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206268

11-Jun-12

Client: Animas Environmental Services

Project: COP San Juan 32-9 #100

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R3275	RunNo:	3275					
Prep Date:		Analysis Date:	6/7/2012	SeqNo:	91230	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.2	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.0	71.7	132			
Surr: Toluene-d8	0.47		0.5000		94.5	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R3275	RunNo:	3275					
Prep Date:		Analysis Date:	6/7/2012	SeqNo:	91236	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	95.0	70.7	123			
Toluene	0.90	0.050	1.000	0	90.5	80	120			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.8	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.8	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	71.7	132			
Surr: Toluene-d8	0.46		0.5000		92.6	70	130			

Sample ID	1206268-001a ms	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-1	Batch ID:	R3275	RunNo:	3275					
Prep Date:		Analysis Date:	6/7/2012	SeqNo:	91242	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.7	0.25	3.990	0.03133	92.8	81.3	119			
Toluene	3.6	0.25	3.990	0.03831	89.4	75	121			
Surr: 1,2-Dichloroethane-d4	1.8		1.995		92.5	70	130			
Surr: 4-Bromofluorobenzene	1.6		1.995		78.9	70	130			
Surr: Dibromofluoromethane	2.0		1.995		98.8	71.7	132			
Surr: Toluene-d8	1.9		1.995		96.3	70	130			

Sample ID	1206268-001a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-1	Batch ID:	R3275	RunNo:	3275					
Prep Date:		Analysis Date:	6/7/2012	SeqNo:	91243	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.9	0.25	3.990	0.03133	96.7	81.3	119	4.08	15.7	
Toluene	3.5	0.25	3.990	0.03831	85.9	75	121	3.92	16.2	
Surr: 1,2-Dichloroethane-d4	1.9		1.995		97.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.5		1.995		77.2	70	130	0	0	

## Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 RI Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1206268

11-Jun-12

Client: Animas Environmental Services

Project: COP San Juan 32-9 #100

Sample ID	1206268-001a msd	SampType	MSD	TestCode	EPA Method 8260B: Volatiles Short List					
Client ID	SC-1	Batch ID	R3275	RunNo	3275					
Prep Date		Analysis Date	6/7/2012	SeqNo	91243	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sum: Dibromofluoromethane	2.1		1.995		106	71.7	132	0	0	
Sum: Toluene-d8	1.9		1.995		92.9	70	130	0	0	

## Qualifiers:

\*X Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87105  
TEL: 505-345-3975 FAX: 505-345-4105  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name:	Animas Environmental	Work Order Number:	1206268
Received by/date:	LM 06/07/12		
Logged By:	Michelle Garcia	6/7/2012 9:53:00 AM	Michelle Garcia
Completed By:	Michelle Garcia	6/7/2012 9:59:57 AM	Michelle Garcia
Reviewed By:	[Signature]	06/07/12	

### Chain of Custody

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

### Log In

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

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

### Special Handling (if applicable)

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

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

18. Additional remarks:

### 19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			

Client: Animas Environmental  
Services LLC  
Mailing Address: 624 E Comanche  
Farmington NM 87401  
Phone #: 505 564 2281  
email or Fax#: aywolson@animasenvironmental.com  
QA/QC Package:  
☒ Standard ☐ Level 4 (Full Validation)  
☒ Accreditation  
☐ NELAP ☐ Other \_\_\_\_\_  
☐ EDD (Type)

☐ Standard ☒ Rush same day

Project Name: A  
COP San Juan 32-9 #100

Project #:

Project Manager:

Sampler: D Watson

Sample Temperature



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/6/12	1728	Ruben Wate	Christine Wate	6/6/12	1728
Date:	Time:	Relinquished by:	Received by:	Date	Time
6/6/12	1759	Ruben Wate	Christine Wate	6/6/12	1759

Remarks:	Bill is Conozo Phillips
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This service is subject to the following conditions: