

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

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

Form C-141  
Revised August 8, 2011

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

**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report ☒ Final Report

Name of Company <b>ConocoPhillips Company</b>	Contact <b>Ashley Maxwell</b>
Address <b>3401 E. 30<sup>th</sup> St., Farmington, NM 87402</b>	Telephone No. <b>505-324-5169</b>
Facility Name <b>San Juan 29-6 Unit #301 SWD</b>	Facility Type <b>Salt Water Disposal</b>

Surface Owner <b>State</b>	Mineral Owner <b>State</b>	API No. <b>3003924807</b>
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**LOCATION OF RELEASE**

Unit Letter <b>P</b>	Section <b>02</b>	Township <b>29N</b>	Range <b>06W</b>	Feet from the <b>350'</b>	North/South Line <b>South</b>	Feet from the <b>350'</b>	East/West Line <b>East</b>	County <b>Rio Arriba</b>
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Latitude **36.74824** Longitude **-107.42393**

**NATURE OF RELEASE**

Type of Release <b>Produced Water Slop Oil</b>	Volume of Release <b>Produced Water- 9 BBL Slop Oil- 1 BBL</b>	Volume Recovered <b>Produced Water- 7.5 BBL Slop Oil- 0.5 BBL</b>
Source of Release <b>Offload Tanks</b>	Date and Hour of Occurrence <b>5/23/2012 @ 3:55 PM</b>	Date and Hour of Discovery <b>5/23/2012 @ 4:00 PM</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Brandon Powell – NMOCD Mark Kelly – BLM FFO</b>	<b>RCVD JAN 16 '13</b>
By Whom? <b>Ashley Maxwell</b>	Date and Hour <b>NMOCD – 5/24/2012 @ 1:06 PM BLM FFO – 5/24/2012 @ 1:09 PM</b>	<b>OIL CONS. DIV. DIST. 3</b>
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

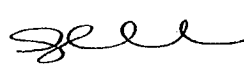
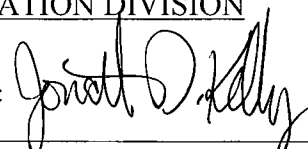
If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* **Main power supply box tripped leaving the ESD valve open allowing a water truck to continue to offload into the tanks. With no power to the transmitter, the tank level was unknown and the PCL was unable to move water causing a release of 9 BBL produced water and 1 BBL slop oil.**

Describe Area Affected and Cleanup Action Taken.\*

The majority of fluid remained within in the berm and approximately 7.5 BBL of produced water and 0.5 BBL slop oil were recovered from the berm. Due to high winds there was an overspray that left location. Overspray did not contact vegetation. COPC will have a third party conduct soil and vegetation assessments to include the spill and overspray areas. Excavation was required based on NMOCD Guidelines for Remediation of Leaks, Spills and Releases. The excavation was 40'X35'X3' and 144 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>1/30/2013</b>	Expiration Date:
E-mail Address: <b>ashley.p.wethington@conocophillips.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>January 9, 2013</b>	Phone: <b>505-324-5169</b>	

\* Attach Additional Sheets If Necessary

nJK1303028012



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

December 28, 2012

Ashley Maxwell  
ConocoPhillips  
San Juan Business Unit  
Office 216-2  
5525 Hwy 64  
Farmington, New Mexico 87401

**RE: Initial Release Assessment and Final Excavation Report  
San Juan 29-6 #301 SWD  
Rio Arriba County, New Mexico**

Dear Ms. Maxwell:

On May 31 and November 8, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 29-6 #301 SWD, located in Rio Arriba County, New Mexico. Approximately nine barrels (bbls) of produced water and one barrel of oil were released at the off load tanks. The initial release assessment was completed by AES on May 31, 2012. The final excavations were completed by CoP contractors prior to AES' arrival at the location on November 8, 2012.

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## 1.0 Site Information

### 1.1 Location

Site Name – San Juan 29-6 #301 SWD

Location - SE¼ SE¼, Section 2, T29N, R6W, Rio Arriba County, New Mexico

Well/Facility Latitude/Longitude - N36.74824 and W107.42393, respectively

Release Latitude/Longitude – N36.74798 and W107.42465, respectively

Land Jurisdiction – State

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Cathodic Protection Report dated February 1992 for the San Juan 29-6 #301 SWD reported the depth to groundwater as 160 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. An unnamed wash is located approximately 250 feet northeast of the location. Based on this information, the location was assessed a ranking score of 10 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

### 1.3 Assessments

AES was initially contacted by Ashley Maxwell of CoP on May 30, 2012, and on May 31, 2012, Tami Ross and Zachary Trujillo of AES completed the release assessment field work. The assessment included collection and field screening of 12 soil samples from eight soil borings (SB-1 through SB-8) in and near the release location. Based on the field screening results, AES recommended an area of excavation for the release area. Sample locations are shown on Figure 3.

On November 8, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of six confirmation soil samples (SC-1 through SC-6) of the walls and bases from two excavations. Composite samples SC-1 through SC-5 were collected from the four walls and base of the excavation in the area of the former off load tanks. The final excavation associated with the former off load tanks was approximately 35 feet by 20 feet by 3 feet in depth. Sample SC-6 was composited from equal portions of the four walls and base of the excavation located within the area of the former 500 bbl tank. The final excavation located within the area of the former 500 bbl tank was approximately 15 feet by 15 feet by 2 feet in depth. Sample locations and final excavation extents are shown on Figure 4.

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## 2.0 Soil Sampling

A total of 12 soil samples from SB-1 through SB-8 and six 5-point composite samples (SC-1 through SC-6) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for TPH. Soil samples collected during the initial assessment (SB-1 through SB-5) were also 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 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 8260B.

A waste characterization sample (SC-1, May 2012) was laboratory analyzed for TCLP-Resource Conservation Recovery Act (RCRA) 8 metals including arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver per USEPA Method 6010B.

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

On May 31, 2012, initial assessment field screening readings for VOCs via OVM ranged from 5.6 ppm in SB-4 and SB-7 up to 2,238 ppm in SB-5. Field TPH concentrations ranged from 325 mg/kg in SB-4 up to 11,900 mg/kg in SB-3. Oil absorbent was used in SB-3 at 1 foot to absorb free water and oil observed during the advancement of the boring.

On November 8, 2012, final excavation field screening results for VOCs via OVM ranged from 7.6 ppm in SC-6 to 62.2 ppm in SC-5. Field TPH concentrations ranged from 86.0 mg/kg in SC-6 up to 885 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. AES field screening reports are attached.

Table 1. Soil Field Screening VOCs and TPH Results  
San Juan 29-6 #301 SWD Initial Release Assessment and Final Excavations  
May and November 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
SB-1	5/31/12	1	101	430
SB-2	5/31/12	1	738	437
SB-3	5/31/12	1	NA	NA
		2	1,627	11,900
		4	1,961	2,400
SB-4	5/31/12	1	5.6	325
SB-5	5/31/12	1	2,238	11,200
		2	574	1,920
SB-6	5/31/12	1	18.2	509
		2	12.1	489
SB-7	5/31/12	1	5.6	693
SB-8	5/31/12	1	43.0	798
SC-1	11/8/12	0.5 to 3	9.5	143
SC-2	11/8/12	0.5 to 3	10.1	469
SC-3	11/8/12	0.5 to 3	16.1	174
SC-4	11/8/12	0.5 to 3	14.8	247
SC-5	11/8/12	3	62.2	885
SC-6	11/8/12	0.5 to 2	7.6	86.0

NA – Not Analyzed

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

Laboratory analyses for SB-1 through SB-5 were used to confirm field screening results from the initial assessment. Benzene concentrations were reported below laboratory detection limits in all samples. Total BTEX concentrations ranged from less than 1.07 mg/kg in SB-1 up to 6.5 mg/kg in SB-3. Results are presented in Table 2 and on Figure 3. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – Benzene and Total BTEX  
San Juan 29-6 #301 SWD Initial Release Assessment, May 2012

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>10</i>	<i>50</i>
SB-1	5/31/12	1	<0.097	<1.07
SB-2	5/31/12	1	<0.25	1.2
SB-3	5/31/12	2	<0.25	6.5
SB-4	5/31/12	1	<0.25	<1.25
SB-5	5/31/12	2	<0.50	1.2

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

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### 3.0 Conclusions and Recommendations

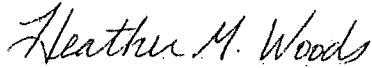
On May 31, 2012, AES conducted an initial assessment for a release from the off load tanks at the San Juan 29-6 #301 SWD. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a ranking score of 10. Field screening results above the NMOCD action level for VOCs (100 ppm) were reported in SB-1, SB-2, SB-3, and SB-5, with the highest VOC concentration reported in SB-5 with 2,238 ppm. Field screening results also showed TPH concentrations above the NMOCD action level of 1,000 mg/kg in SB-3 and SB-5. The highest field TPH concentration was reported in SB-3 with 11,900 mg/kg. Free water and oil were observed within SB-3 during site work. Laboratory analyses collected on May 31, 2012, reported benzene and total BTEX concentrations below the applicable NMOCD action levels in SB-1 through SB-5.

On November 8, 2012, final clearance of two areas of excavation was completed. Field screening results of both excavation extents showed that VOC and TPH concentrations were below applicable NMOCD action levels for all of the final walls and base of each excavation.

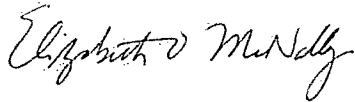
Based on final field screening results of the excavations of petroleum contaminated soils at the San Juan 29-6 #301 SWD, VOC and TPH concentrations were below applicable NMOCD action levels. No further work is recommended.

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

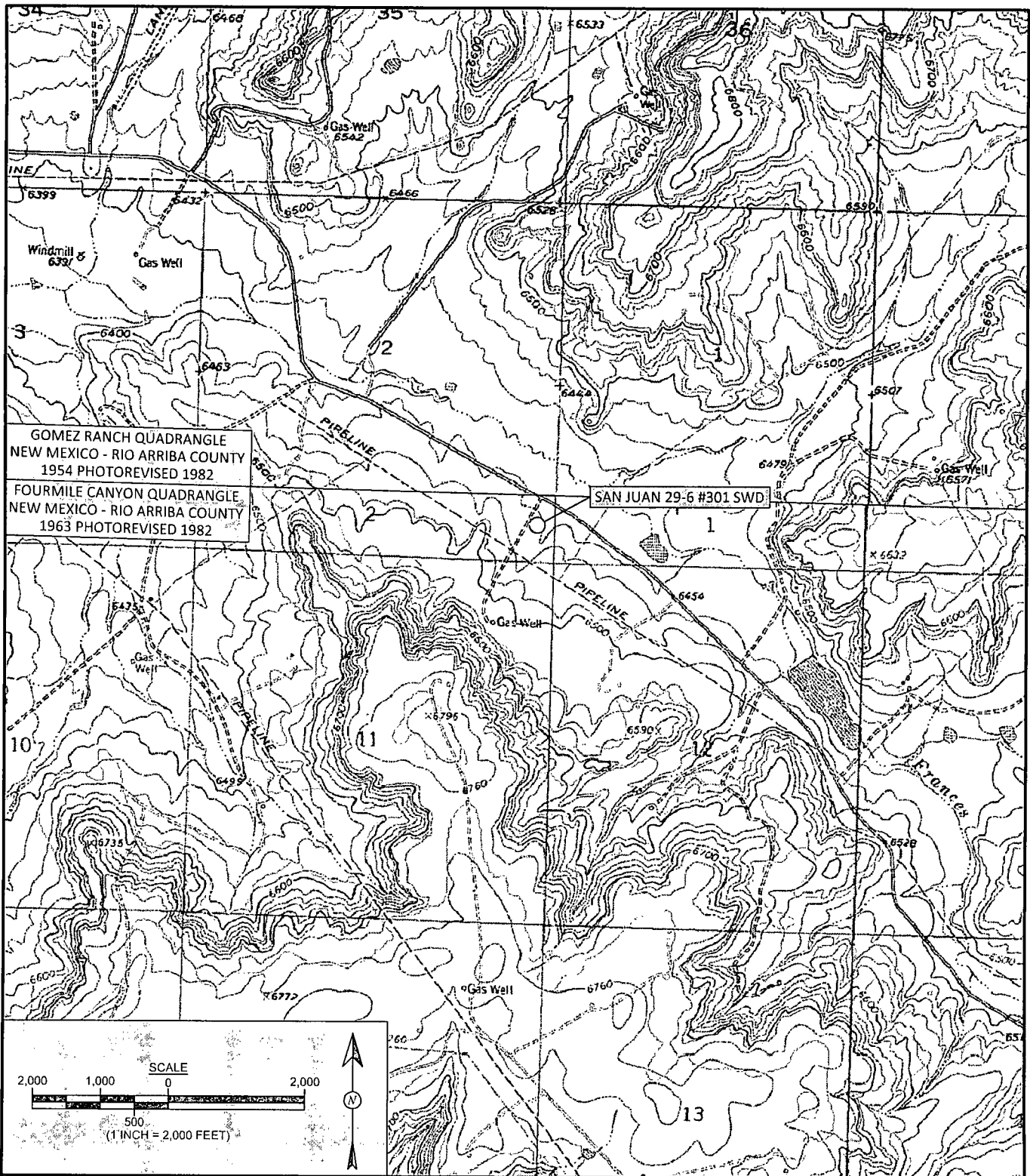


Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map
- Figure 3. Initial Assessment Soil Sample Locations and Results, May 2012
- Figure 4. Final Excavation Soil Sample Locations and Results, November 2012
- AES Field Screening Report 053112
- AES Field Screening Report 110812
- Hall Laboratory Analytical Report 1206021

R:\Animas 2000\Dropbox\2012 December 2012\ConocoPhillips\SJ 29-6 #301 SWD\SJ 29-6 #301 SWD  
Initial Release Assessment and Final Excavation Report 122812.docx



Animas Environmental Services, LLC

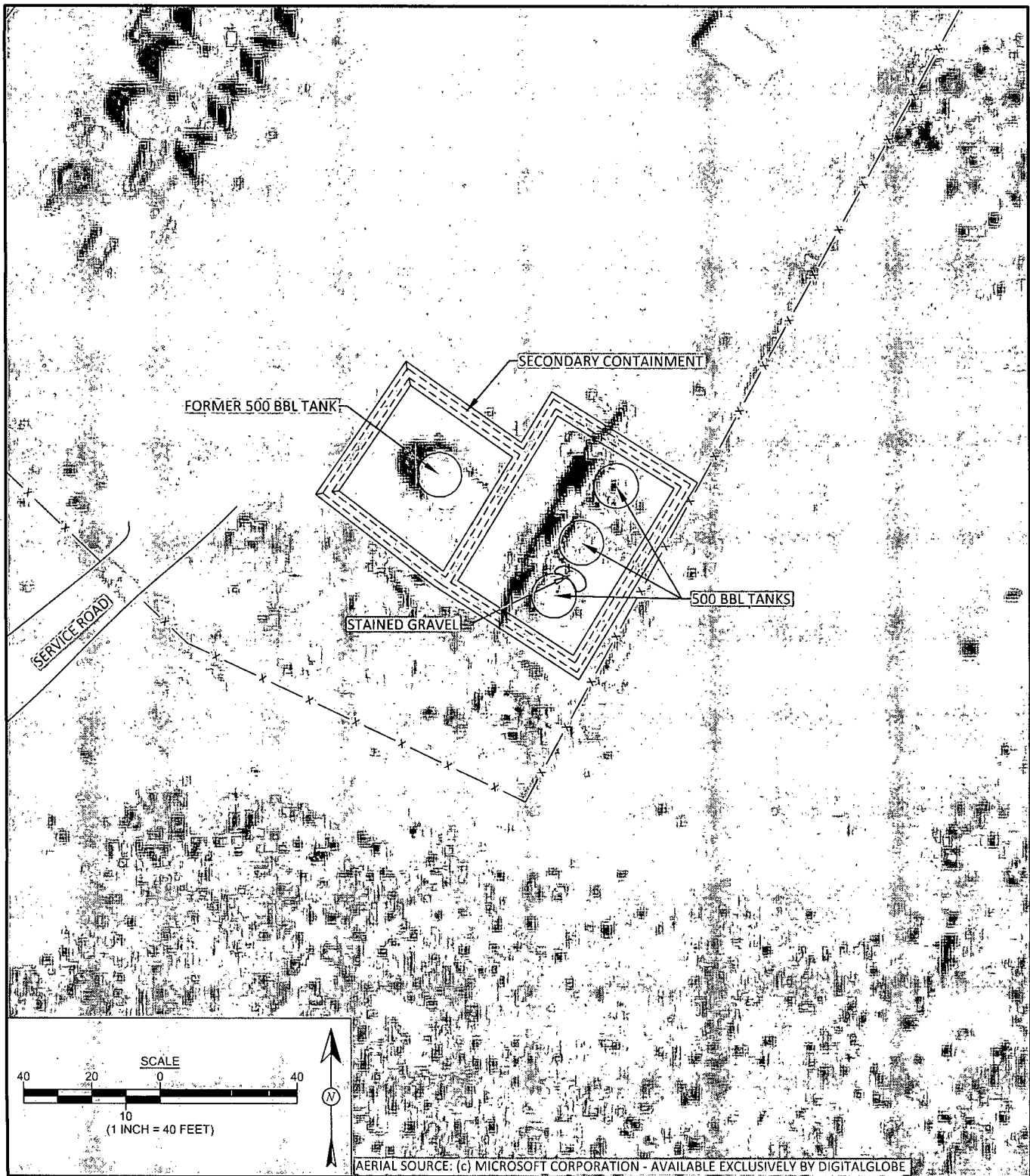
<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 1, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> December 20, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> December 20, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> December 20, 2012

## FIGURE 1

### TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips  
SAN JUAN 29-6 #301 SWD  
RIO ARriba COUNTY, NEW MEXICO  
SE¼ SECTION 2, T29N, R6W  
N36.74824, W107.42393



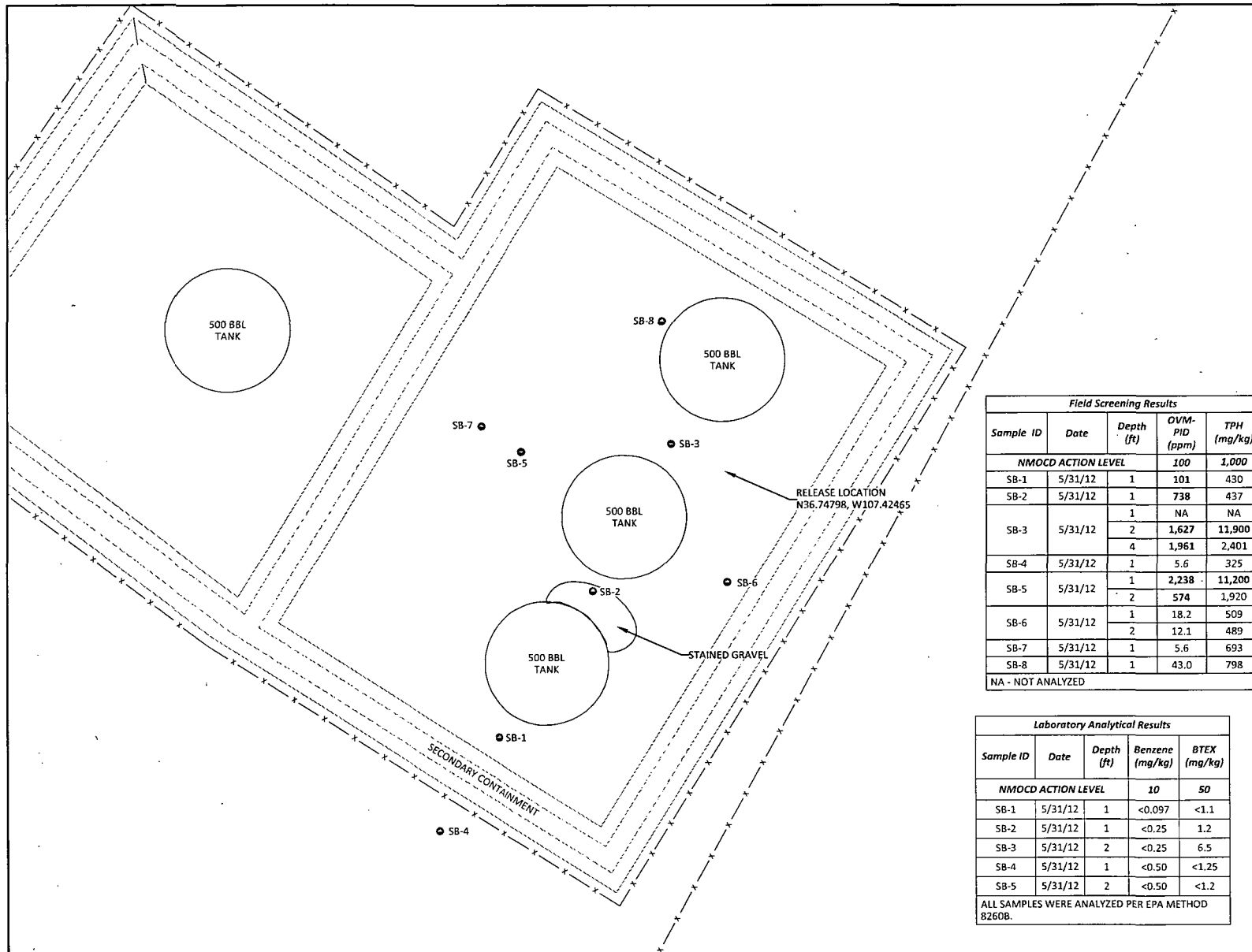


Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 1, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> December 20, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> December 20, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> December 20, 2012

## FIGURE 2

**AERIAL SITE MAP**  
ConocoPhillips  
SAN JUAN 29-6 #301 SWD  
RIO ARriba COUNTY, NEW MEXICO  
SE¼ SE¼, SECTION 2, T29N, R6W  
N36.74824, W107.42393



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL		100	1,000	
SB-1	5/31/12	1	101	430
SB-2	5/31/12	1	738	437
SB-3	5/31/12	1	NA	NA
		2	1,627	11,900
SB-4	5/31/12	4	1,961	2,401
		1	5.6	325
SB-5	5/31/12	1	2,238	11,200
		2	574	1,920
SB-6	5/31/12	1	18.2	509
		2	12.1	489
SB-7	5/31/12	1	5.6	693
SB-8	5/31/12	1	43.0	798
NA - NOT ANALYZED				

Laboratory Analytical Results				
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)
NMOCD ACTION LEVEL		10	50	
SB-1	5/31/12	1	<0.097	<1.1
SB-2	5/31/12	1	<0.25	1.2
SB-3	5/31/12	2	<0.25	6.5
SB-4	5/31/12	1	<0.50	<1.25
SB-5	5/31/12	2	<0.50	<1.2
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8260B.				

**FIGURE 3**

**INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS**  
**MAY 2012**  
 ConocoPhillips  
 SAN JUAN 29-6 #301 SWD  
 RIO ARriba COUNTY, NEW MEXICO  
 SE¼, SE¼, SECTION 2, T29N, R6W  
 N36.74824, W107.42393

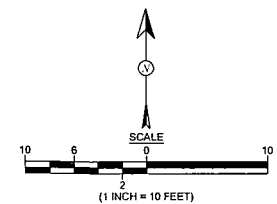


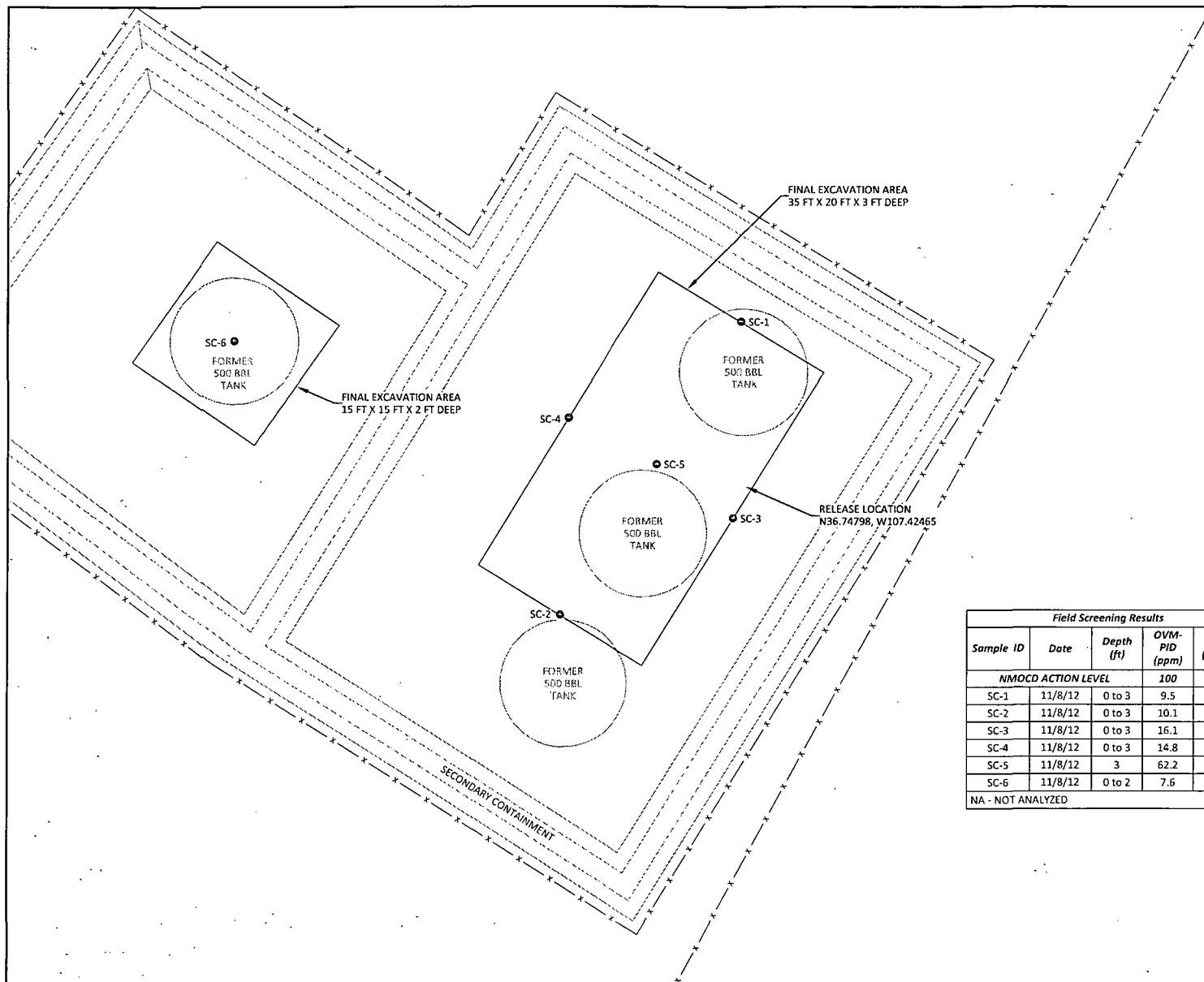
Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 1, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> December 20, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> December 20, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> December 20, 2012

**LEGEND**

- SAMPLE LOCATIONS
- x — FENCE





Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOC ACTION LEVEL			100	1,000
SC-1	11/8/12	0 to 3	9.5	143
SC-2	11/8/12	0 to 3	10.1	469
SC-3	11/8/12	0 to 3	16.1	174
SC-4	11/8/12	0 to 3	14.8	247
SC-5	11/8/12	3	62.2	885
SC-6	11/8/12	0 to 2	7.6	86.0
NA - NOT ANALYZED				

**FIGURE 4**

**FINAL EXCAVATION SAMPLE  
LOCATIONS AND RESULTS  
NOVEMBER 2012**

ConocoPhillips  
SAN JUAN 29-6 #301 SWD  
RIO ARriba COUNTY, NEW MEXICO  
SE¼, SE¼, SECTION 2, T29N, R6W  
N36.74824, W107.42393

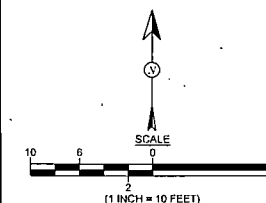


Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> November 13, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> December 20, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> December 20, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> December 20, 2012

**LEGEND**

- SAMPLE LOCATIONS
- x — FENCE



# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: SJ 29-6 #301 SWD

Date: 5/31/2012

Matrix: Soil

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

Durango, Colorado  
970-403-3274

Sample ID	Collection Date	Collection Time	OVN (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 1'	5/31/2012	7:56	101	8:39	430	100	1	TCR
SB-2 @ 1'	5/31/2012	8:13	738	8:46	437	100	1	TCR
SB-3 @ 1'	5/31/2012	8:32	NA- FREE PRODUCT			100	1	TCR
SB-3 @ 2'	5/31/2012	8:42	1,627	9:13	11,900	100	1	TCR
SB-3 @ 4'	5/31/2012	9:35	1,961	9:56	2,400	100	1	TCR
SB-4 @ 1'	5/31/2012	8:46	5.6	9:21	325	100	1	TCR
SB-5 @ 1'	5/31/2012	9:45	2,238	10:34	11,200	100	1	TCR
SB-5 @ 2'	5/31/2012	9:50	574	10:40	1,920	100	1	TCR
SB-6 @ 1'	5/31/2012	9:55	18.2	10:45	509	100	1	TCR
SB-6 @ 2'	5/31/2012	10:00	12.1	10:48	489	100	1	TCR
SB-7 @ 1'	5/31/2012	11:04	5.6	11:23	693	100	1	TCR
SB-8 @ 1'	5/31/2012	11:10	43.0	11:28	798	100	1	TCR

Total Petroleum Hydrocarbons - USEPA 418.1

\*Field TPH concentrations recorded may be below PQL.

PQL

Practical Quantitation Limit

ND

Not Detected at the Reporting Limit

DF

Dilution Factor

Analyst:

*Jami 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 29-6 #301 SWD

Date: 11/8/2012

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
SC-1	11/8/2012	10:00	9.5	12:38	143	20.0	1	DAW
SC-2	11/8/2012	10:02	10.1	12:40	469	20.0	1	DAW
SC-3	11/8/2012	10:05	16.1	12:43	174	20.0	1	DAW
SC-4	11/8/2012	10:10	14.8	12:48	247	20.0	1	DAW
SC-5	11/8/2012	10:12	62.2	12:45	885	20.0	1	DAW
SC-6	11/8/2012	10:20	7.6	12:36	86.0	20.0	1	DAW

\*Field TPH concentrations recorded may be below PQL.

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Debrah Water*



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

June 05, 2012

Tami Ross

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

RE: SJ 29-6 #301 SWD

OrderNo.: 1206021

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 6 sample(s) on 6/1/2012 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", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**Lab Order **1206021**Date Reported: **6/5/2012****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SC-1**Project:** SJ 29-6 #301 SWD**Collection Date:** 5/31/2012 9:15:00 AM**Lab ID:** 1206021-001**Matrix:** MEOH (SOIL)**Received Date:** 6/1/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>MERCURY, TCLP</b>						Analyst: <b>TES</b>
Mercury	ND	0.020		mg/L	1	6/5/2012 10:09:16 AM
<b>EPA METHOD 6010B: TCLP METALS</b>						Analyst: <b>ELS</b>
Arsenic	ND	5.0		mg/L	1	6/4/2012 8:30:26 AM
Barium	ND	100		mg/L	5	6/4/2012 10:59:42 AM
Cadmium	ND	1.0		mg/L	1	6/4/2012 10:54:50 AM
Chromium	ND	5.0		mg/L	1	6/4/2012 8:30:26 AM
Lead	ND	5.0		mg/L	1	6/4/2012 8:30:26 AM
Selenium	ND	1.0		mg/L	1	6/4/2012 10:54:50 AM
Silver	ND	5.0		mg/L	1	6/4/2012 10:54:50 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 1206021

Date Reported: 6/5/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SB-2**Project:** SJ 29-6 #301 SWD**Collection Date:** 5/31/2012 9:20:00 AM**Lab ID:** 1206021-002**Matrix:** MEOH (SOIL)**Received Date:** 6/1/2012 10:05:00 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	6/1/2012 12:12:16 PM
Toluene	ND	0.25		mg/Kg	5	6/1/2012 12:12:16 PM
Ethylbenzene	ND	0.25		mg/Kg	5	6/1/2012 12:12:16 PM
Xylenes, Total	1.2	0.50		mg/Kg	5	6/1/2012 12:12:16 PM
Surr: 1,2-Dichloroethane-d4	88.0	70-130		%REC	5	6/1/2012 12:12:16 PM
Surr: 4-Bromofluorobenzene	59.0	70-130	S	%REC	5	6/1/2012 12:12:16 PM
Surr: Dibromofluoromethane	96.9	71.7-132		%REC	5	6/1/2012 12:12:16 PM
Surr: Toluene-d8	92.9	70-130		%REC	5	6/1/2012 12:12:16 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 1206021

Date Reported: 6/5/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SB-3**Project:** SJ 29-6 #301 SWD**Collection Date:** 5/31/2012 10:07:00 AM**Lab ID:** 1206021-003**Matrix:** MEOH (SOIL)**Received Date:** 6/1/2012 10:05:00 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	6/1/2012 12:40:23 PM
Toluene	ND	0.25		mg/Kg	5	6/1/2012 12:40:23 PM
Ethylbenzene	ND	0.25		mg/Kg	5	6/1/2012 12:40:23 PM
Xylenes, Total	6.5	0.50		mg/Kg	5	6/1/2012 12:40:23 PM
Surr: 1,2-Dichloroethane-d4	90.0	70-130		%REC	5	6/1/2012 12:40:23 PM
Surr: 4-Bromofluorobenzene	41.2	70-130	S	%REC	5	6/1/2012 12:40:23 PM
Surr: Dibromofluoromethane	97.5	71.7-132		%REC	5	6/1/2012 12:40:23 PM
Surr: Toluene-d8	94.0	70-130		%REC	5	6/1/2012 12:40:23 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 1206021

Date Reported: 6/5/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SB-4**Project:** SJ 29-6 #301 SWD**Collection Date:** 5/31/2012 10:15:00 AM**Lab ID:** 1206021-004**Matrix:** SOIL**Received Date:** 6/1/2012 10:05:00 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	6/1/2012 4:54:10 PM
Toluene	ND	0.25		mg/Kg	5	6/1/2012 4:54:10 PM
Ethylbenzene	ND	0.25		mg/Kg	5	6/1/2012 4:54:10 PM
Xylenes, Total	ND	0.50		mg/Kg	5	6/1/2012 4:54:10 PM
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%REC	5	6/1/2012 4:54:10 PM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	5	6/1/2012 4:54:10 PM
Surr: Dibromofluoromethane	99.8	71.7-132		%REC	5	6/1/2012 4:54:10 PM
Surr: Toluene-d8	98.2	70-130		%REC	5	6/1/2012 4:54:10 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

**Analytical Report**

Lab Order 1206021

Date Reported: 6/5/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SB-5**Project:** SJ 29-6 #301 SWD**Collection Date:** 5/31/2012 9:50:00 AM**Lab ID:** 1206021-005**Matrix:** MEOH (SOIL)**Received Date:** 6/1/2012 10:05:00 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	6/1/2012 6:19:12 PM
Toluene	ND	0.50		mg/Kg	10	6/1/2012 6:19:12 PM
Ethylbenzene	ND	0.50		mg/Kg	10	6/1/2012 6:19:12 PM
Xylenes, Total	1.2	1.0		mg/Kg	10	6/1/2012 6:19:12 PM
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%REC	10	6/1/2012 6:19:12 PM
Surr: 4-Bromofluorobenzene	84.5	70-130		%REC	10	6/1/2012 6:19:12 PM
Surr: Dibromofluoromethane	95.0	71.7-132		%REC	10	6/1/2012 6:19:12 PM
Surr: Toluene-d8	97.7	70-130		%REC	10	6/1/2012 6:19:12 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 1206021

Date Reported: 6/5/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SB-1**Project:** SJ 29-6 #301 SWD**Collection Date:** 5/31/2012 7:56:00 AM**Lab ID:** 1206021-006**Matrix:** SOIL**Received Date:** 6/1/2012 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: BDH
Benzene	ND	0.097		mg/Kg	5	6/4/2012 2:00:09 PM
Toluene	ND	0.24		mg/Kg	5	6/4/2012 2:00:09 PM
Ethylbenzene	ND	0.24		mg/Kg	5	6/4/2012 2:00:09 PM
Xylenes, Total	ND	0.49		mg/Kg	5	6/4/2012 2:00:09 PM
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%REC	5	6/4/2012 2:00:09 PM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	5	6/4/2012 2:00:09 PM
Surr: Dibromofluoromethane	86.3	71.7-132		%REC	5	6/4/2012 2:00:09 PM
Surr: Toluene-d8	91.1	70-130		%REC	5	6/4/2012 2:00:09 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#: 1206021

05-Jun-12

Client: Animas Environmental Services

Project: SJ 29-6 #301 SWD

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87429	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.8	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.4	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		101	71.7	132			
Surr: Toluene-d8	0.47		0.5000		94.9	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87430	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.050	1.000	0	93.9	70.7	123			
Toluene	0.93	0.050	1.000	0	92.6	80	120			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.2	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.6	71.7	132			
Surr: Toluene-d8	0.49		0.5000		97.1	70	130			

Sample ID	1206021-004a ms	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SB-4	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87431	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.7	0.25	3.953	0	92.4	81.3	119			
Toluene	3.5	0.25	3.953	0	89.8	75	121			
Surr: 1,2-Dichloroethane-d4	1.8		1.976		88.9	70	130			
Surr: 4-Bromofluorobenzene	1.8		1.976		89.7	70	130			
Surr: Dibromofluoromethane	2.0		1.976		99.1	71.7	132			
Surr: Toluene-d8	1.9		1.976		96.1	70	130			

Sample ID	1206021-004a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SB-4	Batch ID:	R3155	RunNo:	3155					
Prep Date:		Analysis Date:	6/1/2012	SeqNo:	87432	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.6	0.25	3.953	0	90.7	81.3	119	1.82	15.7	
Toluene	3.5	0.25	3.953	0	89.6	75	121	0.157	16.2	
Surr: 1,2-Dichloroethane-d4	1.8		1.976		90.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.8		1.976		91.4	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#: 1206021

05-Jun-12

Client: Animas Environmental Services

Project: SJ 29-6 #301 SWD

Sample ID	1206021-004a msd	SampType: MSD	TestCode: EPA Method 8260B: Volatiles Short List							
Client ID:	SB-4	Batch ID: R3155	RunNo: 3155							
Prep Date:		Analysis Date: 6/1/2012	SeqNo: 87432		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	2.0		1.976		101	71.7	132	0	0	
Surr: Toluene-d8	1.9		1.976		94.3	70	130	0	0	

Sample ID	mb-2203	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID: 2203			RunNo: 3182					
Prep Date:	6/1/2012	Analysis Date: 6/4/2012			SeqNo: 88090		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.020								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.5	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.7	70	130			
Surr: Dibromofluoromethane	0.42		0.5000		84.9	71.7	132			
Surr: Toluene-d8	0.45		0.5000		90.7	70	130			

Sample ID	lcs-2203		SampType: LCS		TestCode: EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS		Batch ID: 2203		RunNo: 3182					
Prep Date:	6/1/2012		Analysis Date: 6/4/2012		SeqNo: 88091		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	111	70.7	123			
Toluene	1.0	0.050	1.000	0	101	80	120			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.2	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.1	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.9	71.7	132			
Surr: Toluene-d8	0.44		0.5000		88.1	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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1206021

05-Jun-12

Client: Animas Environmental Services

Project: SJ 29-6 #301 SWD

Sample ID	MB-2222	SampType	MBLK	TestCode	MERCURY, TCLP					
Client ID	PBW	Batch ID	2222	RunNo	3207					
Prep Date	6/4/2012	Analysis Date	6/5/2012	SeqNo	88954	Units	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID	LCS-2222	SampType	LCS	TestCode	MERCURY, TCLP					
Client ID	LCSW	Batch ID	2222	RunNo	3207					
Prep Date	6/4/2012	Analysis Date	6/5/2012	SeqNo	88955	Units	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	102	80	120			

Sample ID	1205900-001BMS	SampType	MS	TestCode	MERCURY, TCLP					
Client ID	BatchQC	Batch ID	2222	RunNo	3207					
Prep Date	6/4/2012	Analysis Date	6/5/2012	SeqNo	88957	Units	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0.001632	90.4	75	125			

Sample ID	1205900-001BMSD	SampType	MSD	TestCode	MERCURY, TCLP					
Client ID	BatchQC	Batch ID	2222	RunNo	3207					
Prep Date	6/4/2012	Analysis Date	6/5/2012	SeqNo	88958	Units	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0.001632	89.3	75	125	0	20	

### 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#: 1206021

05-Jun-12

Client: Animas Environmental Services

Project: SJ 29-6 #301 SWD

Sample ID	MB-2207	SampType:	MBLK	TestCode:	EPA Method 6010B: TCLP Metals					
Client ID:	PBW	Batch ID:	2207	RunNo:	3177					
Prep Date:	6/2/2012	Analysis Date:	6/4/2012	SeqNo:	87893	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Chromium	ND	5.0								
Lead	ND	5.0								

Sample ID	LCS-2207	SampType:	LCS	TestCode:	EPA Method 6010B: TCLP Metals					
Client ID:	LCSW	Batch ID:	2207	RunNo:	3177					
Prep Date:	6/2/2012	Analysis Date:	6/4/2012	SeqNo:	87894	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.01205	118	80	120			
Chromium	ND	5.0	0.5000	0	106	80	120			
Lead	ND	5.0	0.5000	0	101	80	120			

Sample ID	1205901-002AMS	SampType:	MS	TestCode:	EPA Method 6010B: TCLP Metals					
Client ID:	BatchQC	Batch ID:	2207	RunNo:	3177					
Prep Date:	6/2/2012	Analysis Date:	6/4/2012	SeqNo:	87908	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.01610	113	75	125			
Chromium	ND	5.0	0.5000	0	100	75	125			
Lead	ND	5.0	0.5000	0	95.8	75	125			

Sample ID	1205901-002AMSD	SampType:	MSD	TestCode:	EPA Method 6010B: TCLP Metals					
Client ID:	BatchQC	Batch ID:	2207	RunNo:	3177					
Prep Date:	6/2/2012	Analysis Date:	6/4/2012	SeqNo:	87909	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.01610	105	75	125	0	20	
Chromium	ND	5.0	0.5000	0	92.4	75	125	0	20	
Lead	ND	5.0	0.5000	0	88.6	75	125	0	20	

Sample ID	MB-2207	SampType:	MBLK	TestCode:	EPA Method 6010B: TCLP Metals					
Client ID:	PBW	Batch ID:	2207	RunNo:	3179					
Prep Date:	6/2/2012	Analysis Date:	6/4/2012	SeqNo:	87983	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100								
Cadmium	ND	1.0								
Selenium	ND	1.0								
Silver	ND	5.0								

## 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#: 1206021

05-Jun-12

Client: Animas Environmental Services

Project: SJ 29-6 #301 SWD

Sample ID	LCS-2207		SampType: LCS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	LCSW		Batch ID: 2207		RunNo: 3179					
Prep Date:	6/2/2012		Analysis Date: 6/4/2012		SeqNo: 87984		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	0	97.3	80	120			
Cadmium	ND	1.0	0.5000	0	106	80	120			
Selenium	ND	1.0	0.5000	0	106	80	120			
Silver	ND	5.0	0.1000	0	101	80	120			

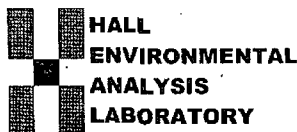
Sample ID	1205901-002AMS		SampType: MS		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	BatchQC		Batch ID: 2207		RunNo: 3179					
Prep Date:	6/2/2012		Analysis Date: 6/4/2012		SeqNo: 87999		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	ND	1.0	0.5000	0	106	75	125			
Selenium	ND	1.0	0.5000	0	104	75	125			
Silver	ND	5.0	0.1000	0	99.4	75	125			

Sample ID	1205901-002AMSD		SampType: MSD		TestCode: EPA Method 6010B: TCLP Metals					
Client ID:	BatchQC		Batch ID: 2207		RunNo: 3179					
Prep Date:	6/2/2012		Analysis Date: 6/4/2012		SeqNo: 88000		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	ND	1.0	0.5000	0	103	75	125	0	20	
Selenium	ND	1.0	0.5000	0	106	75	125	0	20	
Silver	ND	5.0	0.1000	0	96.9	75	125	0	20	

### 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: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1206021

Received by/date:

Logged By: Michelle Garcia

6/1/2012 10:05:00 AM

Michelle Garcia

Completed By: Michelle Garcia

6/1/2012 10:23:58 AM

Michelle Garcia

Reviewed By:

AT 6/1/12

### 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?<br>(Note discrepancies on chain of custody)            | Yes | ✓  | No           | # of preserved bottles checked for pH: |
| 14. Are matrices correctly identified on Chain of Custody?                                     | Yes | ✓  | No           | (<2 or >12 unless noted)               |
| 15. Is it clear what analyses were requested?  | Yes | ✓  | No           | Adjusted?                              |
| 16. Were all holding times able to be met?<br>(If no, notify customer for authorization.)      | Yes | ✓  | No           | 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			

# Chain-of-Custody Record

Client: Animes Environmental

Mailing Address: 624 E Concho  
Farmington NM 87401

Phone #: 505-504-2711  
email or Fax#: 505-504-2711

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

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

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:  
☐ Standard ☒ Rush same day on 80210

Project Name: SJ 29-6 #301 SWD

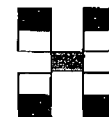
Project #: #7061012

Project Manager: Tami Ross

Sampler: Tami Ross

On Site: ☒ Yes ☐ No

Sample Temperature: 12.0



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBE + TPH (Gas only)	BTEX + MTBE + TPH (Gas/Diesel)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)
5-31-12	9:15	Soil	SB-1	4 oz	MeOH	-001	X						X				
5-31-12	9:20	Soil	SB-2	4 oz	MeOH	-002	X										
5-31-12	10:07	Soil	SB-3	4 oz	MeOH	-003	X										
5-31-12	10:15	Soil	SB-4	4 oz	MeOH	-004	X										
5-31-12	9:50	Soil	SB-5	4 oz	MeOH	-005	X										
5-31-12	08:16	Soil	SB-1	4 oz	none	-006	X										

Date: 5/31/12 Time: 1815 Relinquished by: Tami Ross Received by: Christine Waela Date: 5/31/12 Time: 1815 Remarks: BILL TO CONDO PHILLIPS

Date: 5/31/12 Time: 2005 Relinquished by: Christine Waela Received by: [Signature] Date: 06/01/12 Time: 10:05 Remarks: ASAP on metals

If necessary, samples submitted to Hall Environmental may be subcontracted to other approved laboratories. This service is subject to the availability of such subcontracted data will be provided.