

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

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

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

## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company <b>Burlington Resources Oil &amp; Gas Company</b>	Contact <b>Crystal Tafoya</b>	
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 326-9837</b>	
Facility Name: <b>Ute SWD 1</b>	Facility Type: <b>SWD</b>	
Surface Owner <b>Tribal</b>	Mineral Owner <b>Tribal (I-22-IND-2772)</b>	API No. <b>30-045-11475</b>

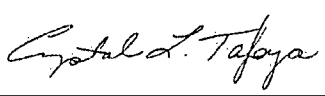
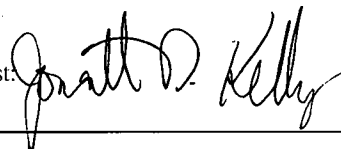
### LOCATION OF RELEASE

Unit Letter <b>M</b>	Section <b>11</b>	Township <b>32N</b>	Range <b>14W</b>	Feet from the <b>560</b>	North/South Line <b>South</b>	Feet from the <b>315</b>	East/West Line <b>West</b>	County <b>San Juan</b>
-------------------------	----------------------	------------------------	---------------------	-----------------------------	----------------------------------	-----------------------------	-------------------------------	---------------------------

Latitude 36.99709 Longitude 108.28589

### NATURE OF RELEASE

Type of Release <b>Produced Water &amp; Condensate</b>	Volume of Release <b>20 bbls PW &amp; 2bbls condensate</b>	Volume Recovered <b>19 bbls PW &amp; 2bbls condensate</b>
Source of Release <b>Injection Pump</b>	Date and Hour of Occurrence <b>5/3/2012</b>	Date and Hour of Discovery <b>5/3/2012 at 10:15 am</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Jeremiah Cutter (Ute Mtn Ute) &amp; Dave Swanson (COBLM) &amp; Brandon Powell (NMOCD)</b>	
By Whom? <b>Shelley Cook-Cowden</b>	Date and Hour <b>5/4/2012 at 10:00am</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>RCVD DEC 11 '12</b>	
If a Watercourse was Impacted, Describe Fully.* <b>N/A</b>	<b>OIL CONS. DIV. DIST. 3</b>	
Describe Cause of Problem and Remedial Action Taken.* <b>New injection system was down waiting on actuator. The old system was being used when a 90 degree elbow below the operating injection pump pulsation dampener developed a pinhole leak due to corrosion. The fluid exited the pump house into the floor drain out to the below grade tank, which overflowed the tank. Some fluid did leave the pump house beneath the closed doors.</b>		
Describe Area Affected and Cleanup Action Taken.* <b>The area of impact is around and inside the cribbing of the below grade tank as well as the area in front of the pump house doors. All fluid remained on location and 21bbls of produced water was recovered. Animas Environmental Services (AES) visited location 5/8/12 to do a spill assessment. The results of the assessment indicate COP will need to excavate the impacted soil and confirmation sampling using the NMOCD Guide to Leaks, Spills and Remediation. *An excavation of the area was completed and backfilled on 7/12/2012. Attached are the laboratory results and report.</b>		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		

Signature: 		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Crystal Tafoya</b>		Approved by Environmental Specialist: 	
Title: <b>Field Environmental Specialist</b>		Approval Date: <u>12/20/2012</u> Expiration Date:	
E-mail Address: <b>crystal.tafoya@conocophillips.com</b>		Conditions of Approval:	
Date: <b>12/6/2012</b> Phone: <b>(505) 326-9837</b>		Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

WJK 1235541677

47



Animas Environmental Services, LLC

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

November 21, 2012

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

624 E. Comanche  
Farmington, NM 87401  
505-564-2281  
  
Durango, Colorado  
970-403-3274

**RE: Final Excavation Report  
Ute SWD #1  
San Juan County, New Mexico**

Dear Ms. Maxwell:

On June 26 and 28, 2012, Animas Environmental Services, LLC (AES) completed an environmental clearance of the final excavation limits at the Ute SWD #1, located in San Juan County, New Mexico. The release consisted of approximately 20 barrels (bbls) of produced water and 2 bbls of condensate which leaked from piping below the operating injection pump pulsation dampener. An initial release assessment was completed by AES on May 7 and 8, 2012, and was detailed in a report entitled *Ute SWD #1 Assessment Report* dated June 12, 2012. The final excavation was completed by ConocoPhillips (CoP) contractors while AES was on location on June 26 and 28, 2012.

---

## 1.0 Site Information

### 1.1 Location

Location - SW $\frac{1}{4}$  SW $\frac{1}{4}$ , Section 11, T32N, R14W, San Juan County, New Mexico

Release Latitude/Longitude - N36.99677 and W108.28665, respectively

Land Jurisdiction – Ute Mountain Ute Tribal Land

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, June 2012

### 1.2 NMOCD Ranking

At the time of the release, the Ute Mountain Ute Environmental Programs Department did not have written regulations regarding oil and gas releases. CoP was instructed to follow the release protocol of the New Mexico Oil Conservation Division (NMOCD) for oil and gas releases and also to include Resource Conservation and Recovery Act (RCRA) 8 Metals. Therefore, prior to site work, the NMOCD database was reviewed, and the September 2010 below grade tank (BGT) permit application reported the depth to

groundwater at the location as 135 feet below ground surface (bgs). No additional NMOCD records were located. Additionally, 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.

Once on-site, AES personnel assessed the NMOCD ranking criteria using topographical interpretation, Global Position System (GPS) elevation readings, and visual reconnaissance. The distance to the nearest surface water body, a drainage leading to Little Barker Arroyo, is located approximately 1,000 feet east of the location. The Little Barker Arroyo drains to the south. The site location was assigned a ranking score of zero per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

### 1.3 Final Confirmation Sampling

On June 26, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of 13 confirmation soil samples (SC-1 through SC-13) of the walls and base of the three areas of excavation. The final areas of excavations were as follows:

- Area 1 (below grade tank): 24 feet by 19 feet by 8 feet in depth;
- Area 2 (south of pump building): 6 feet by 4 feet by 4 feet in depth; and
- Area 3 (north of pump building): 35 feet by 6 to 10 feet by 4 feet in depth.

Based on laboratory results, AES recommended additional excavation of the western and eastern portion of Area 1. AES returned to the site on June 28, 2012, and collected confirmation soil samples SC-14 through SC-16 following the additional excavation. Sample SC-17 was a composite of the final excavation walls and base of Area 1. The area of the final excavation (Area 1) was approximately 930 ft<sup>2</sup> by about 9 feet in depth. Sample locations, results, and final excavation extents are presented on Figure 3.

---

## 2.0 Soil Sampling

A total of 17 composite soil samples (SC-1 through SC-17) were collected during final confirmation sampling. All soil samples, except SC-17, were field screened for volatile organic compounds (VOCs), and also analyzed for total petroleum hydrocarbons (TPH). Fifteen composite soil samples (SC-2 through SC-4, SC-6 through SC-17) collected during confirmation sampling 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 15 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 SC-2 through SC-4 and SC-6 through SC-16 were laboratory analyzed for:

- RCRA (8) Metals including arsenic, barium, cadmium, chromium, lead, selenium, and silver per U.S. Environmental Protection Agency (USEPA) Method 6010B, and mercury per USEPA Method 7471.

Soil samples SC-2 through SC-4, SC-7, and SC-10 through SC-16 were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8260B.

Additionally, soil samples SC-3, SC-4, and SC-14 through SC-17, from the former BGT, were also laboratory analyzed for:

- Chloride per USEPA Method 300.0.

## 2.3 Field Screening and Laboratory Analytical Results

On June 26 and 28, 2012, field screening readings for VOCs via OVM ranged from 4.6 ppm in SC-16 to 6,038 ppm in SC-2. Field TPH concentrations ranged from 28.8 mg/kg in SC-16 up to 12,100 mg/kg in SC-5. Results are included below in Table 1 and on Figure 3. AES field screening reports are attached.

Table 1. Soil Field Screening VOC and TPH Results  
Ute SWD #1 Release Assessment and Final Excavation, 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>	<b>100</b>	<b>5,000</b>
SC-1	6/26/12	1 to 8	<b>4,947</b>	<b>7,990</b>
SC-2	6/26/12	1 to 8	<b>6,038</b>	2,770
SC-3	6/26/12	1 to 8	<b>4,091</b>	2,630
SC-4	6/26/12	8	<b>389</b>	309
SC-5	6/26/12	1 to 8	<b>3,913</b>	<b>12,100</b>
SC-6	6/26/12	1 to 4	45.3	1,820
SC-7	6/26/12	1 to 8	<b>4,054</b>	3,290
SC-8	6/26/12	4	4.7	1,410
SC-9	6/26/12	1 to 4	47.6	1,730
SC-10	6/26/12	1 to 4	<b>264</b>	1,250
SC-11	6/26/12	1 to 4	<b>387</b>	3,080
SC-12	6/26/12	1 to 4	<b>158</b>	1,830
SC-13	6/26/12	1 to 4	<b>4,910</b>	2,030
SC-14	6/28/12	1 to 8	<b>977</b>	114
SC-15	6/28/12	1 to 8	<b>612</b>	452
SC-16	6/28/12	1 to 8	4.6	28.8

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

Laboratory analyses for SC-2 through SC-4, SC-7, and SC-10 through SC-15 were used to confirm field screening results from the final assessment. Benzene concentrations ranged from less than 0.050 mg/kg in SC-4 and SC-10 through SC-12 up to 0.88 mg/kg in SC-13, and total BTEX concentrations ranged from 2.2 mg/kg in SC-4 up to 303 mg/kg in SC-13. Final BTEX results over the NMOCD action level of 50 mg/kg were used to provide recommendations for further excavation at the location. Chloride concentrations ranged from less than 30 mg/kg in SC-16 up to 870 mg/kg in SC-3. Results are presented in Table 2 and on Figure 3.

Table 2. Laboratory Analytical Results – Benzene, BTEX, and Chloride  
Ute SWD #1 Release Assessment and Final Excavation, 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>Chloride (mg/kg)</i>
<b>NMOCD Action Level*</b>			<b>10</b>	<b>50</b>	<b>250**</b>
SC-2	6/26/12	1 to 8	0.39	<b>119</b>	NA
SC-3	6/26/12	1 to 8	<0.25	31	<b>870</b>
SC-4	6/26/12	8	<0.050	2.2	<b>250</b>
SC-7	6/26/12	1 to 8	0.40	<b>94</b>	NA
SC-10	6/26/12	1 to 4	<0.050	3.6	NA
SC-11	6/26/12	1 to 4	<0.050	5.3	NA
SC-12	6/26/12	1 to 4	<0.050	5.8	NA
SC-13	6/26/12	1 to 8	0.88	<b>303</b>	NA
SC-14	6/28/12	1 to 8	<0.25	2.5	67
SC-15	6/28/12	1 to 8	<0.25	10	<b>300</b>
SC-16	6/28/12	1 to 8	NA	NA	<30
SC-17	6/28/12	1 to 8	NA	NA	320

NA = Not Analyzed

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

\*\* Action level for BGTs determined by NMAC 19.15.17.13E

Samples SC-2 through SC-4 and SC-14 through SC-16 were laboratory analyzed for RCRA (8) metals per Ute Mountain Ute Tribe Environmental Programs Department (EPD) guidelines. Results are presented in Table 3, and laboratory analytical reports are attached.

Table 3. Laboratory Analytical Results – RCRA (8) Metals  
Ute SWD 1 Release Assessment and Final Excavation, June 2012

Sample ID	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)
<i>Ute Mountain Ute Standards</i>		0.39	15,000	70	120,000	400	390	390	23
SC-2	6/26/12	<25	280	<1.0	8.0	26	<25	<2.5	0.041
SC-3	6/26/12	<12	180	<0.50	4.9	11	<12	<1.2	0.053
SC-4	6/26/12	<12	100	<0.50	4.3	7.8	<12	<1.2	0.63
SC-6	6/26/12	<12	490	<0.50	6.5	9.6	<12	<1.2	1.5
SC-7	6/26/12	<12	390	<0.50	6.5	12	<12	<1.2	0.064
SC-8	6/26/12	<25	480	<1.0	6.7	22	<25	<2.5	0.22
SC-9	6/26/12	<25	350	<1.0	6.7	23	<25	<2.5	0.073
SC-10	6/26/12	<25	380	<1.0	7.5	27	<25	<2.5	0.079
SC-11	6/26/12	<25	620	<1.0	7.7	35	<25	<2.5	0.089
SC-12	6/26/12	<12	820	<0.50	8.3	10	<12	<1.2	0.12
SC-13	6/26/12	<12	460	<0.50	7.6	12	<12	<1.2	1.2
SC-14	6/28/12	<25	380	<1.0	7.5	19	<25	<1.2	0.14
SC-15	6/28/12	<12	170	<0.50	4.9	3.8	<12	<1.2	0.26
SC-16	6/28/12	<12	300	<0.50	9.2	11	<12	<1.2	0.063

### 3.0 Conclusions and Recommendations

On June 26 and 28, 2012, AES conducted a final assessment of excavated areas at the Ute SWD #1, located in San Juan County, New Mexico. Action levels for releases were determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of zero.

Laboratory analytical results from June 26, 2012, showed that benzene concentrations were below the applicable NMOCD action level of 10 mg/kg in each sample. Total BTEX concentrations were above the applicable NMOCD action level in SC-2 (119 mg/kg), SC-7 (94 mg/kg), and SC-13 (303 mg/kg). Chloride concentrations exceeded the action level of 250 mg/kg for BGT closures in SC-3 and SC-4. Based on field screening and laboratory results, the walls and bases of excavation Areas 2 and 3 were below applicable NMOCD action levels; however, continued excavation was recommended for Area 1.

On June 28, 2012, a final assessment of the additional excavation of Area 1 was completed. Field screening and laboratory analytical results of the excavation extents showed that benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for the final four walls and the base of excavation Area 1. Laboratory analytical results showed that chloride concentrations exceeded the action level of 250 mg/kg for BGT closures in SC-3 (870 mg/kg), SC-4 (250 mg/kg), and SC-15 (300 mg/kg).

Laboratory analytical results for RCRA (8) metals collected on June 26 and 28, 2012, showed concentrations below laboratory detection limits or Ute Mountain Ute standards for each contaminant of concern.

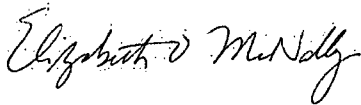
Based on the final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the Ute SWD #1, TPH, benzene, and total BTEX concentrations were reported below applicable NMOCD action levels. Chlorides were reported above the NMOCD action level of 250 mg/kg. CoP received concurrence from NMOCD on July 16, 2012, to backfill the excavation. No further action was recommended for the location.

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 Woods  
Staff Geologist



Elizabeth McNally, PE

Attachments:

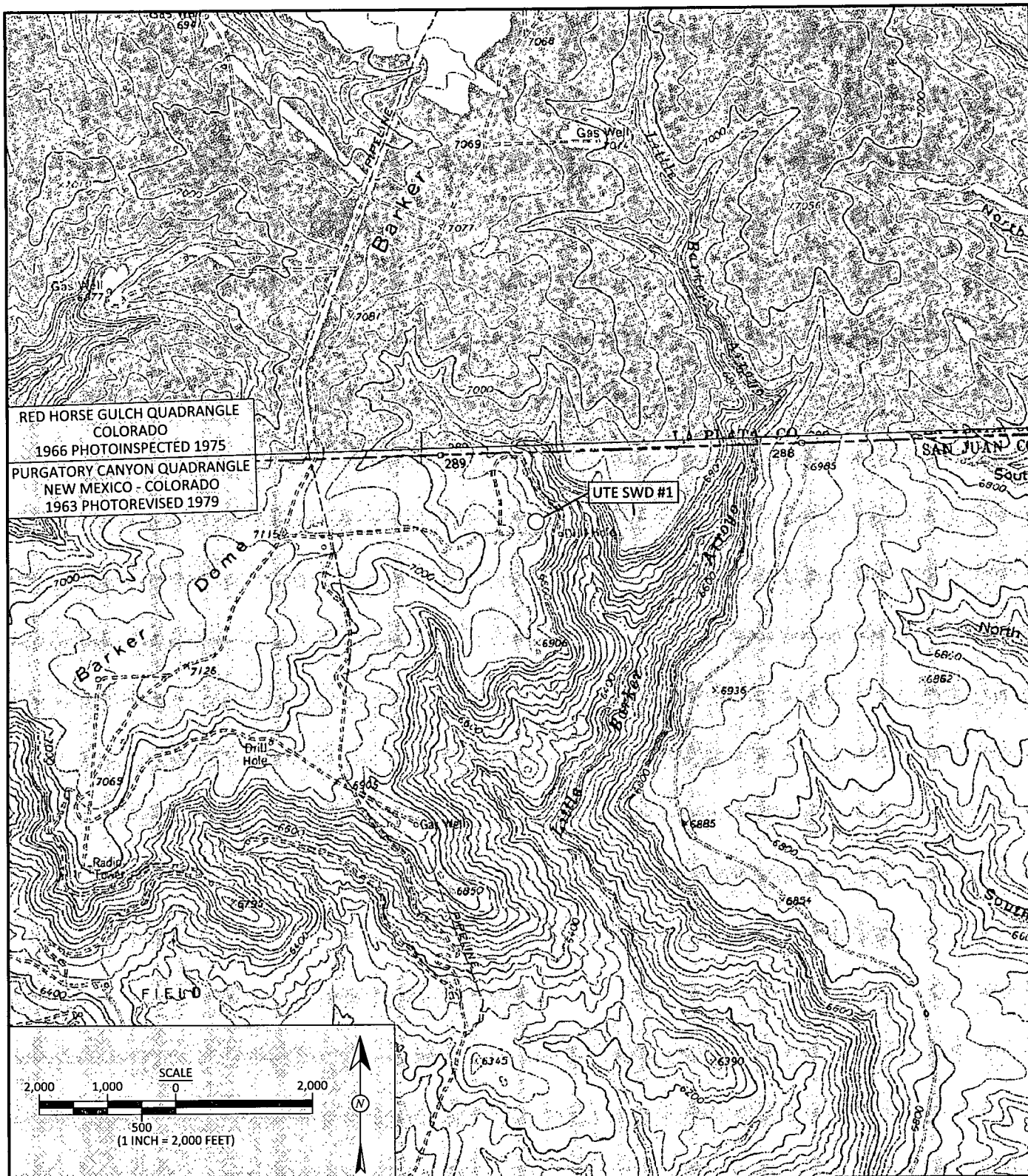
Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, June 2012



Figure 3. Excavation Details, Sample Locations and Results, June 2012  
AES Field Screening Report 062612  
AES Field Screening Report 062812  
Hall Laboratory Analytical Reports 1206B24 and 1206C32

R:\Animas 2000\2012 Projects\Conoco Phillips\UTE SWD #1\Ute SWD #1 Final Excavation Report  
112112.docx



Animas Environmental Services, LLC

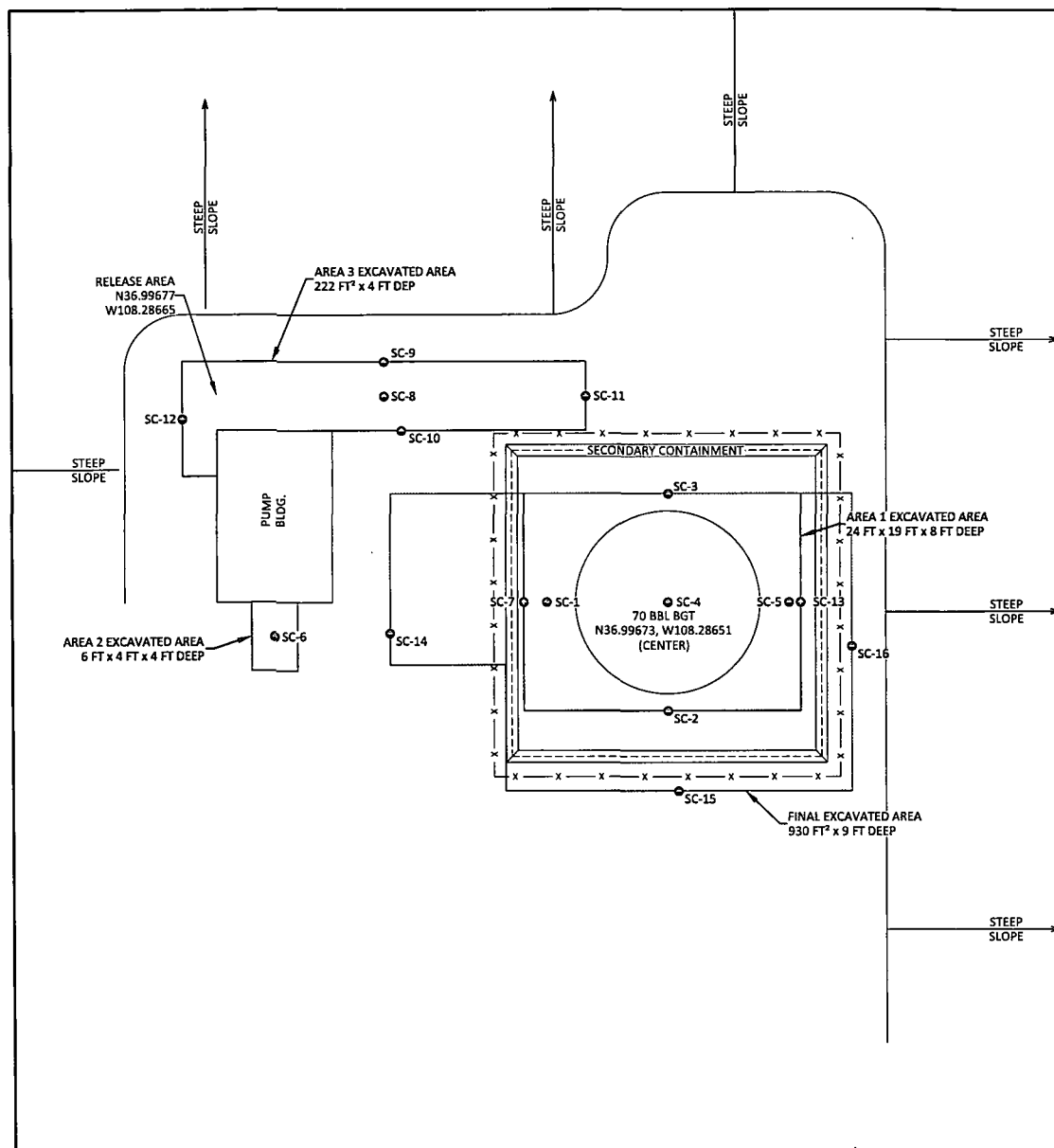
<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> June 27, 2012
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 27, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> June 27, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 27, 2012

## FIGURE 1

### TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips  
UTE SWD #1  
SAN JUAN COUNTY, NEW MEXICO  
SW $\frac{1}{4}$  SW $\frac{1}{4}$ , SECTION 11, T32N, R14W  
N36.99677, W108.28665





**FIGURE 3**

**FINAL EXCAVATION SOIL SAMPLE LOCATIONS AND RESULTS, JUNE 2012**

ConocoPhillips  
UTE SWD #1  
SAN JUAN COUNTY, NEW MEXICO  
SW¼ SW¼, SECTION 11, T32N, R14W  
N36.99677, W108.28665



Animas Environmental Services, LLC

**DRAWN BY:** C. Lameman **DATE DRAWN:** June 27, 2012

**REVISIONS BY:** C. Lameman **DATE REVISED:** June 27, 2012

**CHECKED BY:** D. Watson **DATE CHECKED:** June 27, 2012

**APPROVED BY:** E. McNally **DATE APPROVED:** June 27, 2012

**LEGEND**

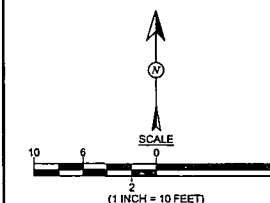
- 5-POINT COMPOSITE SAMPLE LOCATIONS

Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	5,000
SC-1*	6/26/12	1 to 8	4,947	7,990
SC-2	6/26/12	1 to 8	6,038	2,770
SC-3	6/26/12	1 to 8	4,091	2,630
SC-4	6/26/12	8	389	309
SC-5*	6/26/12	1 to 8	3,913	12,100
SC-6	6/26/12	1 to 4	45.3	1,820
SC-7	6/26/12	1 to 8	4,054	3,290
SC-8	6/26/12	4	4.7	1,410
SC-9	6/26/12	1 to 4	47.6	1,730
SC-10	6/26/12	1 to 4	264	1,250
SC-11	6/26/12	1 to 4	387	3,080
SC-12	6/26/12	1 to 4	158	1,830
SC-13	6/26/12	1 to 8	4,910	2,030
SC-14	6/28/12	1 to 8	977	114
SC-15	6/28/12	1 to 8	612	452
SC-16	6/28/12	1 to 8	4.6	28.8

\* - SAMPLE LOCATION REMOVED IN EXTENDED EXCAVATION. NA - NOT ANALYZED

Laboratory Analytical Results					
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			10	50	250
SC-2	6/26/12	1 to 8	0.39	119	NA
SC-3	6/26/12	1 to 8	<0.25	31	870
SC-4	6/26/12	8	<0.050	2.2	250
SC-7	6/26/12	1 to 8	0.40	94	NA
SC-10	6/26/12	1 to 4	<0.050	3.6	NA
SC-11	6/26/12	1 to 4	<0.050	5.3	NA
SC-12	6/26/12	1 to 4	<0.050	5.8	NA
SC-13	6/26/12	1 to 8	0.88	303	NA
SC-14	6/28/12	1 to 8	<0.25	2.5	67
SC-15	6/28/12	1 to 8	<0.25	10.0	300
SC-17	6/28/12	1 to 8	NA	NA	320

NOTE: SAMPLES WERE ANALYZED PER EPA METHOD 8260B AND 300.0. SC-17 WAS A COMPOSITE OF SC-3, SC-14, SC-15, AND SC-16.



# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips  
Project Location: UTE SWD #1

Date: 6/26/2012

Matrix: Soil

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

Durango, Colorado  
970-403-3274

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	6/26/2012	9:30	West Wall	4,947	NA	9:50	7,990	100	1	TCR
SC-2	6/26/2012	9:35	South Wall	6,038	NA	9:53	2,770	100	1	TCR
SC-3	6/26/2012	9:40	North Wall	4,091	NA	9:57	2,630	100	1	TCR
SC-4	6/26/2012	9:45	Base	389	NA	9:59	309	100	1	TCR
SC-5	6/26/2012	9:50	East Wall	3,913	NA	10:05	12,100	100	1	TCR
SC-6	6/26/2012	12:30	S-Pump	45.3	NA	12:50	1,820	100	1	TCR
SC-7	6/26/2012	12:40	West Wall	4,054	NA	13:00	3,290	100	1	TCR
SC-8	6/26/2012	13:00	Base	4.7	NA	13:25	1,410	100	1	TCR
SC-9	6/26/2012	13:02	North Wall	47.6	NA	13:29	1,730	100	1	TCR
SC-10	6/26/2012	13:03	South Wall	264	NA	13:35	1,250	100	1	TCR
SC-11	6/26/2012	13:25	East Wall	387	NA	13:50	3,080	100	1	TCR
SC-12	6/26/2012	13:30	West Wall	158	NA	14:02	1,830	100	1	TCR
SC-13	6/26/2012	14:10	East Wall	4,910	NA	14:35	2,030	100	1	TCR

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst:

*Jamie 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: UTE SWD #1

Date: 6/28/2012

Matrix: Soil

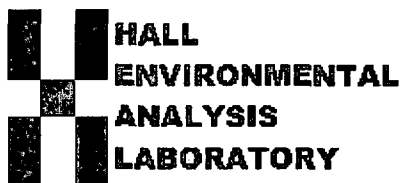
Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-14	6/28/2012	13:02	West Wall	977	NA	13:19	114	20.0	1	DAW
SC-15	6/28/2012	12:10	South Wall	612	NA	12:50	452	20.0	1	DAW
SC-16	6/28/2012	11:20	East Wall	4.6	NA	11:56	28.8	20.0	1	DAW

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

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate  
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)*

July 13, 2012

Debbie Watson

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: UTE SWD #1

OrderNo.: 1206B24

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 11 sample(s) on 6/27/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 10, 2012.

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206B24

Date Reported: 7/13/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-2

Project: UTE SWD #1

Collection Date: 6/26/2012 9:35:00 AM

Lab ID: 1206B24-001

Matrix: MEOH (SOIL)

Received Date: 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 7471: MERCURY</b>						Analyst: RAG
Mercury	0.041	0.033		mg/Kg	1	6/29/2012 9:53:10 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: JLF
Arsenic	ND	25		mg/Kg	10	7/3/2012 2:22:16 PM
Barium	280	1.0		mg/Kg	10	7/3/2012 2:22:16 PM
Cadmium	ND	1.0		mg/Kg	10	7/3/2012 2:22:16 PM
Chromium	8.0	3.0		mg/Kg	10	7/3/2012 2:22:16 PM
Lead	26	2.5		mg/Kg	10	7/3/2012 2:22:16 PM
Selenium	ND	25		mg/Kg	10	7/3/2012 2:22:16 PM
Silver	ND	2.5		mg/Kg	10	7/6/2012 9:38:17 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	0.39	0.25		mg/Kg	5	6/27/2012 12:21:13 PM
Toluene	13	0.25		mg/Kg	5	6/27/2012 12:21:13 PM
Ethylbenzene	5.8	0.25		mg/Kg	5	6/27/2012 12:21:13 PM
Xylenes, Total	100	2.0		mg/Kg	20	6/27/2012 6:05:56 PM
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	5	6/27/2012 12:21:13 PM
Surr: 4-Bromofluorobenzene	88.3	70-130		%REC	5	6/27/2012 12:21:13 PM
Surr: Dibromofluoromethane	123	71.7-132		%REC	5	6/27/2012 12:21:13 PM
Surr: Toluene-d8	86.9	70-130		%REC	5	6/27/2012 12:21:13 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
- U Samples with CalcVal < MDL



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206B24

Date Reported: 7/13/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-3

Project: UTE SWD #1

Collection Date: 6/26/2012 9:40:00 AM

Lab ID: 1206B24-002

Matrix: MEOH (SOIL)

Received Date: 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	870	30		mg/Kg	20	7/12/2012 12:27:18 PM
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>RAG</b>
Mercury	0.053	0.033		mg/Kg	1	6/29/2012 9:54:57 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	12		mg/Kg	5	7/2/2012 7:54:18 PM
Barium	180	0.50		mg/Kg	5	7/2/2012 7:54:18 PM
Cadmium	ND	0.50		mg/Kg	5	7/2/2012 7:54:18 PM
Chromium	4.9	1.5		mg/Kg	5	7/2/2012 7:54:18 PM
Lead	11	1.2		mg/Kg	5	7/3/2012 2:24:44 PM
Selenium	ND	12		mg/Kg	5	7/2/2012 7:54:18 PM
Silver	ND	1.2		mg/Kg	5	7/2/2012 7:54:18 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.25		mg/Kg	5	6/27/2012 12:49:14 PM
Toluene	3.3	0.25		mg/Kg	5	6/27/2012 12:49:14 PM
Ethylbenzene	1.9	0.25		mg/Kg	5	6/27/2012 12:49:14 PM
Xylenes, Total	26	0.50		mg/Kg	5	6/27/2012 12:49:14 PM
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%REC	5	6/27/2012 12:49:14 PM
Surr: 4-Bromofluorobenzene	50.1	70-130	S	%REC	5	6/27/2012 12:49:14 PM
Surr: Dibromofluoromethane	120	71.7-132		%REC	5	6/27/2012 12:49:14 PM
Surr: Toluene-d8	88.5	70-130		%REC	5	6/27/2012 12:49:14 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206B24**

Date Reported: 7/13/2012

**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-4**Project:** UTE SWD #1**Collection Date:** 6/26/2012 9:45:00 AM**Lab ID:** 1206B24-003**Matrix:** MEOH (SOIL)**Received Date:** 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	250	30		mg/Kg	20	7/12/2012 12:52:08 PM
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>RAG</b>
Mercury	0.63	0.16		mg/Kg	5	6/29/2012 10:20:37 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	12		mg/Kg	5	7/2/2012 7:59:49 PM
Barium	100	0.50		mg/Kg	5	7/2/2012 7:59:49 PM
Cadmium	ND	0.50		mg/Kg	5	7/2/2012 7:59:49 PM
Chromium	4.3	1.5		mg/Kg	5	7/2/2012 7:59:49 PM
Lead	7.8	1.2		mg/Kg	5	7/3/2012 2:27:23 PM
Selenium	ND	12		mg/Kg	5	7/2/2012 7:59:49 PM
Silver	ND	1.2		mg/Kg	5	7/2/2012 7:59:49 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.050		mg/Kg	1	6/27/2012 1:45:26 PM
Toluene	0.24	0.050		mg/Kg	1	6/27/2012 1:45:26 PM
Ethylbenzene	0.14	0.050		mg/Kg	1	6/27/2012 1:45:26 PM
Xylenes, Total	1.8	0.10		mg/Kg	1	6/27/2012 1:45:26 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	6/27/2012 1:45:26 PM
Surr: 4-Bromofluorobenzene	74.1	70-130		%REC	1	6/27/2012 1:45:26 PM
Surr: Dibromofluoromethane	125	71.7-132		%REC	1	6/27/2012 1:45:26 PM
Surr: Toluene-d8	92.7	70-130		%REC	1	6/27/2012 1:45:26 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206B24

Date Reported: 7/13/2012

**CLIENT:** Animas Environmental Services

**Client Sample ID:** SC-6

**Project:** UTE SWD #1

**Collection Date:** 6/26/2012 12:30:00 PM

**Lab ID:** 1206B24-004

**Matrix:** SOIL

**Received Date:** 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>RAG</b>
Mercury	1.5	0.33		mg/Kg	10	6/29/2012 10:38:13 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	12		mg/Kg	5	7/2/2012 8:05:16 PM
Barium	490	2.0		mg/Kg	20	7/3/2012 2:39:28 PM
Cadmium	ND	0.50		mg/Kg	5	7/2/2012 8:05:16 PM
Chromium	6.5	1.5		mg/Kg	5	7/2/2012 8:05:16 PM
Lead	9.6	1.2		mg/Kg	5	7/3/2012 2:30:03 PM
Selenium	ND	12		mg/Kg	5	7/2/2012 8:05:16 PM
Silver	ND	1.2		mg/Kg	5	7/2/2012 8:05:16 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
- U Samples with CalcVal < MDL

**Hall Environmental Analysis Laboratory, Inc.****Analytical Report**Lab Order **1206B24**

Date Reported: 7/13/2012

**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-7**Project:** UTE SWD #1**Collection Date:** 6/26/2012 12:40:00 PM**Lab ID:** 1206B24-005**Matrix:** MEOH (SOIL)**Received Date:** 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>RAG</b>
Mercury	0.064	0.033		mg/Kg	1	6/29/2012 10:04:26 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	12		mg/Kg	5	7/2/2012 8:10:56 PM
Barium	390	1.0		mg/Kg	10	7/3/2012 2:42:03 PM
Cadmium	ND	0.50		mg/Kg	5	7/2/2012 8:10:56 PM
Chromium	6.5	1.5		mg/Kg	5	7/2/2012 8:10:56 PM
Lead	12	1.2		mg/Kg	5	7/3/2012 2:35:29 PM
Selenium	ND	12		mg/Kg	5	7/2/2012 8:10:56 PM
Silver	ND	1.2		mg/Kg	5	7/2/2012 8:10:56 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	0.40	0.25		mg/Kg	5	6/27/2012 7:30:04 PM
Toluene	14	0.25		mg/Kg	5	6/27/2012 7:30:04 PM
Ethylbenzene	5.6	0.25		mg/Kg	5	6/27/2012 7:30:04 PM
Xylenes, Total	74	5.0		mg/Kg	50	6/27/2012 11:53:14 AM
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	5	6/27/2012 7:30:04 PM
Surr: 4-Bromofluorobenzene	71.5	70-130		%REC	5	6/27/2012 7:30:04 PM
Surr: Dibromofluoromethane	120	71.7-132		%REC	5	6/27/2012 7:30:04 PM
Surr: Toluene-d8	90.9	70-130		%REC	5	6/27/2012 7:30:04 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  
U   Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1206B24**

Date Reported: 7/13/2012

**CLIENT:** Animas Environmental Services

**Client Sample ID:** SC-8

**Project:** UTE SWD #1

**Collection Date:** 6/26/2012 1:00:00 PM

**Lab ID:** 1206B24-006

**Matrix:** SOIL

**Received Date:** 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>RAG</b>
Mercury	0.22	0.033		mg/Kg	1	6/29/2012 10:06:13 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	25		mg/Kg	10	7/3/2012 2:46:16 PM
Barium	480	1.0		mg/Kg	10	7/3/2012 2:46:16 PM
Cadmium	ND	1.0		mg/Kg	10	7/3/2012 2:46:16 PM
Chromium	6.7	3.0		mg/Kg	10	7/3/2012 2:46:16 PM
Lead	22	2.5		mg/Kg	10	7/3/2012 2:46:16 PM
Selenium	ND	25		mg/Kg	10	7/3/2012 2:46:16 PM
Silver	ND	2.5		mg/Kg	10	7/3/2012 2:46:16 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
- U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1206B24

Date Reported: 7/13/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-9

Project: UTE SWD #1

Collection Date: 6/26/2012 1:02:00 PM

Lab ID: 1206B24-007

Matrix: SOIL

Received Date: 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 7471: MERCURY</b>						Analyst: RAG
Mercury	0.073	0.033		mg/Kg	1	6/29/2012 10:11:31 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: JLF
Arsenic	ND	25		mg/Kg	10	7/3/2012 2:48:47 PM
Barium	350	1.0		mg/Kg	10	7/3/2012 2:48:47 PM
Cadmium	ND	1.0		mg/Kg	10	7/3/2012 2:48:47 PM
Chromium	6.7	3.0		mg/Kg	10	7/3/2012 2:48:47 PM
Lead	23	2.5		mg/Kg	10	7/3/2012 2:48:47 PM
Selenium	ND	25		mg/Kg	10	7/3/2012 2:48:47 PM
Silver	ND	2.5		mg/Kg	10	7/3/2012 2:48:47 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
- U Samples with CalcVal < MDL

**Hall Environmental Analysis Laboratory, Inc.****Analytical Report**Lab Order **1206B24**

Date Reported: 7/13/2012

**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-10**Project:** UTE SWD #1**Collection Date:** 6/26/2012 1:03:00 PM**Lab ID:** 1206B24-008**Matrix:** MEOH (SOIL)**Received Date:** 6/27/2012 10:00:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>EPA METHOD 7471: MERCURY</b>						<b>Analyst: RAG</b>
Mercury	0.079	0.033		mg/Kg	1	6/29/2012 10:13:18 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						<b>Analyst: JLF</b>
Arsenic	ND	25		mg/Kg	10	7/3/2012 3:01:27 PM
Barium	380	1.0		mg/Kg	10	7/3/2012 3:01:27 PM
Cadmium	ND	1.0		mg/Kg	10	7/3/2012 3:01:27 PM
Chromium	7.5	3.0		mg/Kg	10	7/3/2012 3:01:27 PM
Lead	27	2.5		mg/Kg	10	7/3/2012 3:01:27 PM
Selenium	ND	25		mg/Kg	10	7/3/2012 3:01:27 PM
Silver	ND	2.5		mg/Kg	10	7/3/2012 3:01:27 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						<b>Analyst: RAA</b>
Benzene	ND	0.050		mg/Kg	1	6/27/2012 2:13:31 PM
Toluene	0.17	0.050		mg/Kg	1	6/27/2012 2:13:31 PM
Ethylbenzene	0.15	0.050		mg/Kg	1	6/27/2012 2:13:31 PM
Xylenes, Total	3.3	0.10		mg/Kg	1	6/27/2012 2:13:31 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	6/27/2012 2:13:31 PM
Surr: 4-Bromofluorobenzene	57.6	70-130	S	%REC	1	6/27/2012 2:13:31 PM
Surr: Dibromofluoromethane	120	71.7-132		%REC	1	6/27/2012 2:13:31 PM
Surr: Toluene-d8	95.0	70-130		%REC	1	6/27/2012 2:13:31 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  
U Samples with CalcVal < MDL

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206B24

Date Reported: 7/13/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-11

Project: UTE SWD #1

Collection Date: 6/26/2012 1:25:00 PM

Lab ID: 1206B24-009

Matrix: MEOH (SOIL)

Received Date: 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 7471: MERCURY</b>						Analyst: RAG
Mercury	0.089	0.033		mg/Kg	1	6/29/2012 10:15:07 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: JLF
Arsenic	ND	25		mg/Kg	10	7/3/2012 3:04:07 PM
Barium	620	2.0		mg/Kg	20	7/3/2012 3:09:34 PM
Cadmium	ND	1.0		mg/Kg	10	7/3/2012 3:04:07 PM
Chromium	7.7	3.0		mg/Kg	10	7/3/2012 3:04:07 PM
Lead	35	2.5		mg/Kg	10	7/3/2012 3:04:07 PM
Selenium	ND	25		mg/Kg	10	7/3/2012 3:04:07 PM
Silver	ND	2.5		mg/Kg	10	7/3/2012 3:04:07 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	6/27/2012 2:41:37 PM
Toluene	0.37	0.050		mg/Kg	1	6/27/2012 2:41:37 PM
Ethylbenzene	0.29	0.050		mg/Kg	1	6/27/2012 2:41:37 PM
Xylenes, Total	4.6	0.10		mg/Kg	1	6/27/2012 2:41:37 PM
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%REC	1	6/27/2012 2:41:37 PM
Surr: 4-Bromofluorobenzene	54.8	70-130	S	%REC	1	6/27/2012 2:41:37 PM
Surr: Dibromofluoromethane	120	71.7-132		%REC	1	6/27/2012 2:41:37 PM
Surr: Toluene-d8	91.1	70-130		%REC	1	6/27/2012 2:41:37 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  
U Samples with CalcVal < MDL



# Analytical Report

Lab Order 1206B24

Date Reported: 7/13/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-12

Project: UTE SWD #1

Collection Date: 6/26/2012 1:30:00 PM

Lab ID: 1206B24-010

Matrix: MEOH (SOIL)

Received Date: 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>RAG</b>
Mercury	0.12	0.033		mg/Kg	1	6/29/2012 10:16:54 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	12		mg/Kg	5	7/2/2012 8:50:10 PM
Barium	820	2.0		mg/Kg	20	7/3/2012 3:12:09 PM
Cadmium	ND	0.50		mg/Kg	5	7/2/2012 8:50:10 PM
Chromium	8.3	1.5		mg/Kg	5	7/2/2012 8:50:10 PM
Lead	10	1.2		mg/Kg	5	7/3/2012 3:06:48 PM
Selenium	ND	12		mg/Kg	5	7/2/2012 8:50:10 PM
Silver	ND	1.2		mg/Kg	5	7/2/2012 8:50:10 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.050		mg/Kg	1	6/27/2012 3:09:47 PM
Toluene	0.30	0.050		mg/Kg	1	6/27/2012 3:09:47 PM
Ethylbenzene	0.069	0.050		mg/Kg	1	6/27/2012 3:09:47 PM
Xylenes, Total	5.4	0.10		mg/Kg	1	6/27/2012 3:09:47 PM
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%REC	1	6/27/2012 3:09:47 PM
Surr: 4-Bromofluorobenzene	63.8	70-130	S	%REC	1	6/27/2012 3:09:47 PM
Surr: Dibromofluoromethane	120	71.7-132		%REC	1	6/27/2012 3:09:47 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	6/27/2012 3:09:47 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
- U Samples with CalcVal < MDL

## Analytical Report

Lab Order 1206B24

Date Reported: 7/13/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-13

Project: UTE SWD #1

Collection Date: 6/26/2012 2:10:00 PM

Lab ID: 1206B24-011

Matrix: MEOH (SOIL)

Received Date: 6/27/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>RAG</b>
Mercury	1.2	0.33		mg/Kg	10	6/29/2012 11:14:23 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	12		mg/Kg	5	7/2/2012 9:05:37 PM
Barium	460	1.0		mg/Kg	10	7/3/2012 3:19:14 PM
Cadmium	ND	0.50		mg/Kg	5	7/2/2012 9:05:37 PM
Chromium	7.6	1.5		mg/Kg	5	7/2/2012 9:05:37 PM
Lead	12	2.5		mg/Kg	10	7/3/2012 3:19:14 PM
Selenium	ND	12		mg/Kg	5	7/2/2012 9:05:37 PM
Silver	ND	1.2		mg/Kg	5	7/2/2012 9:05:37 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	0.88	0.25		mg/Kg	5	6/27/2012 1:17:18 PM
Toluene	45	2.5		mg/Kg	50	6/27/2012 6:33:59 PM
Ethylbenzene	17	0.25		mg/Kg	5	6/27/2012 1:17:18 PM
Xylenes, Total	240	5.0		mg/Kg	50	6/27/2012 6:33:59 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	5	6/27/2012 1:17:18 PM
Surr: 4-Bromofluorobenzene	60.5	70-130	S	%REC	5	6/27/2012 1:17:18 PM
Surr: Dibromofluoromethane	123	71.7-132		%REC	5	6/27/2012 1:17:18 PM
Surr: Toluene-d8	86.4	70-130		%REC	5	6/27/2012 1:17:18 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  
U Samples with CalcVal < MDL

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1206B24

13-Jul-12

Client: Animas Environmental Services

Project: UTE SWD #1

Sample ID	MB-2797	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	2797	RunNo:	4007					
Prep Date:	7/12/2012	Analysis Date:	7/12/2012	SeqNo:	114674	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-2797	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	2797	RunNo:	4007					
Prep Date:	7/12/2012	Analysis Date:	7/12/2012	SeqNo:	114675	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.6	90	110			

Sample ID	1207452-001AMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	2797	RunNo:	4007					
Prep Date:	7/12/2012	Analysis Date:	7/12/2012	SeqNo:	114688	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	25	7.5	15.00	11.47	89.2	64.4	117			

Sample ID	1207452-001AMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	2797	RunNo:	4007					
Prep Date:	7/12/2012	Analysis Date:	7/12/2012	SeqNo:	114689	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	28	7.5	15.00	11.47	108	64.4	117	10.9	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#: 1206B24

13-Jul-12

Client: Animas Environmental Services

Project: UTE SWD #1

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R3723	RunNo:	3723					
Prep Date:		Analysis Date:	6/27/2012	SeqNo:	105700	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	0.49		0.5000		97.4	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		106	70	130			
Surr: Dibromofluoromethane	0.61		0.5000		121	71.7	132			
Surr: Toluene-d8	0.47		0.5000		94.0	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R3723	RunNo:	3723					
Prep Date:		Analysis Date:	6/27/2012	SeqNo:	105706	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	96.9	70.7	123			
Toluene	0.91	0.050	1.000	0	91.4	80	120			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.2	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.59		0.5000		119	71.7	132			
Surr: Toluene-d8	0.46		0.5000		92.9	70	130			

Sample ID	1206b24-002ams	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-3	Batch ID:	R3723	RunNo:	3723					
Prep Date:		Analysis Date:	6/27/2012	SeqNo:	105713	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.9	0.25	4.027	0.07811	95.1	81.3	119			
Toluene	6.3	0.25	4.027	3.296	74.0	75	121			S
Surr: 1,2-Dichloroethane-d4	2.0		2.013		97.6	70	130			
Surr: 4-Bromofluorobenzene	1.1		2.013		56.4	70	130			S
Surr: Dibromofluoromethane	2.3		2.013		116	71.7	132			
Surr: Toluene-d8	1.7		2.013		86.2	70	130			

Sample ID	1206b24-002amsd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-3	Batch ID:	R3723	RunNo:	3723					
Prep Date:		Analysis Date:	6/27/2012	SeqNo:	105720	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.8	0.25	4.027	0.07811	91.3	81.3	119	3.98	15.7	
Toluene	6.1	0.25	4.027	3.296	70.8	75	121	2.05	16.2	S
Surr: 1,2-Dichloroethane-d4	2.0		2.013		96.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.3		2.013		63.8	70	130	0	0	S

### 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#: 1206B24

13-Jul-12

Client: Animas Environmental Services

Project: UTE SWD #1

Sample ID	1206b24-002amsd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-3	Batch ID:	R3723	RunNo:	3723					
Prep Date:		Analysis Date:	6/27/2012	SeqNo:	105720	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	2.3		2.013		114	71.7	132	0	0	
Surr: Toluene-d8	1.8		2.013		87.1	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#: 1206B24

13-Jul-12

Client: Animas Environmental Services

Project: UTE SWD #1

Sample ID	MB-2620	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	2620	RunNo:	3775					
Prep Date:	6/28/2012	Analysis Date:	6/29/2012	SeqNo:	106870	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-2620	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	2620	RunNo:	3775					
Prep Date:	6/28/2012	Analysis Date:	6/29/2012	SeqNo:	106871	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	103	80	120			

Sample ID	1206B24-003AMS	SampType:	MS	TestCode:	EPA Method 7471: Mercury					
Client ID:	SC-4	Batch ID:	2620	RunNo:	3775					
Prep Date:	6/28/2012	Analysis Date:	6/29/2012	SeqNo:	106888	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	1.2	0.17	0.1643	0.6342	317	75	125			S

Sample ID	1206B24-003AMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	SC-4	Batch ID:	2620	RunNo:	3775					
Prep Date:	6/28/2012	Analysis Date:	6/29/2012	SeqNo:	106889	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	1.0	0.16	0.1662	0.6342	239	75	125	11.4	20	S

### 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#: 1206B24

13-Jul-12

Client: Animas Environmental Services

Project: UTE SWD #1

Sample ID	MB-2628		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	2628		RunNo:	3831			
Prep Date:	6/28/2012		Analysis Date:	7/2/2012		SeqNo:	108556		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID	LCS-2628		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	2628		RunNo:	3831			
Prep Date:	6/28/2012		Analysis Date:	7/2/2012		SeqNo:	108557		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	25.00	0	92.0	80	120			
Barium	24	0.10	25.00	0	94.3	80	120			
Cadmium	24	0.10	25.00	0.04050	97.2	80	120			
Chromium	24	0.30	25.00	0	95.5	80	120			
Selenium	24	2.5	25.00	0.5400	91.9	80	120			
Silver	4.9	0.25	5.000	0	97.1	80	120			

Sample ID	1206710-002CMS		SampType:	MS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	BatchQC		Batch ID:	2628		RunNo:	3831			
Prep Date:	6/28/2012		Analysis Date:	7/2/2012		SeqNo:	108614		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	12	24.83	0	84.8	75	125			
Cadmium	22	0.50	24.83	0.2220	88.9	75	125			
Chromium	28	1.5	24.83	5.639	91.5	75	125			
Selenium	22	12	24.83	0	89.0	75	125			
Silver	4.2	1.2	4.966	0	84.4	75	125			

Sample ID	1206710-002CMSD		SampType:	MSD		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	BatchQC		Batch ID:	2628		RunNo:	3831			
Prep Date:	6/28/2012		Analysis Date:	7/2/2012		SeqNo:	108615		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	12	24.67	0	85.3	75	125	0.0113	20	
Cadmium	22	0.50	24.67	0.2220	90.1	75	125	0.770	20	
Chromium	29	1.5	24.67	5.639	95.6	75	125	3.02	20	
Selenium	22	12	24.67	0	87.5	75	125	2.32	20	
Silver	4.2	1.2	4.935	0	85.1	75	125	0.202	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#: 1206B24

13-Jul-12

Client: Animas Environmental Services

Project: UTE SWD #1

Sample ID	MB-2628	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	2628	RunNo:	3851					
Prep Date:	6/28/2012	Analysis Date:	7/3/2012	SeqNo:	109203	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.25								

Sample ID	LCS-2628	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	2628	RunNo:	3851					
Prep Date:	6/28/2012	Analysis Date:	7/3/2012	SeqNo:	109204	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	24	0.25	25.00	0	96.7	80	120			

Sample ID	1206710-002CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	2628	RunNo:	3851					
Prep Date:	6/28/2012	Analysis Date:	7/3/2012	SeqNo:	109527	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	36	1.2	24.83	14.75	84.0	75	125			

Sample ID	1206710-002CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	2628	RunNo:	3851					
Prep Date:	6/28/2012	Analysis Date:	7/3/2012	SeqNo:	109528	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	36	1.2	24.67	14.75	85.8	75	125	0.864	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

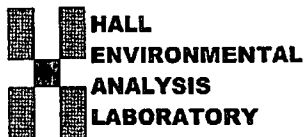
B Analyte detected in the associated Method Blank

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 N.E.  
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: 1206B24

Received by/date:

*LM* 06/27/12

Logged By: Ashley Gallegos

6/27/2012 10:00:00 AM

Completed By: Ashley Gallegos

6/27/2012 10:13:08 AM

Reviewed By:

*JB* 6/27/12

### 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 # 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?  
(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	4.0	Good	Yes			

**Chain of Custody Record**

Client: Animas Environmental Services

Mailing Address 624 E Comanche Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

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

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

☐ EDD (Type) \_\_\_\_\_

☐ Standard ☒ Rush SAME DAY

Project Name: UTE SWD #1

Project #:

Project Manager: Debbie Watson

Sampler: TAMI ROSS

On Site ☒ Yes ☐ No

Sample Temperature 40



# 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	HEALING	RCRA B	EO21 BTEX	Air Bubbles (Y or N)
6/26/12	935	SOIL	SC-2	MeOH Kit	MeOH	-001	X	X	
6/26/12	940		SC-3	MeOH Kit	MeOH	-002	X	X	
6/26/12	945		SC-4	MeOH Kit	MeOH	-003	X	X	
6/26/12	1230	SOIL	SC-6	HOZ		-004	X		
6/26/12	1240		SC-7	MeOH Kit	MeOH	-005	X	X	
6/26/12	1300		SC-8	HOZ		-006	X		
6/26/12	1302		SC-9	HOZ		-007	X		
6/26/12	1303	SOIL	SC-10	MeOH Kit	MeOH	-008	X	X	
6/26/12	1325		SC-11	MeOH Kit	MeOH	-009	X	X	
6/26/12	1330		SC-12	MeOH Kit	MeOH	-010	X	X	
6/26/12	1410		SC-13	MeOH Kit	MeOH	-011	X	X	

Date: 6/26/12 Time: 1725 Relinquished by: Tami Ross

Date: 6/26/12 Time: 1751 Relinquished by: Christine Waeles

Received by: Christine Waeles Date: 6/26/12 Time: 1725

Received by: [Signature] Date: 6/26/12 Time: 1800

Remarks: BILL TO CAROL PHILLIPS

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

July 13, 2012

Debbie Watson

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: COP Ute SWD #1

OrderNo.: 1206C32

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/29/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 09, 2012.

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1206C32

Date Reported: 7/13/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-14

Project: COP Ute SWD #1

Collection Date: 6/28/2012 1:02:00 PM

Lab ID: 1206C32-001

Matrix: MEOH (SOIL)

Received Date: 6/29/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	67	30		mg/Kg	20	7/12/2012 12:39:43 PM
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>DBD</b>
Mercury	0.14	0.033		mg/Kg	1	7/2/2012 11:50:44 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	25		mg/Kg	10	7/3/2012 3:21:53 PM
Barium	380	1.0		mg/Kg	10	7/3/2012 3:21:53 PM
Cadmium	ND	1.0		mg/Kg	10	7/3/2012 3:21:53 PM
Chromium	7.5	3.0		mg/Kg	10	7/3/2012 3:21:53 PM
Lead	19	2.5		mg/Kg	10	7/3/2012 3:21:53 PM
Selenium	ND	25		mg/Kg	10	7/3/2012 3:21:53 PM
Silver	ND	2.5		mg/Kg	10	7/6/2012 9:49:25 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.25		mg/Kg	5	6/29/2012 11:21:59 AM
Toluene	ND	0.25		mg/Kg	5	6/29/2012 11:21:59 AM
Ethylbenzene	ND	0.25		mg/Kg	5	6/29/2012 11:21:59 AM
Xylenes, Total	2.5	0.50		mg/Kg	5	6/29/2012 11:21:59 AM
Surr: 1,2-Dichloroethane-d4	85.1	70-130		%REC	5	6/29/2012 11:21:59 AM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	5	6/29/2012 11:21:59 AM
Surr: Dibromofluoromethane	81.9	71.7-132		%REC	5	6/29/2012 11:21:59 AM
Surr: Toluene-d8	88.8	70-130		%REC	5	6/29/2012 11:21:59 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  
U Samples with CalcVal < MDL

# Analytical Report

Lab Order 1206C32

Date Reported: 7/13/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-15

Project: COP Ute SWD #1

Collection Date: 6/28/2012 12:10:00 PM

Lab ID: 1206C32-002

Matrix: MEOH (SOIL)

Received Date: 6/29/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	300	30		mg/Kg	20	7/12/2012 1:04:33 PM
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>DBD</b>
Mercury	0.26	0.16		mg/Kg	5	7/2/2012 12:12:17 PM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	12		mg/Kg	5	7/3/2012 2:01:59 PM
Barium	170	0.50		mg/Kg	5	7/3/2012 2:01:59 PM
Cadmium	ND	0.50		mg/Kg	5	7/3/2012 2:01:59 PM
Chromium	4.9	1.5		mg/Kg	5	7/3/2012 2:01:59 PM
Lead	3.8	1.2		mg/Kg	5	7/3/2012 2:01:59 PM
Selenium	ND	12		mg/Kg	5	7/3/2012 2:01:59 PM
Silver	ND	1.2		mg/Kg	5	7/6/2012 9:52:53 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.25		mg/Kg	5	6/29/2012 12:17:36 PM
Toluene	ND	0.25		mg/Kg	5	6/29/2012 12:17:36 PM
Ethylbenzene	0.54	0.25		mg/Kg	5	6/29/2012 12:17:36 PM
Xylenes, Total	9.5	0.50		mg/Kg	5	6/29/2012 12:17:36 PM
Surr: 1,2-Dichloroethane-d4	85.3	70-130		%REC	5	6/29/2012 12:17:36 PM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	5	6/29/2012 12:17:36 PM
Surr: Dibromofluoromethane	83.5	71.7-132		%REC	5	6/29/2012 12:17:36 PM
Surr: Toluene-d8	87.5	70-130		%REC	5	6/29/2012 12:17:36 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  
 U Samples with CalcVal < MDL

## Analytical Report

Lab Order 1206C32

Date Reported: 7/13/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-16

Project: COP Ute SWD #1

Collection Date: 6/28/2012 11:20:00 AM

Lab ID: 1206C32-003

Matrix: SOIL

Received Date: 6/29/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	ND	30		mg/Kg	20	7/12/2012 1:16:58 PM
<b>EPA METHOD 7471: MERCURY</b>						Analyst: <b>DBD</b>
Mercury	0.063	0.033		mg/Kg	1	7/2/2012 11:58:10 AM
<b>EPA METHOD 6010B: SOIL METALS</b>						Analyst: <b>JLF</b>
Arsenic	ND	12		mg/Kg	5	7/3/2012 2:07:14 PM
Barium	300	1.0		mg/Kg	10	7/3/2012 3:24:27 PM
Cadmium	ND	0.50		mg/Kg	5	7/3/2012 2:07:14 PM
Chromium	9.2	1.5		mg/Kg	5	7/3/2012 2:07:14 PM
Lead	11	1.2		mg/Kg	5	7/3/2012 2:07:14 PM
Selenium	ND	12		mg/Kg	5	7/3/2012 2:07:14 PM
Silver	ND	1.2		mg/Kg	5	7/6/2012 9:54:43 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  
 U Samples with CalcVal < MDL

**Analytical Report**Lab Order **1206C32**

Date Reported: 7/13/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** SC-17**Project:** COP Ute SWD #1**Collection Date:****Lab ID:** 1206C32-004**Matrix:** SOIL**Received Date:** 6/29/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	320	30		mg/Kg	20	7/13/2012 11:25:52 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  
                  U    Samples with CalcVal < MDL

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1206C32

13-Jul-12

Client: Animas Environmental Services

Project: COP Ute SWD #1

Sample ID	MB-2797	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	2797	RunNo:	4007					
Prep Date:	7/12/2012	Analysis Date:	7/12/2012	SeqNo:	114674	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-2797	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	2797	RunNo:	4007					
Prep Date:	7/12/2012	Analysis Date:	7/12/2012	SeqNo:	114675	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.6	90	110			

Sample ID	1207452-001AMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	2797	RunNo:	4007					
Prep Date:	7/12/2012	Analysis Date:	7/12/2012	SeqNo:	114688	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	25	7.5	15.00	11.47	89.2	64.4	117			

Sample ID	1207452-001AMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	2797	RunNo:	4007					
Prep Date:	7/12/2012	Analysis Date:	7/12/2012	SeqNo:	114689	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	28	7.5	15.00	11.47	108	64.4	117	10.9	20	

Sample ID	MB-2814	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	2814	RunNo:	4021					
Prep Date:	7/13/2012	Analysis Date:	7/13/2012	SeqNo:	115023	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-2814	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	2814	RunNo:	4021					
Prep Date:	7/13/2012	Analysis Date:	7/13/2012	SeqNo:	115024	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	1.5	15.00	0	104	90	110			

Sample ID	1207520-002BMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	2814	RunNo:	4021					
Prep Date:	7/13/2012	Analysis Date:	7/13/2012	SeqNo:	115027	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	44	7.5	15.00	31.04	85.7	64.4	117			

### 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#: 1206C32

13-Jul-12

Client: Animas Environmental Services

Project: COP Ute SWD #1

Sample ID	1207520-002BMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: 2814		RunNo: 4021					
Prep Date:	7/13/2012		Analysis Date: 7/13/2012		SeqNo: 115028		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	43	7.5	15.00	31.04	79.5	64.4	117	2.14	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#: 1206C32

13-Jul-12

Client: Animas Environmental Services

Project: COP Ute SWD #1

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R3777	RunNo:	3777					
Prep Date:		Analysis Date:	6/29/2012	SeqNo:	108101	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		85.9	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.2	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.0	71.7	132			
Surr: Toluene-d8	0.45		0.5000		89.2	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R3777	RunNo:	3777					
Prep Date:		Analysis Date:	6/29/2012	SeqNo:	108104	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	94.8	70.7	123			
Toluene	0.93	0.050	1.000	0	93.2	80	120			
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		83.6	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.2	70	130			
Surr: Dibromofluoromethane	0.41		0.5000		81.6	71.7	132			
Surr: Toluene-d8	0.44		0.5000		87.6	70	130			

Sample ID	1206c32-001a ms	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-14	Batch ID:	R3777	RunNo:	3777					
Prep Date:		Analysis Date:	6/29/2012	SeqNo:	108105	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.6	0.25	3.831	0	94.5	81.3	119			
Toluene	3.9	0.25	3.831	0.1999	96.6	75	121			
Surr: 1,2-Dichloroethane-d4	1.6		1.916		84.2	70	130			
Surr: 4-Bromofluorobenzene	1.9		1.916		101	70	130			
Surr: Dibromofluoromethane	1.5		1.916		77.2	71.7	132			
Surr: Toluene-d8	1.7		1.916		87.8	70	130			

Sample ID	1206c32-001a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-14	Batch ID:	R3777	RunNo:	3777					
Prep Date:		Analysis Date:	6/29/2012	SeqNo:	108106	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.6	0.25	3.831	0	93.3	81.3	119	1.26	15.7	
Toluene	3.8	0.25	3.831	0.1999	92.9	75	121	3.66	16.2	
Surr: 1,2-Dichloroethane-d4	1.6		1.916		84.2	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		1.916		103	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#: 1206C32

13-Jul-12

Client: Animas Environmental Services

Project: COP Ute SWD #1

Sample ID	1206c32-001a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-14	Batch ID:	R3777	RunNo:	3777					
Prep Date:		Analysis Date:	6/29/2012	SeqNo:	108106	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	1.6		1.916		81.0	71.7	132	0	0	
Surr: Toluene-d8	1.6		1.916		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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1206C32

13-Jul-12

Client: Animas Environmental Services

Project: COP Ute SWD #1

Sample ID	MB-2648	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	2648	RunNo:	3821					
Prep Date:	6/29/2012	Analysis Date:	7/2/2012	SeqNo:	108263	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-2648	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	2648	RunNo:	3821					
Prep Date:	6/29/2012	Analysis Date:	7/2/2012	SeqNo:	108264	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID	1206C32-002BMS	SampType:	MS	TestCode:	EPA Method 7471: Mercury					
Client ID:	SC-15	Batch ID:	2648	RunNo:	3821					
Prep Date:	6/29/2012	Analysis Date:	7/2/2012	SeqNo:	108278	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.78	0.16	0.1680	0.2571	309	75	125			S

Sample ID	1206C32-002BMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	SC-15	Batch ID:	2648	RunNo:	3821					
Prep Date:	6/29/2012	Analysis Date:	7/2/2012	SeqNo:	108279	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.77	0.16	0.1681	0.2571	304	75	125	0.865	20	S

### 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#: 1206C32

13-Jul-12

Client: Animas Environmental Services

Project: COP Ute SWD #1

Sample ID	MB-2649		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals				
Client ID:	PBS		Batch ID:	2649		RunNo:	3851				
Prep Date:	6/29/2012		Analysis Date:	7/3/2012		SeqNo:	109205		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	ND	2.5									
Barium	ND	0.10									
Cadmium	ND	0.10									
Chromium	ND	0.30									
Lead	ND	0.25									
Selenium	ND	2.5									

Sample ID	LCS-2649		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 2649		RunNo: 3851					
Prep Date:	6/29/2012		Analysis Date: 7/3/2012		SeqNo: 109232		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0	98.0	80	120			
Barium	25	0.10	25.00	0	98.9	80	120			
Cadmium	25	0.10	25.00	0	98.8	80	120			
Chromium	25	0.30	25.00	0	98.7	80	120			
Lead	25	0.25	25.00	0.1995	98.8	80	120			
Selenium	24	2.5	25.00	1.790	89.2	80	120			

Sample ID	MB-2649		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals				
Client ID:	PBS		Batch ID:	2649		RunNo:	3876				
Prep Date:	6/29/2012		Analysis Date:	7/6/2012		SeqNo:	110447		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Silver	ND	0.25									

Sample ID	LCS-2649		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 2649		RunNo: 3876					
Prep Date:	6/29/2012		Analysis Date: 7/6/2012		SeqNo: 110448		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.4	0.25	5.000	0.09350	86.7	80	120			

### Qualifiers:

\*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

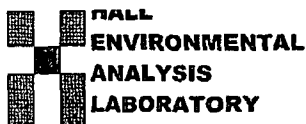
R RPD outside accepted recovery limits

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



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: 1206C32

Received by/date:

Logged By: Lindsay Mangin

6/29/2012 9:45:00 AM

Completed By: Lindsay Mangin

6/29/2012 10:04:36 AM

Reviewed By:

### 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° C to 6.0°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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

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

☐ Standard ☒ Rush One day

CoP Ute SWD #1

Project #:

**Project Manager:**

D. Watson

Sampler: D Watson

Office: ☒ Yes ☐ No

Sample Temperature: 13

Container Type and #	Material	Quantity	Weight	Volume	Value	Notes
1	...	...	...	...	...	...
2	...	...	...	...	...	...
3	...	...	...	...	...	...
4	...	...	...	...	...	...
5	...	...	...	...	...	...
6	...	...	...	...	...	...
7	...	...	...	...	...	...
8	...	...	...	...	...	...
9	...	...	...	...	...	...
10	...	...	...	...	...	...
11	...	...	...	...	...	...
12	...	...	...	...	...	...
13	...	...	...	...	...	...
14	...	...	...	...	...	...
15	...	...	...	...	...	...
16	...	...	...	...	...	...
17	...	...	...	...	...	...
18	...	...	...	...	...	...
19	...	...	...	...	...	...
20	...	...	...	...	...	...
21	...	...	...	...	...	...
22	...	...	...	...	...	...
23	...	...	...	...	...	...
24	...	...	...	...	...	...
25	...	...	...	...	...	...
26	...	...	...	...	...	...
27	...	...	...	...	...	...
28	...	...	...	...	...	...
29	...	...	...	...	...	...
30	...	...	...	...	...	...
31	...	...	...	...	...	...
32	...	...	...	...	...	...
33	...	...	...	...	...	...
34	...	...	...	...	...	...
35	...	...	...	...	...	...
36	...	...	...	...	...	...
37	...	...	...	...	...	...
38	...	...	...	...	...	...
39	...	...	...	...	...	...
40	...	...	...	...	...	...
41	...	...	...	...	...	...
42	...	...	...	...	...	...
43	...	...	...	...	...	...
44	...	...	...	...	...	...
45	...	...	...	...	...	...
46	...	...	...	...	...	...
47	...	...	...	...	...	...
48	...	...	...	...	...	...
49	...	...	...	...	...	...
50	...	...	...	...	...	...
51	...	...	...	...	...	...
52	...	...	...	...	...	...
53	...	...	...	...	...	...
54	...	...	...	...	...	...
55	...	...	...	...	...	...
56	...	...	...	...	...	...
57	...	...	...	...	...	...
58	...	...	...	...	...	...
59	...	...	...	...	...	...
60	...	...	...	...	...	...
61	...	...	...	...	...	...
62	...	...	...	...	...	...
63	...	...	...	...	...	...
64	...	...	...	...	...	...
65	...	...	...	...	...	...
66	...	...	...	...	...	...
67	...	...	...	...	...	...
68	...	...	...	...	...	...
69	...	...	...	...	...	...
70	...	...	...	...	...	...
71	...	...	...	...	...	...
72	...	...	...	...	...	...
73	...	...	...	...	...	...
74	...	...	...	...	...	...
75	...	...	...	...	...	...
76	...	...	...	...	...	...
77	...	...	...	...	...	...
78	...	...	...	...	...	...
79	...	...	...	...	...	...

Preservative Type	Concentration (%)	Shelf Life (Months)	Stability Index
Sodium Benzoate	0.1	6	98
Potassium Sorbate	0.05	12	95
Natural Preservatives	Varies	3-6	90-95

# HEAL No

1706632

2-402	NON
Meditation	Meditation

2-402	non
modif	asset

1-402	—
-------	---

--	--

--	--

--	--

--	--

--	--


[illegible]


Received by	
-------------	--

Received by: Ch. H. L. L. L.

Received by:                     

*[Handwritten signature]*

Date	Time
------	------

6/28/12 1604

Date \_\_\_\_\_ Time \_\_\_\_\_

0045

Remarks:

Bill to Crozo Phillips



## 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: 6/28/12	Time: 11004	Relinquished by: Derek Watson
------------------	----------------	----------------------------------

Date:	Time:	Relinquished by:
6/28/12	11:48	Chas. F. [unclear]

If necessary, samples submitted to Hall Environmental

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This carries no notice of this possibility. Any such subcontracted data will be subject to the same quality control procedures as data generated by Hall Environmental.