<u>District I</u> 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

Revised August 8, 2011

Form C-141

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

**Release Notification and Corrective Action** 

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

_					_	<b>OPERA</b>	FOR		Initia	al Report	$\boxtimes$	Final Rep	ort
				il & Gas Comp	oany	Contact Cr	ystal Tafoya						
Address 340			gton, NM				No.(505) 326-98	337					
Facility Nan	ne: Ute SV	WD 1				Facility Typ	e: SWD						
Surface Own	ner <b>Triba</b> l	 		Mineral	Owner T	Tribal (I-22	-IND-2772)	-	API No.3004511475				
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Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/	West Line	County			
M	11	32N_	14W	560		South	315		West	San Juan			
				Latitude	<u>36.99709</u>	<u> Longitud</u>	le <u>108.28589</u>						
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Type of Relea		luced Fluids			. — .	Volume of	<del></del>	yds3		Recovered	Non	<u>e</u>	
Source of Re	lease Pro	duction Tank	ζ			Unknown	lour of Occurrence	ce 		Hour of Dise er 6, 2012	covery		
Was Immedia	te Notice C					If YES, To	Whom?						
			∣ Yes ∟	No Not	Required				R	CVD FEB	27'1	3	
By Whom?						Date and I			1	III CONS.	Till		
Was a Watero	course Read		Yes 🛛 I	No		If YES, Vo	olume Impacting	the Wa	tercourse.	DIST.	5		
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If a Watercou	irse was Im	pacted, Descr	ibe Fully.	*									
IVA													
Describe Cau			dial Actio	n Taken.*									
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I hereby certi	fy that the i	information g	iven above	e is true and con	nolete to the	he best of my	knowledge and u	ınderst	and that purs	suant to NM	OCD n	ıles and	
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Signature:		. /	1		}	Approved by	Environmental S	enaciali	«:\\	K) 121	\ <b>V</b>		
Printed Name	Crvetal	Tafova				rippioved by	Environmental 3	peciali	Johan	1. Kel	My.		
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Title: Field I	Environme	ntal Specialis	st			Approval Da	10: 0/0/201		Expiration	Date:			
E-mail Addre	ess: crystal.	tafoya@cono	cophillips.	com		Conditions o	f Approval:			Attached	П		
Date: 2/26/2	013	Phone:	(505) 326	-9837									
Attach Addit							77121	11-		<del></del>			



February 14, 2013

Crystal Tafoya ConocoPhillips San Juan Business Unit Office 214-05 5525 Hwy 64 Farmington, New Mexico 87401 Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

**RE:** Release Assessment and Final Excavation Report

Ute SWD #1

San Juan County, New Mexico

Dear Ms. Tafoya:

On September 6, October 22, and October 25, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Ute SWD #1, located in San Juan County, New Mexico. The historical release was discovered when CoP contractors moved a production tank at the location. The initial release assessment was completed by AES on September 6, 2012. The final excavation was completed by CoP contractors prior to AES' arrival to the location on October 25, 2012.

#### 1.0 Site Information

#### 1.1 Location

Location – SW¼ SW¼, Section 11, T32N, R14W, San Juan County, New Mexico Release Latitude/Longitude – N36.99658 and W108.28753, respectively Land Jurisdiction – Ute Mountain Ute Tribe

Figure 1 – Topographic Site Location Map

Figure 2 – Aerial Site Map, September 2012

#### 1.2 Risk 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.

Prior to site work, the NMOCD database was reviewed, and a below grade tank permit application dated September 2010 reported the depth to groundwater at the location as 135 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 (<a href="http://ford.nmt.edu/react/project.html">http://ford.nmt.edu/react/project.html</a>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs. An unnamed ephemeral wash which drains to Little Barker Arroyo is located approximately 800 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 (August 1993).

#### 1.3 Assessments

AES was initially contacted by Ashley Maxwell of CoP on September 4, 2012, and on September 6, 2012, Heather Woods and Zachary Trujillo of AES completed the release assessment field work. The assessment included collection and field screening of 23 soil samples from 11 soil borings (SB-1 through SB-11). Based on the field screening and laboratory analytical results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On October 22, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-1 through SC-5) of the walls and base of the excavation. Based on field screening and laboratory analytical results, AES recommended further excavation of the release area. On October 25, 2012, AES returned to the location to collect additional confirmation soil samples (SC-6, SC-7, and SC-8) from the north, south, and west walls of the expanded excavation. The final excavation was approximately 56 feet by 47 feet by 14 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

### 2.0 Soil Sampling

A total of 23 soil samples (SB-1 through SB-11) and 8 composite samples (SC-1 through SC-8) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Five of the soil samples collected during the initial

assessment (SB-3, SB-8, SB-10, and SB-11) and five composite soil samples (SC-2, SC-3, SC-5, SC-7, and SC-8) collected during the excavation were also submitted for confirmation 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 U.S. Environmental Protection Agency (USEPA) Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

### 2.2 Laboratory Analyses

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

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

Composite soil samples SC-2, SC-5, SC-7, and SC-8 were also analyzed for:

 Toxicity characteristic leaching procedure (TCLP) Resource Conservation and Recovery Act (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.

Composite samples SC-1 and SC-6 were analyzed for TCLP RCRA 8 metals only.

### 2.3 Field Screening and Laboratory Analytical Results

On September 6, 2012, initial assessment field screening readings for VOCs via OVM ranged from 28.5 ppm in SB-9 up to 4,629 ppm in SB-4. Field TPH concentrations ranged from 73.2 mg/kg in SB-3 to greater than 10,000 mg/kg in SB-1, SB-2, and SB-6.

On October 22 and October 25, 2012, final excavation field screening results for VOCs via OVM ranged from 4.5 ppm in SC-6 up to 3,502 ppm in SC-1. Field TPH concentrations ranged from 27.9 mg/kg in SC-6 to greater than 2,500 mg/kg in SC-4. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Table 1. Soil Field Screening VOCs and TPH Results
Ute SWD #1 Release Assessment and Final Excavation
September and October 2012

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
		CD Action Level*	100	1,000
		0.5' horizontal	2,207	>10,000
SB-1	9/6/12	2' horizontal	3,710	NA
30-1	9/0/12	3' horizontal	2,294	NA
		4' horizontal	3,444	NA
		1	112	NA
SB-2	9/6/12	2	1,920	>10,000
		3	417	NA
-		1	208	73.2
SB-3	9/6/12	2	148	118
		3	124	129
		0.5	2,803	NA
SB-4	9/6/12	2	4,412	NA
		3	4,629	2,330
CD F	0/6/12	1	4,315	NA
SB-5	9/6/12	2	950	1,920

Crystal Tafoya Ute SWD #1 Release Assessment and Final Excavation Report February 14, 2013 Page 5 of 8

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
	NMO	CD Action Level*	100	1,000
		. 1	842	>10,000
SB-6	9/6/12	2	685	NA
		3	195	NA
SB-7	9/6/12	1	42.0	90.9
SB-8	9/6/12	4	1,750	1,070
SB-9	9/6/12	0.5	28.5	282
SB-10	9/6/12	0.5	215	567
SB-11	9/6/12	1	175	178
SC-1	10/22/12	1 to 14	3,502	1,960
SC-2	10/22/12	1 to 14	769	419
SC-3	10/22/12	1 to 14	946	1,010
SC-4	10/22/12	1 to 14	1,088	>2,500
SC-5	10/22/12	1 to 14	344	233
SC-6	10/25/12	1 to 14	4.5	27.9
SC-7	10/25/12	1 to 14	189	704
SC-8	10/25/12	1 to 14	118	220

NA - not analyzed

Laboratory analyses for SB-3, SB-8, SB-10, and SB-11 were used to confirm field screening results from the initial assessment. Benzene concentrations were reported at less than 0.050 mg/kg and less than 0.12 mg/kg. Total BTEX concentrations ranged from less than 0.25 mg/kg (SB-3) to 13 mg/kg (SB-8). The TPH concentration (as GRO/DRO) in SB-8 was reported at 420 mg/kg.

Laboratory analytical results of SC-1 through SC-8 were used to confirm field screening results during excavation activities. Benzene concentrations were reported at less than 0.12 mg/kg and 0.25 mg/kg. Total BTEX concentrations were reported below detection limits (1.12 mg/kg and 1.25 mg/kg), except in SC-3 with 1.7 mg/kg. TPH concentrations

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

as GRO/DRO were reported at 1,120 mg/kg in SC-3. Results are presented in Table 2 and on Figures 3 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
Ute SWD #1 Release Assessment and Final Excavation
September and October 2012

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMO	CD Action Le	vel*	10	50	1,0	000
SB-3	9/6/12	1	<0.050	<0.25	NA	NA
SB-8	9/6/12	4	<0.12	13	160	260
SB-10	9/6/12	0.5	<0.12	<1.12	NA	NA
SB-11	9/6/12	1	<0.12	5.9	NA	NA
SC-2	10/22/12	1 to 14	<0.25	<1.25	NA	NA
SC-3	10/22/12	1 to·14	<0.25	1.7	120	1,000
SC-5	10/22/12	1 to 14	<0.25	<1.25	NA	NA
SC-7	10/25/12	1 to 14	<0.12	<1.12	NA	NA
SC-8	10/25/12	1 to 14	<0.12	<1.12	NA	NA

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

Samples SC-1, SC-2, and SC-5 through SC-8 were laboratory analyzed for TCLP RCRA (8) metals per Ute Mountain Ute Tribe Environmental Programs Department (EPD) guidelines. Laboratory analytical results for TCLP RCRA 8 metals were reported below laboratory detection limits in each sample. Results are presented in Table 3, and laboratory analytical reports are attached.

Table 3. Laboratory Analytical Results – TCLP RCRA (8) Metals
Ute SWD #1 Release Assessment and Final Excavation
September and October 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)
Ute Mour Stand		0.39	15,000	70	120,000	400	390	390	23
SC-1	09/06/12	<5.0	<100	<1.0	<5.0	<5.0	<1.0	<5.0	<0.020
SC-2	10/22/12	<5.0	<100	<1.0	<5.0	<5.0	<1.0	<5.0	<0.020
SC-5	10/22/12	<5.0	<100	<1.0	<5.0	<5.0	<1.0	<5.0	<0.020
SC-6	10/25/12	<5.0	<100	<1.0	<5.0	<5.0	<1.0	<5.0	<0.020
SC-7	10/25/12	<5.0	<100	<1.0	<5.0	<5.0	<1.0	<5.0	<0.020
SC-8	10/25/12	<5.0	<100	<1.0	<5.0	<5.0	<1.0	<5.0	<0.020

#### 3.0 Conclusions and Recommendations

On September 6, 2012, AES conducted an initial assessment associated with a historical release discovered when CoP contractors moved production tanks at the Ute SWD #1. Action levels for this release were determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a ranking of 10. Field screening showed results above the NMOCD action level of 100 ppm VOCs in SB-1 through SB-6 and SB-8, with the highest VOC concentrations reported in SB-4 with 4,629 ppm. Field screening TPH results above the NMOCD action level of 1,000 mg/kg were reported in SB-1, SB-2, SB-4 through SB-6, and SB-8. The highest TPH concentrations were reported in SB-1, SB-2, and SB-6 with concentrations greater than 10,000 mg/kg. Laboratory analytical results from September 6, 2012, reported benzene and total BTEX concentrations below the applicable NMOCD action levels in SB-3, SB-8, SB-10, and SB-11. TPH concentrations as GRO/DRO in SB-8 were reported below the NMOCD action level with 420 mg/kg.

On October 22 and 25, 2012, final clearance of the excavation area was completed. Field screening results of the excavation showed that VOC concentrations exceeded the NMOCD action level of 100 ppm in three of the final walls and base of the excavation. However, laboratory analytical results from October 22 and 25, 2012, reported benzene and total BTEX concentrations below applicable NMOCD action levels in SC-2, SC-5, SC-7, and SC-8. Field TPH concentrations were reported below the NMOCD action level of

1,000 mg/kg in each of the final four walls and base of the excavation. Laboratory analytical results for TCLP RCRA 8 metals were reported below Ute Mountain Ute standards in the final four walls and base of the excavation.

Based on the final field screening results of the excavation of petroleum contaminated soils at the Ute SWD #1, benzene, total BTEX, TPH, and TCLP RCRA 8 metal concentrations were below applicable NMOCD and Ute Mountain Ute action levels for each of the final sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,

Heather M. Woods Staff Geologist

Aleather M. Woods

Elizabeth McNally, PE

Elizabeth V MeNdly

#### Attachments:

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, September 2012

Figure 3. Initial Assessment Sample Locations and Results, September 2012

Figure 4. Final Excavation Sample Locations and Results, October 2012

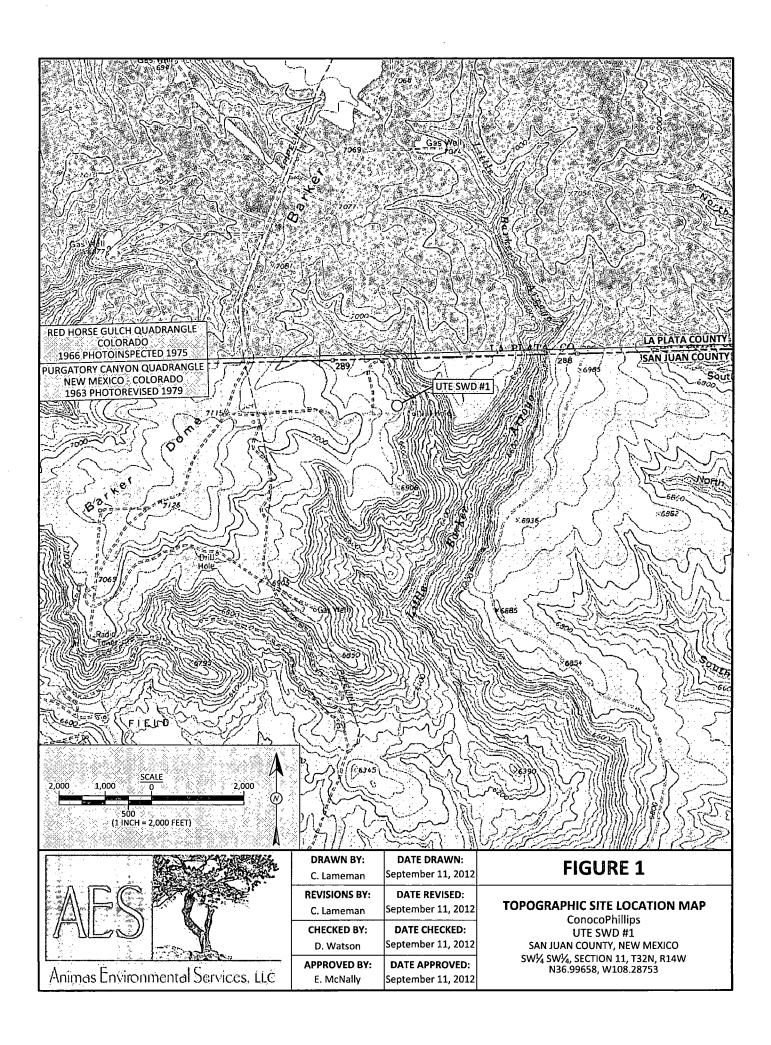
AES Field Screening Report 090612

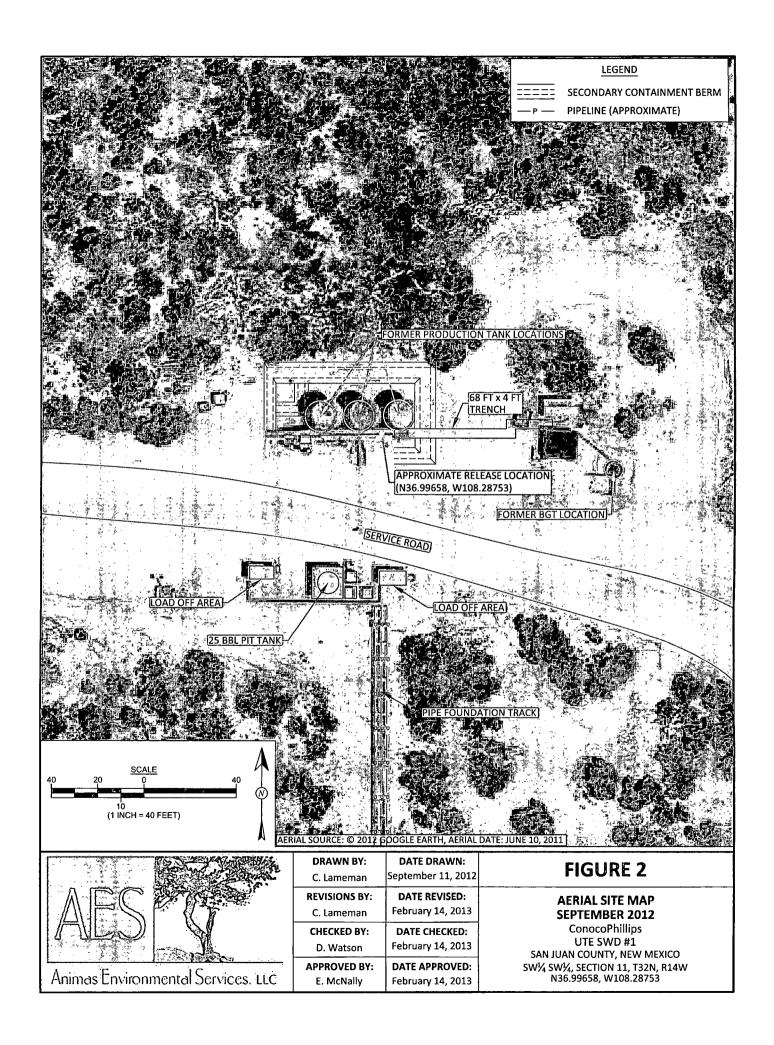
AES Field Screening Report 102212

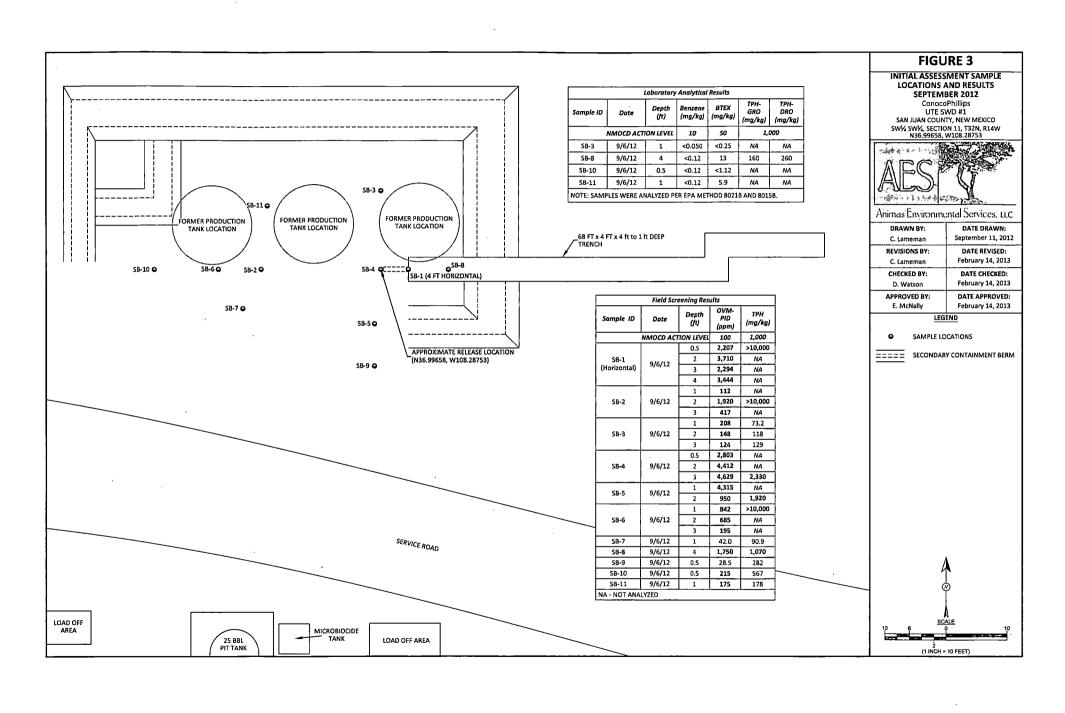
AES Field Screening Report 102512

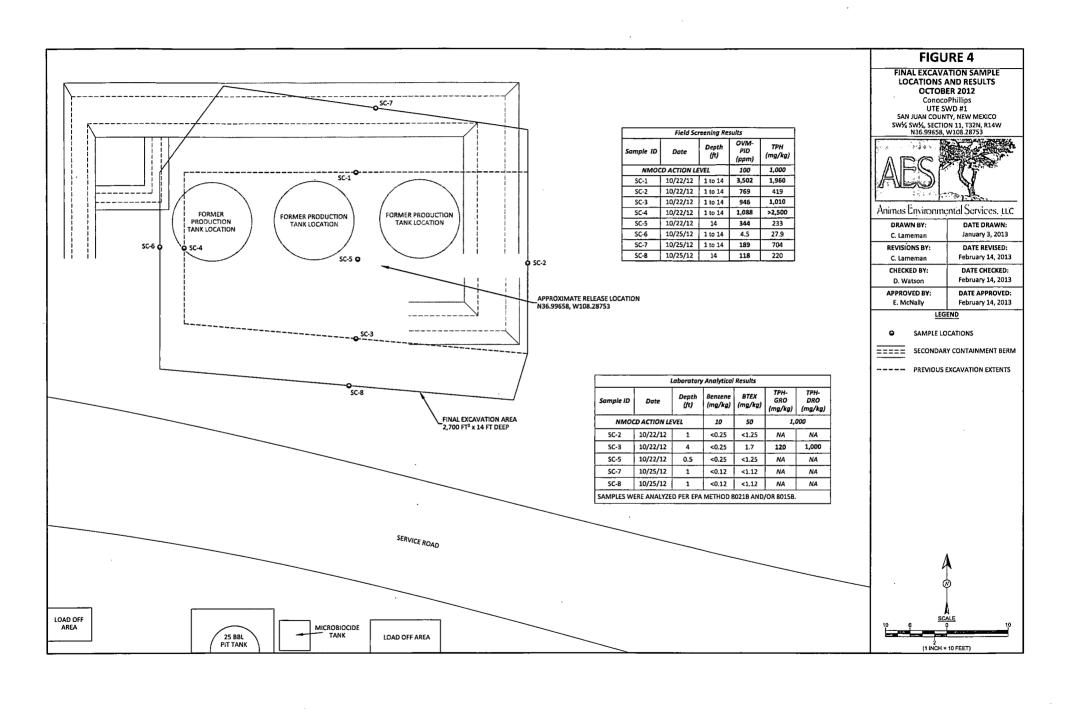
Hall Laboratory Analytical Reports 1209276, 1210A32, and 1210C09

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# **AES Field Screening Report**

Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

Client: ConocoPhillips

Project Location: Ute SWD #1

Date: 9/6/2012

Matrix: Soil

				T						
Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials		
SB-1 @ 0.5' (horizontal)	9/6/2012	9:42	2,207	11:14	>10,000	100	1	HMW		
SB-1 @2' (horizontal)	9/6/2012	9:46	3,710		Not A	nalyzed for T	· РН			
SB-1 @ 3' (horizontal)	9/6/2012	9:50	2,294		Not A	nalyzed for T	<b>ГРН</b>			
SB-1 @ 4' (horizontal)	9/6/2012	9:54	3,444		Not Ai	nalyzed for T	·РН			
SB-2 @ 1'	9/6/2012	10:00	112		Not A	nalyzed for T	РΗ			
SB-2 @ 2'	9/6/2012	10:05	1,920	11:18	>10,000	100	1	HMW		
SB-2 @ 3'	9/6/2012	10:10	417		Not A	nalyzed for T	РΗ			
SB-3 @ 1'	9/6/2012	10:14	208	13:12	73.2	20.0	1	HMW		
SB-3 @ 2'	9/6/2012	10:18	148	11:24	118	20.0	1	HMW		
SB-3 @ 3'	9/6/2012	10:22	124	11:55	129	20.0	1	HMW		
SB-4 @ 0.5'	9/6/2012	10:30	2,803		Not Ai	nalyzed for T	РН			
SB-4 @ 2'	9/6/2012	10:34	4,412	Not Analyzed for TPH						
SB-4 @ 3'	9/6/2012	10:37	4,629	11:16	2,330	20.0	1	HMW		
SB-5 @ 1'	9/6/2012	10:40	4,315	Not Analyzed for TPH						
SB-5 @ 2'	9/6/2012	10:43	950	11:21	1,920	20.0	1	HMW		

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-6 @ 1'	9/6/2012	10:47	842	12:01	>10,000	100	1	HMW
SB-6 @ 2'	9/6/2012	10:51	685		Not Ai	nalyzed for T	<b>Р</b> Н	
SB-6 @ 3'	9/6/2012	10:53	195		Not Ai	nalyzed for T	<b>Р</b> Н	
SB-7 @ 1'	9/6/2012	10:58	42.0	11:58	90.9	20.0	1	HMW
SB-8 @ 4'	9/6/2012	12:14	1,750	12:47	1,070	20.0	1	HMW
SB-9 @ 0.5'	9/6/2012	12:22	28.5	12:49	282	20.0	1	HMW
SB-10 @ 0.5'	9/6/2012	12:28	215	12:53	567	20.0	1	HMW
SB-11 @ 1'	9/6/2012	12:36	175	12:56	178	20.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL

**Practical Quantitation Limit** 

Analyst:

Heather M. Woods

ND

Not Detected at the Reporting Limit

DF NA Dilution Factor Not Analyzed

Report Finalized: 09/06/12

# **AES Field Screening Report**

AES

Animas Environmental Services, LLC

Debrah Water

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

Client: ConocoPhillips

Project Location: Ute SWD #1

Date: 10/22/2012

Matrix: Soil

	Collection	Collection	Sample	OVM	Time of Sample	Field TPH*	TPH PQL		TPH Analysts
Sample ID	Date	Time	Location	(ppm)	Analysis	(mg/kg)	(mg/kg)	DF	Initials
SC-1	10/22/2012	12:15	North Wall	3,502	13:10	1,960	20.0	1	DAW
SC-2	10/22/2012	12:20	East Wall	769	13:15	419	20.0	1	DAW
SC-3	10/22/2012	12:25	South Wall	946	13:18	1,010	20.0	1	DAW
SC-4	10/22/2012	12:28	West Wall	1,088	13:20	>2,500	20.0	1	DAW
SC-5	10/22/2012	12:30	Base	344	13:23	233	20.0	1	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor NA Not Analyzed Analyst:

## **AES Field Screening Report**

AES V

Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

Client: ConocoPhillips

Project Location: Ute SWD #1

Date: 10/25/2012

Matrix: Soil

	17.64.15			1					
Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	10/25/2012	12:14	West Wall	4.5	12:55	27.9	20.0	1	HMW
SC-7	10/25/2012	12:17	North Wall	189	12:57	704	20.0	1	HMW
SC-8	10/25/2012	12:20	South Wall	118	12:59	220	20.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL

**Practical Quantitation Limit** 

ND

Not Detected at the Reporting Limit

DF NA Dilution Factor

Not Analyzed

Heather M. Woods

Analyst:



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

OrderNo.: 1209276

September 14, 2012

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

FAX

RE: COP Ute SWD #1

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/8/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order 1209276

Date Reported: 9/14/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

Client Sample ID: SB-8 @ 4'

Project: COP Ute SWD #1

**Collection Date:** 9/6/2012 12:14:00 PM

**Lab ID:** 1209276-001

Matrix: SOIL

Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	SE ORGANICS					Analyst: JMP
Diesel Range Organics (DRO)	260	97		mg/Kg	10	9/10/2012 12:27:57 PM
Surr: DNOP	0	77.6-140	s	%REC	10	9/10/2012 12:27:57 PM
EPA METHOD 8015B: GASOLINE RA	ANGE					Analyst: NSB
Gasoline Range Organics (GRO)	160	25		mg/Kg	5	9/10/2012 3:12:18 PM
Surr: BFB	200	84-116	S	%REC	5	9/10/2012 3:12:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	9/10/2012 3:12:18 PM
Toluene	0.83	0.25		mg/Kg	5	9/10/2012 3:12:18 PM
Ethylbenzene	0.61	0.25		mg/Kg	5	9/10/2012 3:12:18 PM
Xylenes, Total	12	0.50		mg/Kg	5	9/10/2012 3:12:18 PM
Surr: 4-Bromofluorobenzene	112	80-120		%REC	5	9/10/2012 3:12:18 PM

#### Qualifiers:

- 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

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Lab Order 1209276

Date Reported: 9/14/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

Client Sample ID: SB-10 @ 0.5'

Project: COP Ute SWD #1

Collection Date: 9/6/2012 12:28:00 PM

Lab ID: 1209276-002

Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	9/10/2012 3:42:32 PM
Toluene	ND	0.25		mg/Kg	5	9/10/2012 3:42:32 PM
Ethylbenzene	ND	0.25		mg/Kg	5	9/10/2012 3:42:32 PM
Xylenes, Total	ND	0.50		mg/Kg	5	9/10/2012 3:42:32 PM
Surr: 4-Bromofluorobenzene	137	80-120	S	%REC	5	9/10/2012 3:42:32 PM

Matrix: SOIL

#### Qualifiers:

- 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

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Lab Order 1209276

Date Reported: 9/14/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

Client Sample ID: SB-11 @ 1'

Project:

COP Ute SWD #1

Collection Date: 9/6/2012 12:36:00 PM

Lab ID:

1209276-003

Matrix: SOIL

Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.12	mg/Kg	5	9/10/2012 4:12:53 PM
Toluene	ND	0.25	mg/Kg	5	9/10/2012 4:12:53 PM
Ethylbenzene	0.71	0.25	mg/Kg	5	9/10/2012 4:12:53 PM
Xylenes, Total	5.2	0.50	mg/Kg	5	9/10/2012 4:12:53 PM
Surr: 4-Bromofluorobenzene	113	80-120	%REC	5	9/10/2012 4:12:53 PM

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Reporting Detection Limit RL

#### Lab Order 1209276

Date Reported: 9/14/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

COP Ute SWD #1

**Lab ID:** 1209276-004

Project:

Matrix: SOIL

Client Sample ID: SB-3 @ 1'

Collection Date: 9/6/2012 10:14:00 AM

Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	9/10/2012 2:42:00 PM
Toluene	ND	0.050	mg/Kg	1	9/10/2012 2:42:00 PM
Ethylbenzene	ND	0.050	mg/Kg	1	9/10/2012 2:42:00 PM
Xylenes, Total	ND	0.10	mg/Kg	1	9/10/2012 2:42:00 PM
Surr: 4-Bromofluorobenzene	93.5	80-120	%REC	1	9/10/2012 2:42:00 PM

Qualifiers:

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

Page 4 of 14

#### Lab Order 1209276

Date Reported: 9/14/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

Project: COP Ute SWD #1

**Lab ID:** 1209276-005

Client Sample ID: SC-1

**Collection Date:** 9/6/2012 2:22:00 PM

Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
MERCURY, TCLP		· · <del>-</del> · · ·			Analyst: <b>JLF</b>
Mercury	ND	0.020	mg/L	1	9/13/2012 9:21:06 AM
EPA METHOD 6010B: TCLP METALS					Analyst: <b>JLF</b>
Arsenic	ND	5.0	mg/L	1	9/14/2012 1:45:00 PM
Barium	ND	100	mg/L	5	9/14/2012 1:50:17 PM
Cadmium	ND	1.0	mg/L	1	9/14/2012 1:45:00 PM
Chromium	ND	5.0	mg/L	1	9/14/2012 1:45:00 PM
Lead	ND	5.0	mg/L	1	9/14/2012 1:45:00 PM
Selenium	ND	1.0	mg/L	1	9/14/2012 1:45:00 PM
Silver	ND	5.0	mg/L	1	9/14/2012 1:45:00 PM

Matrix: SOIL

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1209276

14-Sep-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID MB-3669	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015B: Dies	el Range (	Organics	
Client ID: PBS	Batch	1D: <b>36</b>	69	F	RunNo: 5	402				
Prep Date: 9/10/2012	Analysis D	ate: 9/	10/2012	2 SeqNo: 154019 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		111	77.6	140			
Sample ID LCS-3669	SampT	ype: LC	:S	Tes	tCode: EI	PA Method	8015B: Dies	el Range (	Organics	
Sample ID LCS-3669 Client ID: LCSS	•	ype: LC			tCode: El		8015B: Dies	el Range (	Organics	
·	•	i ID: 36	69	F		402	8015B: Diese	J	Organics	
Client ID: LCSS	Batch	i ID: 36	69 10/2012	F	RunNo: 5 SeqNo: 1:	402		J	Organics RPDLimit	Qual
Client ID: LCSS Prep Date: 9/10/2012	Batch Analysis D	n ID: <b>36</b> ate: <b>9</b> /	69 10/2012	F	RunNo: 5 SeqNo: 1:	402 54022	Units: mg/h	ζg	Ü	Qual

#### Qualifiers:

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

Page 6 of 14

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1209276

Qual

14-Sep-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID 1209273-004ADUP

SampType: DUP

TestCode: EPA Method 8015B: Gasoline Range

Client ID:

**BatchQC** 

Batch ID: R5410

RunNo: 5410

Prep Date:

Analysis Date: 9/10/2012

SeqNo: 154803

Units: µg/L

PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit 120 5.0 4.49 Gasoline Range Organics (GRO)

Surr: BFB

1700

2000

83.0

43.1

185

0

0

21

Qualifiers:

Value exceeds Maximum Contaminant Level.

Е Value above quantitation range

Analyte detected below quantitation limits

RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Reporting Detection Limit

Page 7 of 14

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1209276

14-Sep-12

Client:

Animas Environmental Services

Project:	COP Ute	SWD #1									
Sample ID	5ML RB	SampT	ype: ME	3LK	Tes	tCode: EI	PA Method	8015B: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: <b>R5</b>	410	F	RunNo: 5	410				
Prep Date:		Analysis D	ate: 9/	10/2012	S	SeqNo: 1	54807	Units: mg/k	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	e Organics (GRO)	ND	5.0								
Surr: BFB		940		1000		93.6	84	116			
Sample ID	2.5UG GRO LCS	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015B: Gaso	line Rang	е	
Client ID:	LCSS	Batch	ID: R5	410	F	RunNo: 5	410				
Prep Date:		Analysis D	ate: 9/	10/2012	S	SeqNo: 1	54808	Units: mg/k	ζg		
Analyte	_	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	23	5.0	25.00	0	90.0	74	117			
Surr: BFB		880		1000		87.6	84	116			
Sample ID	1209278-001AMS	SampT	уре: М\$	3	Tes	tCode: El	PA Method	8015B: Gaso	line Rang	е	
Client ID:	BatchQC	Batch	ID: R5	410	F	RunNo: 5	410				
Prep Date:		Analysis D	ate: 9/	10/2012	S	SeqNo: 1	54810	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	20	5.0	19.14	2.021	96.3	70	130			
Surr: BFB		760		765.7		98.9	84	116			
Sample ID	1209278-001AMS	<b>)</b> SampT	ype: <b>M</b> \$	SD.	Tes	tCode: El	PA Method	8015B: Gaso	oline Rang	e	
Client ID:	BatchQC	Batch	ID: R5	410	F	RunNo: 5	410				
Prep Date:		Analysis D	ate: 9/	10/2012	\$	SeqNo: 1	54811	Units: mg/k	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	20	5.0	19.14	2.021	93.8	70	130	2.39	22.1	
Surr: BFB		800		765.7		105	84	116	0	0	

#### Qualifiers:

- 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

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### Hall Environmental Analysis Laboratory, Inc.

WO#:

1209276

14-Sep-12

Client:

**Animas Environmental Services** 

18

Project:

Surr: BFB

COP Ute SWD #1

Sample ID 5ML RB TestCode: EPA Method 8015B: Gasoline Range SampType: MBLK Client ID: PBW Batch ID: R5410 RunNo: 5410 SeqNo: 154800 Prep Date: Analysis Date: 9/10/2012 Units: mg/L SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result PQL Gasoline Range Organics (GRO) ND 0.050 Surr: BFB 19 20.00 93.6 69.8 119

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015B: Gasoline Range Client ID: RunNo: 5410 LCSW Batch ID: R5410 Prep Date: Analysis Date: 9/10/2012 SeqNo: 154801 Units: mg/L **RPDLimit** %REC HighLimit %RPD Qual Analyte Result **PQL** SPK value SPK Ref Val LowLimit Gasoline Range Organics (GRO) 0.45 0.050 0.5000 90.0 75.9 119

20.00

69.8

119

87.6

#### Qualifiers:

- 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

Page 9 of 14

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1209276

14-Sep-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID 1209273-004ADUP TestCode: EPA Method 8021B: Volatiles SampType: DUP Client ID: **BatchQC** Batch ID: R5410 RunNo: 5410 Prep Date: Analysis Date: 9/10/2012 SeqNo: 154817 Units: µg/L %RPD **RPDLimit** Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit Qual Analyte 2.89 105 0.49 0.10 Benzene 0.12 0.10 3.41 34 Toluene 0 22.1 Ethylbenzene ND 0.10 21.9 Xylenes, Total ND 0.30 0 Surr: 4-Bromofluorobenzene 1.9 2.000 94.8 66.1 135 0 0

#### Qualifiers:

- 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

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1209276

14-Sep-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batch	ID: <b>R5</b>	410	F	RunNo: 5	410				
Prep Date:	Analysis D	ate: 9/	10/2012	SeqNo: <b>154818</b>			Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								·
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID 100NG BTEX LC	S Samp1	ype: LC	s	Tes	tCode: E	tiles				
Client ID: LCSS	Batcl	h ID: <b>R5</b>	410	F	RunNo: <b>5</b>	410				
Prep Date:	Analysis [	)ate: 9/	10/2012	S	SeqNo: 1	54819	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	112	76.3	117			
Toluene	1.1	0.050	1.000	0	113	80	120			
Ethylbenzene	1.1	0.050	1.000	0	115	77	116			
Xylenes, Total	- 3.5	0.10	3.000	0	116	76.7	117			
Surr: 4-Bromofluorobenzene	1.2		1.000		122	80	120			S

Sample ID 1209276-004AMS	Samp <sup>-</sup>	Гуре: МS	5	Tes	tCode: E	tiles				
Client ID: SB-3 @ 1'	Batc	h ID: <b>R5</b>	410	F	RunNo: 5	410				
Prep Date:	Analysis [	Date: 9/	10/2012	9	SeqNo: 1	54820	Units: mg/K	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.77	0.050	0.7900	0	97.9	67.2	113			
Toluene	0.82	0.050	0.7900	0.007268	102	62.1	116			
Ethylbenzene	0.84	0.050	0.7900	0.01114	104	67.9	127			
Xylenes, Total	2.6	0.10	2.370	0.06834	107	60.6	134			
Surr: 4-Bromofluorobenzene	0.96				121	80	120			S

Sample ID 1209276-004AM	I <b>SD</b> SampT	уре: М\$	SD	Tes	tCode: E	tiles				
Client ID: SB-3 @ 1'	Batch	n ID: <b>R5</b>	410	F	RunNo: <b>5</b>	410				
Prep Date:	Analysis D	)ate: <b>9</b> /	10/2012	S	SeqNo: 1	54821	Units: mg/K	ξg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HìghLimit	%RPD	RPDLimit	Qual
Benzene	0.76	0.050	0.7900	0	95.8	67.2	113	2.17	14.3	
Toluene	0.79	0.050	0.7900	0.007268	99.6	62.1	116	2.86	15.9	
Ethylbenzene	0.81	0.050	0.7900	0.01114	101	67.9	127	2.70	14.4	
Xylenes, Total	2.5	0.10	2.370	0.06834	104	60.6	134	3.19	12.6	
Surr: 4-Bromofluorobenzene	0.88		0.7900		112	80	120	0	0	

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

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

Page 11 of 14

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1209276

14-Sep-12

Client:

Animas Environmental Services

**Project:** 

COP Ute SWD #1

Sample ID 5ML RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBW	Batch ID: R5410			F	RunNo: 5	410				
Prep Date:	Analysis D	ate: 9/	10/2012	SeqNo: <b>154814</b>			Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	21		20.00		107	69.7	152			

Sample ID 100NG BTEX LC	SampT	ype: LC	s	Tes							
Client ID: LCSW	Batch	ID: R5	410	F	RunNo: <b>5</b>	410					
Prep Date:	Analysis D	ate: 9/	10/2012	S	SeqNo: 1	54815	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	22	1.0	20.00	0	112	80	120				
Toluene	23	1.0	20.00	0	113	80	120				
Ethylbenzene	23	1.0	20.00	0	115	80	120				
Xylenes, Total	69	2.0	60.00	0	116	80	120				
1,2,4-Trimethylbenzene	23	1.0	20.00	0	113	74.3	117				
1,3,5-Trimethylbenzene	23	1.0	20.00	0	117	75.8	117			S	
Surr: 4-Bromofluorobenzene	24		20.00		122	69.7	152				

#### Qualifiers:

- 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, Inc.

WO#: 1209276

14-Sep-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID MB-3727

Prep Date: 9/12/2012

SampType: MBLK

TestCode: MERCURY, TCLP

Client ID:

PBW

Batch ID: 3727

RunNo: 5491

SPK value SPK Ref Val %REC LowLimit

Analysis Date: 9/13/2012

PQL

SeqNo: 156920

Units: mg/L

%RPD

**RPDLimit** 

Qual

Analyte Mercury

ND 0.020

Sample ID LCS-3727

SampType: LCS

TestCode: MERCURY, TCLP

Client ID: **LCSW**  Batch ID: 3727

RunNo: 5491

Prep Date: 9/12/2012

Analysis Date: 9/13/2012

SeqNo: 156921

Units: mg/L

HighLimit

Analyte

Client ID:

Prep Date:

**PQL** 

%REC

HighLimit

120

**RPDLimit** 

Mercury

Result ND

SPK value SPK Ref Val 0.020 0.005000

0 102

80

LowLimit

LowLimit

LowLimit

75

%RPD

Qual

Result

TestCode: MERCURY, TCLP

Sample ID 1209276-005AMS SC-1

SampType: MS

RunNo: 5491

SeqNo: 156924

Units: mg/L

%RPD

Analyte

Result

SPK value SPK Ref Val

%REC

HighLimit

125

**RPDLimit** 

Qual

Qual

Mercury

ND 0.020 0.005000

Batch ID: 3727

Analysis Date: 9/13/2012

90.4

TestCode: MERCURY, TCLP

Client ID: Prep Date:

Sample ID 1209276-005AMSD SC-1

SampType: MSD Batch ID: 3727

RunNo: 5491

Analyte

9/12/2012

9/12/2012

Analysis Date: 9/13/2012

0

SeqNo: 156925

Units: mg/L HighLimit

**RPDLimit** 20

Mercury

Result PQL SPK value SPK Ref Val ND 0.020 0.005000

%REC

91.0

75

125

%RPD

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits J

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit Page 13 of 14

RPD outside accepted recovery limits

Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1209276

14-Sep-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID 1209198-001AMS	SampT	ype: <b>M</b> S	6	Tes	P Metals					
Client ID: BatchQC	Batch	1D: <b>37</b>	40	F	RunNo: 5	534				
Prep Date: 9/13/2012	Analysis D	ate: <b>9</b> /	14/2012	S	SeqNo: 1	58309	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	107	75	125			
Cadmium	ND	1.0	0.5000	0	108	75	125			
Chromium	ND	5.0	0.5000	0	99.3	75	125			
Lead	ND	5.0	0.5000	0.002600	103	75	125			

Sample ID 1209198-001AN	<b>/ISD</b> SampT	уре: М\$	SD	Tes	tCode: E	PA Method	Metals			
Client ID: BatchQC	Batch	1D: <b>37</b>	40	F	RunNo: 5	534				
Prep Date: 9/13/2012	Analysis D	ate: <b>9</b> /	14/2012	S	SeqNo: 1	58310	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	109	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	108	75	125	0	20	
Chromium	ND	5.0	0.5000	0	99.7	75	125	0	20	
Lead	ND	5.0	0.5000	0.002600	104	75	125	0	20	

#### Qualifiers:

- \* 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

Page 14 of 14



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-410;

## Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: Work Order Number: 1209276 09/08/12 Received by/date: ans Il-Logged By: 9/8/2012 11:15:00 AM **Anne Thorne** Completed By: **Anne Thorne** 9/10/2012 Reviewed By: Chain of Custody 1. Were seals intact? Yes 🗌 No 🔲 Not Present Yes 🗹 No 🗌 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In Yes V No NA 🗌 4. Coolers are present? (see 19. for cooler specific information) NA 🗍 Yes V No 5. Was an attempt made to cool the samples? NA 🔲 6. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗌 Yes 🗸 No 🗌 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 🗹 NA  $\square$ 10. Was preservative added to bottles? Yes No No VOA Vials 11 VOA vials have zero headspace? Yes No 🗸 12. Were any sample containers received broken? # of preserved Yes 🗹 No 🗌 13. Does paperwork match bottle labels? botties checked (Note discrepancies on chain of custody) for pH: Yes 🗸 No 🗌 14. Are matrices correctly identified on Chain of Custody? (<2 or >12 unless noted) Adjusted? Yes 🗹 No 🗌 15. Is it clear what analyses were requested? Yes 🗹 No 🗌 16. Were all holding times able to be met? (If no, notify customer for authorization.) 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 Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By Cooler No 2.8 Good

Chain-of-Custody Record				Turn-Around Time:				2		Si E	B. 5	A.G	14 62			3 A			a """ <i>E</i>	B &		
Client:	Animo	ıs Env	monmental Survices	□ Standard XI Rush Same Day Project Name:				33.5			HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com											
Mailing	Address	6246	E. Comanche	COP Ute SWD#1				4901 Hawkins NE - Albuquerque, NM 87109														
Farmington, NM 87401				Project #:					Tel. 505-345-3975 Fax 505-345-4107													
Phone #: 585-564-2281													Ana	llysis	Rec	ues				France		
email or Fax#:				Project Manager:				_	ly)	sel)				( <del>}</del>								
QA/QC F	<sup>o</sup> ackage: dard		☐ Level 4 (Full Validation)	D. Watson				<b>B</b> (8021)	(Gas o	as/Die	ŀ		٩	PO4,S(	PCB's							
Accreditation  □ NELAP  □ Other				Sampler: H. Woods On fice: 10 Mayes 11 (LITN)					표	2B (C	==	<del>[</del> -7		1 0 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	808						or N	
□ EDD (Type)				Sample Tem		LU INO		4	щ <b>у</b> + 4	) S	141	5 5	<u> </u>	ၙ႞ၔၟိ	les /		0 V				δ	
Date	Time	Matrix	Sample Request ID		Preservative Type			BTEX + MEE	BTEX + MTBE	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	BCBA 8 Metals "T	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (	
7/6/12	1214	5011	5B-8@41	HOOH KIL	MEOHNA		-001	×		X											Ľ	
			SB-10@0.5'	MeOH Kit	NA		-002	×												T	Γ	
			58-11@1'	405 Jan	HOLA		-003	X	İ												Γ	
			5B-3@1'	MEOH KIL YOZZ	MUDH /		004	×											1		Γ	
	1422		SC-1	2 402 Jans			-005						>	<					1			
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	~	D-6		Declaration	· · · · · · · · · · · · · · · · · · ·		<b>-</b>					Ļ								上	L	
Date: 1/1/12 Date:	Time:	Relinquish Relinquish	tha M. Woods	Mustulcele 97/2 1555				Remarks: Bill to Conoco Phillips														
1/7/12	1621	Cha	atus Wolldon milited to Hall Environmental may be subc	Received by: Date Time 9/8/14/11/15						,			- · · · · · · · · · · · · · · · · · · ·									



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

November 02, 2012

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

FAX:

RE: CoP Ute SWD #1

OrderNo.: 1210A32

#### Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/23/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order 1210A32

Date Reported: 11/2/2012

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

CoP Ute SWD #1 Project:

Lab ID: 1210A32-001 Client Sample ID: SC-2

Collection Date: 10/22/2012 12:20:00 PM Received Date: 10/23/2012 10:15:00 AM

DF Analyses Result **RL Qual Units Date Analyzed EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.25 mg/Kg 5 10/23/2012 11:55:24 PM Toluene ND 0.25 mg/Kg 5 10/23/2012 11:55:24 PM Ethylbenzene ND 0.25 mg/Kg 5 10/23/2012 11:55:24 PM ND 0.50 5 Xylenes, Total mg/Kg 10/23/2012 11:55:24 PM 5 Surr: 4-Bromofluorobenzene 105 80-120 %REC 10/23/2012 11:55:24 PM MERCURY, TCLP Analyst: IDC ND 0.020 10/30/2012 4:33:11 PM Mercury mg/L 1 **EPA METHOD 6010B: TCLP METALS** Analyst: ELS Arsenic 10/29/2012 12:50:33 PM ND 5.0 mg/L 1 Barium ND 100 mg/L 5 10/29/2012 12:58:54 PM Cadmium ND 1.0 mg/L 1 10/29/2012 12:50:33 PM Chromium ND 5.0 1 10/29/2012 12:50:33 PM mg/L Lead ND 5.0 1 10/29/2012 12:50:33 PM mg/L Selenium ND 1.0 mg/L 1 10/29/2012 12:50:33 PM Silver ND 5.0 mg/L 1 10/29/2012 12:50:33 PM

Matrix: MEOH (SOIL)

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits 1 of 9

## **Analytical Report**

#### Lab Order 1210A32

Date Reported: 11/2/2012

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

Client Sample ID: SC-3

Project: CoP Ute SWD #1 Collection Date: 10/22/2012 12:25:00 PM

Lab ID: 1210A32-002

Received Date: 10/23/2012 10:15:00 AM Matrix: MEOH (SOIL)

Analyses	Result	RL (	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	SE ORGANICS			•	Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	1000	10	mg/Kg	1	10/23/2012 2:04:51 PM
Surr: DNOP	95.6	77.6-140	%REC	1	10/23/2012 2:04:51 PM
EPA METHOD 8015B: GASOLINE RA	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	120	25	mg/Kg	5	10/24/2012 12:24:12 AM
Surr: BFB	383	84-116	S %REC	5	10/24/2012 12:24:12 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.25	mg/Kg	5	10/24/2012 12:24:12 AM
Toluene	ND	0.25	mg/Kg	5	10/24/2012 12:24:12 AM
Ethylbenzene	ND	0.25	mg/Kg	5	10/24/2012 12:24:12 AM
Xylenes, Total	1.7	0.50	mg/Kg	5	10/24/2012 12:24:12 AM
Surr: 4-Bromofluorobenzene	114	80-120	%REC	5	10/24/2012 12:24:12 AM

Quali	fiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits
- Р Sample pH greater than 2
- Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits 2 of 9

## **Analytical Report**

### Lab Order 1210A32

Date Reported: 11/2/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

CoP Ute SWD #1

Lab ID: 1210A32-003

Project:

Client Sample ID: SC-5

Collection Date: 10/22/2012 12:30:00 PM Matrix: MEOH (SOIL) Received Date: 10/23/2012 10:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: <b>NSB</b>
Benzene	ND	0.25	mg/Kg	5	10/23/2012 11:26:45 PM
Toluene	ND	0.25	mg/Kg	5	10/23/2012 11:26:45 PM
Ethylbenzene	ND	0.25	mg/Kg	5	10/23/2012 11:26:45 PM
Xylenes, Total	ND	0.50	mg/Kg	5	10/23/2012 11:26:45 PM
Surr: 4-Bromofluorobenzene	102	80-120	%REC	5	10/23/2012 11:26:45 PM
MERCURY, TCLP					Analyst: IDC
Mercury	ND	0.020	mg/L	1	10/30/2012 4:34:56 PM
EPA METHOD 6010B: TCLP METALS					Analyst: ELS
Arsenic	ND	5.0	mg/L	1	10/29/2012 1:17:35 PM
Barium	ND	100	mg/L	5	10/29/2012 1:20:33 PM
Cadmium	ND	1.0	mg/L	1	10/29/2012 1:17:35 PM
Chromium	ND	5.0	mg/L	1	10/29/2012 1:17:35 PM
Lead	ND	5.0	mg/L	1	10/29/2012 1:17:35 PM
Selenium	ND	1.0	mg/L	1	10/29/2012 1:17:35 PM
Silver	ND	5.0	mg/L	1	10/29/2012 1:17:35 PM

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits Page 3 of 9

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1210A32

02-Nov-12

Client:

Animas Environmental Services

Project:

CoP Ute SWD #1

Sample ID: MB-4462	Samp1	Гуре: <b>МЕ</b>	BLK	Tes	TestCode: EPA Method 8015B: Diesel Range Organics							
Client ID: PBS	Batcl	h ID: <b>44</b> 0	62	F	RunNo: 6	424						
Prep Date: 10/22/2012	Analysis D	Date: 10	/23/2012	S	SeqNo: 184656			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	ND	10										
Surr: DNOP	9.8		10.00		98.4	77.6	140					
Sample ID: LCS-4462	Samp1	Type: LC	S	Tes	tCode: El	PA Method	8015B: Diese	el Range C	Organics			
Client ID: LCSS	Batcl	h ID: <b>44</b> 0	62	F	RunNo: 6	424						
Prep Date: 10/22/2012	Analysis D	Date: 10	/23/2012	\$	SeqNo: 1	84657	Units: mg/K	ζg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Disast Banga Organics (DDO)	46	10	50.00	0	91.5	52.6	130					
Diesel Range Organics (DRO)	70	10	00.00	•	0							

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1210A32

02-Nov-12

Client:

Animas Environmental Services

Project:

CoP Ute SWD #1

Sample ID: 5ML RB	SampT	SampType: MBLK			tCode: Ef	PA Method	8015B: Gaso	line Rang	е	
Client ID: PBS	Batch	Batch ID: R6438			RunNo: 64	438				
Prep Date:	Analysis D	)ate: 10	/23/2012	9	SeqNo: 18	85196	Units: mg/K	.g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BF8	920		1000		92.0	84	116			
Sample ID: 2.5UG GRO LCS	Samp1	ype: LC	s	TestCode: EPA Method 8015B: Gasoline Range						

Sample ID: 2.5UG GRO LCS	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015B: Gaso	line Rang	е	
Client ID: LCSS	Batch	1D: <b>R6</b>	438	F	RunNo: 6	438				
Prep Date:	Analysis D	ate: 10	/23/2012	8	SeqNo: 1	85197	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	78.6	74	117	,		
Surr: BFB	850		1000		84.5	84	116			

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1210A32

02-Nov-12

Client:

Animas Environmental Services

Project:

CoP Ute SWD #1

Sample ID: 5ML RB	·	ype: ME					8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: <b>R6</b>	438	F	RunNo: 6	438				
Prep Date:	Analysis [	Oate: 10	/23/2012	\$	SeqNo: 1	85253	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene .	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			
Sample ID: 100NG BTEX LCS	Samp	SampType: <b>LCS</b>			TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batcl	h ID: <b>R6</b>	438	F	RunNo: 6	438				
				_						

Sample ID: 100NG BTEX LC	CS Samp	Type: <b>LC</b>	S	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Bato	h ID: <b>R6</b>	438	F	RunNo: 6	438						
Prep Date:	Analysis I	Date: <b>10</b>	)/23/2012	8	SeqNo: 185254 Units: mg				/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	1.0	0.050	1.000	0	102	76.3	117		_			
Toluene	1.0	0.050	1.000	0	103	80	120					
Ethylbenzene	1.0	0.050	1.000	0	104	77	116					
Xylenes, Total	3.2	0.10	3.000	0	105	76.7	117					
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120					

Sample ID: LCS-4403	SampT	ype: LC	s	Tes	Code: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	ID: <b>44</b>	03	F	lunNo: 6	438				
Prep Date: 10/18/2012	Analysis D	ate: 10	0/24/2012	S	eqNo: 1	85273	Units: %RE	С		
Analyte	Result	PQL	SPK value	SPK Ref Val	SPK Ref Val %REC LowLimit HighL				RPDLimit	Qual

 Surr: 4-Bromofluorobenzene
 1.1
 1.000
 107
 80
 120

### Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Page 6 of 9

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1210A32

Qual

02-Nov-12

Client:

Animas Environmental Services

Project:

CoP Ute SWD #1

Sample ID: MB-4584

SampType: mblk

TestCode: MERCURY, TCLP

Client ID: PBW

Batch ID: 4584

RunNo: 6576

Prep Date: 10/30/2012

Analysis Date: 10/30/2012

SPK value SPK Ref Val %REC LowLimit

SeqNo: 189737

Units: mg/L HighLimit

%RPD **RPDLimit** 

Analyte Mercury

Result **PQL** 0.020

Sample ID: LCS-4584

SampType: Ics

TestCode: MERCURY, TCLP

Client ID: LCSW Prep Date: 10/30/2012 Batch ID: 4584

RunNo: 6576

SeqNo: 189738

Units: mg/L

Analyte

Client ID:

Prep Date:

Client ID:

Prep Date:

Result

Analysis Date: 10/30/2012

%REC LowLimit

**PQL** 

SPK value SPK Ref Val

HighLimit 120

Mercury

ND

0.020 0.005000

104

80

%RPD

**RPDLimit** Qual

Sample ID: 1210C09-001AMS

SampType: ms

TestCode: MERCURY, TCLP

BatchQC 10/30/2012 Batch ID: 4584

RunNo: 6576 SeqNo: 189755

Units: mg/L

125

HighLimit

Analyte Mercury

Analysis Date: 10/30/2012 Result **PQL** 

SPK value SPK Ref Val

0

%REC LowLimit

**RPDLimit** %RPD

Qual

Qual

Sample ID: 1210C09-001AMSD

**BatchQC** 

ND

0.020 SampType: msd

TestCode: MERCURY, TCLP

86.1

RunNo: 6576

75

Analyte

10/30/2012

Batch ID: 4584

Analysis Date: 10/30/2012

0.005000

SeqNo: 189756

Units: mg/L

%RPD

**RPDLimit** 

Mercury

Result **PQL** SPK value SPK Ref Val ND 0.020 0.005000

%REC 85.8

LowLimit

75

HighLimit 125

0

20

**Oualifiers:** 

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits J

Sample pH greater than 2

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

RPD outside accepted recovery limits

Page 7 of 9

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1210A32

02-Nov-12

Animas Environmental Services

Client:

CoP Ute SWD #1

Project:

Sample ID: MB-4549 TestCode: EPA Method 6010B: TCLP Metals SampType: MBLK

Client ID: PBW Batch ID: 4549 RunNo: 6546

Prep Date: 10/28/2012 Analysis Date: 10/29/2012 SeqNo: 188996 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0			•					
Chromium	ND	5.0					•	•		
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID: LCS-4549	SampT	Type: <b>LC</b>	:s	Tes	TestCode: EPA Method 6010B: TCLP Metals						
Client ID: LCSW	Batch	h ID: 454	49	F	RunNo: 6	546					
Prep Date: 10/28/2012	Analysis D	)ate: 10	0/29/2012	S	SeqNo: 18	88997	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	ND	5.0	0.5000	0 .	. 116	80	120				
Barium	ND	100	0.5000	0	97.7	. 80	120				
Cadmium	ND	1.0	0.5000	0	106	80	120		•		
Chromium	ND	5.0	0.5000	0	97.0	80	120				
Lead	ND	5.0	0.5000	0	97.7	80	120				
Selenium	ND	1.0	0.5000	0	124	80	120			S	
Silver	ND	5.0	0.1000	0	105	80	120				

Sample ID: 1210A32-001AMS	SampT	ype: MS	5	Tes	tCode: El	PA Method	6010B: TCLP	Metals		
Client ID: SC-2	Batch	n ID: <b>45</b> 4	<b>1</b> 9	F	RunNo: 6	546				
Prep Date: 10/28/2012	Analysis D	ate: 10	/29/2012	S	SeqNo: 1	88999	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.01688	109	75	125			
Cadmium	ND	1.0	0.5000	0	103	75	125			
Chromium	ND	5.0	0.5000	0	92.3	75	125		•	
Lead	ND	5.0	0.5000	0.002700	91.3	75	125			
Selenium	ND	1.0	0.5000	0	109	75	125			
Silver	ND	5.0	0.1000	0	104	75	125			

Sample ID: 1210A32-001AMS	<b>D</b> SampT	ype: MS	D	Tes	tCode: El	PA Method	6010B: TCLP	Metals		
Client ID: SC-2	Batch	1D: <b>45</b> 4	49	F	RunNo: 6	546				
Prep Date: 10/28/2012	Analysis D	ate: 10	/29/2012	8	SeqNo: 1	89000	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.01688	105	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	102	75	125	0	20	
Chromium	ND	5.0	0.5000	0	91.5	75	125	0	20	
Lead	ND	5.0	0.5000	0.002700	91.1	75	125	0	20	

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range Е
- Analyte detected below quantitation limits
- Sample pH greater than 2

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н

RPD outside accepted recovery limits

Not Detected at the Reporting Limit

Page 8 of 9

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1210A32

02-Nov-12

Client:

Animas Environmental Services

Project:

CoP Ute SWD #1

Sample ID: 1210A32-001AMSE	) SampTy	pe: <b>MS</b>	D	Tes	tCode: El	PA Method	6010B: TCL	P Metals		
Client ID: SC-2	Batch	ID: 454	19	F	RunNo: 6	546				
Prep Date: 10/28/2012	Analysis Da	ate: 1 <u>,</u> 0	/29/2012	S	SeqNo: 1	89000	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit_	%RPD	RPDLimit	Qual
Selenium	ND	1.0	0.5000	0	105	75	125	0	20	
Silver	ND	5.0	0.1000	0	104	75	125	0	20	

Sample ID: 1210A32-001AMS	SampT	ype: <b>MS</b>	6	Tes	tCode: El	PA Method	6010B: TCLI	P Metals		
Client ID: SC-2	Batch	1D: <b>45</b> 4	49	F	RunNo: 6	546				
Prep Date: 10/28/2012	Analysis D	ate: 10	/29/2012	8	SeqNo: 1	89004	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	3.638	95.9	75	125			

Sample ID:	1210A32-001AMSE	) SampTy	ре: <b>М</b> .	SD	Tes	tCode: Ei	PA Method	6010B: TCLF	P Metals		
Client ID:	SC-2	Batch	ID: 45	49	F	RunNo: 6	546				
Prep Date:	10/28/2012	Analysis Da	te: 10	0/29/2012	8	SeqNo: 1	89005	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium		ND	100	0.5000	3 638	89.2	75	125	n	20	

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Page 9 of 9



Hall Environmental Analysis Laborator) 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-410. Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Na	ame:	Animas En	rironmental	. /	W	ork Orde	er Numl	ber: 1	210A3	2		
Received	d by/date:_	AG		10/23/16	<u>L</u>							
Logged E	Зу: (	Michelle G	arcia .	10/23/2012 1	0:15:00 AM	1		-Mik	riel Gan riel Gan	i		•
Complete	ed By:	Michelle Ga	arcia	10/23/2012 1	0:32:37 AN	1		min	ul Gar	iù		
Reviewe	d By: 🔙	$\Rightarrow$		10/23/1	2				•			
Chain o	of Custo	dy (		, ,								
1. Wen	e seals int	tact?	ı			Yes [	□ No		Not F	Present 🗹		
2. Is C	hain of Cu	stody comp	lete?			Yes 6	<b>☑</b> No		Not F	Present 🗌		
3. How	was the s	sample deliv	ered?			Courie	ī					
<u>Log In</u>												
4. Cool	lers are pr	esent? (see	19. for cooler	specific Informat	ion)	Yes 8	<b>✓</b> No			na 🗆		
5. Was	an attem	pt made to	cool the sample	es?		Yes 6	<b>☑</b> No			na 🗆		•
6. Wer	e all samp	iles received	d at a temperati	ure of >0° C to (	3.0°C	Yes 6	<b>V</b> No			NA 🗆		
7. Sam	ple(s) in p	roper conta	iner(s)?			Yes [	✓ No					
		-	for indicated te	st(s)?			_ ☑ No	_				
•		•		perly preserved?	•	_	_ ✓ No					
		tive added to				-	☐ No	_		NA 🗆		
								П		A 1.0°-1. [64]		
		e zero head				.00 -	☐ No☐ No		No VO	A Vials 🗹		
	-		ers received bro	oken?		Yes (			[ ;	# of preserved		
		rk match bo incies on ch	ain of custody)			Yes I	M INO	<b></b>		bottles checked for pH:		
14. Are r	matrices c	correctly idea	ntified on Chain	of Custody?		Yes 5	<b>⊘</b> No			,	2 or >12	2 unless noted)
15. Is It o	clear what	analyses w	rere requested?	)			✓ No			Adjusted?		
			e to be met? authorization.)			Yes b	<b>∠</b> No			Checked by	<b>/</b> :	
Special	Handlin	ıg (if app	licable)						L			
17. Was	client not	ified of all d	screpancies wi	th this order?		Yes [	□ No			NA 🗹		
	Person N	otified:			Date:		ė dės m	in a worder strike.		,		
	By Whom	ո: [			Via:	] eMail	☐ Pi	none [	☐ Fax	☐ In Person		
	Regarding	g: [									······································	
	Client Ins	tructions:										}
18. Addit	tional rem	arks:										
19. <u>Cool</u>			1 1	<b>.</b>	1		,			1.		
<u>Cc</u>	ooler No	Temp ºC 1.0		Seal Intact Se	al No Se	eal Date		Signe	d By			
<u>.                                    </u>	<u> </u>	1	<u> </u>		L					_		

Client: Animas Environmental Distandard Rush Sun. du Project Name:    Mailing Address: Lg2+ & Come inche   Cof Ut & SWD # 1	C	hain	-of-Cu	stody Record	Turn-Around	Time:			P.	J	<b>13</b>	91 /a. 1	7 D	<b></b>	AIR	7 T F	3 eF3		LA E	BET	T A S	
Farmung  Pn   NM	Client:	Anim	us En	vironmental	☐ Standard	ÇX, Rush e:	Same day	=-			A	N	AL	Y§	SIS	5 L	A	<b>30</b>				
Farmung  Pn   NM	Mailing	Address	624	E Comanche	1CoP life	SWD #	1	- {	49	01 H	awki	ns N	E -	Alb	ouque	erqu	e, Ni	M 87	'109			
Project Manager:															-							
Project Manager:								32		N. O.											A.,	
Signature   Container   Container   Container   Container   Type and #   Freservative   Type and #   Freservative   Type and #   Freservative   Type and #   Ty			0_00	10001	Project Mana	nger			ζ.	<u></u>						3 1.3.de						
10-22-12   1225   50 \cdot   SC - 2   Meth Kit   Min   - CO   X   M X   X   X   X   X   X   X   X	QA/QC F	ackage:		□ Level 4 (Full Validation)	1 1			(8021)	Gas on	as/Dies				offes	PO4,SO	PCB's						
10-22-12   1225   50 \cdot   SC - 2   Meth Kit   Min   - CO   X   M X   X   X   X   X   X   X   X	<del></del>				Sampler D	14/1/2010	<del></del>		Ξ	99				17	02,	082						
10-22-12   1225   50 \cdot   SC - 2   Meth Kit   Min   - CO   X   M X   X   X   X   X   X   X   X	□ NEL	ĄΡ	□ Othe	r	Onlice	V/wSv/			11.	15E	18.1	4.7	Æ	2/	3,N	1 8		8		l		닏
10-22-12   1225   50 \cdot   SC - 2   Meth Kit   Min   - CO   X   M X   X   X   X   X   X   X   X	□ EDD	(Type)			Samble Trem	oeiature == 1			品	88	4	d S	ᆸ	tals	N.	ides	7	8				_
	Date	Time	Matrix	Sample Request ID			HEALNDEN HOLLOND	BTEX + @	BTEX + MT	TPH Method	TPH (Metho	EDB (Metho	8310 (PNA	RCRA 8 Me	Anions (F,C	8081 Pestic	8260B (VO/	8270 (Semi	即			Air Bubbles
Date: Time: Relinquished by:    10-22-12   1230   Soi   SC-3   1-402	10-22-12	1220	Soil	SC-2		Heat hon	-001	X	7	W				Y								
Dete: Time: Relinquished by:    Dete: Time: Relinquished by:   Received by:   Date   Time   Remarks: Pull to Concrot Phillips     Dete: Time: Relinquished by:   Received by:   Date   Time   Remarks: Pull to Concrot Phillips     Dete: Time: Relinquished by:   Received by:   Date   Time   Remarks: Pull to Concrot Phillips     Dete: Time: Relinquished by:   Received by:   Date   Time   Remarks: Pull to Concrot Phillips     Dete: Time: Relinquished by:   Received by:   Date   Time     Dete: Time: Relinquished by:   Received by:   Date   Time     Dete: Time: Relinquished by:   Received by:   Date   Time     Dete: Time: Relinquished by:   Outland by: Smith     Dete: Date: Time   Remarks: Pull to Concrot Phillips     Dete: Date: Time: Relinquished by:   Outland by: Smith     Dete: Date: Time: Relinquish					I MEOH KUT	Med 4 hon		X	M					-7								
Date: Time: Relinquished by:    Date   Time: Relinquished by:   Received by:   Date   Time   Remarks: Prut in Concrol Pullips     Date: Time: Relinquished by:   Date   Time   Remarks: Prut in Concrol Pullips     Date: Time: Relinquished by:   Date   Time   Remarks: Prut in Concrol Pullips     Date: Time: Relinquished by:   Onders   South     Date: Time: Relinquished by:   Date: Time   Remarks: Prut in Concrol Pullips     Date: Time: Relinquished by:   Onders   South     Date: Time: Relinquished by:   Onders   Onders   South     Date: Time: Relinquished by:   Onders   South     Date: Time:					1 Mest Kut	Nicola		X						λ						$\exists$	十	1
Date: Time: Relinquished by:    Received by:   Date Time   Area 1   Act cords: DISO   Act cords: DISO   Switch   Received by:   Date   Time   Act cords: DISO   Supervisor: Kerdal Passing Diso added TRUS   Supervisor: Kerdal Passing Diso added Tru	14				10/10									~~						1		
Date: Time: Relinquished by:    Received by:   Date Time   Area 1   Act cords: DISO   Act cords: DISO   Switch   Received by:   Date   Time   Act cords: DISO   Supervisor: Kerdal Passing Diso added TRUS   Supervisor: Kerdal Passing Diso added Tru																						
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Date: Time: Relinquished by:    Received by:   Date Time   Area 1   Act cords: DISO   Act cords: DISO   Switch   Received by:   Date   Time   Act cords: DISO   Supervisor: Kerdal Passing Diso added TRUS   Supervisor: Kerdal Passing Diso added Tru	<del>*************</del>	· · · · ·				ļ		+	<u> </u>			-	_					$\sqcup$	<b>  </b>		$\dashv$	_
Date: Time: Relinquished by:    Received by:   Date Time   Area 1   Act cords: DISO   Act cords: DISO   Switch   Received by:   Date   Time   Act cords: DISO   Supervisor: Kerdal Passing Diso added TRUS   Supervisor: Kerdal Passing Diso added Tru	-		<u> </u>		D	<u></u>	D-A- Time	1	لبا	لبا			,		0.4	لــا				ᆚ	<u>.</u>	
10/22/12/1728 Muster Whelen 10/28/12 10/5 act-cords: DEN added TCLP supervisor: Kendal Passing Den added TCLP supervisor: Kendal Passing Den added TCLP	10/	1657	Debn	eh Water	mestr	Weeler	10/22/12/165	7 Ker 7 Kre	nark: . 91° .a.;1	s: Pa 908 -	Uh 94	Co	vir	eor!	سكل	po O1	ide	ا ال	27° (	5ru Sm	iter.	
122/21/728/ Mustic Waller 4 8 10/28/12 105 supervisor. Auch ECA 8	1 - •		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(		را. ر		ad	-cod	ال: ما	20, F	ال . د	ا 1	<u>β</u>	~ <sup>/</sup>	Z	sii)	co	lde	1	TC.L.I	P
	122/12	11728	r -Mu	attent to Hall Environmental and to such		7 10	15/12 10/15		<u> </u>			mara	data	will be	clos	D note	A ted or	<u>لکٹ'</u> د the a	nahdic	<u>LC</u>	<u>KA</u>	<u>\$</u> .

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

OrderNo.: 1210C09

November 20, 2012

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

FAX

RE: COP Ute SWD #1

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/26/2012 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report**

### Lab Order 1210C09

Date Reported: 11/20/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

COP Ute SWD #1 Project:

1210C09-001 Lab ID:

Client Sample ID: SC-6

Collection Date: 10/25/2012 12:14:00 PM

Received Date: 10/26/2012 9:55:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
MERCURY, TCLP					Analyst: IDC
Mercury ·	ND	0.020	mg/L	1	10/30/2012 4:57:47 PM
EPA METHOD 6010B: TCLP METALS					Analyst: <b>JLF</b>
Arsenic	ND	5.0	mg/L	1	10/31/2012 11:46:51 AM
Barium	ND	100	mg/L	1	10/31/2012 11:46:51 AM
Cadmium	ND	1.0	mg/L	1	10/31/2012 11:46:51 AM
Chromium	ND	5.0	mg/L	1	10/31/2012 11:46:51 AM
Lead	ND	5.0	mg/L	1	10/31/2012 11:46:51 AM
Selenium	ND	1.0	mg/L	1	10/31/2012 11:46:51 AM
Silver	ND	5.0	mg/L	1	10/31/2012 11:46:51 AM

Matrix: SOIL

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- Reporting Detection Limit

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits Page 1 of 9

## Date Reported: 11/20/2012

Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

COP Ute SWD #1 Project:

**Lab ID:** 1210C09-002

Client Sample ID: SC-7

Collection Date: 10/25/2012 12:17:00 PM

Matrix: MEOH (SOIL) Received Date: 10/26/2012 9:55:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES				-	Analyst: <b>NSB</b>
Benzene	ND	0.12	mg/Kg	5	10/26/2012 2:07:56 PM
Toluene	ND	0.25	mg/Kg	5	10/26/2012 2:07:56 PM
Ethylbenzene	ND	0.25	mg/Kg	. 5	10/26/2012 2:07:56 PM
Xylenes, Total	ND	0.50	mg/Kg	5	10/26/2012 2:07:56 PM
Surr: 4-Bromofluorobenzene	102	80-120	%REC	5	10/26/2012 2:07:56 PM
MERCURY, TCLP					Analyst: IDC
Mercury	ND	0.020	mg/L	1	11/14/2012 1:00:04 PM
EPA METHOD 6010B: TCLP METALS					Analyst: <b>JLF</b>
Arsenic	ND	5.0	mg/L	1	11/2/2012 1:56:19 PM
Barium	ND	100	mg/L	1	11/2/2012 1:56:19 PM
Cadmium	ND	1.0	mg/L	1	11/2/2012 1:56:19 PM
Chromium	ND	5.0	mg/L	1	11/2/2012 1:56:19 PM
Lead	ND	5.0	mg/L	1	11/2/2012 1:56:19 PM
Selenium	ND	1.0	mg/L	1	11/2/2012 1:56:19 PM
Silver	ND	5.0	mg/L	1 ·	11/2/2012 1:56:19 PM

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- Reporting Detection Limit

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits 2 of 9

## **Analytical Report**

#### Lab Order 1210C09

Date Reported: 11/20/2012

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

Project: COP Ute SWD #1

Lab ID: 1210C09-003 Client Sample ID: SC-8

Collection Date: 10/25/2012 12:20:00 PM Matrix: MEOH (SOIL) Received Date: 10/26/2012 9:55:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.12	mg/Kg	5	10/26/2012 1:10:21 PM
Toluene	ND	0.25	mg/Kg	5	10/26/2012 1:10:21 PM
Ethylbenzene	ND	0.25	mg/Kg	5	10/26/2012 1:10:21 PM
Xylenes, Total	ND	0.50	mg/Kg	5	10/26/2012 1:10:21 PM
Surr: 4-Bromofluorobenzene	103	80-120	%REC	, 5	10/26/2012 1:10:21 PM
MERCURY, TCLP					Analyst: IDC
Mercury	ND	0.020	mg/L	1	11/14/2012 1:01:52 PM
EPA METHOD 6010B: TCLP METALS					Analyst: <b>JLF</b>
Arsenic	ND	5.0	mg/L	1	11/2/2012 1:59:14 PM
Barium	ND	100	mg/L	5	11/2/2012 2:25:40 PM
Cadmium	ND	1.0	mg/L	1	11/2/2012 1:59:14 PM
Chromium	ND	5.0	mg/L	1	11/2/2012 1:59:14 PM
Lead	ND	5.0	mg/L	1	11/2/2012 1:59:14 PM
Selenium	ND	1.0	mg/L	1	11/2/2012 1:59:14 PM
Silver <b>⊀</b>	ND	5.0	mg/L	1	11/2/2012 1:59:14 PM

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- Reporting Detection Limit

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits Page 3 of 9

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1210C09

20-Nov-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID MB-4447	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batch	n ID: 44	47	F	RunNo: 6	512				
Prep Date: 10/22/2012	Analysis D	ate: 10	0/26/2012	\$	SeqNo: 1	88018	Units: mg/k	<b>(</b> g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050						·		
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			
Sample ID LCS-4447	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Ratch	1D: 44	47		PunNo: 6	512				

Sample ID LCS-4447	Sampı	ype: LC	S	ies	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batch	1D: 44	47	F	RunNo: 6	512				
Prep Date: 10/22/2012	Analysis D	ate: 10	0/26/2012	\$	SeqNo: 1	88019	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	76.3	117			
Toluene	1.1	0.050	1.000	0	107	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	. 77	116			
Xylenes, Total	3.3	0.10	3.000	0	110	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		112	80	120			铲

Sample ID 1210970-002AMS	SampT	ype: MS	6	Tes	tCode: E	tiles					
Client ID: BatchQC	Batch	1D: <b>44</b>	47	F	RunNo: 6	512					
Prep Date: 10/22/2012	Date: 10/22/2012 Analysis Date: 10/26/2012					SeqNo: 188025 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.96	0.048	0.9699	0.008249	97.8	67.2	113				
Toluene	0.95	0.048	0.9699	0	98.3	62.1	116				
Ethylbenzene	0.97	0.048	0.9699	0	100	67.9	127				
Xylenes, Total	3.0	0.097	2.910	0.02729	101	60.6	134				
Surr: 4-Bromofluorobenzene 1.1 0.9699				110	80	120					

Sample ID 1210970-002AM	<b>SD</b> SampT	ype: MS	D	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: BatchQC	Batch	1D: 444	47	F	RunNo: 6	512				
Prep Date: 10/22/2012	Analysis D	ate: 10	/26/2012	S	SeqNo: 1	88026	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.048	0.9634	0.008249	95.5	67.2	113	3.10	14.3	
Toluene	0.92	0.048	0.9634	0	95.9	62.1	116	3.07	15.9	
Ethylbenzene	0.95	0.048	0.9634	0	98.2	67.9	127	2.59	14.4	
Xylenes, Total	2.890	0.02729	98.7	60.6	134	2.74	12.6			
Surr: 4-Bromofluorobenzene	0.9634		111	80	120	0	0			

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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## Hall Environmental Analysis Laboratory, Inc.

WO#: 121

1210C09 20-Nov-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Project:	COP Ute	3WD#1									
Sample ID	MB-4584	SampT	ype: mb	olk	Tes	tCode: M	ERCURY, T	CLP			
Client ID:	PBW	Batch	ID: <b>45</b>	84	· F	RunNo: 6	576				
Prep Date:	10/30/2012	Analysis D	ate: 10	)/30/2012	S	SeqNo: 1	89737	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		ND	0.020								
Sample ID	LCS-4584	SampT	ype: Ics	3	Tes	tCode: M	ERCURY, T	CLP			
Client ID:	LCSW	Batch	ID: <b>45</b>	84	R	RunNo: 6	576				
Prep Date:	10/30/2012	Analysis D	ate: 10	)/30/2012	S	SeqNo: 1	89738	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		ND	0.020	0.005000	. 0	104	80	120			
Sample ID	1210C09-001AMS	SampT	ype: ms	<u> </u>	Test	tCode: M	ERCURY, T	CLP			
Client ID:	SC-6	Batch	ID: <b>45</b> 8	84	R	RunNo: 6	576				
Prep Date:	10/30/2012	Analysis D	ate: 10	/30/2012	S	SeqNo: 18	89755	Units: mg/L			
Anglista		Result	PQL	0011	ODK D. CV	V DE0	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LOWLITTIC	i ngiiliii			
Mercury		ND	0.020	0.005000	O O	86.1	75	125			
Mercury	1210C09-001AMS	ND		0.005000	0	86.1		125			
Mercury		ND D SampT	0.020	0.005000 sd	0 Test	86.1	75 ERCURY, T	125			
Mercury Sample ID Client ID:		ND D SampT	0.020 ype: ms	0.005000 sd 84	0 Test	86.1 tCode: <b>M</b>	75 ERCURY, T	125			
Mercury Sample ID Client ID:	SC-6	ND D SampT Batch	0.020 ype: ms	0.005000 sd 84 0/30/2012	0 Test	86.1 Code: <b>M</b>	75 ERCURY, T	125	%RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date:	SC-6	ND SampT Batch Analysis D	0.020 ype: ms i ID: <b>45</b> 8 ate: <b>1</b> 0	0.005000 sd 84 0/30/2012	0 Test R S	86.1 tCode: Mi tunNo: 69 seqNo: 18	75 ERCURY, T 576 89756	125 CLP Units: mg/L			Qual
Sample ID Client ID: Prep Date: Analyte	SC-6 10/30/2012	ND SampT Batch Analysis D Result ND	0.020 ype: ms ID: 458 ate: 10	0.005000 6d 84 0/30/2012 SPK value 0.005000	0 Test R S SPK Ref Val 0	86.1 tCode: Mi tunNo: 69 seqNo: 18 %REC 85.8	75 ERCURY, T 576 B9756 LowLimit	125 CLP Units: mg/L HighLimit 125	%RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Mercury	SC-6 10/30/2012 MB-4800	ND SampT Batch Analysis D Result ND SampT	0.020  ype: ms  ID: 458  ate: 10  PQL  0.020	0.005000 84 84 0/30/2012 SPK value 0.005000 BLK	0 Test R S SPK Ref Val 0 Test	86.1 tCode: Mi tunNo: 69 seqNo: 18 %REC 85.8	75 ERCURY, T 576 89756 LowLimit 75 ERCURY, T	125 CLP Units: mg/L HighLimit 125	%RPD	RPDLimit	Qual
Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID:	SC-6 10/30/2012 MB-4800	ND SampT Batch Analysis D Result ND SampT	0.020  ype: ms ID: 458 ate: 10  PQL 0.020  ype: ME	0.005000 6d 84 0/30/2012 SPK value 0.005000 BLK	0 Test R S SPK Ref Val 0 Test	86.1 tCode: Mitten Mitt	75 ERCURY, T 576 89756 LowLimit 75 ERCURY, T	125 CLP Units: mg/L HighLimit 125	%RPD	RPDLimit	Qual
Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID:	SC-6 10/30/2012 MB-4800 PBW	ND SampT Batch Analysis D Result ND SampT Batch	0.020  ype: ms ID: 458 ate: 10  PQL 0.020  ype: ME	0.005000 6d 84 9/30/2012 SPK value 0.005000 BLK 00 1/14/2012	0 Test R S SPK Ref Val 0 Test	86.1  Code: Mi  RunNo: 65  SeqNo: 18  %REC  85.8  Code: Mi  RunNo: 65  SeqNo: 26	75 ERCURY, T 576 89756 LowLimit 75 ERCURY, T 925	125 CCLP Units: mg/L HighLimit 125	%RPD	RPDLimit	Qual
Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID: Prep Date:	SC-6 10/30/2012 MB-4800 PBW	ND SampT Batch Analysis D Result ND SampT Batch Analysis D	0.020  ype: ms ID: 458 ate: 10  PQL 0.020  ype: ME ID: 486 ate: 11	0.005000 6d 84 9/30/2012 SPK value 0.005000 BLK 00 1/14/2012	0 Test S SPK Ref Val 0 Test R S	86.1  Code: Mi  RunNo: 65  SeqNo: 18  %REC  85.8  Code: Mi  RunNo: 65  SeqNo: 26	75 ERCURY, T 576 89756 LowLimit 75 ERCURY, T 925	125 CLP Units: mg/L HighLimit 125 CLP Units: mg/L	%RPD 0	RPDLimit 20	
Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID: Prep Date: Analyte	SC-6 10/30/2012 MB-4800 PBW 11/13/2012	ND SampT Batch Analysis D Result ND SampT Batch Analysis D	0.020  ype: ms ID: 458 ate: 10  PQL 0.020  ype: ME ID: 486 ate: 11	0.005000 6d 84 9/30/2012 SPK value 0.005000 8LK 00 1/14/2012 SPK value	0 Test R S SPK Ref Val 0 Test R S SPK Ref Val	86.1  Code: Mi  RunNo: 69  REC  85.8  Code: Mi  RunNo: 69  ReqNo: 20  %REC	75 ERCURY, T 576 89756 LowLimit 75 ERCURY, T 925	125 CLP Units: mg/L HighLimit 125 CLP Units: mg/L HighLimit	%RPD 0	RPDLimit 20	
Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID: Prep Date: Analyte Mercury	SC-6 10/30/2012 MB-4800 PBW 11/13/2012	ND SampT Batch Analysis D Result ND SampT Batch Analysis D Result ND SampT SampT	0.020  ype: ms ID: 458 ate: 10  PQL 0.020  ype: ME ID: 486 ate: 11  PQL 0.020	0.005000  6d  84  0/30/2012  SPK value 0.005000  8LK  00  1/14/2012  SPK value	0 Test R S SPK Ref Val 0 Test R S SPK Ref Val	86.1  Code: Mi  RunNo: 69  REC  85.8  Code: Mi  RunNo: 69  ReqNo: 20  %REC	75 ERCURY, T 576 B9756 LowLimit 75 ERCURY, T 925 00355 LowLimit	125 CLP Units: mg/L HighLimit 125 CLP Units: mg/L HighLimit	%RPD 0	RPDLimit 20	
Sample ID Client ID: Prep Date: Analyte Mercury Sample ID Client ID: Prep Date: Analyte Mercury Sample ID Sample ID Client ID: Prep Date: Analyte Mercury	SC-6 10/30/2012 MB-4800 PBW 11/13/2012 LCS-4800 LCSW	ND SampT Batch Analysis D Result ND SampT Batch Analysis D Result ND SampT SampT	0.020  ype: ms ID: 456 ate: 10  PQL 0.020  ype: ME ID: 486 ate: 11  PQL 0.020  ype: LC	0.005000 6d 84 9/30/2012 SPK value 0.005000 8LK 00 1/14/2012 SPK value	0 Test SPK Ref Val 0 Test R SPK Ref Val Test	86.1  Code: Mi  CunNo: 68  REC 85.8  Code: Mi  CunNo: 69  REC  *REC	75 ERCURY, T 576 89756 LowLimit 75 ERCURY, T 925 LowLimit ERCURY, T	125 CLP Units: mg/L HighLimit 125 CLP Units: mg/L HighLimit	%RPD 0	RPDLimit 20	
Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID: Client ID: Client ID:	SC-6 10/30/2012 MB-4800 PBW 11/13/2012 LCS-4800 LCSW	ND SampT Batch Analysis D Result ND SampT Batch Analysis D Result ND SampT Batch	0.020  ype: ms ID: 456 ate: 10  PQL 0.020  ype: ME ID: 486 ate: 11  PQL 0.020  ype: LC	0.005000  ad  84  0/30/2012  SPK value 0.005000  8LK  00  1/14/2012  SPK value	0 Test SPK Ref Val 0 Test R SPK Ref Val Test	86.1  Code: Mi  CunNo: 68  REC  85.8  Code: Mi  CunNo: 69  REC  **REC	75 ERCURY, T 576 89756 LowLimit 75 ERCURY, T 925 LowLimit ERCURY, T	125 CCLP Units: mg/L HighLimit 125 CCLP Units: mg/L HighLimit	%RPD 0	RPDLimit 20	
Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID: Prep Date: Analyte Mercury  Sample ID Client ID: Prep Date:	SC-6 10/30/2012 MB-4800 PBW 11/13/2012 LCS-4800 LCSW	ND SampT Batch Analysis D Result ND SampT Batch Analysis D Result ND SampT Batch Analysis D	0.020  ype: ms ID: 458 ate: 10  PQL 0.020  ype: ME ID: 480 ate: 11  PQL 0.020  ype: LC ID: 480 ate: 11	0.005000  ad  84  0/30/2012  SPK value 0.005000  8LK  00  1/14/2012  SPK value	Test R S SPK Ref Val 0 Test R S SPK Ref Val	86.1  Code: Mi  CunNo: 68  REC  85.8  Code: Mi  CunNo: 69  REC  **REC	75 ERCURY, T 576 89756 LowLimit 75 ERCURY, T 925 00355 LowLimit ERCURY, T 925	125 CLP Units: mg/L HighLimit 125 CLP Units: mg/L HighLimit CLP Units: mg/L	%RPD 0 %RPD	RPDLimit 20 RPDLimit	Qual

## Qualifiers:

Analyte

Mercury

Client ID: BatchQC

Prep Date: 11/13/2012

\* Value exceeds Maximum Contaminant Level.

Batch ID: 4800

Result

ND

Analysis Date: 11/14/2012

**PQL** 

0.020

SPK value SPK Ref Val

0

0.005000

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

75

Units: mg/L

HighLimit

125

%RPD

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RunNo: 6925

99.2

SeqNo: 200361

%REC LowLimit

R RPD outside accepted recovery limits

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Qual

**RPDLimit** 

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1210C09

20-Nov-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID 1211391-001CMSD

SampType: MSD

TestCode: MERCURY, TCLP

Client ID: **BatchQC** 

Batch ID: 4800

RunNo: 6925

Prep Date: 11/13/2012

Analysis Date: 11/14/2012

Analyte

SeqNo: 200362

Units: mg/L

125

Mercury

Result **PQL** SPK value SPK Ref Val

%REC LowLimit HighLimit

%RPD **RPDLimit** Qual

0.005000

98.9

75

0

ND 0.020

20

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2

- Analyte detected in the associated Method Blank В
- Ы Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits

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# Hall Environmental Analysis Laboratory, Inc.

WO#: **1210C09** 

20-Nov-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID MB-4577	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	6010B: TCLF	Metals		
Client ID: PBW	Batch	1D: <b>45</b>	77	F	RunNo: 6	598				
Prep Date: 10/30/2012	Analysis D	ate: 10	0/31/2012	5	SeqNo: 1	90645	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								•
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID LCS-4577	SampT	ype: LC	s	Tes	tCode: El	PA Method	6010B: TCLF	<sup>o</sup> Metals		
Client ID: LCSW	Batch	1D: <b>45</b>	77	F	RunNo: 6	598				
Prep Date: 10/30/2012	Analysis D	ate: 10	0/31/2012	S	SeqNo: 1	90646	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	113	80	120			
Barium	ND	100	0.5000	0	101	80	120			*
Cadmium	ND	1.0	0.5000	0	106	80	120			
Chromium	ND	5.0	0.5000	0	100	80	120			
Lead	ND	5.0	0.5000	0	101	80	120			
Selenium	ND	1.0	0.5000	0	114	80	120			
Silver	ND	5.0	0.1000	0	107	80	120			

Sample ID 1210C00-001AMS	SampT	ype: <b>M</b> S	3	Tes	tCode: E	PA Method	6010B: TCLI	P Metals	· · · ·	
Client ID: BatchQC	Batch	ID: 45	77	F	RunNo: 6	598				
Prep Date: 10/30/2012	Analysis D	ate: 10	0/31/2012	S	SeqNo: 1	90649	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.1840	112	75	125			
Cadmium	ND	1.0	0.5000	0	106	75	125			
Chromium	ND	5.0	0.5000	0.006900	100	75	125			
Lead	ND	5.0	0.5000	0	97.8	75	125			
Selenium	ND	1.0	0.5000	0	105	75	125			
Silver	ND	5.0	0.1000	0.0006000	109	75	125			

Sample ID 1210C00-001AM	SD SampT	ype: MS	SD	Tes	tCode: El	PA Method	6010B: TCL	Metals		·
Client ID: BatchQC	Batch	ID: <b>45</b>	77	F	RunNo: 6	598				
Prep Date: 10/30/2012	Analysis D	ate: 10	)/31/2012	8	SeqNo: 1	90653	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.1840	112	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	104	75	125	0	20	
Chromium	ND	5.0	0.5000	0.006900	98.4	75	125	0	20	
Lead	ND	5.0	0.5000	0	96.7	75	125	0	20	

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1210C09

20-Nov-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID	1210C00-001AMSD	) SampTy	/pe: <b>MS</b>	D	Test	Code: El	PA Method	6010B: TCLI	P Metals		
Client ID:	BatchQC	Batch	ID: <b>45</b>	77	R	tunNo: 6	598				
Prep Date:	10/30/2012	Analysis Da	ate: 10	/31/2012	S	eqNo: 1	90653	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium		ND	1.0	0.5000	0	101	75	125	0	20	
Silver		ND	5.0	0.1000	0.0006000	109	75	125	0	20	

Sample ID MB-4642	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	6010B: TCL	P Metals		
Client ID: PBW	Batch	1D: <b>46</b>	42	F	RunNo: 6	663				
Prep Date: 11/2/2012	Analysis D	ate: 11	1/2/2012	8	SeqNo: 1	92320	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND.	1.0		•						
Silver	ND	5.0				a.				

Sample ID LCS-4642	SampT	ype: LC	s	Tes	tCode: El	PA Method	6010B: TCL	P Metals		
Client ID: LCSW	Batch	1D: 46	42	F	RunNo: 6	663				
Prep Date: 11/2/2012	Analysis D	ate: <b>1</b> 1	1/2/2012	5	SeqNo: 1	92321	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	113	80	120			
Barium	ND	100	0.5000	0	99.8	80	120			
Cadmium	ND	1.0	0.5000	0	106	80	120			
Chromium	ND	5.0	0.5000	0	99.4	80	120			
Lead	ND	5.0	0.5000	0	101	80	120			
Selenium	ND	1.0	0.5000	0	123	80	120			S
Silver	ND	5.0	0.1000	0	107	80	120			

Sample ID 1210C09-003AM	S SampT	ype: MS	3	Tes	tCode: E	PA Method	6010B: TCL	Metals	· · · · · ·	
Client ID: SC-8	Batch	n ID: <b>46</b>	42	F	RunNo: 6	663				
Prep Date: 11/2/2012	Analysis E	)ate: 11	1/2/2012	8	SeqNo: 1	92326	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	111	75	125			
Cadmium	ND	1.0	0.5000	0.001210	104	75	125			
Chromium	ND	5.0	0.5000	0	94.6	75	125			
Lead	ND	5.0	0.5000	0	94.6	75	125			
Selenium	ND	1.0	0.5000	0	112	75	125			
Silver	ND	5.0	0.1000	0	106	75	125			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1210C09

20-Nov-12

Client:

Animas Environmental Services

Project:

COP Ute SWD #1

Sample ID 1210C09-003AMS	SD SampT	ype: MS	SD	Tes	tCode: E	PA Method	6010B: TCLF	Metals	-	
Client ID: SC-8	Batch	ID: <b>46</b> 4	42	F	RunNo: 6	663				
Prep Date: 11/2/2012	Analysis D	ate: 11	/2/2012	5	SeqNo: 1	92327	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	107	75	125	0	20	
Cadmium	ND	1.0	0.5000	0.001210	103	75	125	0	20	
Chromium	ND	5.0	0.5000	0	93.7	75	125	0	20	
Lead	ND	5.0	0.5000	0	93.8	75	125	0	20	
Selenium	ND	1.0	0.5000	0	110	75	125	0	20	
Silver	ND	5.0	0.1000	0	106	75	125	0	20	

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquergue, NM 87105

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: Anima Environmental	Work Order Nur	mber: 1210C09	- · - · · · · · · · · · · · · · · · · ·
Received by/date 10/20/	12		
Logged By: Ashley Gallegos 10/26/2012	2 9:55:00 AM	A	
Completed By: Ashley Gallegos 10/26/2012	2 10:08:25 AM	A	,
Reviewed By: MA 18 20/	()		
Chain of Custody			
1. Were seals intact?	Yes <sup>;;</sup>   N	o : Not Pres	ent 🗸
2. Is Chain of Custody complete?	Yes 🗸 N	o : Not Pres	ent ! !
3. How was the sample delivered?	Courier		
<u>Log In</u>			
4. Coolers are present? (see 19. for cooler specific inform	nation) Yes 🗸 N	o	NA i i
5. Was an attempt made to cool the samples?	Yes 🗸 N	0   ]	NA i;
6. Were all samples received at a temperature of >0° C t	to 6.0°C Yes 🕍 N	o Cl	NA [T]
7 Sample(s) <sup>t</sup> in proper container(s)?	Yes 🗸 N	o i i	<b>*</b>
8. Sufficient sample volume for indicated test(s)?	Yes V N	lo İ İ	
9. Are samples (except VOA and ONG) properly preserve	ed? Yes 🗸 N	lo i i	
10. Was preservative added to bottles?	Yes : N	lo 🕍	NA ! I
11. VOA vials have zero headspace?	Yes N	o i No VOA V	rials 🖄
12. Were any sample containers received broken?	Yes i N		
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🖊 N		f preserved tles checked pH:
14. Are matrices correctly identified on Chain of Custody?	Yes Mi N	lo ii	(<2 or >12 unless noted)
15. Is it clear what analyses were requested?	Yes ✓ N		Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✓ N	lo i !	Checked by:
Special Handling (if applicable)		ı	•
17. Was client notified of all discrepancies with this order?	Yes   N	o I .	NA IVI
Person Notified:  By Whom:  Regarding:  Client Instructions:	Date: Via:   eMail	Phone   Fax	In Person
18. Additional remarks:			
19 Cooler Information  Cooler No Temp °C Condition Seal Intact  1 1.8 Good Yes	Seal No Seal Date	Signed By	

Chain-of-Custody Record		Turn-Around Time:  □ Standard 💢 Rush Same Day /ASAP  Project Name:					2	Ŧ.	<b>9</b> -41 /		E	NV	/TR	20	NN	1EN	TA							
Client: Animas Environmental Services						HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com																		
Mailing Address: 624 E. Comanche			Cop Vte SWD #1			4901 Hawkins NE - Albuquerque, NM 87109																		
Farmington, NM B7401		Project #:			Tel. 505-345-3975 Fax 505-345-4107																			
		-564		]				5		a radia e	. Olikari	or tro	Anal	ysis.	Req	uést		77. A	W. C. W.	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
email o				Project Mana	ger:	75	•		ج	sel)				(*)					$\prod$					
QA/QC Package:  ☐ Level 4 (Full Validation)			D. Watson			<b>RES</b> (8021)	Gas or	as/Die				PO <sub>4</sub> ,S(	PCB's					·						
Accred	itation		r	Sampler: L	<del></del>	(DANO)			+ TPH (	15B (G	18.1	¥)		J <sub>3</sub> ,NO <sub>2</sub> ,	/ 8082		€			SIS				
	(Type)			Sampleticul	educt	<b>S</b> S##		吊	BE	8	4 b	ў   ъ	stals	<u>X</u>	ides	8	9			ĮΣ				
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type			BTEX + 保存配配	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)			Air Bubbles (Y or N)				
10/25/12	1214	Soil	SC-6	2 402 Jars	Non	~ (	001		•				X						П					
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Date:	Time:	Relinquishe	ed by:	Received by: Date Time				Remarks: Bill to Conoco Phillips																
0/25/12 Date:	<b>ルリン</b>	Relinquishe	tha M. Woods do by:	Received by:	Worke	1 <u>147</u> Time	Wo: 9190894 Ana: 1 Ordered by: Eric Smith									uc and								
10/25/12	····	Cho.	other Waller to caller to	Solitariad a other as	10/210/12 1955						Activity Code: DISO Supervisor: Kondal Bassing						A CONTRACTOR OF THE CONTRACT O							