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

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

Santa I	Fe, NM 87505	
Release Notification	on and Corrective Actio	n
	OPERATOR	☐ Initial Report ☐ Final Report
Name of Company Burlington Resources Oil & Gas Company	Contact Lindsay Dumas	
Address 3401 East 30 th St, Farmington, NM	Telephone No.(505) 599-4089	
Facility Name: San Juan 28-6 170M	Facility Type: Gas	
Surface Owner BLM Mineral Owner	BLM (SF-079049B)	API No.3003925772
LOCATIO	ON OF RELEASE	
		/West Line County Rio Arriba
Latitude <u>36.6009</u>	25 Longitude <u>-107.48419</u>	
NATURI	E OF RELEASE	
Type of Release Hydrocarbon	Volume of Release unknown	Volume Recovered 0
Source of Release Production tank	Date and Hour of Occurrence	Date and Hour of Discovery
The state of the s	unknown	8/7/13
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.
☐ Yes ☒ No		RCVD JAN 29 '14
If a Watercourse was Impacted, Describe Fully.*		
•		OIL CONS. DIV.
		DIST. 3
Describe Cause of Problem and Remedial Action Taken.*		
Contaminated soil was associated with a historical release that was	discovered during an equipment rese	et, on August 7, 2013. Third party
environmental was contracted for an assessment.	discovered during an equipment resc	on reagast 7, 2010. Time party
D. J. A. ACC et d. J. Cleanur Action Tales *		
Describe Area Affected and Cleanup Action Taken.* The historical release was discovered during equipment reset on locations.	ation Excepation was 40' Y 45' Y 6'	doon 374 clyds of soil was transported to
IEI land farm and 374 c/yds of clean soil was transported from Azte		
below the regulatory standards – no further remedial action needed		
•		
		·
I hereby certify that the information given above is true and complete to	the best of my knowledge and underst	and that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release		
public health or the environment. The acceptance of a C-141 report by t	he NMOCD marked as "Final Report"	does not relieve the operator of liability
should their operations have failed to adequately investigate and remedia		
or the environment. In addition, NMOCD acceptance of a C-141 report	does not relieve the operator of respon	sibility for compliance with any other
federal, state, or local laws and/or regulations.	OH CONCED	WATION DIVICTORY
Signature: Xmdray I amas	OIL CONSER	VATION DIVISION
Signature. / WWW. L. GOV. GO		(m) / V a/
Printed Name: Lindsay Dumas	Approved by Environmental Speciali	st: Color Color
	0/./11	
Title: Field Environmental Specialist	Approval Date: 7/4/14	Expiration Date:
E-mail Address: Lindsay.Dumas@conocophillips.com	Conditions of Approval:	Augustus 🗖
	, · ·	Attached

* Attach Additional Sheets If Necessary

Phone: (505) 599-4089

Date: 1/28/14

NCS 142 4735411





January 17, 2014

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

Animas Environmental Services Lic

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

Via electronic mail to: SJBUE-Team@ConocoPhillips.com

RE:

Initial Release Assessment and Final Excavation Report

San Juan 28-6 #170M

Rio Arriba County, New Mexico

RCVD JAN 29'14 OIL CONS. DIV. DIST. 3

Dear Ms. Dumas:

On August 6, August 28, and September 4, 2013, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 28-6 #170M, located in Rio Arriba County, New Mexico. The historic contamination was discovered during a facility reset at the location. The initial release assessment was completed by AES on August 6, 2013, and the final excavation was completed by CoP contractors while AES was on location on September 4, 2013.

1.0 Site Information

1.1 Location

Site Name – San Juan 28-6 #170M

Location – NE¼ SE¾, Section 5, T27N, R6W, Rio Arriba County, New Mexico

Well Head Latitude/Longitude – N36.60104 and W107.48479, respectively

Release Location Latitude/Longitude – N36.60123 and W107.48479, respectively

Land Jurisdiction – Bureau of Land Management

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, August 2013

1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release location was given a ranking score of 10 based on the following factors:

- Depth to Groundwater: A cathodic report dated April 1998 reported the depth to groundwater at 100 feet below ground surface (bgs). (10 points)
- Wellhead Protection Area: The release location is not within a wellhead protection area. (0 points)
- Distance to Surface Water Body: The wash in Carrizo Canyon is located approximately 1,250 feet south-southeast of the release location. (0 points)

1.3 Assessment

AES was initially contacted by Dan Rudder of CoP on August 6, 2013, and on the same day, Heather Woods and Jesse Christopherson of AES completed the release assessment field work. The assessment included collection and field screening of 15 soil samples from eight assessment trenches (TH-1 through TH-8) in and around the release area. Based on the field screening results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On August 28, 2013, 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) from the walls and base of the excavation. The area of the final excavation was approximately 36 feet by 35 feet by 3 to 6 feet in depth. The depth of the excavation was limited due to a confining shale unit around 3 to 6 feet bgs. A final confirmation soil sample (SC-6) from the base was collected on September 4, 2013, following application of potassium permanganate. The area of the final excavation was approximately 36 feet by 35 feet by 3 to 6 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 15 soil samples from 8 assessment trenches (TH-1 through TH-8) as well as 6 composite samples (SC-1 through SC-6) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Two samples (TH-2 and TH-3) collected during the initial assessment and three samples (SC-3 to SC-5) collected during the final excavation were 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 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 TH-2, TH-3, and SC-3 to SC-5 were laboratory analyzed for:

 Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B/8260B.

Samples TH-2, TH-3, and SC-5 were also analyzed for:

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

2.3 Field Screening and Laboratory Analytical Results

On August 6, 2013, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 2.3 ppm in TH-7 up to 1,684 ppm in TH-2. Field TPH concentrations ranged from 75.6 mg/kg in TH-5 to 2,740 mg/kg in TH-4.

On August 28 and September 4, 2013, final excavation field screening results for VOCs via OVM ranged from 0.0 ppm in SC-2 up to 1,935 ppm in SC-5. Field TPH ranged from 127 mg/kg in SC-4 up to 2,080 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Table 1. Field Screening VOCs and TPH Results
San Juan 28-6 #170M Initial Release Assessment and Final Excavation
August and September 2013

	<u>~</u>	Sample	VOCs	Field
	Date	Depth	via OVM	TPH
Sample ID	Sampled	(ft bgs)	(ppm)	(mg/kg)
<u> </u>	NMOCD A	ction Level*	100	1,000
TH-1	8/6/13 ·	2	1,429	NA
	0/0/13	5	1,554	2,620
TH-2	8/6/13	2	1,073	NA
1H-Z	6/0/13	5	1,684	1,230
TH-3	8/6/13	1 to 4	45.6	84.8
I II-3	0/0/13	5	. to 4 45.6 5 1,619 2 1,336 5 1,578 2 92.1 5 9.5 2 4.2	928
TH-4	8/6/13	2	1,336	NA
I I I - 4	8/0/13	5	5 1,578	2,740
TILE	0/6/12	2	92.1	75.6
TH-5	8/6/13	5	9.5	NA
TH-6	0/6/12	2	4.2	NA
1п-о	8/6/13	4	4.9	93.5
TH-7	8/6/13	4.5	2.3	79.7
TU 0	0/0/12	2	3.3	NA
TH-8	8/6/13	5	5.4	81.1
SC-1	8/28/13	1 to 3	34.5	152
SC-2	8/28/13	1 to 5	0.0	542
SC-3	8/28/13	1 to 6	546	708
SC-4	8/28/13	1 to 6	208	127
SC-5	8/28/13	3 to 6	1,935	2,080
SC-6	9/4/13	3 to 6	65.5	157

NA - Not Analyzed

Laboratory analyses for TH-2 and TH-3 were used to confirm field screening results of the initial release assessment. In samples TH-2 and TH-3, benzene concentrations were reported at 3.0 mg/kg and 1.4 mg/kg, respectively. Total BTEX concentrations were reported at 64 mg/kg and 74 mg/kg, respectively. TPH concentrations as DRO/GRO were reported at 1,450 mg/kg (TH-2) and 2,090 mg/kg (TH-3).

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

Laboratory analyses for SC-3 to SC-5 were used to confirm field screening results from the final excavation. Benzene concentrations were reported at 0.056 mg/kg (SC-3), 0.15 mg/kg (SC-4), and 3.9 mg/kg (SC-5). Total BTEX concentrations were reported at 2.9 mg/kg (SC-3), 4.5 mg/kg (SC-4, and 139 mg/kg (SC-5). TPH concentrations as GRO/DRO in SC-5 were reported at 3,980 mg/kg. Results are presented in Table 2 and on Figures 3 and 4. The laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH San Juan 28-6 #170M Initial Release Assessment and Final Excavation, August 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)
NMOCD Action Level*			10	50	1,	000
TH-2	8/6/13	5	3.0	64	1,000	450
TH-3	8/6/13	5	1.4	74	1,500	590
SC-3	8/28/13	1 to 6	0.056	2.9	NA	NA
SC-4	8/28/13	1 to 6	0.15	4.5	NA	NA
SC-5	8/28/13	3 to 6	3.9	139	3,100	880

NA – Not Analyzed; *Action level determined by the NMOCD ranking score per NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993)

3.0 Conclusions and Recommendations

On August 6, 2013, AES conducted an initial assessment of petroleum contaminated soils associated with a historical release at the San Juan 28-6 #170M. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 10. Initial assessment field screening results above the NMOCD action level of 100 ppm VOCs were reported in TH-1 to TH-4, with the highest VOC concentration reported in TH-2 with 1,684 ppm. Field screening results also showed TPH concentrations above the NMOCD action level of 1,000 mg/kg in three samples (TH-1, TH-2, and TH-4), with the highest TPH concentration reported in TH-4 with 2,740 mg/kg.

Laboratory analyses for TH-2 and TH-3 were used to confirm field screening results. In both samples, benzene concentrations were reported below the NMOCD action level of 10 mg/kg, but total BTEX concentrations were reported above the NMOCD action level of 50 mg/kg with 64 mg/kg and 74 mg/kg, respectively. TPH concentrations as

Lindsay Dumas San Juan 28-6 #170M Release Assessment and Final Excavation Report January 17, 2014 Page 6 of 7

GRO/DRO exceeded the NMOCD action level of 1,000 mg/kg for TH-2 and TH-3, with 1,450 mg/kg and 2,090 mg/kg, respectively.

On August 28, 2013, final clearance of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were below applicable NMOCD action level of 100 ppm for the west (SC-1) and north (SC-2) walls. The remaining sidewalls (SC-3 and SC-4) and base (SC-5) exceeded the NMOCD action level of 100 ppm VOCs. Field TPH concentrations were reported below the NMOCD action level of 1,000 mg/kg in all final sidewalls; however, the base exceeded the NMOCD action level with 2,080 mg/kg. Laboratory analytical results from August 30, 2013, reported benzene and total BTEX concentrations in SC-3 and SC-4 below NMOCD action levels. However, total BTEX and TPH concentrations as GRO/DRO were reported above applicable NMOCD action levels in SC-5 (base). Potassium permanganate was applied to the base of the excavation, and an additional confirmation sample (SC-6) was collected on September 4, 2013. Field screening results for SC-6 reported VOC and TPH concentrations below applicable NMOCD action levels for the base of the excavation.

Based on the final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 28-6 #170M, benzene, total BTEX, VOC, and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,

David J. Reese

Environmental Scientist

Ward of Reme

Elizabeth McNally, PE

Lindsay Dumas San Juan 28-6 #170M Release Assessment and Final Excavation Report January 17, 2014 Page 7 of 7

Attachments:

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, August 2013

Figure 3. Initial Assessment Sample Locations and Results, August 2013

Figure 4. Final Excavation Sample Locations and Results, August and September 2013

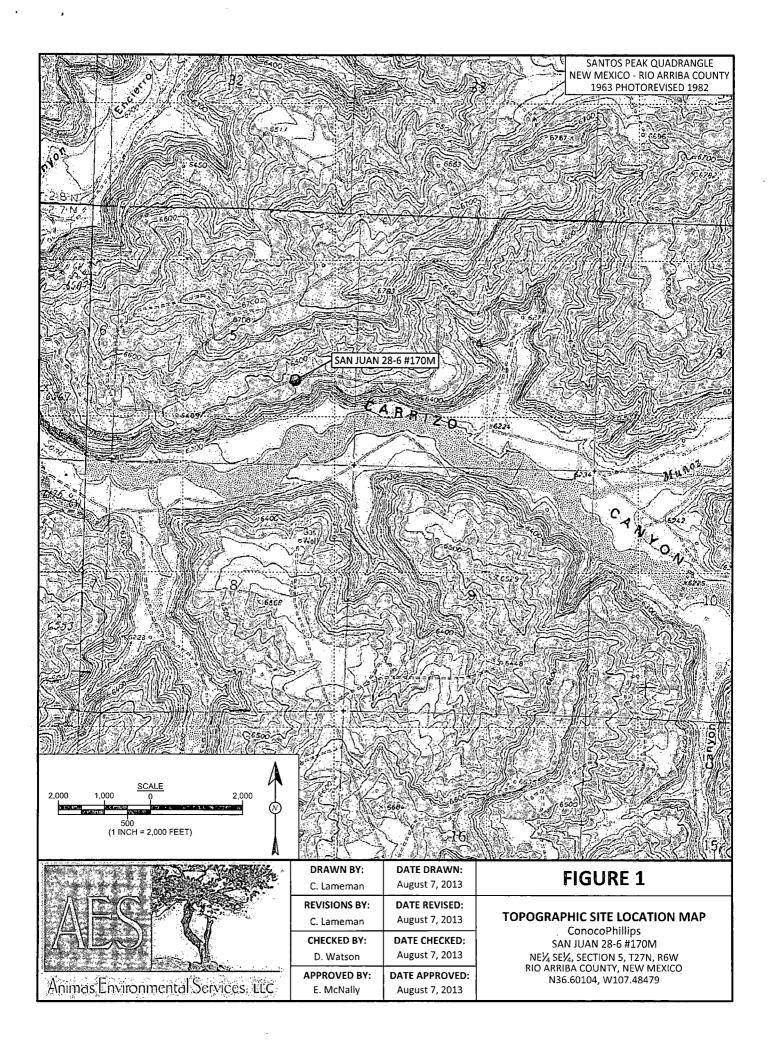
AES Field Screening Report 080613

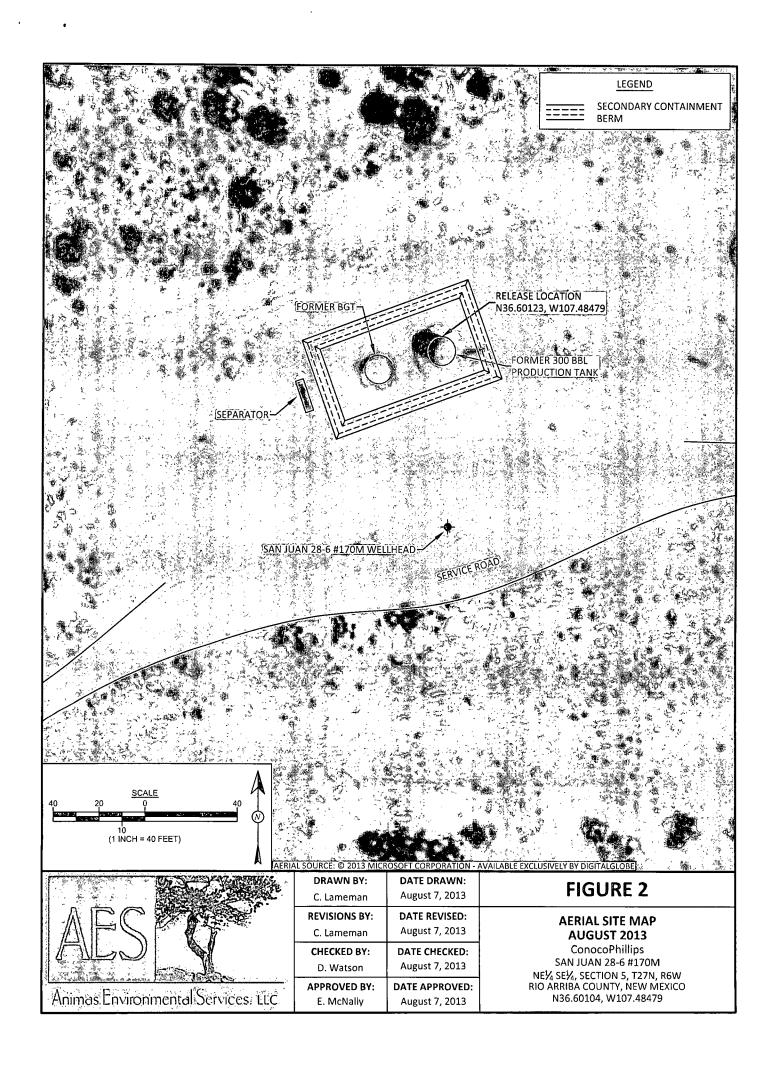
AES Field Screening Report 082813 090413

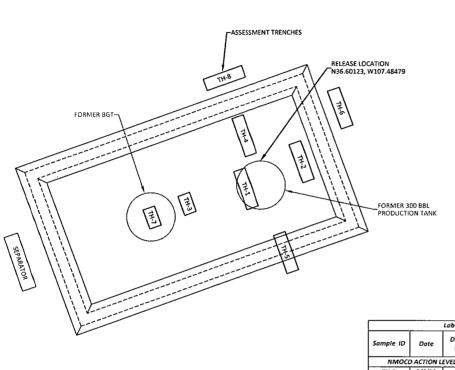
Hall Laboratory Analytical Report 1308353

Hall Laboratory Analytical Report 1308C82

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	Field Sc	reening Res	ults	
Sample ID	Date	Depth (ft)	OVM- PID (ppm)	TPH (mg/kg,
N	MOCD ACT	ION LEVEL	100	1,000
TH-1	8/6/13	2	1,429	NA
1 m-1	0/0/13	5	1,554	2,620
TH-2	8/6/13	2	1,073	NA
1n-2	9/9/13	5	1,684	1,230
TH-3	8/6/13	1 to 4	45.6	84.8
111-3	0/0/13	5	1,619	928
TH-4	8/6/13	2	1,336	NA
1H-4	8/0/13	5	1,578	2,740
TH-5	8/6/13	2	92.1	75.6
in-5	0/0/13	5	9.5	NA
TH-6	8/6/13	2	4.2	NA
111-0	6/6/13	4	4.9	93.5
TH-7	8/6/13	4.5	2.3	79.7
TH-8	8/6/13	2	3.3	NA.
111-8	0/0/13	5	5.4	81.1

Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			50	1,000	
8/6/13	5	3.0	64	1,000	450
8/6/13	5	1.4	74	1,500	590
	CTION L 8/6/13	CCTION LEVEL 8/6/13 5	Date (ft) (mg/kg) ICTION LEVEL 10 B/6/13 5 3.0	Date Depth (ft) Benzene (mg/kg) BTEX (mg/kg) ICTION LEVEL 10 50 8/6/13 5 3.0 64	Date Depth (ft) Benzene (mg/kg) BTEX (mg/kg) GRO (mg/kg) CTION LEVEL 10 50 1,0 8/6/13 5 3.0 64 1,000

SERVICE ROAD

SAN JUAN 28-6 #170M WELLHEAD

FIGURE 3

INITIAL ASSESSMENT SAMPLE
LOCATIONS AND RESULTS
AUGUST 2013
ConocoPhillips
SAN JUAN 28-6 #170M
NEX SEX, SECTION 5, T27N, RGW
RIO ARRIBA COUNTY, NEW MEXICO
N36.60104, W107.48479

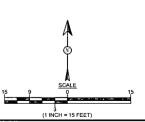


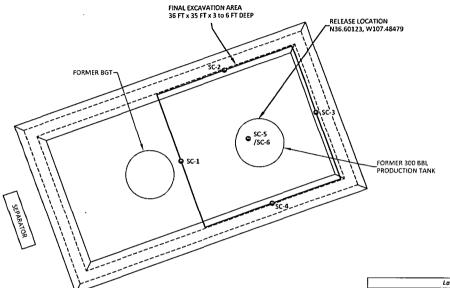
Animas Environmental Services: tLC

DRAWN BY:	DATE DRAWN:
C. Lameman	August 7, 2013
REVISIONS BY:	DATE REVISED:
C. Lameman	January 15, 2014
CHECKED BY:	DATE CHECKED:
D. Watson	January 15, 2014
APPROVED BY:	DATE APPROVED:
F McNally	January 15, 2014

LEGEND

SECONDARY CONTAINMENT BERM





SAN JUAN 28-6 #170M WELLHEAD

	Field Screening Results									
Sample ID	Date	Depth (ft)	OVM- PID (ppm)	TPH (mg/kg)						
N	MOCD ACT	100	1,000							
SC-1	8/28/13	1 to 3	34.5	152						
SC-2	8/28/13	1 to 5	0.0	542						
SC-3	8/28/13	1 to 6	546	708						
SC-4	8/28/13	1 to 6	208	127						
SC-5	8/28/13	3 to 6	1,935	2,080						
SC-6	9/4/13	3 to 6	65.5	157						
ALL SAMPLES	WERE CON	APOSITE SA	MPLES.							

		Laborator	y Analytica	Results			
Sample ID	Date	Depth Benzene (ft) (mg/kg)		Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	
NMOC	NMOCD ACTION LEVEL		10	50	1,000		
SC-3	8/28/13	1 to 6	0.056	2.9	NA	NA	
SC-4	8/28/13	1 to 6	0.15	4.5	NA	NA	
SC-5	8/28/13	3 to 6	3.9	139	3,100	880	

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B/8260B AND SC-5 WAS ALSO ANALYZED PER EPA METHOD 8015D.

NA - NOT ANALYZED

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS AUGUST AND SEPTEMBER 2013

Conocophillips
SAN JUAN 28-6 #170M
NEX, SEX, SECTION 5, 127,N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.60104, W107.48479



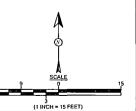
Animas Environmental Services, LLC

	DRAWN BY:	DATE DRAWN:				
	C. Lameman	December 6, 2013				
1	REVISIONS BY:	DATE REVISED:				
	C. Lameman	December 6, 2013				
	CHECKED BY:	DATE CHECKED:				
	D. Watson	December 6, 2013				
	APPROVED BY:	DATE APPROVED:				
	E. McNally	December 6, 2013				

LEGEND

SAMPLE LOCATIONS

SECONDARY CONTAINMENT BERM



AES Field Screening Report

ARS Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

Client: ConocoPhillips

Project Location: San Juan 28-6 #170M

Date: 8/6/2013

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 2'	8/6/2013	14:38	1,429		Not A	nalyzed for TP	Н	
TH-1 @ 5'	8/6/2013	14:41	1,554	2,620	15:13	20.0	1	HMW
TH-2 @ 2'	8/6/2013	14:47	1,073		Not A	nalyzed for TP	Н	
TH-2 @ 5'	8/6/2013	14:52	1,684	1,230	15:38	20.0	1	HMW
TH-3 @ 1-4'	8/6/2013	14:58	45.6	84.8	15:17	20.0	1	HMW
TH-3 @ 5'	8/6/2013	15:01	1,619	928	15:50	20.0	1	HMW
TH-4 @ 2'	8/6/2013	15:31	1,336		Not A	nalyzed for TP	Н	
TH-4 @ 5'	8/6/2013	15:34	1,578	2,740	16:10	20.0	1	HMW
TH-5 @ 2'	8/6/2013	15:37	92.1	75.6	16:12	20.0	1	нмм
TH-5 @ 5'	8/6/2013	15:40	9.5		Not A	nalyzed for TP	H	
TH-6 @ 2'	8/6/2013	15:46	4.2		Not A	nalyzed for TP	Н	
TH-6 @ 4'	8/6/2013	15:52	4.9	93.5	16:41	20.0	1	HMW
TH-7 @ 4.5'	8/6/2013	15:56	2.3	79.7	16:43	20.0	1	HMW
TH-8 @ 2'	8/6/2013	15:58	3.3		Not A	nalyzed for TP	Н	
TH-8 @ 5'	8/6/2013	16:01	5.4	81.1	16:44	20.0	1	нмм

DF

Dilution Factor

NA

Not Analyzed

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitation Limit

Analyst:

*Field TPH concentrations recorded may be below PQL.

Heather M. Woods

AES Field Screening Report

AES C

Animas Environmental Services, Lic

www.animasenvironmental.com:

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

> Durarigo, Colorado 970-403-3084

Client: ConocoPhillips

Project Location: San Juan 28-6 #170M

Date: 8/28/2013 and 9/4/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	8/28/2013	11:02	West Wall	34.5	11:50	152	20.0	1	HMW
SC-2	8/28/2013	12:41	North Wall	0.0	11:52	542	20.0	1	HMW
SC-3	8/28/2013	12:43	East Wall	546	11:54	708	20.0	1	HMW
SC-4	8/28/2013	11:08	South Wall	208	11:57	127	20.0	1	HMW
SC-5	8/28/2013	11:10	Base	1,935	12:00	2,080	20.0	1	HMW
SC-6	9/4/2013	12:35	Base	65.5	12:48	157	20.0	1	нмм

DF

Dilution Factor

NA

Not Analyzed

Total Petroleum Hydrocarbons - USEPA 418.1

Heather M. Woods

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitation Limit

Analyst:

*Field TPH concentrations recorded may be below PQL.



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

OrderNo.: 1308353

August 15, 2013

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

FAX

RE: COP San Juan 28-6 #170M

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/8/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

Andist

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1308353

Date Reported: 8/15/2013

8/12/2013 6:31:50 PM

8/12/2013 6:31:50 PM

8/12/2013 6:31:50 PM

8800

8800

8800

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

ironmental Client Sample ID: TH-2@5'

Project: COP San Juan 28-6 #170M

Collection Date: 8/6/2013 2:52:00 PM Received Date: 8/8/2013 9:55:00 AM

Lab ID: 1308353-001

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

Matrix: SOIL

3.9

43

111

Analyses Result **RL Oual Units DF** Date Analyzed Batch **EPA METHOD 8015D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) 450 9.9 mg/Kg 8/13/2013 12:35:31 AM 8796 Surr: DNOP 104 63-147 %REC 1 8/13/2013 12:35:31 AM 8796 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 1000 8/12/2013 6:31:50 PM 94 mg/Kg 20 8800 Surr: BFB 164 80-120 S %REC 20 8/12/2013 6:31:50 PM 8800 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 3.0 0.94 mg/Kg 8/12/2013 6:31:50 PM 8800 Toluene 14 0.94 8/12/2013 6:31:50 PM mg/Kg 20 8800

0.94

1.9

80-120

mg/Kg

mg/Kg

%REC

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit Page 1
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Lab Order 1308353

Date Reported: 8/15/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: TH-3@5'

Project: COP San Juan 28-6 #170M

Collection Date: 8/6/2013 3:01:00 PM

Lab ID: 1308353-002

Matrix: SOIL

Received Date: 8/8/2013 9:55:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS					Analys	: JME
Diesel Range Organics (DRO)	590	10		mg/Kg	1	8/13/2013 12:57:19 AM	1 8796
Surr: DNOP	96.6	63-147		%REC	1	8/13/2013 12:57:19 AM	1 8796
EPA METHOD 8015D: GASOLINE RA	ANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	1500	240		mg/Kg	50	8/12/2013 7:00:29 PM	8800
Surr: BFB	149	80-120	s	%REC	50	8/12/2013 7:00:29 PM	8800
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	1.4	1.2		mg/Kg	50	8/12/2013 7:00:29 PM	8800
Toluene	14	. 2.4		mg/Kg	50	8/12/2013 7:00:29 PM	8800
Ethylbenzene	4.3	2.4		mg/Kg	50	8/12/2013 7:00:29 PM	8800
Xylenes, Total	54	4.7		mg/Kg	50	8/12/2013 7:00:29 PM	8800
Surr: 4-Bromofluorobenzene	107	80-120		%REC	50	8/12/2013 7:00:29 PM	8800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- О RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Η
- Not Detected at the Reporting Limit

- Sample pH greater than 2 for VOA and TOC only. Р
- Reporting Detection Limit RL

Hall Environmental Analysis Laboratory, Inc.

WO#:

1308353 15-Aug-13

Client:

Animas Environmental

Project:	COP San	Juan 28-6 #	170M	[
Sample ID	MB-8796	SampTyp	e: ME	BLK	Test	Code: El	PA Method	8015D: Diese	el Range C	Organics	•••
Client ID:	PBS	Batch I	D: 87 9	96	R	unNo: 1	2540				
Prep Date:	8/9/2013	Analysis Date	e: 8 /	12/2013	S	eqNo: 3	57283	Units: mg/K	g		
Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	ND	10								
Surr: DNOP		9.7		10.00		97.2	63	147			
Sample ID	LCS-8796	SampTyp	e: LC	S	Test	Code: El	PA Method	8015D: Diese	el Range C	Organics	
Client ID:	LCSS	Batch II	D: 87 9	96	R	unNo: 1	2540				
Prep Date:	8/9/2013	Analysis Date	e: 8/	12/2013	S	eqNo: 3	57284	Units: mg/K	g		
Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	40	10	50.00	0	79.9	77.1	128			
Surr: DNOP		3.8		5.000		76.5	63	147			
Sample ID	MB-8810	SampTyp	e: ME	BLK	Test	Code: El	PA Method	8015D: Diese	el Range C	Organics	
Client ID:	PBS	Batch II	D: 88	10	R	unNo: 1	2540				
Prep Date:	8/12/2013	Analysis Date	e: 8 /	12/2013	S	eqNo: 3	57705	Units: %RE	С		
Analyte		Result I	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.9		10.00		99.3	63	147	_		
Sample ID	LCS-8810	SampTyp	e: LC	S	Test	Code: El	PA Method	8015D: Diese	el Range C	Organics	
Client ID:	LCSS	Batch II	D: 88	10	Ŕ	unNo: 1	2540				
					•		-0-70				
Prep Date:	8/12/2013	Analysis Date	e: 8/			eqNo: 3		Units: %RE	С		
Prep Date:	8/12/2013		e: 8/ PQL	12/2013		·		Units: %RE HighLimit	C %RPD	RPDLimit	Qual
	8/12/2013			12/2013	S	·	57950			RPDLimit	Qual
Analyte Surr: DNOP	8/12/2013 1308352-001AMS	Result I	PQL	12/2013 SPK value 5.000	SPK Ref Val	%REC 81.3	57950 LowLimit 63	HighLimit	%RPD		Qual
Analyte Surr: DNOP Sample ID		Result F	PQL e: MS	12/2013 SPK value 5.000	SPK Ref Val	%REC 81.3	LowLimit 63 PA Method	HighLimit 147	%RPD		Qual
Analyte Surr: DNOP Sample ID	1308352-001AMS BatchQC	Result I 4.1 SampTyp	PQL e: MS D: 87 9	12/2013 SPK value 5.000	SPK Ref Val Test	%REC 81.3 Code: E I	LowLimit 63 PA Method 2540	HighLimit 147	%RPD		Qual
Analyte Surr: DNOP Sample ID Client ID:	1308352-001AMS BatchQC	Result I 4.1 SampTyp Batch IE Analysis Date	PQL e: MS D: 87 9	5.000 5.000 3.000	SPK Ref Val Test	%REC 81.3 Code: El unNo: 1	LowLimit 63 PA Method 2540	HighLimit 147 8015D: Diese	%RPD		Qual
Analyte Surr: DNOP Sample ID Client ID: Prep Date:	1308352-001AMS BatchQC 8/9/2013	Result F 4.1 SampTyp Batch ID Analysis Date Result F 43	e: MS D: 879 e: 8/	12/2013 SPK value 5.000 3 96 12/2013 SPK value 50.30	SPK Ref Val Test	%REC 81.3 Code: El unNo: 1: eqNo: 3: %REC 51.5	LowLimit 63 PA Method 2540 57951 LowLimit 61.3	HighLimit 147 8015D: Diese Units: mg/K HighLimit 138	%RPD	Organics	
Analyte Surr: DNOP Sample ID Client ID: Prep Date: Analyte	1308352-001AMS BatchQC 8/9/2013	Result F 4.1 SampTyp Batch IE Analysis Date Result F	e: MS D: 879 e: 8/	12/2013 SPK value 5.000 3. 96 12/2013 SPK value	SPK Ref Val Test R S SPK Ref Val	%REC 81.3 Code: El unNo: 1: eqNo: 3:	LowLimit 63 PA Method 2540 57951 LowLimit	HighLimit 147 8015D: Diese Units: mg/K HighLimit	%RPD	Organics	Qual
Analyte Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP	1308352-001AMS BatchQC 8/9/2013	Result F 4.1 SampTyp Batch ID Analysis Date Result F 43 4.4	e: MS D: 879 e: 8/ PQL 10	12/2013 SPK value 5.000 3 96 12/2013 SPK value 50.30 5.030	SPK Ref Val Test R S SPK Ref Val 17.04	%REC 81.3 Code: EI unNo: 1: eqNo: 3: %REC 51.5 87.0	Example 10	HighLimit 147 8015D: Diese Units: mg/K HighLimit 138	%RPD PI Range C g %RPD	Organics RPDLimit	Qual
Analyte Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID	1308352-001AMS BatchQC 8/9/2013 Drganics (DRO)	Result F 4.1 SampTyp Batch ID Analysis Date Result F 43 4.4	e: MS e: MS 10	5.000 SPK value 5.000 SPK value 50.30 5.030	Test SPK Ref Val Test S SPK Ref Val 17.04 Test	%REC 81.3 Code: EI unNo: 1: eqNo: 3: %REC 51.5 87.0	LowLimit 63 PA Method 2540 57951 LowLimit 61.3 63 PA Method	HighLimit 147 8015D: Diese Units: mg/K HighLimit 138 147	%RPD PI Range C g %RPD	Organics RPDLimit	Qual
Analyte Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID	1308352-001AMS BatchQC 8/9/2013 Drganics (DRO) 1308352-001AMSE BatchQC	Result 4.1 SampTyp Batch ID Analysis Date Result 43 4.4 SampTyp	e: MS e: 87 10 e: MS	5.000 SPK value 5.000 5.000 5.000 5.000 SPK value 50.30 5.030 5.030	SPK Ref Val Test SPK Ref Val 17.04 Test	%REC 81.3 Code: El unNo: 1: eqNo: 3: %REC 51.5 87.0	LowLimit 63 PA Method 2540 LowLimit 61.3 63 PA Method 2540	HighLimit 147 8015D: Diese Units: mg/K HighLimit 138 147	%RPD PI Range C 9 %RPD PI Range C	Organics RPDLimit	Qual
Analyte Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID:	1308352-001AMS BatchQC 8/9/2013 Drganics (DRO) 1308352-001AMSE BatchQC	Result II 4.1 SampTyp Batch IE Analysis Date 43 4.4 SampTyp Batch IE Analysis Date	e: MS e: 87 10 e: MS	12/2013 SPK value 5.000 3 96 12/2013 SPK value 50.30 5.030 SD 96 12/2013	SPK Ref Val Test SPK Ref Val 17.04 Test	%REC 81.3 Code: El unNo: 1: eqNo: 3: %REC 51.5 87.0 Code: El unNo: 1: eqNo: 3:	LowLimit 63 PA Method 2540 LowLimit 61.3 63 PA Method 2540	HighLimit 147 8015D: Diese Units: mg/K HighLimit 138 147 8015D: Diese	%RPD PI Range C 9 %RPD PI Range C	Organics RPDLimit	Qual
Analyte Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C	1308352-001AMS BatchQC 8/9/2013 Organics (DRO) 1308352-001AMSE BatchQC 8/9/2013	Result F 4.1 SampTyp Batch ID Analysis Date Result F 43 4.4 O SampTyp Batch ID Analysis Date Result ID Analysis Date Result ID	e: MS 8792 8/9 10 10 8792 8/9 10 8792 8/9	12/2013 SPK value 5.000 3 96 12/2013 SPK value 50.30 5.030 6D 96 12/2013 SPK value 49.70	SPK Ref Val Test SPK Ref Val 17.04 Test R S	%REC 81.3 Code: El unNo: 1: eqNo: 3: %REC 51.5 87.0 Code: El unNo: 1: eqNo: 3: %REC 64.0	Example 1.3	HighLimit 147 8015D: Diese Units: mg/K HighLimit 138 147 8015D: Diese Units: mg/K HighLimit 138	%RPD PI Range C SP WRPD 12.9	Prganics RPDLimit Prganics RPDLimit 20	Qual S
Analyte Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID: Prep Date: Analyte	1308352-001AMS BatchQC 8/9/2013 Organics (DRO) 1308352-001AMSE BatchQC 8/9/2013	Result F 4.1 SampTyp Batch IE Analysis Date 43 4.4 SampTyp Batch IE Analysis Date Result F	e: MS 8/90L 10 10 10 10 10 10 10 10 10 10 10 10 10	12/2013 SPK value 5.000 3 96 12/2013 SPK value 50.30 5.030 6D 96 12/2013 SPK value	SPK Ref Val Test SPK Ref Val 17.04 Test R S SPK Ref Val	%REC 81.3 Code: El unNo: 1: eqNo: 3: %REC 51.5 87.0 Code: El unNo: 1: eqNo: 3: %REC	Example 10	HighLimit 147 8015D: Diese Units: mg/K HighLimit 138 147 8015D: Diese Units: mg/K HighLimit	%RPD PI Range C RPD PI Range C RPD WRPD	Prganics RPDLimit Prganics RPDLimit	Qual S

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range Е
- Analyte detected below quantitation limits
- О RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RLReporting Detection Limit

Page 3 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308353

15-Aug-13

Client:

Animas Environmental

Project:

COP San Juan 28-6 #170M

Sample ID 1308420-001AMS

SampType: MS

TestCode: EPA Method 8015D: Diesel Range Organics

Client ID:

BatchQC

Batch ID: 8810

RunNo: 12540

Prep Date:

8/12/2013

Analysis Date: 8/12/2013 **PQL**

PQL

SeqNo: 357965

Units: %REC

Analyte

Result

SPK value SPK Ref Val

%REC LowLimit

Surr: DNOP

4.0

4.995

81.0

HighLimit 147

RPDLimit

Qual

Qual

Sample ID 1308420-001AMSD

SampType: MSD

TestCode: EPA Method 8015D: Diesel Range Organics RunNo: 12540

Client ID: BatchQC Batch ID: 8810

Units: %REC

Prep Date: 8/12/2013 Analysis Date: 8/12/2013

SeqNo: 357966

%RPD HighLimit

%RPD

Analyte

Result

SPK value SPK Ref Val

%REC 88.9

RPDLimit

Surr: DNOP

63

LowLimit

147

4.4

4.931

Qualifiers:

S

Value exceeds Maximum Contaminant Level.

Ε Value above quantitation range

Analyte detected below quantitation limits J

RSD is greater than RSDlimit 0

RPD outside accepted recovery limits R

Spike Recovery outside accepted recovery limits

Holding times for preparation or analysis exceeded Н

Analyte detected in the associated Method Blank

ND

Reporting Detection Limit RL

P Sample pH greater than 2 for VOA and TOC only.

Not Detected at the Reporting Limit Page 4 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308353

Page 5 of 7

15-Aug-13

Client:

Animas Environmental

Project:		Juan 28-6		ſ 							
Sample ID	MB-8800	SampT	ype: ME	BLK	Test	Code: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	PBS	Batch	ID: R1	2570	R	lunNo: 1	2570				
Prep Date:	8/9/2013	Analysis D	ate: 8/	12/2013	S	SeqNo: 3	58060	Units: %RE	:C		
Analyte_		Result.	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		870		1000		86.9	80	120			
Sample ID	LCS-8800	SampT	ype: LC	s	Test	tCode: El	PA Method	8015D: Gaso	oline Rang	9	-
Client ID:	LCSS	Batch	ID: R1	2570	R	RunNo: 1	2570				
Prep Date:	8/9/2013	Analysis D	ate: 8/	12/2013	S	SeqNo: 3	58068	Units: %RE	:C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		940		1000		93.7	80	120	,		
Sample ID	MB-8800	SampT	ype: Mi	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	PBS	Batch	ID: 88	00	R	RunNo: 1	2570				
Prep Date:	8/9/2013	Analysis D	ate: 8	12/2013	S	SeqNo: 3	58118	Units: mg/l	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ge Organics (GRO)	ND 870	5.0	4000		86.9	90	120			
Surr: BFB		070		1000		00.9	80	120			
	LCS-8800	SampT	ype: LC		Tes			8015D: Gase	oline Rang	e	
		SampT	ype: LC				PA Method		oline Rang	e	
Sample ID Client ID:		SampT	ID: 88		R	tCode: E	PA Method 2570		G	e	
Sample ID Client ID:	LCSS	SampT ₁ Batch	ID: 88	00 112/2013	R	tCode: El RunNo: 1 SeqNo: 3	PA Method 2570	8015D: Gaso	G	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Range	LCSS	SampTy Batch Analysis Da Result 25	ID: 88 ate: 8	SPK value 25.00	R	tCode: El RunNo: 1 SeqNo: 3 %REC 100	PA Method 2570 58119 LowLimit 62.6	8015D: Gase Units: mg/k HighLimit 136	⟨ g		Qual
Sample ID Client ID: Prep Date: Analyte	LCSS 8/9/2013	SampTy Batch Analysis D Result	ID: 88 ate: 8	SS 00 12/2013 SPK value	SPK Ref Val	tCode: El RunNo: 1 SeqNo: 3 %REC	PA Method 2570 58119 LowLimit	8015D: Gaso Units: mg/l HighLimit	⟨ g		Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	LCSS 8/9/2013	SampTy Batch Analysis D Result 25	ID: 88 ate: 8 / PQL 5.0	SPK value 25.00 1000	SPK Ref Val	RunNo: 1 SeqNo: 3 %REC 100 93.7	PA Method 2570 58119 LowLimit 62.6 80	8015D: Gase Units: mg/k HighLimit 136	√g %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID	LCSS 8/9/2013 ge Organics (GRO)	SampTy Batch Analysis Dane Result 25 940 SampTy	ID: 88 ate: 8 / PQL 5.0	SPK value 25.00 1000	SPK Ref Val 0	RunNo: 1 SeqNo: 3 %REC 100 93.7	PA Method 2570 58119 LowLimit 62.6 80	8015D: Gase Units: mg/k HighLimit 136 120	√g %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID:	LCSS 8/9/2013 ge Organics (GRO)	SampTy Batch Analysis Dane Result 25 940 SampTy	PQL 5.0 specification 5.0 spec	SPK value 25.00 1000	SPK Ref Val 0	RunNo: 1 GeqNo: 3 %REC 100 93.7	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570	8015D: Gase Units: mg/k HighLimit 136 120	Kg %RPD pline Rang	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte	LCSS 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC 8/9/2013	SampTy Batch Analysis Date Result 25 940 SampTy Batch Analysis Date Result	PQL 5.0 ype: MS ate: 8,0 PQL 5.0	SPK value 25.00 1000 5 00 25.00 1000 5 00 25.00	SPK Ref Val 0 Test R SPK Ref Val	tCode: El RunNo: 1 SeqNo: 3 %REC 100 93.7 tCode: El RunNo: 1 SeqNo: 3 %REC	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570 58122 LowLimit	8015D: Gaso Units: mg/k HighLimit 136 120 8015D: Gaso Units: mg/k	Kg %RPD pline Rang	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang	LCSS 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC	SampTy Batch Analysis Do Result 25 940 SampTy Batch Analysis Do Result 22	PQL 5.0 ype: Ms ate: 8,	SPK value 25.00 1000 5 00 25.01 25.00 25.0	SPK Ref Val 0 Test	tCode: El RunNo: 1 SeqNo: 3 %REC 100 93.7 tCode: El RunNo: 1 SeqNo: 3 %REC 92.0	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570 58122 LowLimit	8015D: Gaso Units: mg/k HighLimit 136 120 8015D: Gaso Units: mg/k HighLimit 156	Kg %RPD pline Rang	RPDLimit	
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte	LCSS 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC 8/9/2013	SampTy Batch Analysis Date Result 25 940 SampTy Batch Analysis Date Result	PQL 5.0 ype: MS ate: 8,0 PQL 5.0	SPK value 25.00 1000 5 00 25.00 1000 5 00 25.00	SPK Ref Val 0 Test R SPK Ref Val	tCode: El RunNo: 1 SeqNo: 3 %REC 100 93.7 tCode: El RunNo: 1 SeqNo: 3 %REC	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570 58122 LowLimit	8015D: Gaso Units: mg/k HighLimit 136 120 8015D: Gaso Units: mg/k	Kg %RPD pline Rang	RPDLimit	
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB	LCSS 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC 8/9/2013	SampTy Batch Analysis D Result 25 940 SampTy Batch Analysis D Result 22 930	PQL 5.0 ype: M3 ID: 88 PQL 4.8	SPK value 25.00 1000 5 00 12/2013 SPK value 24.18 967.1	SPK Ref Val 0 Test SPK Ref Val 0 Test	tCode: El RunNo: 1 SeqNo: 3 %REC 100 93.7 tCode: El RunNo: 1 SeqNo: 3 %REC 92.0 96.2	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570 58122 LowLimit 76 80 PA Method	8015D: Gaso Units: mg/k HighLimit 136 120 8015D: Gaso Units: mg/k HighLimit 156	Kg %RPD Dline Rang Kg %RPD	RPDLimit e RPDLimit	
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Client ID:	LCSS 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC	SampTy Batch Analysis D Result 25 940 SampTy Batch Analysis D Result 22 930 S SampTy Batch	PQL 5.0 PQL 5.0 ype: Ms ID: 88 ate: 8/ PQL 4.8	SPK value 25.00 1000 5 00 24.13 SPK value 24.18 967.1	SPK Ref Val 0 Test S SPK Ref Val 0 Test F	tCode: El RunNo: 1 SeqNo: 3 %REC 100 93.7 tCode: El RunNo: 1 SeqNo: 3 %REC 92.0 96.2 tCode: El RunNo: 1 tCod	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570 58122 LowLimit 76 80 PA Method 2570	8015D: Gaso Units: mg/k HighLimit 136 120 8015D: Gaso Units: mg/k HighLimit 156 120 8015D: Gaso	%RPD Dline Rang %RPD bline Rang	RPDLimit e RPDLimit	
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Client ID:	BatchQC 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC 8/9/2013 ge Organics (GRO)	SampTy Batch Analysis D Result 25 940 SampTy Batch Analysis D Result 22 930 SampTy	PQL 5.0 PQL 5.0 ype: Ms ID: 88 ate: 8/ PQL 4.8	SPK value 25.00 1000 5 00 24.13 SPK value 24.18 967.1	SPK Ref Val 0 Test S SPK Ref Val 0 Test F	tCode: El RunNo: 1 SeqNo: 3 %REC 100 93.7 tCode: El RunNo: 1 SeqNo: 3 %REC 92.0 96.2	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570 58122 LowLimit 76 80 PA Method 2570	8015D: Gaso Units: mg/k HighLimit 136 120 8015D: Gaso Units: mg/k HighLimit 156 120	%RPD Dline Rang %RPD Dline Rang	RPDLimit e RPDLimit	
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Analyte Analyte Analyte	LCSS 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC 8/9/2013	SampTy Batch Analysis D Result 25 940 SampTy Batch Analysis D Result 22 930 D SampTy Batch Analysis D Result	PQL 5.0 PQL 5.0 PQL 4.8 PQL 4.8 PQL 4.8 PQL	SS 000 25.00 1000 25.00 1000 26.00 24.18 967.1 25.00 27.22013 SPK value 24.18 967.1 SD 000 27.22013 SPK value 27.2013 SPK value 27.2013 SPK value 27.2013	SPK Ref Val 0 Test SPK Ref Val 0 Test SPK Ref Val 0 SPK Ref Val SPK Ref Val	tCode: El RunNo: 1 SeqNo: 3 %REC 100 93.7 tCode: El RunNo: 1 SeqNo: 3 %REC 92.0 96.2 tCode: El RunNo: 1 SeqNo: 1 SeqNo: 3 %REC 8 %REC \$ %REC \$ %REC	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570 58122 LowLimit 76 80 PA Method 2570 58123 LowLimit	8015D: Gaso Units: mg/h HighLimit 136 120 8015D: Gaso Units: mg/h HighLimit 156 120 8015D: Gaso Units: mg/h HighLimit	%RPD oline Rang %RPD oline Rang kg %RPD	RPDLimit e RPDLimit	
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Analyte Analyte	LCSS 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC 8/9/2013 ge Organics (GRO) 1308352-002AMS BatchQC	SampTy Batch Analysis D Result 25 940 SampTy Batch Analysis D Result 22 930 D SampTy Batch Analysis D	PQL 5.0 ype: MS ate: 8/ A.8 PQL 4.8 PQL 4.8 PQL 4.8	SS 000 12/2013 SPK value 25.00 1000 S 00 12/2013 SPK value 24.18 967.1 SD 00 12/2013	SPK Ref Val 0 Test SPK Ref Val 0 Test SPK Ref Val 0	RunNo: 1 SeqNo: 3 %REC 100 93.7 Code: El RunNo: 1 SeqNo: 3 %REC 92.0 96.2 Code: El RunNo: 1 SeqNo: 3	PA Method 2570 58119 LowLimit 62.6 80 PA Method 2570 58122 LowLimit 76 80 PA Method 2570 58123	8015D: Gase Units: mg/l HighLimit 136 120 8015D: Gase Units: mg/l HighLimit 156 120 8015D: Gase Units: mg/l	%RPD Dline Rang %RPD oline Rang	RPDLimit e RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308353

15-Aug-13

Client:

Animas Environmental

Project:

COP San Juan 28-6 #170M

Sample	ID	MB-8800

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

Client ID:

PBS

Batch ID: R12570

POL

RunNo: 12570

Prep Date: 8/9/2013 Analysis Date: 8/12/2013

SeqNo: 358141

Units: %REC

Analyte

RPDLimit Qual

Surr: 4-Bromofluorobenzene

Result 1.0 SPK value SPK Ref Val 1.000

%REC LowLimit HighLimit

%RPD

%RPD

%RPD

Sample ID LCS-8800

SampType: LCS

PQL

TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS

Batch ID: R12570

RunNo: 12570

Prep Date:

8/9/2013

Analysis Date: 8/12/2013

SeqNo: 358142

Units: %REC

Analyte Surr: 4-Bromofluorobenzene Result 1.0

SPK value SPK Ref Val 1.000

%REC LowLimit 105

HighLimit 120

RPDLimit Qual

Sample ID MB-8800 Client ID:

SampType: MBLK Batch ID: 8800

0.050

0.050

TestCode: EPA Method 8021B: Volatiles

SPK value SPK Ref Val %REC LowLimit

RunNo: 12570

Prep Date:

PBS

8/9/2013 Analysis Date: 8/12/2013

SeqNo: 358149

Units: mg/Kg

RPDLimit

Page 6 of 7

Analyte Benzene

Result **PQL**

ND

ND

1.0

HighLimit

RPDLimit Qual

Qual

Toluene Ethylbenzene

Xvienes, Total

ND 0.050 ND 0.10

1.000

103

80

120

Sample ID LCS-8800

Client ID: LCSS

Surr: 4-Bromofluorobenzene

SampType: LCS Batch ID: 8800

TestCode: EPA Method 8021B: Volatiles RunNo: 12570

105

80

120

Analysis Date: 8/12/2013 SeqNo: 358150 Prep Date: 8/9/2013 Units: mg/Kg Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Analyte **PQL** 1.0 0.050 1.000 n 102 80 120 Benzene Toluene 1.0 0.050 1.000 0 101 80 120 Ethylbenzene 1.0 0.050 1.000 0 103 80 120 Xylenes, Total 3.1 0.10 3.000 n 104 80 120

1.000

Sample ID 1308352-001AMS

Surr: 4-Bromofluorobenzene

SampType: MS

1.0

TestCode: EPA Method 8021B: Volatiles

80

Client ID:

BatchQC Batch ID: 8800 RunNo: 12570 Prep Date: Analysis Date: 8/12/2013 SeqNo: 358152 8/9/2013 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte 0.93 0.047 0.9443 0 98.6 67.3 145 Benzene 0 96.1 66.8 0.91 0.047 0.9443 144 Toluene 0.9443 0 99.1 61.9 153 0.94 0.047 Ethylbenzene 100 2.833 n 65.8 149 2.8 0.094 Xylenes, Total

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range Е

Analyte detected below quantitation limits J

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Н

P Sample pH greater than 2 for VOA and TOC only.

RLReporting Detection Limit

ND Not Detected at the Reporting Limit

0 RSD is greater than RSDlimit

RPD outside accepted recovery limits R Spike Recovery outside accepted recovery limits S

Hall Environmental Analysis Laboratory, Inc.

WO#:

RPDLimit

1308353

15-Aug-13

Client:

Animas Environmental

Project:

COP San Juan 28-6 #170M

Sample ID 1308352-001AMS

SampType: MS

TestCode: EPA Method 8021B: Volatiles

Client ID:

BatchQC

Batch ID: 8800

RunNo: 12570

8/9/2013

SeqNo: 358152

Units: mg/Kg

Prep Date:

Analysis Date: 8/12/2013

PQL

Analyte

Result

SPK value SPK Ref Val

%REC

1.0

0.9443

LowLimit 107

HighLimit %RPD

Qual

Surr: 4-Bromofluorobenzene

SampType: MSD

TestCode: EPA Method 8021B: Volatiles

Client ID:

Sample ID 1308352-001AMSD **BatchQC**

Batch ID: 8800

RunNo: 12570

Prep Date: 8/9/2013	12/2013	S	SeqNo: 358154			(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.047	0.9443	0	93.8	67.3	145	4.98	20	
Toluene	0.86	0.047	0.9443	0	91.5	66.8	144	4.93	20	
Ethylbenzene	0.88	0.047	0.9443	0	93.5	61.9	153	5.83	20	
Xylenes, Total	2.7	0.094	2.833	0	94.5	65.8	149	6.13	20	
Surr: 4-Bromofluorobenzene	1.0		0.9443		106	80	120	0	0	

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits

RSD is greater than RSDlimit O

RPD outside accepted recovery limits R

Spike Recovery outside accepted recovery limits

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

P Sample pH greater than 2 for VOA and TOC only.

RL Reporting Detection Limit Page 7 of 7



Hall Environmental Analysis Laboratory
4901 Hawkins NE

Albuquerque, NM 87109

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

Sample Log-In Check List

Client Name:	Animas Environmental	Work Order Number:	1308353		RcptNo:	1
Received by/dar	te: Ashley Gallegos	08 08 13 8/8/2013 9:55:00 AM		A		
Completed By:	Ashley Gallegos	8/8/2013 12:49:44 PM		AZ		
Reviewed By:	70	08/08/13		, 0		
Chain of Cus	stody	-0,0,0				
	als intact on sample bottles?		Yes	No !!	Not Present ✓	
	Custody complete?		Yes I✓	No	Not Present	
	e sample delivered?		Courier			
<u>Log In</u>				! .		
4. Was an att	empt made to cool the samp	les?	Yes !✔	No i	NA :	
5. Were all sa	mples received at a tempera	ture of >0° C to 6.0°C	Yes 🗸	No :	NA ·	
6. Sample(s)	in proper container(s)?		Yes 🗸	No		
7. Sufficient s	ample volume for indicated t	est(s)?	Yes 🗸	No		
8. Are sample	s (except VOA and ONG) pr	operly preserved?	Yes 🗸	No -		
9. Was preser	rvative added to bottles?		Yes	No 🤽	NA	
10 VOA vials h	nave zero headspace?		Yes	No :	No VOA Vials	
	sample containers received t	proken?	Yes	No 🗸		
,,,	•			. :	# of preserved bottles checked	
	rwork match bottle labels?		Yes 🗸	No	for pH:	r >12 unless noted)
•	epancies on chain of custody	•	Yes i ∕ i	No : :	Adjusted?	1 > 12 uniess noted)
	es correctly identified on Cha what analyses were requested	*	Yes 🗸	No !!	·	
15. Were all ho	olding times able to be met? y customer for authorization.		Yes V	No !!	Checked by:	
Special Han	dling (if applicable)					
16. Was client	notified of all discrepancies	with this order?	Yes !	No 🗀	NA 🗸	
Pers	on Notified:	Date:	A STANSON OF THE PROPERTY OF T			
By W	/hom:	Via:	: eMail i ·	Phone : Fax	In Person	
:	arding:					
Clien	t Instructions:					
17. Additional	remarks:					
18. <u>Cooler In</u>						
Cooler 1	No Temp °C Condition 1.4 Good	Seal Intact Seal No Yes	Seal Date	Signed By		

			stody Record	Turn-Around	ime.			. P	ک ت	8.8	A.	. 5	FILES:	ATRIC		RIR	1EN		A.I	
Client:	nimas	Environ	montal Services	☑ Standard Project Name				78. 7	**************************************	A	NA		SI:	S L	AE	30	ra Ra			7
Mailing	Address:	1.24 6	Comanche	Cop San	Juan 28-	6#170M		49	01 H:			- Al					109			
			B7401	Project #:			1				5-397					4107				
Phone #	± 565-	564-2	281	:								Ana	ysis	Req	uest			11g		
email o				Project Mana	iger:			nly)					(%					T	T	Ī
QA/QC	Package:	. •					(8021)	TPH (Gas only)	*		2	<u>o</u>	,S,	PCB's				İ		
t∦ Stan			☐ Level 4 (Full Validation)	D. Wats	· · · · · · · · · · · · · · · · · · ·		AL	9	DRO			CIMIC	μ ²	2 P.						
Accredi		□ Othe	, ¶ <u> </u>	On ice	⊿ Yes	J. Chrisdopherson	# # # # # # # # # # # # # # # # # # #	+ TP	_	418.1)	4.1 2.1 3.1	0770	ON'E	/ 8082		a				ŀ
□ EDD	(Type)			Samolevitem	derature /			MTBE	<u>ت</u>	4 b	S S) talk	ž	ides	8	Ş				
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO	BTEX + NO	BTEX + MT	TPH 8015B	TPH (Method	EDB (Method 504.1)	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)				
8/6/13	1452	Soil	TH-265'	1-402		-001	X		X									1	1	T
8/6/13			TH-305'	1-402		-002	X		X											I
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Date	Time?	Relinquish	ed hữ	Received by:		Date Time	B				1		<u> </u>					上		L
Pate: 8/7/13	1715	Hear	ther M. Woods	Mitte	Walter	8/7/13 17/S	Ken	пагк	5: Bi	11-60	Cono	coPh	illif	5						
Date: 8/7/13	Time: 1737	Relinquish	ed by:	Received by:	_ /\gamma	Date Time \$108.13.0955														
) i	necessary,	amples subi	mitted to Hall Environmental may be subc	ontracted to other ac	ccredited laboratorie	es. This serves as notice of this	possit	oility. A	Any sub	-contra	cted da	ta will b	e clear	ly nota	ted on	the and	alytical r	eport.		



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

OrderNo.: 1308C82

August 30, 2013

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

FAX:

RE: CoP SJ 28-6 #170M

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/29/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1308C82

Date Reported: 8/30/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-3

CoP SJ 28-6 #170M Project:

Collection Date: 8/28/2013 12:43:00 PM

Lab ID: 1308C82-001 Matrix: MEOH (SOIL) Received Date: 8/29/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analys	t: RAA
Benzene	0.056	0.050	mg/Kg	1	8/29/2013 12:24:54 PM	/ R12977
Toluene	0.46	0.050	mg/Kg	1	8/29/2013 12:24:54 PM	/I R12977
Ethylbenzene	0.17	0.050	mg/Kg	1	8/29/2013 12:24:54 PM	/ R12977
Xylenes, Total	2.2	0.10	mg/Kg	1	8/29/2013 12:24:54 PM	/I R12977
Surr: 1,2-Dichloroethane-d4	103	70-130	%REC	1	8/29/2013 12:24:54 PM	/I R12977
Surr: 4-Bromofluorobenzene	83.7	70-130	%REC	1	8/29/2013 12:24:54 PM	/ R12977
Surr: Dibromofluoromethane	104	70-130	%REC	1	8/29/2013 12:24:54 PM	/ R12977
Surr: Toluene-d8	87.1	70-130	%REC	1	8/29/2013 12:24:54 PM	/ R12977

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

- Sample pH greater than 2 for VOA and TOC only. P
- RLReporting Detection Limit

Lab Order 1308C82

Date Reported: 8/30/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-4

Project: CoP SJ 28-6 #170M

Collection Date: 8/28/2013 11:08:00 AM

Lab ID: 1308C82-002

Matrix: MEOH (SOIL) Received Date: 8/29/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES	SHORT LIST		-		Analys	st: RAA
Benzene	0.15	0.050	mg/Kg	1	8/29/2013 12:53:47 P	M R1297
Toluene	0.15	0.050	mg/Kg	1	8/29/2013 12:53:47 P	M R1297
Ethylbenzene	0.36	0.050	mg/Kg	1	8/29/2013 12:53:47 P	M R1297
Xylenes, Total	3.8	0.10	mg/Kg	1	8/29/2013 12:53:47 P	M R1297
Surr: 1,2-Dichloroethane-d4	102	70-130	%REC	1	8/29/2013 12:53:47 P	M R1297
Surr: 4-Bromofluorobenzene	87.5	70-130	%REC	1	8/29/2013 12:53:47 P	M R1297
Surr: Dibromofluoromethane	107	70-130	%REC	1	8/29/2013 12:53:47 P	M R1297
Surr: Toluene-d8	74.8	70-130	%REC	1	8/29/2013 12:53:47 P	M R1297

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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

Page 2 of 7

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Lab Order 1308C82

Date Reported: 8/30/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: SC-5

Project: CoP SJ 28-6 #170M Collection Date: 8/28/2013 11:10:00 AM

1308C82-003 Lab ID:

Matrix: MEOH (SOIL) Received Date: 8/29/2013 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RAN	IGE ORGANICS				Analyst	JME
Diesel Range Organics (DRO)	880	10	mg/Kg	1	8/29/2013 11:42:57 AM	9101
Surr: DNOP	98.5	63-147	%REC	1	8/29/2013 11:42:57 AM	9101
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst	RAA
Benzene	3.9	0.25	mg/Kg	5	8/29/2013 1:51:33 PM	R12977
Toluene	37	2.5	mg/Kg	50	8/29/2013 3:47:20 PM	R12977
Ethylbenzene	6.9	0.25	mg/Kg	5	8/29/2013 1:51:33 PM	R12977
Xylenes, Total	91	5.0	mg/Kg	50	8/29/2013 3:47:20 PM	R12977
Surr: 1,2-Dichloroethane-d4	93.4	70-130	%REC	5	8/29/2013 1:51:33 PM	R12977
Surr: 4-Bromofluorobenzene	80.9	70-130	%REC	5	8/29/2013 1:51:33 PM	R12977
Surr: Dibromofluoromethane	107	70-130	%REC	5	8/29/2013 1:51:33 PM	R12977
Surr: Toluene-d8	94.7	70-130	%REC	5	8/29/2013 1:51:33 PM	R12977
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	RAA
Gasoline Range Organics (GRO)	3100	250	mg/Kg	50	8/29/2013 3:47:20 PM	R12977
Surr: BFB	82.7	70-130	%REC	50	8/29/2013 3:47:20 PM	R12977

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit

- Sample pH greater than 2 for VOA and TOC only. Р
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308C82

30-Aug-13

Client:

Animas Environmental

Project: CoP SJ	J 28-6 #170M	
Sample ID: MB-9101	SampType: MBLK TestCode: EPA Metho	d 8015D: Diesel Range Organics
Client ID: PBS	Batch ID: 9101 RunNo: 12963	
Prep Date: 8/29/2013	Analysis Date: 8/29/2013 SeqNo: 370092	Units: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLim	t HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10	
Surr: DNOP	7.9 10.00 78.5 6	3 147
Sample ID: LCS-9101	SampType: LCS TestCode: EPA Metho	d 8015D: Diesel Range Organics
Client ID: LCSS	Batch ID: 9101 RunNo: 12963	
Prep Date: 8/29/2013	Analysis Date: 8/29/2013 SeqNo: 370093	Units: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLim	it HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	59 10 50.00 0 119 77.	1 128
Surr: DNOP	4.1 5.000 82.1 6	3 147
Sample ID: LCS-9079	SampType: LCS TestCode: EPA Metho	d 8015D: Diesel Range Organics
Client ID: LCSS	Batch ID: 9079 RunNo: 12963	
Prep Date: 8/28/2013	Analysis Date: 8/29/2013 SeqNo: 370124	Units: %REC
Analyte	Result PQL SPK value SPK Ref Val %REC LowLim	it HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.5 5.000 90.0 6	3 147
Sample ID: MB-9079	SampType: MBLK TestCode: EPA Metho	d 8015D: Diesel Range Organics
Client ID: PBS	Batch ID: 9079 RunNo: 12963	
Prep Date: 8/28/2013	Analysis Date: 8/29/2013 SeqNo: 370125	Units: %REC
Analyte	Result PQL SPK value SPK Ref Val %REC LowLim	it HighLimit %RPD RPDLimit Qual

10.00

Qualifiers:

Surr: DNOP

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

76.8

147

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1308C82

30-Aug-13

Client:

Animas Environmental

Project:

CoP SJ 28-6 #170M

Sample ID: 5ml rb	SampT	ype: ME	LK	Tes	tCode: E	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batch	ID: R1	2977	F	RunNo: 1	2977				
Prep Date:	Analysis D	ate: 8/	29/2013	5	SeqNo: 3	70249	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: 1,2-Dichloroethane-d4	0.50		0.5000		99.7	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		113	70	130			
Surr: Toluene-d8	0.49		0.5000		98.4	70	130			
Sample ID: 100ng lcs	SampT	s	Tes	tCode: E	PA Method	8260B: Volat	tiles Short	List		
Client ID: LCSS	RunNo: 12977									
Prep Date:	Analysis Date: 8/29/2013				SeqNo: 370251 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	70	130			
Toluene	0.99	0.050	1.000	0	98.6	69.9	139			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.5	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			
Sample ID: 1308c82-001a m	ns SampT	ype: MS	3	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: SC-3	Batch	ID: R1	2977	F	RunNo: 1	2977				
Prep Date:	Analysis D	ate: 8/	29/2013	5	SeqNo: 3	70980	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.63	0.050	0.6061	0.05622	94.3	65.1	127			
Toluene	1.0	0.050	0.6061	0.4601	93.6	54.2	148			
Surr: 1,2-Dichloroethane-d4	0.30		0.3030		99.7	70	130			
Surr: 4-Bromofluorobenzene	0.25		0.3030		82.6	70	130			
Surr: Dibromofluoromethane	0.30		0.3030		97.6	70	130			
Surr: Toluene-d8	0.25		0.3030		81.9	70	130			
Sample ID: 1308c82-001a m	nsd SampT	ype: M \$	SD	Tes	tCode: E	PA Method	8260B: Vola	tiles Shor	List	
Client ID: SC-3	Batch	ID: R1	2977	RunNo: 12977						
Prep Date:	Analysis D	ate: 8/	29/2013	\$	SeqNo: 3	70981	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
				0.0====						

Qualifiers:

Benzene

Toluene

Value exceeds Maximum Contaminant Level.

0.61

0.94

0.050

0.050

0.6061

0.6061

0.05622

0.4601

- Value above quantitation range Ε
- Analyte detected below quantitation limits J
- RSD is greater than RSDlimit O
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits S
- Analyte detected in the associated Method Blank

65.1

54.2

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

91.5

79.4

- Sample pH greater than 2 for VOA and TOC only. P
- RLReporting Detection Limit

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20

20

2.82

8.79

127

148

Hall Environmental Analysis Laboratory, Inc.

WO#:

1308C82

30-Aug-13

Client:

Animas Environmental

Project:

CoP SJ 28-6 #170M

Sample ID: 1308c82-001a msd	i SampT	SampType: MSD			TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: SC-3	Batch	h ID: R1	2977	F	RunNo: 1	2977					
Prep Date:	Analysis Date: 8/29/2013			SeqNo: 370981			Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 1,2-Dichloroethane-d4	0.30		0.3030		98.8	70	130	0	0		
Surr: 4-Bromofluorobenzene	0.26		0.3030		84.7	70	130	0	0		
Surr: Dibromofluoromethane	0.30		0.3030		100	70	130	0	0		
Surr: Toluene-d8	0.25		0.3030		81.8	70	130	0	0		

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1308C82

30-Aug-13

Client:

Animas Environmental

C-D CL 20 C #170M

Project: CoP SJ 2	28-6 #170N	1								
Sample ID: 5ml rb	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: R12977		RunNo: 12977							
Prep Date:	Analysis D	ate: 8/	29/2013	S	SeqNo: 3	70255	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 520	5.0	500.0		103	70	130			
Sample ID: 2,5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: R12977			RunNo: 12977						
Prep Date:	Analysis Date: 8/29/2013		SeqNo: 370257			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	80	120			
Surr: BFB	470		500.0		94.9	70	130			
Sample ID: 1308c82-003a ms	SampT	SampType: MS			TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: SC-5	Batch ID: R12977		RunNo: 12977							
Prep Date:	Analysis D	ate: 8/	29/2013	8	SeqNo: 3	70982	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4000	250	823.5	3050	117	58	134			
Surr: BFB	13000		16470 ————		81.7	70	130			
Sample ID: 1308c82-003a msd SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range										
Client ID: SC-5	Batch ID: R12977			RunNo: 12977						
Prep Date:	Analysis D	Analysis Date: 8/29/2013		SeqNo: 370983			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3700	250	823.5	3050	74.9	58	134	9.06	20	· ·
Surr: BFB	13000		16470		81.7	70	130	0	0	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits J
- RSD is greater than RSDlimit 0
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RLReporting Detection Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE

Sample Log-In Check List Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Client Name: Animas Envir	onmental Work Order	Number: 1308	C82		RoptNo:	1	
Received by/date:	05/29/13						
Logged By: Lindsay Ma	ngin 8/29/2013 10:0	0:00 AM		Spreaky Hlagge			
Completed By: Lindsay Ma		19:07 AM		State Happo			
Reviewed By:	08/29/	/ '					
Chain of Custody							
1. Custody seals intact on sar	· Yes		No 🗆	Not Present			
2. Is Chain of Custody complete?			\checkmark	No 🔲	Not Present		
3. How was the sample delivered?			<u>ier</u>				
<u>Log In</u>							
4. Was an attempt made to cool the samples?			V	No 🗀	na 🗆	•	
5. Were all samples received at a temperature of >0° C to 6.0°C			V	No 🔲	NA 🗀		
6. Sample(s) in proper container(s)?			¥	No 🗆			
7. Sufficient sample volume for indicated test(s)?			\checkmark	No 🗆			
8. Are samples (except VOA	and ONG) properly preserved?	Yes	$ \mathbf{V} $	No 🗆			
9. Was preservative added to bottles?				No 🗹	na 🗆		
10.VOA vials have zero headspace?				No 🗆	No VOA Vials 🗹		
11. Were any sample containers received broken?				No 🗹	# of preserved	······································	
· 12 Doos nanonwark match had	· His ishalo?	Yes		No 🗆	bottles checked for pH:		
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)			الكا	ب ١٩٠٠		'>12 unless noted)	
13. Are matrices correctly identified on Chain of Custody?			\checkmark	No 🗆	Adjusted?	 	
14. Is it clear what analyses were requested?			\checkmark	No 🗀			
15. Were all holding times able to be met? (If no, notify customer for authorization.)			\checkmark	No 🗌	Checked by:		
(ii no, notily obstories for e	· ·						
Special Handling (if app	licable)		٠.	,			
16. Was client notified of all dis	screpancies with this order?	Yes		No 🗆	na 🗹		
Person Notified:		Date:					
By Whom:		Via: eM	ail 🗌	Phone Fax	☐ In Person		
Regarding:							
Client Instructions:							
17. Additional remarks:							
18. <u>Cooler Information</u>							
Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 1 1.0 Good Yes							
	1745				l 		

Chain-of-Custody Record	Turn-Around Time:						
Client: Animas Environmental Services	□ Ständard Ø Rush Same Dru	HALL ENVIRONMENTAL ANALYSIS LABORATORY					
The Child All Strikes	Project Name:						
Mailing Address: 624 E. Comandy	Cof SJ 28-6#170M	www.hallenvironmental.com					
	Project #:	4901 Hawkins NE - Albuquerque, NM 87109					
Farmington, NM 87401	1. 19,555	Tel. 505-345-3975 Fax 505-345-4107 Analysis Request					
Phone #: 505 - 564 228)	A 7						
email or Fax#:	Project Manager:	3021) as only) (AMEXE) (AMEXE) CB's CB's					
QA/QC Package:	Sle .	1812141 1 181 10121 1 1 1 1 1 1					
☐ Level 4 (Full Validation)	D. watson	4.1) 270 SIM 270 SIM (8082 PC					
Accreditation NELAP Öther	Sampler: 4. Woods	(O / DR (O / DR))))) () () () () () () () () () () () () () (
□ EDD (Type)	Opalce: Zyres Mess No Mary C. Sample remperature www.	+ +					
	Som presidente de la companya del companya de la companya del companya de la comp	MTBE GF ethod 4 ethod 5 a310 or F.CI,NC emi-VO emi-VO					
Date Time Matrix Sample Request ID	Container Preservative	BTEX + MEBE + TPH BTEX + MTBE + TPH TPH 8015B (GRO / D TPH 8015B (GRO / G TPH 8015B (VOA) S260B (VOA) Air Bubbles (Y or N)					
Date Time Matrix Sample Request ID	Type and # Type	BTEX BTEX TPH (I TPH (I EDB (I					
8/28/B 1243 So:1 SC-3	MEDHKILL WOH						
3128/13 1108 Soil SC-4	Meotics Meoti						
3120/15 1110 Soil SC -S	MOH KY MOH053	X X					
	1						
Date: Time: Relinquished by:	Received by: Date Time	Remarks: 7.11 C					
8/28/13 1650 Heather M. Wood	Mistrabelto 8/28/13 1650	Remarks: Bill to Conoco Phillips					
Date: Time: Relinguished by:	Fleceived by: Date Time	WD: 9706301 ordered by: Eric Smith					
No Visit Control Visit Control	holada man	Superior: Mike Smith					
108 13 17 10 10 10 10 10 10 10							
in recessary, samples submitted to rian Environmental may be sub-	This serves as house of the analytical report.						