

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

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

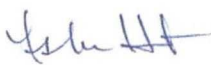

Name of Company Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company	Contact Lisa Hunter	
Address 3401 East 30th St, Farmington, NM	Telephone No. (505) 326-9786	
Facility Name: San Juan 28-4 Unit 30	Facility Type: Gas Well	
Surface Owner USFS	Mineral Owner BLM	API No. 3003920078

LOCATION OF RELEASE

Unit Letter G	Section 31	Township 28N	Range 04W	Feet from the 1565	North/South Line North	Feet from the 1830	East/West Line East	County Rio Arriba
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Latitude 36.61924 Longitude -107.28871

NATURE OF RELEASE

Type of Release Historic Hydrocarbon	Volume of Release Unknown	Volume Recovered N/A
Source of Release Below Grade Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery November 12, 2013
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Evidence of a historic release was discovered during a Below Grade Tank closure. Third-party environmental was call to sample and assess.		
Describe Area Affected and Cleanup Action Taken.* Release assessment was completed by third-party environmental and Analytical results were below the NMOCD regulatory standards – no further action required. The soil sampling report is attached for review. No further remediation required.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Lisa Hunter	Approved by Environmental Specialist: 	
Title: Field Environmental Specialist	Approval Date: 4/13/15	Expiration Date:
E-mail Address: Lisa.Hunter@cop.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: February 9, 2015	Phone: (505) 326-9786	

* Attach Additional Sheets If Necessary

HACS 1510348739

16



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado
970-403-3274

December 30, 2013

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

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

**RE: Below Grade Tank Closure Report
San Juan 28-4 #30
Rio Arriba County, New Mexico**

Dear Ms. Dumas:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) San Juan 28-4 #30, located in Rio Arriba County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

1.0 Site Information

1.1 Location

Site Name – San Juan 28-4 #30

Legal Description - SW¼ NE¼, Section 31, T28N, R4W, Rio Arriba County, New Mexico

Well Latitude/Longitude – N36.61941 and W107.28889, respectively

BGT Latitude/Longitude - N36.61926 and W107.28866, respectively

Land Jurisdiction – U.S. Forest Service (USFS)

Figure 1 - Topographic Site Location Map

Figure 2 - Aerial Site Map, November 2013

1.2 NMOCD Ranking

In accordance with the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), the location was given a ranking score of 0 based on the following factors:

- **Depth to Groundwater:** Based on the elevation differential between the location and the nearest surface water, AES personnel estimated that depth groundwater is greater than 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** An unnamed wash which discharges to the wash in Muñoz Canyon and ultimately to the San Juan River is located approximately 1,650 feet west of the location. (0 points)

1.3 BGT Closure Assessment

AES was initially contacted by Fred Martinez, CoP representative, on November 12, 2013, and on the same day, Deborah Watson and Heather Woods of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

2.0 Soil Sampling

On November 12, 2013, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for VOCs and chloride and was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

2.1 Field Screening

2.1.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors 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

Soil samples were also analyzed in the field for TPH 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*.

2.1.3 Chlorides

Soil sample SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

2.2 Laboratory Analyses

The composite soil sample SC-1 collected for laboratory analysis was placed into a new, clean, laboratory-supplied container, which was then labeled, placed on ice, and logged onto a sample chain of custody record. The sample was maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D; and
- Chloride per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM ranged from 1.0 ppm in S-4 up to 7.2 ppm in S-5. Field TPH concentrations ranged from 92.7 mg/kg in S-3 up to 587 mg/kg in S-5. The field chloride concentration in SC-1 was 60 mg/kg. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results
San Juan 28-4 #30 BGT Closure, November 2013

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth below BGT (ft)</i>	<i>VOCs OVM Reading (ppm)</i>	<i>Field TPH (mg/kg)</i>	<i>Field Chlorides (mg/kg)</i>
NMOCD Action Level (NMAC 19.15.17.13E)			--	100	250
S-1	11/12/13	0.5	1.6	156	NA
S-2	11/12/13	0.5	2.7	132	NA
S-3	11/12/13	0.5	1.7	92.7	NA
S-4	11/12/13	0.5	1.0	228	NA
S-5	11/12/13	0.5	7.2	587	NA
SC-1	11/12/13	0.5	3.8	NA	60

NA - Not Analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.050 mg/kg and 0.25 mg/kg, respectively. TPH concentrations as GRO and DRO were reported at less than 5.0 mg/kg and at 110 mg/kg, respectively. The laboratory chloride concentration was reported at 31 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. The laboratory analytical report is attached.

Table 2. Soil Laboratory Analytical Results
San Juan 28-4 #30 BGT Closure, November 2013

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth (ft)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>TPH-GRO (mg/kg)</i>	<i>TPH-DRO (mg/kg)</i>	<i>Chlorides (mg/kg)</i>
NMOCD Action Level (NMAC 19.15.17.13E)			0.2/10*	50	100/5,000*		250
SC-1	11/12/13	0.5	<0.50	<2.5	<5.0	110	31

*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

3.1 BGT Closure

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in four samples, with the highest concentration reported in S-5 with 587 mg/kg. Laboratory analytical results for TPH (as GRO/DRO) in SC-1 were reported above the NMOCD action level of 100 mg/kg with 110 mg/kg. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations in SC-1 were below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results on November 12, 2013, a release is confirmed at the San Juan 28-4 #30.

3.2 Release Confirmation

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 0. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively. TPH concentrations as GRO/DRO in SC-1 were reported below the NMOCD action level of 5,000 mg/kg. Soil laboratory analyses showed that benzene, total BTEX, TPH and chloride concentrations were below the NMOCD action levels for SC-1. Release notification should follow the

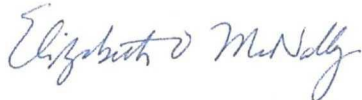
protocols outlined in NMAC 19.15.29 and 30. No further work is recommended for the San Juan 28-4 #30 BGT release.

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



Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, November 2013
AES Field Screening Report 111213
Hall Analytical Report 1311503

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\SJ 28-4 #30\San Juan 28-4 #30 BGT Closure Report 123013.docx



Animas Environmental Services, LLC

DRAWN BY:

S. Glasses

DATE DRAWN:

November 18, 2013

REVISIONS BY:

C. Lameman

DATE REVISED:

November 18, 2013

CHECKED BY:

D. Watson

DATE CHECKED:

November 18, 2013

APPROVED BY:

E. McNally

DATE APPROVED:

November 18, 2013

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips
SAN JUAN 28-4 #30
SW¼ NE¼, SECTION 31, T28N, R4W
RIO ARRIBA COUNTY, NEW MEXICO
N36.61941, W107.28889

LEGEND

● SAMPLE LOCATIONS

Field Screening Results

Sample ID	Date	OVUM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL	--	--	100	250
S-1	11/12/13	1.6	156	NA
S-2	11/12/13	2.7	132	NA
S-3	11/12/13	1.7	92.7	NA
S-4	11/12/13	1.0	228	NA
S-5	11/12/13	7.2	587	NA
SC-1	11/12/13	3.8	NA	60

SC-1 IS A 5-POINT COMPOSITE SAMPLE OF S-1 THROUGH S-5. NA - NOT ANALYZED

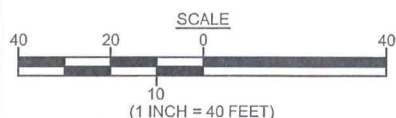
Laboratory Analytical Results

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		0.2/10	50	100/5,000		250
SC-1	11/12/13	<0.050	<0.25	<5.0	110	31

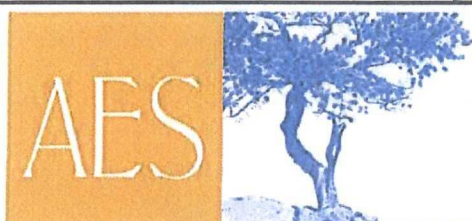
SAMPLE WAS ANALYZED PER EPA METHOD 8021B, 8015D AND 300.0.

SAN JUAN 28-4 #30 WELL MONUMENT

S-5
S-4
S-3
S-2
BGT - N36.61926
W107.28866



AERIAL SOURCE: © 2012 GOOGLE EARTH, AERIAL DATE: MAY 2, 2013



Animas Environmental Services, LLC

DRAWN BY:

S. Glasses

DATE DRAWN:

November 18, 2013

REVISIONS BY:

C. Lameman

DATE REVISED:

November 18, 2013

CHECKED BY:

D. Watson

DATE CHECKED:

November 18, 2013

APPROVED BY:

E. McNally

DATE APPROVED:

November 18, 2013

FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
NOVEMBER 2013

ConocoPhillips

SAN JUAN 28-4 #30

SW¼ NE¼, SECTION 31, T28N, R4W
RIO ARriba COUNTY, NEW MEXICO
N36.61941, W107.28889



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

November 15, 2013

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

RE: CoP San Juan 28-4 #30

OrderNo.: 1311503

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/13/2013 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 qualifiers 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1311503

Date Reported: 11/15/2013

CLIENT: Animas Environmental

Client Sample ID: SC-1

Project: CoP San Juan 28-4 #30

Collection Date: 11/12/2013 3:20:00 PM

Lab ID: 1311503-001

Matrix: SOIL

Received Date: 11/13/2013 9:47:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	110	9.9		mg/Kg	1	11/13/2013 12:07:19 PM	10315
Surr: DNOP	96.3	66-131		%REC	1	11/13/2013 12:07:19 PM	10315
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/13/2013 12:29:45 PM	R14768
Surr: BFB	103	74.5-129		%REC	1	11/13/2013 12:29:45 PM	R14768
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	11/13/2013 12:29:45 PM	R14768
Toluene	ND	0.050		mg/Kg	1	11/13/2013 12:29:45 PM	R14768
Ethylbenzene	ND	0.050		mg/Kg	1	11/13/2013 12:29:45 PM	R14768
Xylenes, Total	ND	0.10		mg/Kg	1	11/13/2013 12:29:45 PM	R14768
Surr: 4-Bromofluorobenzene	114	80-120		%REC	1	11/13/2013 12:29:45 PM	R14768
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	31	30		mg/Kg	20	11/13/2013 12:30:15 PM	10324

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311503

15-Nov-13

Client: Animas Environmental

Project: CoP San Juan 28-4 #30

Sample ID	MB-10324	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions						
Client ID:	PBS	Batch ID:	10324	RunNo:	14791						
Prep Date:	11/13/2013	Analysis Date:	11/13/2013	SeqNo:	426109	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-10324	SampType:	LCS	TestCode:	EPA Method 300.0: Anions						
Client ID:	LCSS	Batch ID:	10324	RunNo:	14791						
Prep Date:	11/13/2013	Analysis Date:	11/13/2013	SeqNo:	426111	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	91.3	90	110				

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311503

15-Nov-13

Client: Animas Environmental

Project: CoP San Juan 28-4 #30

Sample ID	MB-10315	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	10315	RunNo:	14753					
Prep Date:	11/13/2013	Analysis Date:	11/13/2013	SeqNo:	424980	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	8.6		10.00		85.9	66	131			

Sample ID	LCS-10315	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	10315	RunNo:	14753					
Prep Date:	11/13/2013	Analysis Date:	11/13/2013	SeqNo:	425003	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.9	62.1	127			
Surr: DNOP	4.3		5.000		85.7	66	131			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311503

15-Nov-13

Client: Animas Environmental

Project: CoP San Juan 28-4 #30

Sample ID	MB-10303 MK		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: R14768		RunNo: 14768					
Prep Date:			Analysis Date: 11/13/2013		SeqNo: 425628		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.5	74.5	129			

Sample ID	LCS-10303 MK		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: R14768		RunNo: 14768					
Prep Date:			Analysis Date: 11/13/2013		SeqNo: 425629		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	74.5	126			
Surr: BFB	970		1000		96.9	74.5	129			

Sample ID	MB-10303		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 10303		RunNo: 14768					
Prep Date:	11/12/2013		Analysis Date: 11/13/2013		SeqNo: 425633		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.5	74.5	129			

Sample ID	LCS-10303		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 10303		RunNo: 14768					
Prep Date:	11/12/2013		Analysis Date: 11/13/2013		SeqNo: 425634		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		96.9	74.5	129			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1311503

15-Nov-13

Client: Animas Environmental

Project: CoP San Juan 28-4 #30

Sample ID	MB-10303 MK		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R14768		RunNo:	14768			
Prep Date:			Analysis Date:	11/13/2013		SeqNo:	425652		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID	LCS-10303 MK		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R14768		RunNo:	14768			
Prep Date:			Analysis Date:	11/13/2013		SeqNo:	425653		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.2	80	120			
Toluene	1.0	0.050	1.000	0	99.9	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		115	80	120			

Sample ID	MB-10303		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	10303		RunNo:	14768			
Prep Date:	11/12/2013		Analysis Date:	11/13/2013		SeqNo:	425656		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID	LCS-10303		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	10303		RunNo:	14768			
Prep Date:	11/12/2013		Analysis Date:	11/13/2013		SeqNo:	425657		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		115	80	120			

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

Sample Log-In Check List

Client Name: **Animas Environmental**

Work Order Number: **1311503**

RcptNo: **1**

Received by/date:

AG 11/13/13

Logged By: **Anne Thorne**

11/13/2013 9:47:00 AM

Anne Thorne

Completed By: **Anne Thorne**

11/13/2013

Anne Thorne

Reviewed By:

IO

11/13/13

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

Cooler No.	Temp °C	Condition	Seal Intact	Seal No.	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Turn-Around Time:

☐ Standard

☒ Rush Same day

Project Name:

CoP Sandman 28-4 #30

Project #:

Project Manager:

D Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

Metall - to bag

Preservative Type

Metall -

HEAL No.

131503



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX + THP + THP (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO/DRO/MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	300.0 Chlorides	Air Bubbles (Y or N)
X	X	X									X	

Client: Animas Environmental
Services LLC

Mailing Address: 624 E Comanche
Farmington NM 87401

Phone #: 505 564 2281

email or Fax#:

QA/QC Package:

☒ Standard

☐ Level 4 (Full Validation)

Accreditation

☐ NELAP

☐ Other

☐ EDD (Type)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + THP + THP (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO/DRO/MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	300.0 Chlorides	Air Bubbles (Y or N)
1-12-13	1520	Soil	SC-1	Metall - to bag	Metall -	131503	X	X	X									X	

Date: 1/13/13 Time: 625 Relinquished by: Delbrich Watson

Date: 1/13/13 Time: 645 Relinquished by: Christine Watson

Received by: Christine Watson Date: 1/13/13 Time: 625

Received by: [Signature] Date: 1/13/13 Time: 0947

Remarks: Bill to ConocoPhillips
WO: 10353364 Super: Nick Ferrari
Area: 24 User: Benale
Act Code C200 ordered by: Freddie Martinez

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