

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

State of New Mexico
Energy Minerals and Natural Resources

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 in
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 Ashley Maxwell	
Address 3401 E. 30th St., Farmington, NM 87402	Telephone No. 505-324-5169	
Facility Name – Aztec A 1B	Facility Type – Gas Well	
Surface Owner – Private	Mineral Owner – Fee	API No. 3004530397

LOCATION OF RELEASE

Unit Letter K	Section 22	Township 31N	Range 11W	Feet from the 1900'	North/South Line South	Feet from the 1980'	East/West Line West	County – San Juan County
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Latitude 36.88231° N Longitude -107.98016° W

NATURE OF RELEASE

Type of Release – Condensate	Volume of Release – 12BBL	Volume Recovered – 0BBL
Source of Release – Production Tank	Date and Hour of Occurrence - Unknown	Date and Hour of Discovery – 5/7/12 @ 11:30AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? RCVD NOV 16 '12	
By Whom? OIL CONS. DIV.	Date and Hour DIST. 3	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.*COP Employee noticed wet area on the side of the production tank and discovered a bullet hole. COP had remainder of condensate removed from the tank.		
Describe Area Affected and Cleanup Action Taken.*The well was shut in and the remainder of the fluid in the tank was removed. The area of impact will be assessed. The area will be delineated and sampled per NMOCD Leaks, Spills and Remediation Guidelines. Excavation was required based on NMOCD Guidelines for Remediation of Leaks, Spills and Releases. The excavation was 20'X40'X6" and 54 yds³ of soil was transported to a third party land farm. Excavation and confirmation sampling occurred. Analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases; therefore no further action is needed.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Ashley Maxwell	Approved by Environmental Specialist: 	
Title: Environmental Specialist	Approval Date: 11/27/2012	Expiration Date:
E-mail Address: ashley.p.wethington@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: November 12, 2012	Phone: 505-324-5169	

* Attach Additional Sheets If Necessary

nJK12332 54346



Animas Environmental Services, LLC

www.animasenvironmental.com

November 6, 2012

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

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

Durango, Colorado
970-403-3274

**RE: Final Excavation Report
Aztec A #1B
San Juan County, New Mexico**

Dear Ms. Maxwell:

On August 7, 2012, Animas Environmental Services, LLC (AES) completed an environmental clearance of the final excavation limits associated with a release at the ConocoPhillips (CoP) Aztec A #1B, located in San Juan County, New Mexico. The initial release assessment was completed by AES and a report was issued June 12, 2012. The final excavation was completed by CoP contractors prior to AES' arrival to the location on August 7, 2012. The release consisted of approximately 12 barrels (bbls) of condensate, which leaked as a result of a bullet hole in the 286 bbl condensate tank.

1.0 Site Information

1.1 Location

Location - NE¼ SW¼, Section 22, T31N, R11W, San Juan County, New Mexico
Well Head Latitude/Longitude - N36.88238 and W107.98074, respectively
Release Location Latitude/Longitude - N36.88213 and W107.98077, respectively
Land Jurisdiction - Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2012

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and no prior ranking information was located. The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery Research

Center online mapping tool (<http://ford.nmt.edu/react/project.html>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet below ground surface (bgs). Two tributaries to an unnamed wash are located approximately 530 feet southeast and 600 feet southwest of the location. Based on this information, the location was assessed a ranking score of 10 per the *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993).

1.3 Assessment

AES was initially contacted by Shelly Cook-Cowden of CoP on May 8, 2012, and on May 9, 2012, Thomas Long and Zachary Trujillo of AES completed the release assessment field work. The assessment included collection and field screening of 13 soil samples from 10 soil borings in the release area. Based on the field screening results, AES recommended an area of excavation for the location. Details of the initial release assessment were included in the AES report dated June 12, 2012.

On August 7, 2012, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of six confirmation soil samples (SC-1 through SC-6) of the walls and base of the excavation. The two areas of the final excavation were approximately 22 feet by 20 feet by 3.5 feet in depth (former below grade tank location) and 28.5 feet by 24 feet by 1 foot in depth (former condensate tank location). Sample locations and final excavation extents are shown on Figure 3.

2.0 Soil Sampling

A total of six 5-point composite soil samples (SC-1 through SC-6) were collected during the assessment. All soil samples were field screened for volatile organic compounds (VOCs) and analyzed for total petroleum hydrocarbons (TPH). Four of the composite soil samples (SC-1, SC-2, SC-3 and SC-6) collected during the 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 were laboratory analyzed for:

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

Note that SC-3 and SC-6 were analyzed for TPH only per USEPA 8015B.

2.3 Field Screening and Laboratory Analytical Results

On August 7, 2012, final excavation field screening readings for VOCs via OVM ranged from 3.3 ppm in SC-4 to 1,029 ppm in SC-1. Field TPH concentrations ranged from 62.0 mg/kg in SC-4 up to 1,470 mg/kg in S-6. Results are included below in Table 1 and on Figures 3. The AES field screening report is attached.

Table 1. Soil Field Screening VOCs and TPH Results
 Aztec A #1B Final Excavation, August 2012

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>Field TPH (mg/kg)</i>
			<i>NMOCOD Action Level*</i>	<i>100</i>
SC-1	8/7/12	1	1,029	1,310
SC-2	8/7/12	3.5	592	177
SC-3	8/7/12	1 to 3.5	78.2	643
SC-4	8/7/12	1 to 3.5	3.3	62.0
SC-5	8/7/12	1 to 3.5	4.0	86.6

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
NMOCD Action Level*			100	1,000
SC-6	8/7/12	1 to 3.5	55.5	1,470

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

Laboratory analyses for SC-1, SC-2, SC-3 and SC-6 were used to confirm field screening results during excavation activities. Benzene concentrations were below laboratory detection limits in SC-1 and SC-2, and BTEX concentrations were 19 mg/kg in SC-1 and 0.35 mg/kg in SC-2. TPH concentrations (as GRO/DRO) ranged from 65 mg/kg in SC-2 up to 880 mg/kg in SC-1. Results are presented in Table 2 and on Figure 3. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, BTEX and TPH
Aztec A #1B Final Excavation, August 2012

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMOCD Action Level*			10	50	1,000	
SC-1	8/7/12	1	<1.0	19	580	300
SC-2	8/7/12	3.5	<0.050	0.35	39	26
SC-3	8/7/12	1 to 3.5	NA	NA	6.6	260
SC-6	8/7/12	1 to 3.5	NA	NA	<5.0	320

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

3.0 Conclusions and Recommendations

On August 7, 2012, AES conducted an environmental clearance of the final excavation limits associated with a release at the Aztec A #1B, located in San Juan County, New Mexico. The release consisted of approximately 12 bbls of condensate, which leaked from a bullet hole in the 286 bbl condensate tank. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 10. Field screening results above the NMOCD action level of 100 ppm VOCs were reported in SC-1 (1,029 ppm) and SC-2 (592 ppm). Field TPH concentrations exceeded the NMOCD action level of 1,000 mg/kg in SC-1 (1,310 mg/kg) and SC-6 (1,470 mg/kg). However, laboratory analytical

results showed reported benzene, total BTEX, and TPH concentrations below the applicable NMOCD action levels in SC-1, SC-2, SC-3, and SC-6.

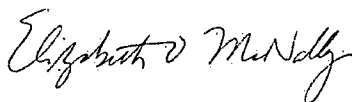
Based on field screening and laboratory analytical results of the final excavation of petroleum contaminated soils at the Aztec A #1B, benzene, total BTEX, and TPH (GRO/DRO) concentrations were below applicable NMOCD action levels. No further work is recommended.

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

Sincerely,



Heather M. Woods
Staff Geologist



Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, May 2012
- Figure 3. Final Excavation Soil Sample Locations and Results, August 2012
- AES Field Screening Report 080712
- Hall Laboratory Analytical Report 1208326

R:\Animas 2000\2012 Projects\Conoco Phillips\Aztec A #1B\Aztec A #1B Final Excavation Report
110612.docx



Animas Environmental Services, LLC

DRAWN BY: N. Willis	DATE DRAWN: May 14, 2012
REVISIONS BY: C. Lameman	DATE REVISED: October 19, 2012
CHECKED BY: D. Watson	DATE CHECKED: October 19, 2012
APPROVED BY: E. McNally	DATE APPROVED: October 19, 2012

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
AZTEC A #1B
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 22, T31N, R11W
N36.88238, W107.98074



DRAWN BY:
N. Willis

DATE DRAWN:
May 14, 2012

FIGURE 2

REVISIONS BY:
C. Lameman

DATE REVISED:
October 19, 2012

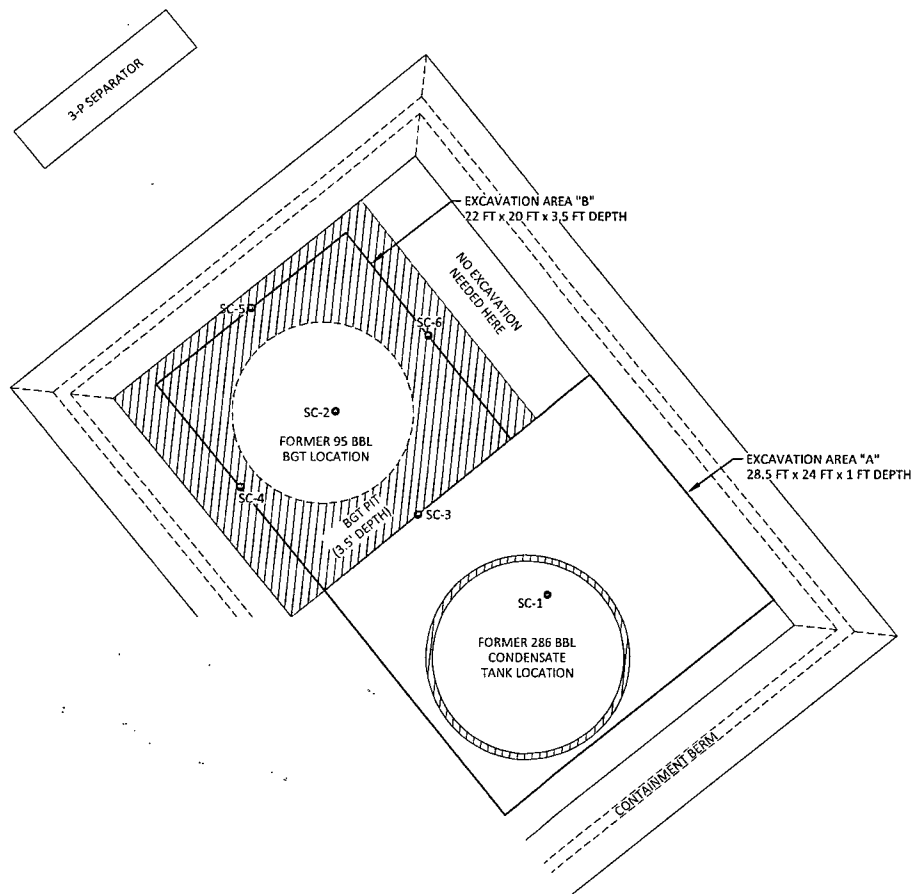
CHECKED BY:
D. Watson

DATE CHECKED:
October 19, 2012

APPROVED BY:
E. McNally

DATE APPROVED:
October 19, 2012

AERIAL SITE MAP
ConocoPhillips
AZTEC A #1B
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 22, T31N, R11W
N36.88238, W107.98074



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	8/7/12	1	1,029	1,300
SC-2	8/7/12	3.5	529	177
SC-3	8/7/12	1 to 3.5	78.2	643
SC-4	8/7/12	1 to 3.5	3.3	62.0
SC-5	8/7/12	1 to 3.5	4.0	86.6
SC-6	8/7/12	1 to 3.5	55.5	1,470
NA - NOT ANALYZED				

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
SC-1	8/7/12	1	<1.0	19	580	300
SC-2	8/7/12	3.5	<0.050	0.35	39	26
SC-3	8/7/12	1 to 3.5	NA	NA	6.6	260
SC-6	8/7/12	1 to 3.5	NA	NA	<5.0	320
SC-1 AND SC-2 WERE ANALYZED PER EPA METHOD 8021B AND 8015B. SC-3 AND SC-6 WERE ANALYZED PER EPA METHOD 8015B. NA - NOT ANALYZED						

FIGURE 3

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
AUGUST 2012
 CONOCOPHILLIPS
 AZTEC A #1B
 SAN JUAN COUNTY, NEW MEXICO
 NE¼ SW¼, SECTION 22, T31N, R11W
 N36.88238, W107.98074



Aninas Environmental Services, LLC

DRAWN BY:
R. Kennemer

DATE DRAWN:
May 10, 2012

REVISIONS BY:
C. Lamenan

DATE REVISED:
October 19, 2012

CHECKED BY:
D. Watson

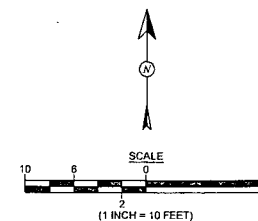
DATE CHECKED:
October 19, 2012

APPROVED BY:
E. McNally

DATE APPROVED:
October 19, 2012

LEGEND

- ABOVE GRADE EQUIPMENT
- - - BELOW GRADE EQUIPMENT
- x - FENCE
- ===== SECONDARY CONTAINMENT
- 5-POINT COMPOSITE SAMPLE LOCATIONS



AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: Aztec A #1B

Date: 8/7/2012

Matrix: Soil

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

Durango, Colorado
970-403-3274

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	8/7/2012	8:48	South Base	1,029	9:52	1,310	20.0	1	DAW
SC-2	8/7/2012	8:52	North Base	592	9:55	177	20.0	1	DAW
SC-3	8/7/2012	8:57	South Wall	78.2	9:58	643	20.0	1	DAW
SC-4	8/7/2012	9:02	West Wall	3.3	10:01	62.0	20.0	1	DAW
SC-5	8/7/2012	9:06	North Wall	4.0	10:04	86.6	20.0	1	DAW
SC-6	8/7/2012	9:10	East Wall	55.5	10:07	1,470	20.0	1	DAW

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

*Field TPH concentrations recorded may be below PQL.

Analyst:

Deborah W. Water



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

August 10, 2012

Debbie Watson

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

RE: CoP Aztec A #1B

OrderNo.: 1208326

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/8/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman'.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1208326

Date Reported: 8/10/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-1**Project:** CoP Aztec A #1B**Collection Date:** 8/7/2012 8:48:00 AM**Lab ID:** 1208326-001**Matrix:** MEOH (SOIL)**Received Date:** 8/8/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	300	9.8		mg/Kg	1	8/8/2012 10:36:04 AM
Surr: DNOP	102	77.6-140		%REC	1	8/8/2012 10:36:04 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	580	100		mg/Kg	20	8/8/2012 3:26:01 PM
Surr: BFB	275	84-116	S	%REC	20	8/8/2012 3:26:01 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	8/8/2012 3:26:01 PM
Toluene	ND	1.0		mg/Kg	20	8/8/2012 3:26:01 PM
Ethylbenzene	ND	1.0		mg/Kg	20	8/8/2012 3:26:01 PM
Xylenes, Total	19	2.0		mg/Kg	20	8/8/2012 3:26:01 PM
Surr: 4-Bromofluorobenzene	115	80-120		%REC	20	8/8/2012 3:26:01 PM

Qualifiers:

- *X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Analytical Report

Lab Order 1208326

Date Reported: 8/10/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-2**Project:** CoP Aztec A #1B**Collection Date:** 8/7/2012 8:52:00 AM**Lab ID:** 1208326-002**Matrix:** MEOH (SOIL)**Received Date:** 8/8/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	26	10		mg/Kg	1	8/8/2012 10:57:58 AM
Surr: DNOP	98.1	77.6-140		%REC	1	8/8/2012 10:57:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	39	5.0		mg/Kg	1	8/8/2012 1:30:42 PM
Surr: BFB	328	84-116	S	%REC	1	8/8/2012 1:30:42 PM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	8/8/2012 1:30:42 PM
Toluene	ND	0.050		mg/Kg	1	8/8/2012 1:30:42 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/8/2012 1:30:42 PM
Xylenes, Total	0.35	0.10		mg/Kg	1	8/8/2012 1:30:42 PM
Surr: 4-Bromofluorobenzene	117	80-120		%REC	1	8/8/2012 1:30:42 PM

Qualifiers: *X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Analytical Report

Lab Order 1208326

Date Reported: 8/10/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-3**Project:** CoP Aztec A #1B**Collection Date:** 8/7/2012 8:57:00 AM**Lab ID:** 1208326-003**Matrix:** MEOH (SOIL)**Received Date:** 8/8/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	260	9.9		mg/Kg	1	8/8/2012 11:19:45 AM
Surr: DNOP	105	77.6-140		%REC	1	8/8/2012 11:19:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	6.6	5.0		mg/Kg	1	8/8/2012 12:33:13 PM
Surr: BFB	141	84-116	S	%REC	1	8/8/2012 12:33:13 PM

Qualifiers: *X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1208326

Date Reported: 8/10/2012

CLIENT: Animas Environmental Services

Client Sample ID: SC-6

Project: CoP Aztec A #1B

Collection Date: 8/7/2012 9:10:00 AM

Lab ID: 1208326-004

Matrix: MEOH (SOIL) **Received Date:** 8/8/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	320	99		mg/Kg	10	8/8/2012 11:41:41 AM
Surr: DNOP	0	77.6-140	S	%REC	10	8/8/2012 11:41:41 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/8/2012 1:01:58 PM
Surr: BFB	129	84-116	S	%REC	1	8/8/2012 1:01:58 PM

Qualifiers:

- *X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1208326

10-Aug-12

Client: Animas Environmental Services

Project: CoP Aztec A #1B

Sample ID	MB-3244		SampType:	MBLK		TestCode:	EPA Method 8015B: Diesel Range Organics			
Client ID:	PBS		Batch ID:	3244		RunNo:	4713			
Prep Date:	8/8/2012		Analysis Date:	8/8/2012		SeqNo:	133155		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		109	77.6	140			

Sample ID	LCS-3244		SampType:	LCS		TestCode:	EPA Method 8015B: Diesel Range Organics			
Client ID:	LCSS		Batch ID:	3244		RunNo:	4713			
Prep Date:	8/8/2012		Analysis Date:	8/8/2012		SeqNo:	133156		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	75.9	52.6	130			
Surr: DNOP	5.2		5.000		103	77.6	140			

Qualifiers:

*X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1208326

10-Aug-12

Client: Animas Environmental Services

Project: CoP Aztec A #1B

Sample ID	MB-3221	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	3221	RunNo:	4735					
Prep Date:	8/7/2012	Analysis Date:	8/8/2012	SeqNo:	133697	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	970		1000		97.3	84	116			

Sample ID	2.5UG GRO LCS2	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	3221	RunNo:	4735					
Prep Date:		Analysis Date:	8/8/2012	SeqNo:	133701	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.6	85	115			
Surr: BFB	1100		1000		109	84	116			

Sample ID	1208312-001A MS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	3221	RunNo:	4735					
Prep Date:		Analysis Date:	8/8/2012	SeqNo:	133702	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	17.04	0	87.4	70	130			
Surr: BFB	710		681.5		104	84	116			

Sample ID	1208312-001A MSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	3221	RunNo:	4735					
Prep Date:		Analysis Date:	8/8/2012	SeqNo:	133703	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	5.0	17.04	0	83.2	70	130	4.92	22.1	
Surr: BFB	700		681.5		103	84	116	0	0	

Qualifiers:

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R RPD outside accepted recovery limits

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H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1208326

10-Aug-12

Client: Animas Environmental Services

Project: CoP Aztec A #1B

Sample ID	MB-3221		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	3221		RunNo:	4735			
Prep Date:	8/7/2012		Analysis Date:	8/8/2012		SeqNo:	133738		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	1.0		1.000		101	80	120			

Sample ID	LCS-3221		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	3221		RunNo:	4735			
Prep Date:	8/7/2012		Analysis Date:	8/8/2012		SeqNo:	133742		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	93.3	76.3	117			
Toluene	0.95	0.050	1.000	0	94.7	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.1	77	116			
Xylenes, Total	2.9	0.10	3.000	0	95.6	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

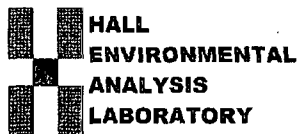
Sample ID	1208221-002AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	BatchQC		Batch ID:	3221		RunNo:	4735			
Prep Date:	8/7/2012		Analysis Date:	8/8/2012		SeqNo:	133743		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.47	0.9311	0	90.2	67.2	113			
Toluene	0.85	0.47	0.9311	0	91.3	62.1	116			
Ethylbenzene	0.86	0.47	0.9311	0	91.9	67.9	127			
Xylenes, Total	2.6	0.93	2.793	0	92.7	60.6	134			
Surr: 4-Bromofluorobenzene	9.6		9.311		103	80	120			

Sample ID	1208221-002AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	BatchQC		Batch ID:	3221		RunNo:	4735			
Prep Date:	8/7/2012		Analysis Date:	8/8/2012		SeqNo:	133744		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.49	0.9881	0	94.3	67.2	113	10.4	14.3	
Toluene	0.94	0.49	0.9881	0	95.1	62.1	116	9.97	15.9	
Ethylbenzene	0.93	0.49	0.9881	0	94.0	67.9	127	8.22	14.4	
Xylenes, Total	2.8	0.99	2.964	0	95.4	60.6	134	8.83	12.6	
Surr: 4-Bromofluorobenzene	10		9.881		104	80	120	0	0	

Qualifiers:

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H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1208326

Received by/date: AG 08/08/12

Logged By: Michelle Garcia

8/8/2012 9:55:00 AM

Michelle Garcia

Completed By: Michelle Garcia

8/8/2012 10:00:05 AM

Michelle Garcia

Reviewed By: [Signature]

08/08/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted?
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by:

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: _____

eMail _____

Phone _____

Fax _____

In Person _____

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			

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) _____

☐ Standard ☒ **Rush** Same day

CoP Aztec A #1B

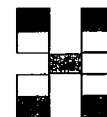
Project #:

Project Manager:

D. Watson
Sampler: D. Watson

On Ice: ☒ Yes ☐ No
Sample Temperature: 2-8

Date: 8/7/12	Time: 1737	Relinquished by: Deborah Wata	Received by: Christine Wata	Date 8/7/12	Time 1737	Remarks: Bull to ConocoPhillips
Date: 8/7/12	Time: 1758	Relinquished by: Christine Wata	Received by: Christine Wata	Date 08/08/12	Time 0955	



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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 noted on the analytical report.