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 Oil & Gas Company**	Contact **Crystal Tafoya**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 326-9837
Facility Name: **Atlantic B Com 9A**	Facility Type: **Gas Well**

Surface Owner **BLM**	Mineral Owner **BLM (SF-080917)**	API No.**30-045-22977**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	**34**	**31N**	**10W**	**1500**	**South**	**1825**	**East**	**San Juan**

Latitude 36.85197 Longitude 107.86685

NATURE OF RELEASE

Type of Release **Produced Water**	Volume of Release **14 bbls**	Volume Recovered **2.5 bbls**
Source of Release **Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **3/9/2013 at 2:35 pm**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

OIL CONS. DIV DIST. 3

DEC 12 2013

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Separator water box plugged causing all fluid to the production tank and allowing 14bbls to be released over the top of the production tank. 2.5bbls of produced water was recovered. All fluid was contained within the berm. The well was shut-in immediately and fluids pulled from the tank.

Describe Area Affected and Cleanup Action Taken.*
NMOCD action levels for releases are specified in NMOCD's Guidelines for Leaks, Spills and Releases and the release was assigned a ranking score of 10. Sample results were above regulatory standards by USEP method 418.1 for TPH confirming a release. The excavation was 35' x 45' x 4' and 270 cubic yards of soil was transported to a third party landfarm. Excavation and confirmation sampling occurred. Analytical results for TPH, and BTEX were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required. The final report is attached for review.

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: Crystal L. Tafoya	OIL CONSERVATION DIVISION Approved by Environmental Specialist: Jonathan D. Kelly	
Printed Name: **Crystal Tafoya**		
Title: **Field Environmental Specialist**	Approval Date: 4/11/2014	Expiration Date:
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval:	Attached ☐
Date: 12/10/2013 Phone: (505) 326-9837		

* Attach Additional Sheets If Necessary

nJK1410147109

41

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

November 22, 2013

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

OIL CONS. DIV DIST. 3
DEC 12 2013

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

RE: Initial Release Assessment and Final Excavation Clearance Report
Atlantic B Com #9A
San Juan County, New Mexico

Dear Ms. Tafoya:

A production tank at the ConocoPhillips (CoP) Atlantic B Com #9A located in San Juan County, New Mexico, overflowed which resulted in a release of approximately 14 barrels (bbls) of produced water. Envirotech, Inc. (Envirotech) conducted a release assessment at the location on March 21, 2013. On July 24, 2013, Animas Environmental Services, LLC (AES) completed an environmental clearance of the final excavation limits. The final excavation was completed by CoP contractors prior to AES' arrival on July 24, 2013.

1.0 Site Information

1.1 Location

Location – NW¼ SE¼, Section 34, T31N, R10W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.85210 and W107.86737, respectively
Release Location Latitude/Longitude – N36.85204 and W107.86712, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, July 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 location was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** A cathodic protection report dated May 1991 for the Atlantic B Com #9A reported the depth to groundwater as 140 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** A pond and a small unnamed wash which discharges to Mud Canyon are located approximately 530 feet southwest of the release location. (10 points)

1.3 Assessment

Envirotech conducted the release assessment field work on March 21, 2013. The assessment included collection of nine samples from within the release area. Based on the field screening results, Envirotech recommended excavation of the release area. Details of the release assessment along with sample locations are included within the attached Envirotech report.

AES was initially contacted by Eric Smith of CoP on July 24, 2013, and the same day, Corwin Lameman and Stephanie Lynn of AES collected confirmation soil samples of the excavation. The field screening activities included collection of six confirmation soil samples of the walls and base of the excavation. The area of the final excavation was approximately 1,390 ft^2 by 4.5 feet in depth. Sample locations and final excavation extents are presented on Figure 3.

2.0 Soil Sampling

A total of eight soil samples and one composite sample were collected by Envirotech during the assessment. All samples were field screened for volatile organic compounds (VOCs) and were also analyzed for total petroleum hydrocarbons (TPH).

A total of six composite samples (SC-1 through SC-6) were collected during the excavation clearance. All soil samples were field screened for VOCs and analyzed for TPH. One composite sample (SC-5) was submitted for confirmation laboratory analysis.

2.1 AES 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

In March 2013, three release assessment samples (background, North at 4 feet bgs, and Middle at 4 feet bgs) were collected by Envirotech and submitted for laboratory analysis to Envirotech Analytical Laboratory in Farmington, New Mexico. All submitted samples were laboratory analyzed for chloride per U.S. Environmental Protection Agency (USEPA) Method 300.0. Samples North at 4 feet bgs and Middle at 4 feet bgs were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B. Sample North at 4 feet bgs was additionally analyzed for TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B.

In July 2013, the soil sample collected by AES 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. The soil sample was laboratory analyzed for BTEX per USEPA Method 8021B.

2.3 Field Screening and Laboratory Analytical Results

On March 21, 2013, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 96 ppm in the South sample up to 813 ppm in the Middle sample. Field TPH concentrations ranged from 620 mg/kg in the Middle sample up to 20,000 mg/kg in the Composite sample. Results are included below in Table 1, and details of the sampling are included in the attached Envirotech report.

On July 24, 2013, final excavation field screening results for VOCs via OVM showed concentrations ranging from 1.6 ppm in SC-2 up to 350 ppm in SC-5. Field TPH concentrations ranged from 58.8 mg/kg in SC-3 up to 236 mg/kg in SC-5. Results are included below in Table 1 and on Figure 3. The AES Field Screening Report is attached.

Table 1. Field Screening VOCs and TPH Results
Atlantic B Com #9A Initial Release Assessment and Final Excavation Clearance, March and July 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
	*NMOCD Action Level**		*100*	*1,000*
Composite**	3/21/13	--	**443**	**20,000**
North**	3/21/13	1	**780**	**18,500**
		3	**788**	**10,200**
		4	**443**	**2,440**
Middle**	3/21/13	1	**813**	**11,600**
		3	**299**	**1,580**
		4	**363**	620
South**	3/21/13	1	**707**	**1,480**
		2	96	<5.0
Background**	3/21/13	--	NA	NA
SC-1	7/24/13	1 to 4.5	38.6	113
SC-2	7/24/13	1 to 4.5	1.6	81.1
SC-3	7/24/13	4.5	9.4	58.8
SC-4	7/24/13	1 to 4.5	23.4	115
SC-5	7/24/13	1 to 4.5	**350**	236
SC-6	7/24/13	4.5	34.0	63.1

NA-Not analyzed ;
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993);
**Results taken from Envirotech Report dated April 12, 2013

During the release assessment conducted by Envirotech on March 21, 2013, the benzene concentrations in North and Middle samples were reported below the laboratory detection limit of 0.50 mg/kg, and total BTEX concentrations were reported at 31.9 mg/kg and 18.7 mg/kg, respectively. Chloride concentrations ranged from below the laboratory detection limit of 1.0 mg/kg (North and Background) and 17.0 mg/kg (Middle). The background sample had a reported concentration less than 1.0 mg/kg. Results are presented in Table 2 and within the attached Envirotech report.

On July 24, 2013, laboratory analyses for SC-5 were used to confirm field screening results during excavation activities. The benzene concentration in SC-5 was reported below the laboratory detection limit of 0.050 mg/kg, and the total BTEX concentration was reported at 0.30 mg/kg. Results are presented in Table 2 and on Figure 3. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chloride
Atlantic B Com #9A Initial Release Assessment and Final Excavation Clearance
March and July 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Chloride (mg/kg)
*NMOCD Action Level**			*10*	*50*	*1,000*		*NE*
North**	3/21/13	4	<0.5	31.9	15.7	40.4	<1.0
Middle**	3/21/13	4	<0.5	18.7	NA	NA	17.0
Back-ground**	3/21/13	---	NA	NA	NA	NA	<1.0
SC-5	7/24/13	1 to 4.5	<0.050	0.30	NA	NA	NA

NA-Not analyzed; NE-Not established;
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993));
**Results taken from Envirotech Report dated April 12, 2013

3.0 Conclusions and Recommendations

On March 21, 2013, Envirotech completed a release assessment associated with a production tank overflow at the Atlantic B Com #9A and recommended excavation of the release area in their April 2013 report.

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.

On July 24, 2013, AES completed clearance sampling of the final excavation extents. Final excavation field screening results above the NMOCD action level of 100 ppm VOCs were reported in SC-5 (south wall) with 350 ppm. Field screening results showed TPH concentrations below the NMOCD action level of 1,000 mg/kg in each sample collected. The highest TPH concentration was reported in SC-5 with 350 mg/kg; however, laboratory analytical results from SC-5 reported benzene and total BTEX concentrations below NMOCD action levels.

Based on final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the Atlantic B Com #9A, 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,

Landrea R. Cupps

Landrea Cupps
Environmental Scientist

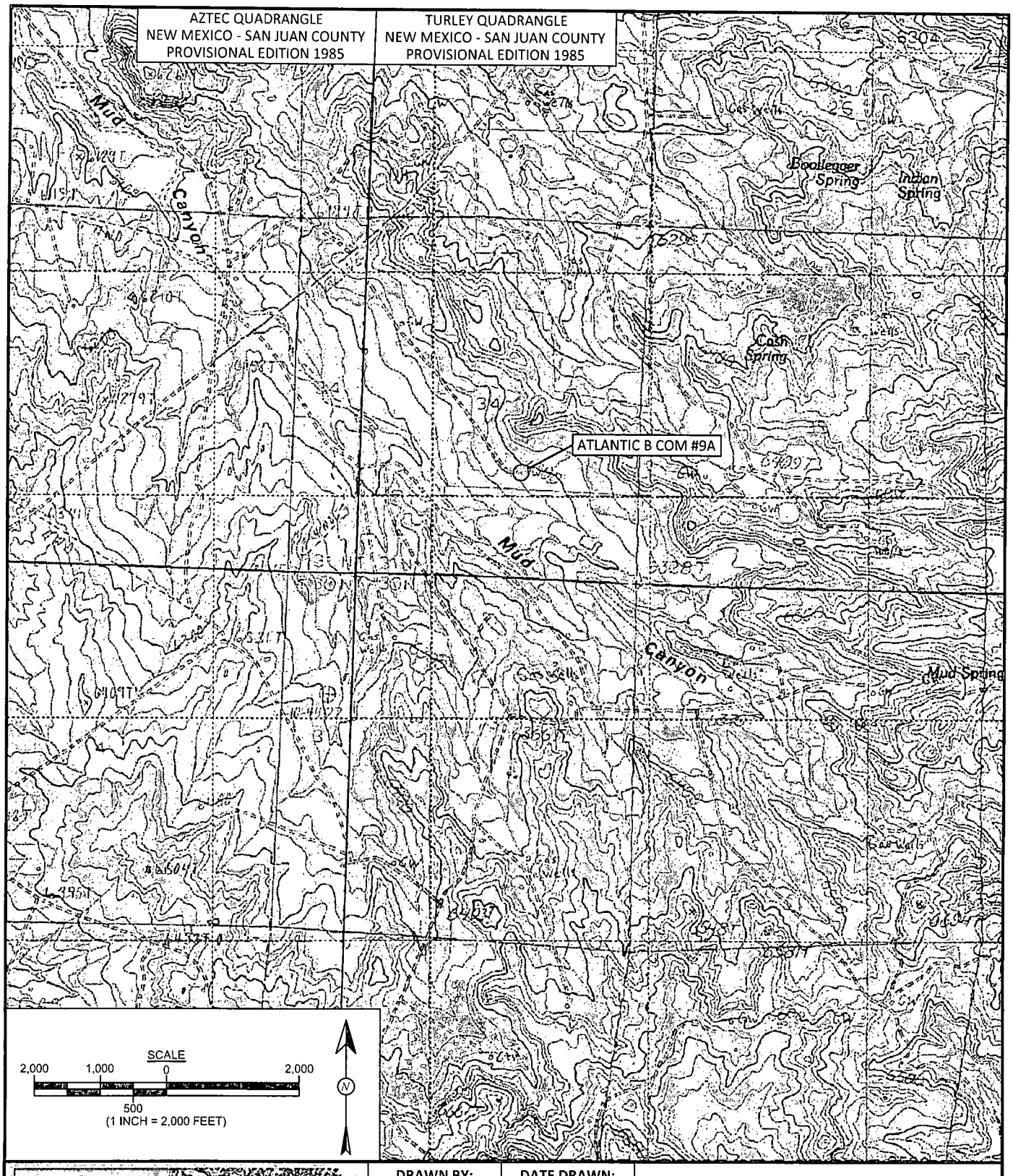
Elizabeth McNally

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, July 2013
Figure 3. Final Excavation Sample Locations and Results, July 2013
Envirotech Spill Assessment Report, April 12, 2013
AES Field Screening Report 072413
Hall Laboratory Analytical Report 1307B44

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\Atlantic B Com #9A\CoP Atlantic B Com #9A Initial Release Assessment and Final Excavation Clearance Report 112213.docx



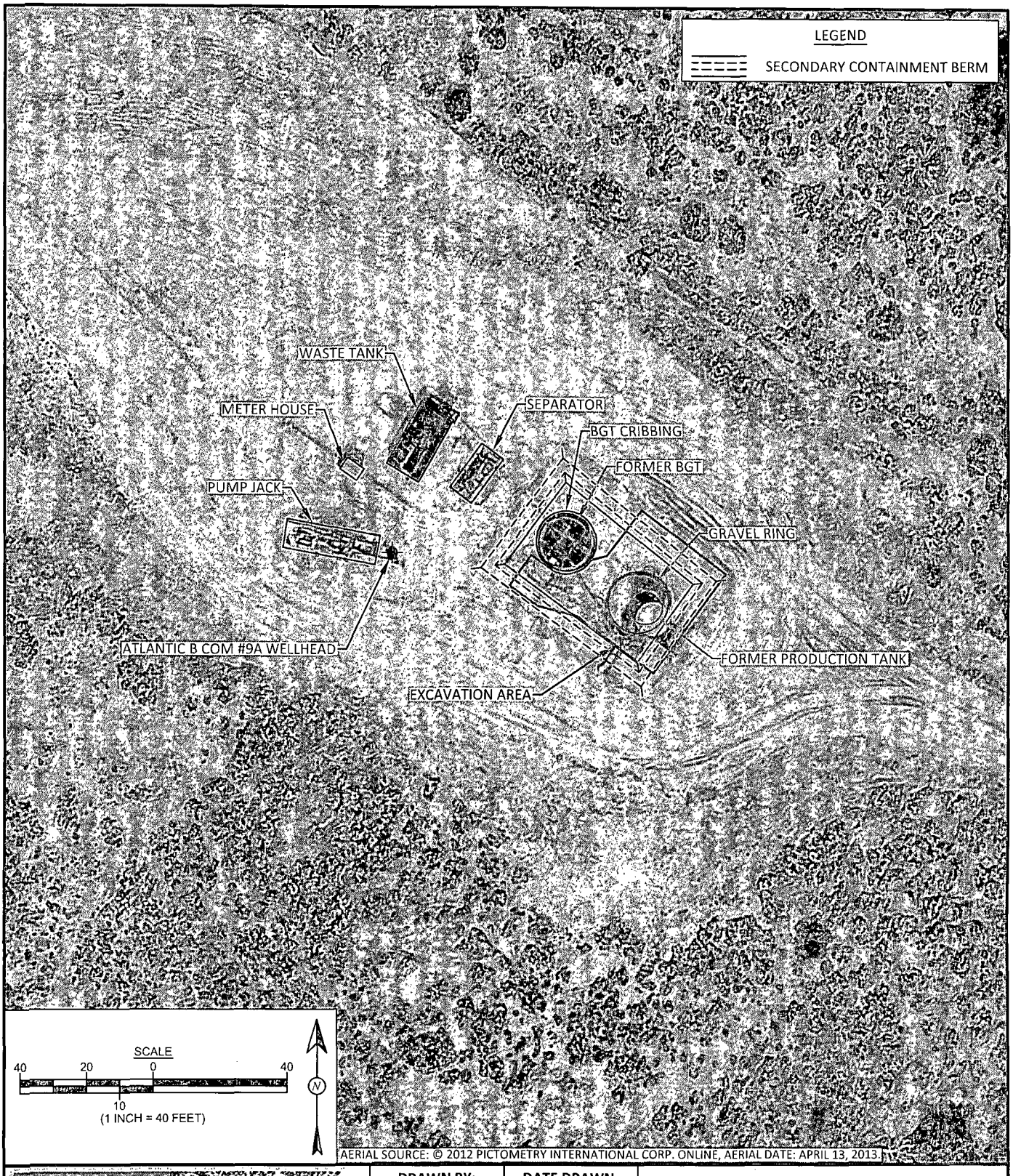
DRAWN BY: C. Lameman	**DATE DRAWN:** July 29, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** July 29, 2013
CHECKED BY: D. Watson	**DATE CHECKED:** July 29, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** July 29, 2013

Animas Environmental Services, LLC

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips
ATLANTIC B COM #9A
NW¼ SE¼, SECTION 34, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.85210, W107.86737



AERIAL SOURCE: © 2012 PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL DATE: APRIL 13, 2013.

Animas Environmental Services, LLC

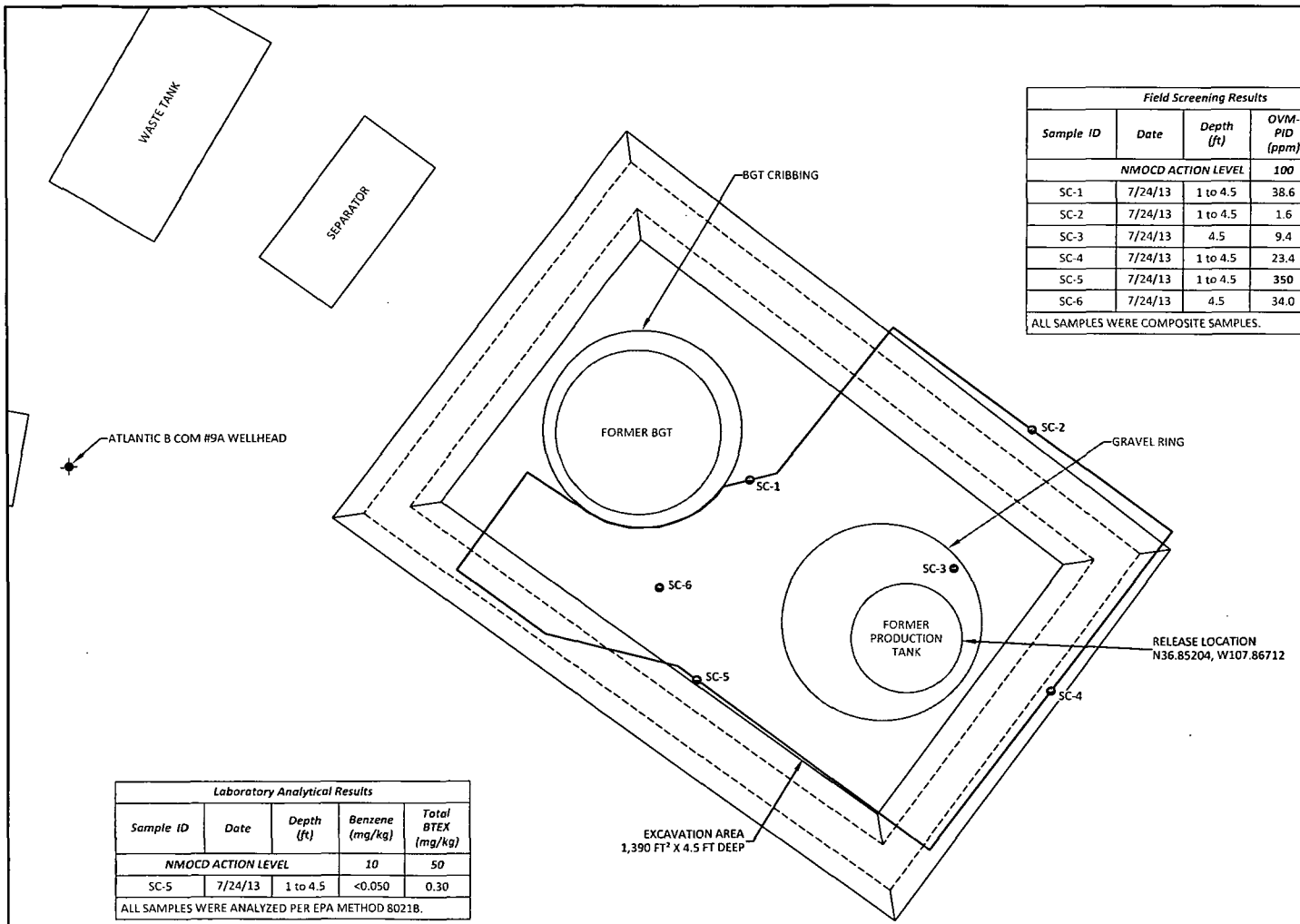
DRAWN BY: C. Lameman	**DATE DRAWN:** July 29, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** July 29, 2013
CHECKED BY: D. Watson	**DATE CHECKED:** July 29, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** July 29, 2013

FIGURE 2

AERIAL SITE MAP
JULY 2013
ConocoPhillips
ATLANTIC B COM #9A
NW¼ SE¼, SECTION 34, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.85210, W107.86737

FIGURE 3

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
JULY 2013
ConocoPhillips
ATLANTIC B COM #9A
NW¼ SE¼, SECTION 34, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.85210, W107.86737



Field Screening Results				
Sample ID	*Date*	*Depth (ft)*	*OVM-PID (ppm)*	*TPH (mg/kg)*
NMOCD ACTION LEVEL			*100*	*1,000*
SC-1	7/24/13	1 to 4.5	38.6	113
SC-2	7/24/13	1 to 4.5	1.6	81.1
SC-3	7/24/13	4.5	9.4	58.8
SC-4	7/24/13	1 to 4.5	23.4	115
SC-5	7/24/13	1 to 4.5	350	236
SC-6	7/24/13	4.5	34.0	63.1
ALL SAMPLES WERE COMPOSITE SAMPLES.				

Laboratory Analytical Results				
Sample ID	*Date*	*Depth (ft)*	*Benzene (mg/kg)*	*Total BTEX (mg/kg)*
NMOCD ACTION LEVEL			*10*	*50*
SC-5	7/24/13	1 to 4.5	<0.050	0.30
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B.				

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** July 29, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** July 29, 2013
CHECKED BY: D. Watson	**DATE CHECKED:** July 29, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** July 29, 2013

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM

SCALE
10 6 0 10
2
(1 INCH = 10 FEET)

envirotech

April 12, 2013

Project Number 92115-2410

Ms. Crystal Tafoya
ConocoPhillips
3401 East 30th Street
Farmington, New Mexico 87401

Phone: (505) 215-4361
Fax: (505) 599-4005

RE: SPILL ASSESSMENT DOCUMENTATION FOR THE ATLANTIC B COM #9A (HBR) WELL SITE, SAN JUAN COUNTY, NEW MEXICO

Dear Ms. Tafoya,

Enclosed please find documentation for spill assessment activities performed at the Atlantic B Com #9A (hBr) well site located in Section 34, Township 31 North, Range 10 West, San Juan County, New Mexico. Upon Envirotech personnel's arrival on March 21, 2013, a brief site assessment was conducted. Because depth to groundwater was greater than 100 feet, nearest surface water was between 200 and 1000 feet, and the well site was not located within a well head protection area, the regulatory standards for the site were determined to be 1000 parts per million (ppm) total petroleum hydrocarbons (TPH) and 100 ppm organic vapors, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases.

At the above referenced well site, a production tank overflowed, releasing 14 barrels (bbls) of produced water into the area between the berms surrounding the above ground storage tank (AST) and below ground storage tank (BGT). The release was observed to have impacted the west half of the area between the berms; see enclosed ***Site Map***.

One (1) five (5)-point composite sample was collected from the release area. The sample was analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a photoionization detector (PID). The sample returned results above the regulatory standard for TPH and for organic vapor; see enclosed ***Analytical Results*** and ***Summary of Analytical Results***. The area of release was divided into three (3) separate sections: the north, middle and south; see ***Site Map*** for locations.

Three (3) samples were collected from the north section: one (1) from one (1) foot below ground surface (BGS), one (1) from three (3) feet BGS and one (1) from four (4) feet BGS. The samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a

PID. All three (3) samples returned results above the regulatory standard for TPH and for organic vapor; see enclosed ***Analytical Results*** and ***Summary of Analytical Results***. The sample collected from four (4) feet BGS was placed into a four (4)-ounce glass jar, capped head space free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015, for benzene and total BTEX using USEPA Method 8021, and for chloride using USEPA Method 300. The sample returned results that were non-detect for chloride and below the regulatory standards for all other constituents analyzed; see enclosed ***Analytical Results*** and ***Summary of Analytical Results***.

Three (3) samples were collected from the middle section: one (1) from one (1) foot BGS, one (1) from three (3) feet BGS and one (1) from four (4) feet BGS. The samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. All three (3) samples returned results above the regulatory standard for TPH, except for the sample from four (4) feet BGS. All three (3) samples returned results above the regulatory standard for organic vapor; see enclosed ***Analytical Results*** and ***Summary of Analytical Results***. The sample collected from four (4) feet BGS was placed into a four (4)-ounce glass jar, capped head space free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for benzene and total BTEX using USEPA Method 8021 and for chloride using USEPA Method 300. The sample returned a result of 17 ppm for chloride and below the regulatory standards for all other constituents analyzed; see enclosed ***Analytical Results*** and ***Summary of Analytical Results***.

Two (2) samples were collected from the south section: one (1) from one (1) foot BGS and one (1) from two (2) feet BGS. The samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample collected from one (1) foot BGS returned a result above the regulatory standards for TPH and for organic vapors. The sample collected from two (2) feet BGS returned a result that was below the regulatory standard for TPH and for organic vapors; see enclosed ***Analytical Results*** and ***Summary of Analytical Results***.

Additionally, one (1) background sample was collected from the area outside of the berms, to the northeast of the release area; see ***Site Map*** for sample location. The background sample was collected into a four (4)-ounce glass jar, capped head space free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for chlorides using USEPA Method 300. The background sample returned results that were non-detect for chloride; see enclosed ***Analytical Results*** and ***Summary of Analytical Results***. Envirotech, Inc. recommends excavation of the impacted area, 75 feet by eight (8) feet by four (4) feet deep, followed by confirmation sampling.

We appreciate the opportunity to be of service. If you have questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,
ENVIROTECH, INC.

Kyle Cossum
Staff Engineer
kcossum@envirotech-inc.com

Enclosure(s): Site Map
Summary of Analytical Results
Analytical Results

Cc: Client File 92115

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	1	Date Reported:	4/8/2013
Sample ID:	Composite	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**20,000**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	2	Date Reported:	4/8/2013
Sample ID:	South 1' BGS	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**1,480**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
Printed

Review

Toni McKnight, EIT
Printed

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Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	3	Date Reported:	4/8/2013
Sample ID:	Middle 1' BGS	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**11,600**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	4	Date Reported:	4/8/2013
Sample ID:	North 1' BGS	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**18,500**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
Printed

Review

Toni McKnight, EIT
Printed

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	5	Date Reported:	4/8/2013
Sample ID:	South 2' BGS	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**ND**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
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Review

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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	6	Date Reported:	4/8/2013
Sample ID:	Middle 3' BGS	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**1,580**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
Printed

Review

Toni McKnight, EIT
Printed

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	7	Date Reported:	4/8/2013
Sample ID:	North 3' BGS	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**10,200**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
Printed

Review

Toni McKnight, EIT
Printed

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	8	Date Reported:	4/8/2013
Sample ID:	Middle 4' BGS	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**620**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
Printed

Review

Toni McKnight, EIT
Printed

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2410
Sample No.:	9	Date Reported:	4/8/2013
Sample ID:	North 4' BGS	Date Sampled:	3/21/2013
Sample Matrix:	Soil	Date Analyzed:	3/21/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**2,440**	**5.0**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Atlantic B Com #9A (hBr)**

Instrument calibrated to 5000 ppm standard and zeroed before each sample.

Analyst

Kyle Cossum
Printed

Review

Toni McKnight, EIT
Printed

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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 21-Mar-13

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	
	500	
	1000	
	5000	4955

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

Analyst _____ Date 4/8/2013

Kyle Cossum
Print Name

Review _____ Date 4/8/2013

Toni McKnight, EIT
Print Name

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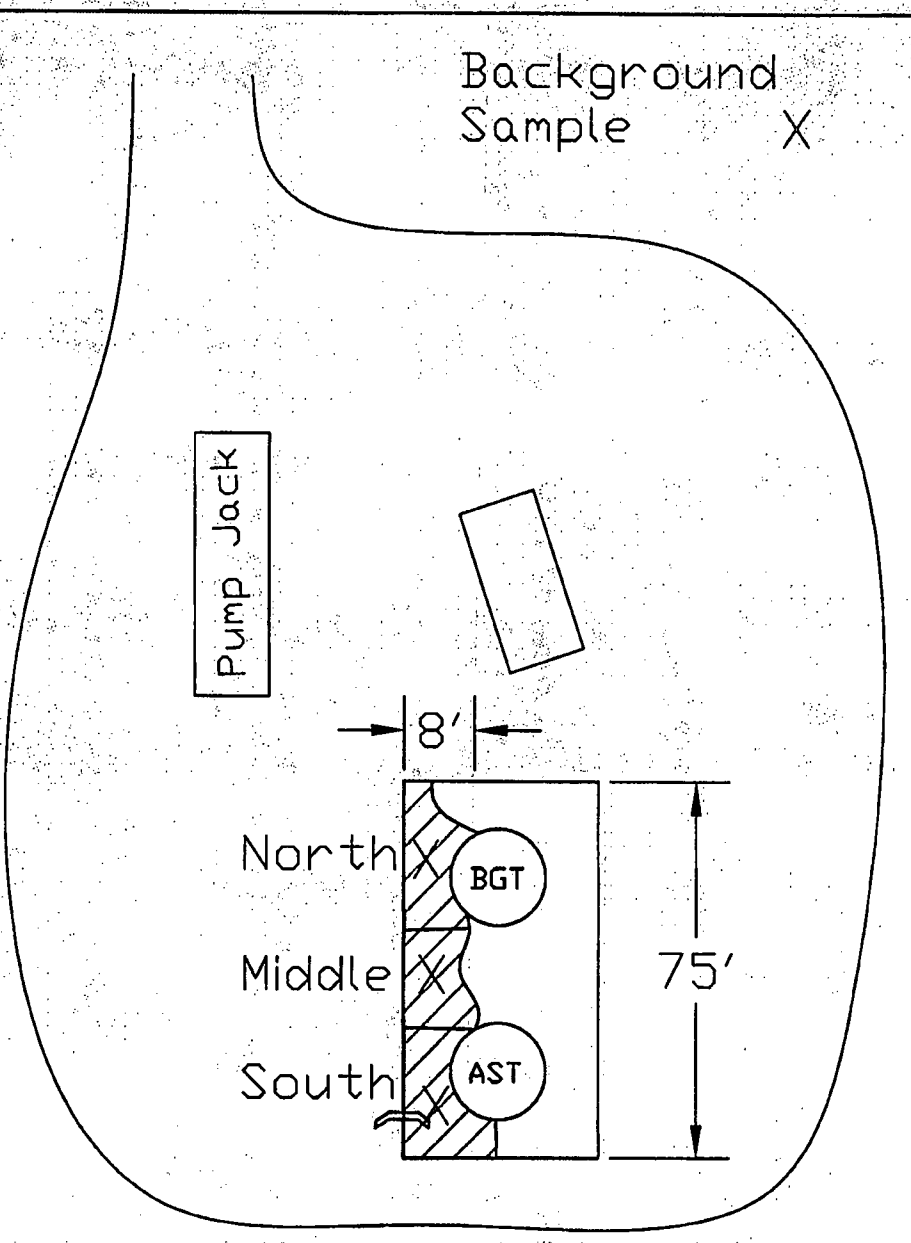

LEGEND

- ☒ Spill Path
- X Auger Holes
- X Background Sample

ConocoPhillips
Atlantic B Com #9A
Section 34, Township 31 North, Range 10 West
San Juan County, New Mexico

SCALE: NTS	FIGURE NO. 1	REV
PROJECT NO92115-2410		

REVISIONS

NO.	DATE	BY	DESCRIPTION

MAP DRWN	KFC	4/9/13	BASE DRWN	TLM	2/25/13

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Table 1, Summary of Analytical Results
ConocoPhillips
Atlantic B Com #9A (hBr)
Spill Assessment Report
San Juan County, New Mexico
Project Number 92115-2410

Sample Description	Sample Number	Date	TPH 418.1 (ppm)	TPH USEPA Method 8015 (ppm)	Benzene USEPA Method 8021 (ppm)	BTEX USEPA Method 8021 (ppm)	Chloride USEPA Method 300 (ppm)	OVM (ppm)
NMOCD/RCRA Standards	NA	NA	1000	1000	10	50	NA	100
Composite	1	3/21/2013	**20000**	NS	NS	NS	NS	**443**
North 1' BGS	4	3/21/2013	**18500**	NS	NS	NS	NS	**780**
North 3' BGS	7	3/21/2013	**10200**	NS	NS	NS	NS	**788**
North 4' BGS	9	3/21/2013	**2440**	56.1	ND	31.9	ND	**443**
Middle 1' BGS	3	3/21/2013	**11600**	NS	NS	NS	NS	**813**
Middle 3' BGS	6	3/21/2013	**1580**	NS	NS	NS	NS	**299**
Middle 4' BGS	8	3/21/2013	620	NS	ND	18.7	17	**363**
South 1' BGS	2	3/21/2013	**1480**	NS	NS	NS	NS	**707**
South 2' BGS	5	3/21/2013	ND	NS	NS	NS	NS	96
Background	10	3/21/2013	NS	NS	NS	NS	ND	NS

NS = Not Sampled
ND = Non-Detect at Stated Method's Detection Limit
* Values in **BOLD** above regulatory standards

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Analytical Laboratory

Analytical Report

Report Summary

Client: ConocoPhillips

Chain Of Custody Number: 15320

Samples Received: 3/21/2013 12:45:00PM

Job Number: 92115-2410

Work Order: P303076

Project Name/Location: Spill Assessment/ Atlantic B Com 9A (hBr)

Entire Report Reviewed By: _____ Date: 3/22/13

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

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Analytical Laboratory

ConocoPhillips	Project Name:	Spill Assessment/ Atlantic B Com 9A (hBr)	
PO Box 2200	Project Number:	92115-2410	Reported:
Bartlesville OK, 74005	Project Manager:	Kyle Cossum	22-Mar-13 13:55

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Background	P303076-01A	Soil	03/21/13	03/21/13	Glass Jar, 4 oz.
North 4'	P303076-02A	Soil	03/21/13	03/21/13	Glass Jar, 4 oz.
Mid 4'	P303076-03A	Soil	03/21/13	03/21/13	Glass Jar, 4 oz.

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ConocoPhillips	Project Name:	Spill Assessment/ Atlantic B Com 9A (hBr)	
PO Box 2200	Project Number:	92115-2410	Reported:
Bartlesville OK, 74005	Project Manager:	Kyle Cossum	22-Mar-13 13:55

Background

P303076-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Cation/Anion Analysis									
Chloride	ND	1.00	mg/kg	1	1312025	21-Mar-13	21-Mar-13	EPA 300.0	

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Analytical Laboratory

ConocoPhillips	Project Name:	Spill Assessment/ Atlantic B Com 9A (hBr)	
PO Box 2200	Project Number:	92115-2410	Reported:
Bartlesville OK, 74005	Project Manager:	Kyle Cossum	22-Mar-13 13:55

North 4'

P303076-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
Toluene	933	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
Ethylbenzene	2180	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
p,m-Xylene	23100	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
o-Xylene	5700	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
Total BTEX	31900	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
Surrogate: Bromochlorobenzene		*106 %*	*80-120*		*1312031*	*21-Mar-13*	*22-Mar-13*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*101 %*	*80-120*		*1312031*	*21-Mar-13*	*22-Mar-13*	*EPA 8021B*	
Surrogate: Fluorobenzene		*101 %*	*80-120*		*1312031*	*21-Mar-13*	*22-Mar-13*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	15.7	5.0	mg/kg	1	1312030	21-Mar-13	22-Mar-13	EPA 8015D	
Diesel Range Organics (C10-C28)	40.4	5.0	mg/kg	1	1312030	21-Mar-13	22-Mar-13	EPA 8015D	
GRO and DRO Combined Fractions	56.1	5.0	mg/kg	1	1312030	21-Mar-13	22-Mar-13	EPA 8015D	
Cation/Anion Analysis									
Chloride	ND	1.00	mg/kg	1	1312025	21-Mar-13	21-Mar-13	EPA 300.0	

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Analytical Laboratory

ConocoPhillips	Project Name:	Spill Assessment/ Atlantic B Com 9A (hBr)	
PO Box 2200	Project Number:	92115-2410	Reported:
Bartlesville OK, 74005	Project Manager:	Kyle Cossum	22-Mar-13 13:55

Mid 4'

P303076-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
Toluene	1280	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
Ethylbenzene	1390	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
p,m-Xylene	13200	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
o-Xylene	2780	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
Total BTEX	18700	500	ug/L	10	1312031	21-Mar-13	22-Mar-13	EPA 8021B	
Surrogate: Bromochlorobenzene		*106 %*	*80-120*		*1312031*	*21-Mar-13*	*22-Mar-13*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*93.6 %*	*80-120*		*1312031*	*21-Mar-13*	*22-Mar-13*	*EPA 8021B*	
Surrogate: Fluorobenzene		*93.6 %*	*80-120*		*1312031*	*21-Mar-13*	*22-Mar-13*	*EPA 8021B*	
Cation/Anion Analysis									
Chloride	17.0	1.00	mg/kg	1	1312025	21-Mar-13	21-Mar-13	EPA 300.0	

ConocoPhillips	Project Name:	Spill Assessment/ Atlantic B Com 9A (hBr)	
PO Box 2200	Project Number:	92115-2410	Reported:
Bartlesville OK, 74005	Project Manager:	Kyle Cossum	22-Mar-13 13:55

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1312031 - Purge and Trap EPA 5030A										
Blank (1312031-BLK1)				Prepared: 21-Mar-13 Analyzed: 22-Mar-13						
Benzene	ND	1.00	ug/L							
Toluene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
p,m-Xylene	ND	1.00	"							
o-Xylene	ND	1.00	"							
Total BTEX	ND	1.00	"							
Surrogate: Bromochlorobenzene	*42.4*		"	*50.0*		*84.9*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*45.0*		"	*50.0*		*90.1*	*80-120*			
Surrogate: Fluorobenzene	*44.3*		"	*50.0*		*88.6*	*80-120*			
Duplicate (1312031-DUP1)	Source: P303076-02			Prepared: 21-Mar-13 Analyzed: 22-Mar-13						
Benzene	ND	500	ug/L		ND				30	
Toluene	932	500	"		933			0.167	30	
Ethylbenzene	2400	500	"		2180			9.65	30	
p,m-Xylene	24700	500	"		23100			6.73	30	
o-Xylene	5600	500	"		5700			1.88	30	
Surrogate: Bromochlorobenzene	*55.5*		"	*50.0*		*111*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*52.3*		"	*50.0*		*105*	*80-120*			
Surrogate: Fluorobenzene	*52.2*		"	*50.0*		*104*	*80-120*			
Matrix Spike (1312031-MS1)	Source: P303076-02			Prepared: 21-Mar-13 Analyzed: 22-Mar-13						
Benzene	50.8		ug/L	50.0	0.34	101	39-150			
Toluene	52.0		"	50.0	1.87	100	46-148			
Ethylbenzene	54.0		"	50.0	4.36	99.3	32-160			
p,m-Xylene	132		"	100	46.3	86.1	46-148			
o-Xylene	58.2		"	50.0	11.4	93.7	46-148			
Surrogate: Bromochlorobenzene	*53.9*		"	*50.0*		*108*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*48.5*		"	*50.0*		*96.9*	*80-120*			
Surrogate: Fluorobenzene	*48.6*		"	*50.0*		*97.2*	*80-120*			

ConocoPhillips	Project Name:	Spill Assessment/ Atlantic B Com 9A (hBr)	
PO Box 2200	Project Number:	92115-2410	Reported:
Bartlesville OK, 74005	Project Manager:	Kyle Cossum	22-Mar-13 13:55

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1312030 - GRO/DRO Extraction EPA 3550C										
Blank (1312030-BLK1)				Prepared: 21-Mar-13 Analyzed: 22-Mar-13						
Gasoline Range Organics (C6-C10)	ND	5.0	mg/kg							
Diesel Range Organics (C10-C28)	ND	5.0	"							
GRO and DRO Combined Fractions	ND	5.0	"							
Duplicate (1312030-DUP1)	Source: P303076-02			Prepared: 21-Mar-13 Analyzed: 22-Mar-13						
Gasoline Range Organics (C6-C10)	14.3	5.0	mg/kg		15.7			9.18	30	
Diesel Range Organics (C10-C28)	39.4	5.0	"		40.4			2.57	30	
Matrix Spike (1312030-MS1)	Source: P303076-02			Prepared: 21-Mar-13 Analyzed: 22-Mar-13						
Gasoline Range Organics (C6-C10)	266	5.0	mg/kg	250	15.7	100	75-125			
Diesel Range Organics (C10-C28)	297	5.0	"	250	40.4	103	75-125			

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Analytical Laboratory

ConocoPhillips	Project Name:	Spill Assessment/ Atlantic B Com 9A (hBr)	
PO Box 2200	Project Number:	92115-2410	Reported:
Bartlesville OK, 74005	Project Manager:	Kyle Cossum	22-Mar-13 13:55

Cation/Anion Analysis - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1312025 - Anion Extraction EPA 300.0										
Blank (1312025-BLK1)				Prepared & Analyzed: 21-Mar-13						
Chloride	ND	1.00	mg/kg							
Duplicate (1312025-DUP1)		Source: P303061-01		Prepared & Analyzed: 21-Mar-13						
Chloride	118	1.00	mg/kg		120			1.92	30	

ConocoPhillips	Project Name:	Spill Assessment/ Atlantic B Com 9A (hBr)	
PO Box 2200	Project Number:	92115-2410	Reported:
Bartlesville OK, 74005	Project Manager:	Kyle Cossum	22-Mar-13 13:55

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

RUSH

CHAIN OF CUSTODY RECORD

15320

Client:	Project Name / Location:
COPC	Spill Assessment Atlantic B Com 9A (LBF)
Email results to:	**Sampler Name:**
Kcossum@envirotech-inc.com	Kyle Cossum
Client Phone No.:	**Client No.:**
	92115-2410

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
					$HgCl_2$	HCl	cool															
Background	3/21/13	11:15	P303076-01	(1) 4oz jar			↓										X				↓	↓
North 4'	3/21/13	11:30	P303076-02	↓				X	X								X					
Mid 4'	3/21/13	11:45	P303076-03	↓				~~X~~	X								X				↓	↓
								↑ cancelled HG 3/21/13														

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/21/13	12:45		3/21/13	12:45
Relinquished by: (Signature)			Received by: (Signature)		

Sample Matrix

Soil ☑ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐ _____

☐ Sample(s) dropped off after hours to secure drop off area.

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Analytical Laboratory

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AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: Atlantic B Com #9A

Date: 7/24/2013

Matrix: Soil

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	7/24/2013	12:02	West Wall	38.6	12:57	113	20.0	1	SL
SC-2	7/24/2013	12:04	North Wall	1.6	13:00	81.1	20.0	1	SL
SC-3	7/24/2013	12:05	Base (East)	9.4	13:02	58.8	20.0	1	SL
SC-4	7/24/2013	12:08	East Wall	23.4	13:05	115	20.0	1	SL
SC-5	7/24/2013	12:10	South Wall	350	13:07	236	20.0	1	SL
SC-6	7/24/2013	12:12	Base (West)	34.0	13:10	63.1	20.0	1	SL

Total Petroleum Hydrocarbons - USEPA 418.1

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

Analyst: Stephanie Hyden

Report Finalized: 07/24/13

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 29, 2013

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

RE: CoP Atlantic B Com #9A OrderNo.: 1307B44

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/25/2013 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

Analytical Report
Lab Order **1307B44**
Date Reported: **7/29/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Atlantic B Com #9A
Lab ID: 1307B44-001

Client Sample ID: SC-5
Collection Date: 7/24/2013 12:10:00 PM
Matrix: MEOH (SOIL) **Received Date:** 7/25/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**	
Benzene	ND	0.050		mg/Kg	1	7/25/2013 11:31:04 AM	R12184
Toluene	ND	0.050		mg/Kg	1	7/25/2013 11:31:04 AM	R12184
Ethylbenzene	ND	0.050		mg/Kg	1	7/25/2013 11:31:04 AM	R12184
Xylenes, Total	0.30	0.10		mg/Kg	1	7/25/2013 11:31:04 AM	R12184
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	7/25/2013 11:31:04 AM	R12184

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1307B44**

29-Jul-13

Client: Animas Environmental

Project: CoP Atlantic B Com #9A

Sample ID **mb-8541 25**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R12184**	RunNo: **12184**
Prep Date:	Analysis Date: **7/25/2013**	SeqNo: **347492** 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	0.98		1.000		97.6	80	120			

Sample ID **lcs-8541 24**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R12184**	RunNo: **12184**
Prep Date:	Analysis Date: **7/25/2013**	SeqNo: **347494** 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	103	80	120			
Toluene	1.0	0.050	1.000	0	105	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	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
- 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

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: 1307B44 RcptNo: 1

Received by/date: LM 07/25/13

Logged By: Ashley Gallegos 7/25/2013 10:00:00 AM

Completed By: Ashley Gallegos 7/25/2013 10:04:34 AM

Reviewed By: TO 07/25/13

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° 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: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush Same day

Project Name:
CoP Atlantic B Com #9A

Project #:

Project Manager:
& Debbie Watson

Sampler: S. Lynn / C. Lamerman

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. #1302344	BTEX + ~~MTBE~~ + ~~TMB's~~ (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)	Air Bubbles (Y or N)
7/24/13	12:10	Soil	SC-5	MeOH Kit 1-4oz	MeOH	-001	X											

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/24/13	1739	Stephanie Lynn	Chris Walls	7/24/13	1739
7/24/13	1757	Chris Walls		07/25/13	1000

Remarks: Bill to ConocoPhillips

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.