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 C 4**	Facility Type: **Gas Well**

Surface Owner **BLM**	Mineral Owner **BLM (NM-0607)**	API No.**30-045-10046**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**31**	**31N**	**10W**	**990**	**South**	**1650**	**West**	**San Juan**

Latitude 36.85065 Longitude 107.927

NATURE OF RELEASE

Type of Release **Hydrocarbon**	Volume of Release **13 BBLS**	Volume Recovered **None**
Source of Release **Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **10/31/2013 at 2:45PM**
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.	

RCVD DEC 27 '13
OIL CONS. DIV.
DIST. 3

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

Describe Cause of Problem and Remedial Action Taken.*
Equipment malfunction allowed water and oil to spill over into production tank causing 13bbls of hydrocarbon to overflow from the tank onto the soil. The release was contained within the berm. None of the release was recovered and the equipment was shut-in immediately.

Describe Area Affected and Cleanup Action Taken.*
NMOCD actiona levels for releases are specified in NMOCD's Guidelines for Leaks, Spills and Releases and the release was assigned a ranking score of 10. Samples were collected and analytical results were above applicable NMOCD action levels indicating a release. An excavation 30' x 40' x 4' and 222cubic 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: 12/19/2013 Phone: (505) 326-9837	

* Attach Additional Sheets If Necessary

nJK1410142071

23

envirotech

December 18, 2013 Project Number 92115-2521

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

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

RE: SPILL ASSESSMENT AND CONFIRMATIONS SAMPLING DOCUMENTATION FOR THE ATLANTIC C #4 (HBR) WELL SITE, SAN JUAN COUNTY, NEW MEXICO

Dear Ms. Tafoya,

Enclosed please find the field notes and analytical results for spill assessment activities performed at the Atlantic C #4 well site located in Section 31, Township 31 North, Range 10 West, San Juan County, New Mexico; see enclosed ***Site Map***. The above-ground storage tank (AST) at the above referenced well site overflowed, releasing approximately 13 barrels (bbls) of condensate into the surrounding area; see enclosed ***Site Map*** and ***Field Notes***. Upon Envirotech personnel's arrival on November 4, 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.

On November 4, 2013, one (1) five (5)-point surface composite soil sample was collected from the western area between the berms, surrounding the AST; see enclosed ***Site Map*** and ***Field Notes***. 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 a result above the regulatory standard for TPH and organic vapor; see enclosed ***Field Notes***, ***Analytical Results***, and ***Summary of Analytical Results***.

One (1) soil sample was then collected from four (4) feet below ground surface (BGS) near the AST; see enclosed ***Site Map***, for sample location. The sample was analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample returned a result below the regulatory standard for TPH, but above the regulatory standard for organic vapor; see enclosed ***Field Notes***, ***Analytical Results***, and ***Summary of Analytical Results***.

One (1) four (4)-point composite soil sample was then collected from four (4) feet BGS along the perimeter of the visually contaminated area between the berms; see enclosed ***Site Map***, for sample location. The sample was analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample returned a result below the regulatory standard for TPH and organic vapor; see enclosed ***Field Notes***, ***Analytical Results***, and ***Summary of Analytical Results***.

Therefore, Envirotech made the recommendation to excavate approximately 50 feet by 50 feet by four (4) feet BGS of contaminated soil along the western end of the area between the berms surrounding the AST, followed by re-sampling for closure; see enclosed ***Site Map***.

ConocoPhillips personnel contacted Envirotech on November 20, 2013, with a notification that excavation activities had been completed and requested that Envirotech return to the above referenced location to conduct confirmation sampling activities.

On November 20, 2013, five (5) five (5)-point composite soil samples were collected from the excavated area: north wall, west wall, south wall, east wall and bottom; see enclosed ***Site Map*** and ***Field Notes***. All five (5) samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. All four (4) wall composite samples returned results below the regulatory standard for TPH and organic vapor; see enclosed ***Field Notes***, ***Analytical Results***, and ***Summary of Analytical Results***. The bottom composite sample returned a result below the regulatory standard for TPH, but above the regulatory standard for organic vapor; see enclosed ***Field Notes***, ***Analytical Results***, and ***Summary of Analytical Results***.

The bottom composite sample was then 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. The sample returned a result below the regulatory standard for benzene and total BTEX; see enclosed ***Analytical Results*** and ***Summary of Analytical Results***. Therefore, Envirotech, Inc. recommends no further action in regards to this incident.

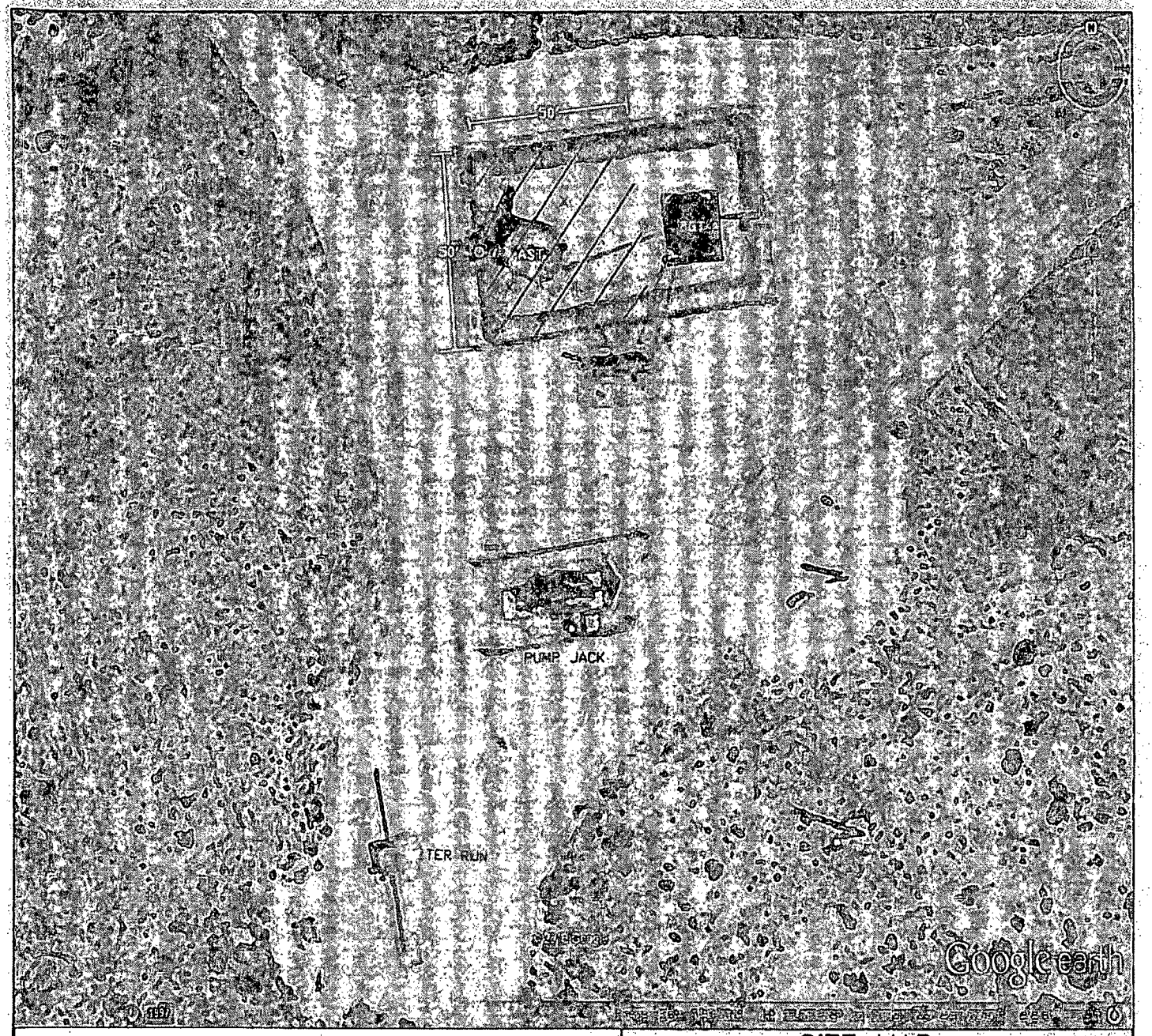
We appreciate the opportunity to be of service. If you have questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,
ENVIROTECH, INC.

Tiffany McIntosh
Staff Scientist
tmcintosh@envirotech-inc.com

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

Cc: Client File 92115



LEGEND

X SAMPLE 1: SURFACE COMPOSITE

X SAMPLE 2: 4 FEET BGS

⊗ SAMPLE 3: PERIMETER COMPOSITE

▨ RECOMMENDED AREA TO EXCAVATE

SITE MAP
ConocoPhillips
Atlantic C #4 (hBr)
SECTION 31, TWP 31 NORTH, RANGE 10 WEST
SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS	FIGURE NO. 2	REV
PROJECT NO92115-2521		

REVISIONS

NO.	DATE	BY	DESCRIPTION

MAP DRWN	TLM	11/8/13	BASE DRWN	TLM	2/25/13

envirotech
5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

Client: Conoco Phillips

envirotech (505) 632-0615 (800) 362-1879 5796 U.S. Hwy 64, Farmington, NM 87401

Project No: 92115-2521

COC No: NONE

FIELD REPORT: SPILL CLOSURE VERIFICATION

PAGE NO: 1 OF 1

DATE STARTED: 11/4/13

DATE FINISHED: 11/4/13

ENVIRONMENTAL SPECIALIST: T. McInnes

LOCATION: NAME: Atlantic C #4 WELL #: NA

QUAD/UNIT: N SEC: 31 TWP: 31 RNG: 10 PM: NA CNTY: SJ ST: NM

QTR/FOOTAGE: N/A CONTRACTOR: N/A

EXCAVATION APPROX: NA FT. X NA FT. X NA FT. DEEP CUBIC YARDAGE: NA

DISPOSAL FACILITY: NA REMEDIATION METHOD: NA

LAND USE: NA LEASE: NA LAND OWNER: NA

CAUSE OF RELEASE: Tank Overflow MATERIAL RELEASED: condensate ~13 BBLS

SPILL LOCATED APPROXIMATELY: NA FT. NA FROM NA

DEPTH TO GROUNDWATER: 100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: 700'

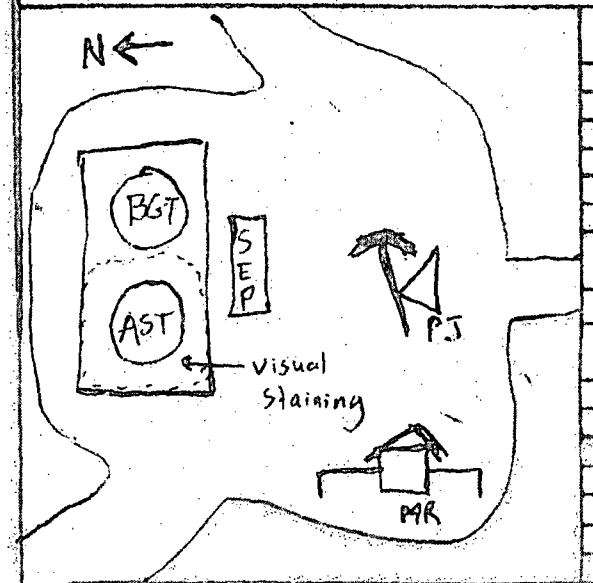
NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM

SOIL AND EXCAVATION DESCRIPTION:

1330: Notified Crystal Tafoya of my recommendation to excavate to a depth of 4' BGS by dimensions 50' x 50'. The area around the BGT (on East side of berm) does not need to be excavated.

SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
200 std	1145	+	—	—	—	—	202	—
surface composite	1150	1	—	5	20	4	2925	11700
4' BGS	1208	2	—	5	20	4	89	356
4' BGS perimeter comp.	1240	3	—	5	20	4	45	180

SPILL PERIMETER



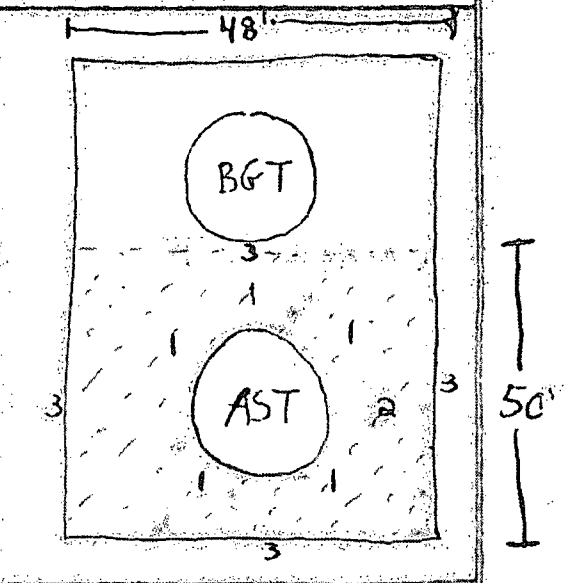
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1	1452
2	187
3	4.9

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

SPILL PROFILE



1 = 5-pt composite sample
2 = 1-pt grab sample
3 = 4-pt composite sample

TRAVEL NOTES: CALLED OUT: ONSITE:

▨ = area that should be excavated to a depth of 4' BGS

Client: COPC (hBr)

envirotech
(505) 632-0615 (800) 362-1879
5796 U.S. Hwy 64, Farmington, NM 87401

Project No: 92115-2521
COC No: 16017

FIELD REPORT: SPILL CLOSURE VERIFICATION

PAGE NO: 1 OF 1
DATE STARTED: 11/20/13
DATE FINISHED: 11/20/13
ENVIRONMENTAL SPECIALIST: T. McIntosh

LOCATION: NAME: Atlantic C WELL #: 4
QUAD/UNIT: N SEC: 31 TWP: 31N RNG: 10W PM: N/A CNTY: SJ ST: NM
QTR/FOOTAGE: NA CONTRACTOR: NA

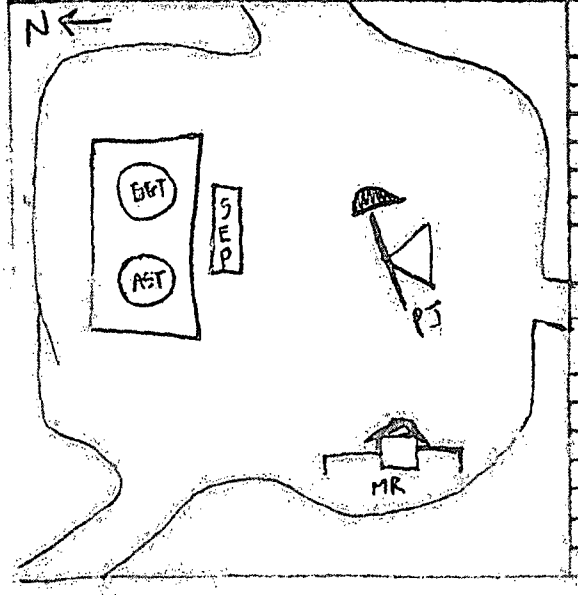
EXCAVATION APPROX: NA FT. X NA FT. X NF FT. DEEP CUBIC YARDAGE: NA
DISPOSAL FACILITY: NA REMEDIATION METHOD: NA
LAND USE: NA LEASE: NA LAND OWNER: NA
CAUSE OF RELEASE: Tank overflow MATERIAL RELEASED: condensate ~13 BBLS

SPILL LOCATED APPROXIMATELY: NA FT. NA FROM NA
DEPTH TO GROUNDWATER: 100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: 700'
NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM

SOIL AND EXCAVATION DESCRIPTION:
Email results to → sconsulting.eric@gmail.com → and Crystal
1 day rush on BTEX 8021 for Bottom Composite. excavation w s ~4' deep
Confirmation sampling after excavation.

SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
200 Standard	1309	—	—	—	—	—	189	—
North comp. (wall)	1350	1	—	5	20	4	9	36
West comp (wall)	1353	2	—	5	20	4	11	44
South comp (wall)	1355	3	—	5	20	4	10	40
East comp (wall)	1357	4	—	5	20	4	8	32
Bottom comp	1400	5	—	5	20	4	61	244

SPILL PERIMETER



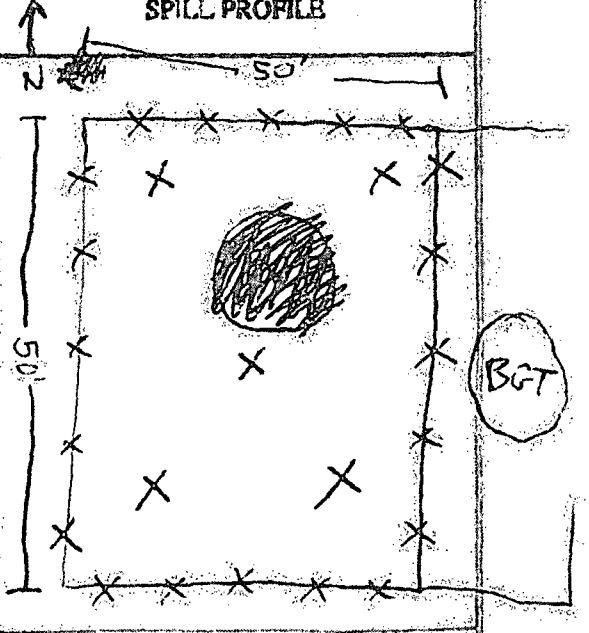
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1	1.2
2	25.8
3	11.8
4	56.9
5	169.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
5	8021	

SPILL PROFILE



TRAVEL NOTES: CALLOUT: ONSITE: 5-5pt composites

Table 1, Summary of Analytical Results
ConocoPhillips
Atlantic C #4 (hBr)
Spill Assessment and Confirmation Sampling Report
San Juan County, New Mexico
Project Number 92115-2521

Sample Description	Sample Number	Date	TPH 418.1 (ppm)	OVM (ppm)	Benzene USEPA Method 8021 (ppm)	BTEX USEPA Method 8021 (ppm)
NMOCD/RCRA Standards	NA	NA	1000	100	10	50
Surface Composite	1	11/4/2013	**11700**	**1452**	NS	NS
4 Feet BGS	2	11/4/2013	356	**187**	NS	NS
4 Feet BGS Perimeter Composite	3	11/4/2013	180	4.9	NS	NS
North Wall Composite	1	11/20/2013	36	1.2	NS	NS
West Wall Composite	2	11/20/2013	44	25.8	NS	NS
South Wall Composite	3	11/20/2013	40	11.8	NS	NS
East Wall Composite	4	11/20/2013	32	56.9	NS	NS
Bottom Composite	5	11/20/2013	244	**169.0**	ND	8.08

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

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2521
Sample No.:	1	Date Reported:	11/8/2013
Sample ID:	Surface Composite	Date Sampled:	11/4/2013
Sample Matrix:	Soil	Date Analyzed:	11/4/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**11,700**	**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 C #4 (hBr)**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

Tiffany McIntosh
Analyst

Tiffany McIntosh
Printed

Toni McKnight
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 #:	92115-2521
Sample No.:	2	Date Reported:	11/8/2013
Sample ID:	4 Feet BGS	Date Sampled:	11/4/2013
Sample Matrix:	Soil	Date Analyzed:	11/4/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**356**	**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 C #4 (hBr)**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

Tiffany McIntosh
Analyst

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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2521
Sample No.:	3	Date Reported:	11/8/2013
Sample ID:	4 Feet BGS Perimeter Composit	Date Sampled:	11/4/2013
Sample Matrix:	Soil	Date Analyzed:	11/4/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**180**	**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 C #4 (hBr)**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

Analyst

Tiffany McIntosh
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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 4-Nov-13

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	202
	500	
	1000	

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

Tiffany McIntosh
Analyst

11/8/2013
Date

Tiffany McIntosh
Print Name

Toni McKnight
Review

11/8/2013
Date

Toni McKnight, EIT
Print Name

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2521
Sample No.:	1	Date Reported:	11/21/2013
Sample ID:	North Wall Composite	Date Sampled:	11/20/2013
Sample Matrix:	Soil	Date Analyzed:	11/20/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**36**	**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 C #4 (hBr)**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

Tiffany McIntosh
Analyst

Tiffany McIntosh
Printed

Toni McKnight
Review

Toni McKnight, EIT
Printed

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2521
Sample No.:	2	Date Reported:	11/21/2013
Sample ID:	West Wall Composite	Date Sampled:	11/20/2013
Sample Matrix:	Soil	Date Analyzed:	11/20/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**44**	**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 C #4 (hBr)**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

Tiffany McIntosh
Analyst

Tiffany McIntosh
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Review

Toni McKnight, EIT
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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2521
Sample No.:	3	Date Reported:	11/21/2013
Sample ID:	South Wall Composite	Date Sampled:	11/20/2013
Sample Matrix:	Soil	Date Analyzed:	11/20/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**40**	**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 C #4 (hBr)**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

Tiffany McIntosh
Analyst

Tiffany McIntosh
Printed

Toni McKnight
Review

Toni McKnight, EIT
Printed

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envirotech-inc.com
info@envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2521
Sample No.:	4	Date Reported:	11/21/2013
Sample ID:	East Wall Composite	Date Sampled:	11/20/2013
Sample Matrix:	Soil	Date Analyzed:	11/20/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**32**	**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 C #4 (hBr)**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

Analyst

Tiffany McIntosh
Printed

Review

Toni McKnight, EIT
Printed

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envirotech-inc.com
info@envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2521
Sample No.:	5	Date Reported:	11/21/2013
Sample ID:	Bottom Composite	Date Sampled:	11/20/2013
Sample Matrix:	Soil	Date Analyzed:	11/20/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**244**	**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 C #4 (hBr)**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

Tiffany McIntosh
Analyst

Tiffany McIntosh
Printed

Toni McKnight
Review

Toni McKnight, EIT
Printed

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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 20-Nov-13

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	189
	500	
	1000	

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

Tiffany McIntosh
Analyst

11/21/2013
Date

Tiffany McIntosh
Print Name

Toni McKnight
Review

11/21/2013
Date

Toni McKnight, EIT
Print Name

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Analytical Laboratory

Analytical Report

Report Summary

Client: ConocoPhillips
Chain Of Custody Number: 16017
Samples Received: 11/20/2013 4:45:00PM
Job Number: 92115-2521
Work Order: P311060
Project Name/Location: Atlantic C #4

Entire Report Reviewed By: _____ Date: 11/22/13

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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ConocoPhillips	Project Name:	Atlantic C #4	
PO Box 2200	Project Number:	92115-2521	Reported:
Bartlesville OK, 74005	Project Manager:	Tiffany McIntosh	22-Nov-13 10:53

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Bottom Comp.	P311060-01A	Soil	11/20/13	11/20/13	Glass Jar, 4 oz.

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ConocoPhillips	Project Name:	Atlantic C #4	
PO Box 2200	Project Number:	92115-2521	**Reported:**
Bartlesville OK, 74005	Project Manager:	Tiffany McIntosh	22-Nov-13 10:53

Bottom Comp.

P311060-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1347014	11/21/13	11/21/13	EPA 8021B	
Toluene	0.25	0.05	mg/kg	1	1347014	11/21/13	11/21/13	EPA 8021B	
Ethylbenzene	0.46	0.05	mg/kg	1	1347014	11/21/13	11/21/13	EPA 8021B	
p,m-Xylene	5.79	0.05	mg/kg	1	1347014	11/21/13	11/21/13	EPA 8021B	
o-Xylene	1.58	0.05	mg/kg	1	1347014	11/21/13	11/21/13	EPA 8021B	
Total Xylenes	7.36	0.05	mg/kg	1	1347014	11/21/13	11/21/13	EPA 8021B	
Total BTEX	8.08	0.05	mg/kg	1	1347014	11/21/13	11/21/13	EPA 8021B	
Surrogate: Bromochlorobenzene		*118 %*		*80-120*	*1347014*	*11/21/13*	*11/21/13*	*EPA 8021B*	
Surrogate: 1,3-Dichlorobenzene		*111 %*		*80-120*	*1347014*	*11/21/13*	*11/21/13*	*EPA 8021B*	

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ConocoPhillips	Project Name:	Atlantic C #4	
PO Box 2200	Project Number:	92115-2521	Reported:
Bartlesville OK, 74005	Project Manager:	Tiffany McIntosh	22-Nov-13 10:53

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 1347014 - Purge and Trap EPA 5030A										
Blank (1347014-BLK1)				Prepared: 20-Nov-13 Analyzed: 21-Nov-13						
Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.05	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: 1,3-Dichlorobenzene	*47.2*		*ug/L*	*50.0*		*94.4*	*80-120*			
Surrogate: Bromochlorobenzene	*50.7*		*"*	*50.0*		*101*	*80-120*			
Duplicate (1347014-DUP1)	**Source: P311042-01**			Prepared: 20-Nov-13 Analyzed: 21-Nov-13						
Benzene	ND	0.05	mg/kg		ND				30	
Toluene	ND	0.05	"		0.05				30	
Ethylbenzene	ND	0.05	"		ND				30	
p,m-Xylene	ND	0.05	"		0.22				30	
o-Xylene	ND	0.05	"		0.10				30	
Surrogate: 1,3-Dichlorobenzene	*50.6*		*ug/L*	*50.0*		*101*	*80-120*			
Surrogate: Bromochlorobenzene	*53.5*		*"*	*50.0*		*107*	*80-120*			
Matrix Spike (1347014-MS1)	**Source: P311042-01**			Prepared: 20-Nov-13 Analyzed: 21-Nov-13						
Benzene	39.5		ug/L	50.0	0.26	78.5	39-150			
Toluene	53.8		"	50.0	1.02	106	46-148			
Ethylbenzene	53.4		"	50.0	0.73	105	32-160			
p,m-Xylene	106		"	100	4.31	102	46-148			
o-Xylene	53.6		"	50.0	1.96	103	46-148			
Surrogate: 1,3-Dichlorobenzene	*52.2*		*"*	*50.0*		*104*	*80-120*			
Surrogate: Bromochlorobenzene	*54.7*		*"*	*50.0*		*109*	*80-120*			

ConocoPhillips	Project Name:	Atlantic C #4	
PO Box 2200	Project Number:	92115-2521	Reported:
Bartlesville OK, 74005	Project Manager:	Tiffany McIntosh	22-Nov-13 10:53

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

1 Day RUSH!

CHAIN OF CUSTODY RECORD

16017

Client: COPC (hBr)	Project Name / Location: Atlantic C #4
Email results to: T. McIntosh	Sampler Name: T. McIntosh
Client Phone No.:	Client No.: 92115-2521

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative: HNO_3	HCl	Cool	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
Bottom Comp.	11/20/13	1400	P311060-01	1-4oz jar			X		X												✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Tiffany McIntosh	11/20/13	1645	Jaime J Zazza	11/20/13	1645
Relinquished by: (Signature)			Received by: (Signature)		

Sample Matrix

Soil ☑ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐ _____

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

RUSH!

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