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: **Schumacher 1**	Facility Type: **Gas Well**

Surface Owner **BLM**	Mineral Owner **BLM (SF-077764)**	API No.**30-045-09511**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	**17**	**30N**	**10W**	**1750**	**North**	**1650**	**East**	**San Juan**

Latitude 36.81433 Longitude 107.90352

NATURE OF RELEASE

Type of Release **Produced Water**	Volume of Release **14 BBLS**	Volume Recovered **11 BBLS**
Source of Release **Pumping Unit**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **11/4/2013 at 2:30 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.	

RCVD JAN 22 '14
OIL CONS. DIV.
DIST. 3

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

Describe Cause of Problem and Remedial Action Taken.*
Equipment replaced and started without proper communication allowing 14bbls of Produced Water to overflow from the pit. The location was immediately shut-in and a water truck called to location. 11bbls was recovered and the release was contained within the berm.

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 20. Samples were collected and analytical results were above applicable NMOCD action levels. An excavation of 45' x 35' x 4' and 233 cubic yards of soil was transported to a third party landfarm. Excavation and confirmation sampling occurred. Analytical results for TPH, BTEX and Chlorides 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: 9/4/2014 Expiration Date:
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval: Attached ☐
Date: 1/16/2014 Phone: (505) 326-9837	

* Attach Additional Sheets If Necessary

nJK1424754534

17

envirotech

January 15, 2014

Project Number 92115-2523

Ms. Crystal Tafoya
ConocoPhillips
3401 East 30th Street
Farmington, New Mexico 87402

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

RE: SPILL ASSESSMENT DOCUMENTATION FOR THE SCHUMACHER #1 (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 Schumacher #1 well site located in Section 17, Township 30 North, Range 10 West, San Juan County, New Mexico; see enclosed ***Site Map***. The below ground tank (BGT) at the above referenced well site overflowed, releasing approximately 14 barrels (bbls) of produced water into the surrounding area, of which 11 bbls were recovered; see enclosed ***Field Notes***. Upon Envirotech personnel's arrival on November 6, 2013, a brief site assessment was conducted. Because depth to groundwater was greater than 100 feet, nearest surface water was less than 200 feet, and the well site was not located within a well head protection area, the regulatory standards for the site were determined to be 100 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 6, 2013, one (1) five (5)-point composite soil sample was collected from the surface of the northern area between the berms, surrounding the BGT; see enclosed ***Field Notes***. The sample was analyzed in the field for TPH using USEPA Method 418.1, for organic vapors using a photoionization detector (PID), and for chlorides using a Quantab field chloride strip. 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***. The Quantab field chloride strip returned a result of 479 ppm for chlorides; see enclosed ***Field Notes*** and ***Summary of Analytical Results***.

One (1) soil sample was then collected from four (4) feet below ground surface (BGS) near the BGT; see enclosed ***Site Map*** for sample location. The sample was analyzed in the field for TPH using USEPA Method 418.1, for organic vapors using a PID, and for chlorides using a Quantab field chloride strip. 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***. The Quantab field chloride strip returned a result of non-detect for chlorides; see enclosed ***Field Notes*** and ***Summary of Analytical Results***.

One (1) four (4)-point composite soil sample was then collected from the perimeter of the visually contaminated area between the berm; see enclosed ***Site Map*** for sample location. The sample was analyzed in the field for TPH using USEPA Method 418.1, for organic vapors using a PID, and for chlorides using a Quantab field chloride strip. 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***. The Quantab field chloride strip returned a result of non-detect for chlorides; see enclosed ***Field Notes*** and ***Summary of Analytical Results***.

Therefore, Envirotech made the recommendation to excavate approximately 45 feet by 35 feet by four (4) feet BGS of contaminated soil along the northern end of the area between the berms surrounding the BGT, followed by re-sampling for closure; see enclosed ***Site Map***.

ConocoPhillips personnel contacted Envirotech, Inc. 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.

Upon Envirotech personnel's arrival 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 five (5) composite samples returned results below the regulatory standard for TPH and organic vapor; see enclosed ***Field Notes***, ***Analytical Results***, and ***Summary of Analytical Results***. Therefore, Envirotech, Inc. recommends no further action in regards to this incident.

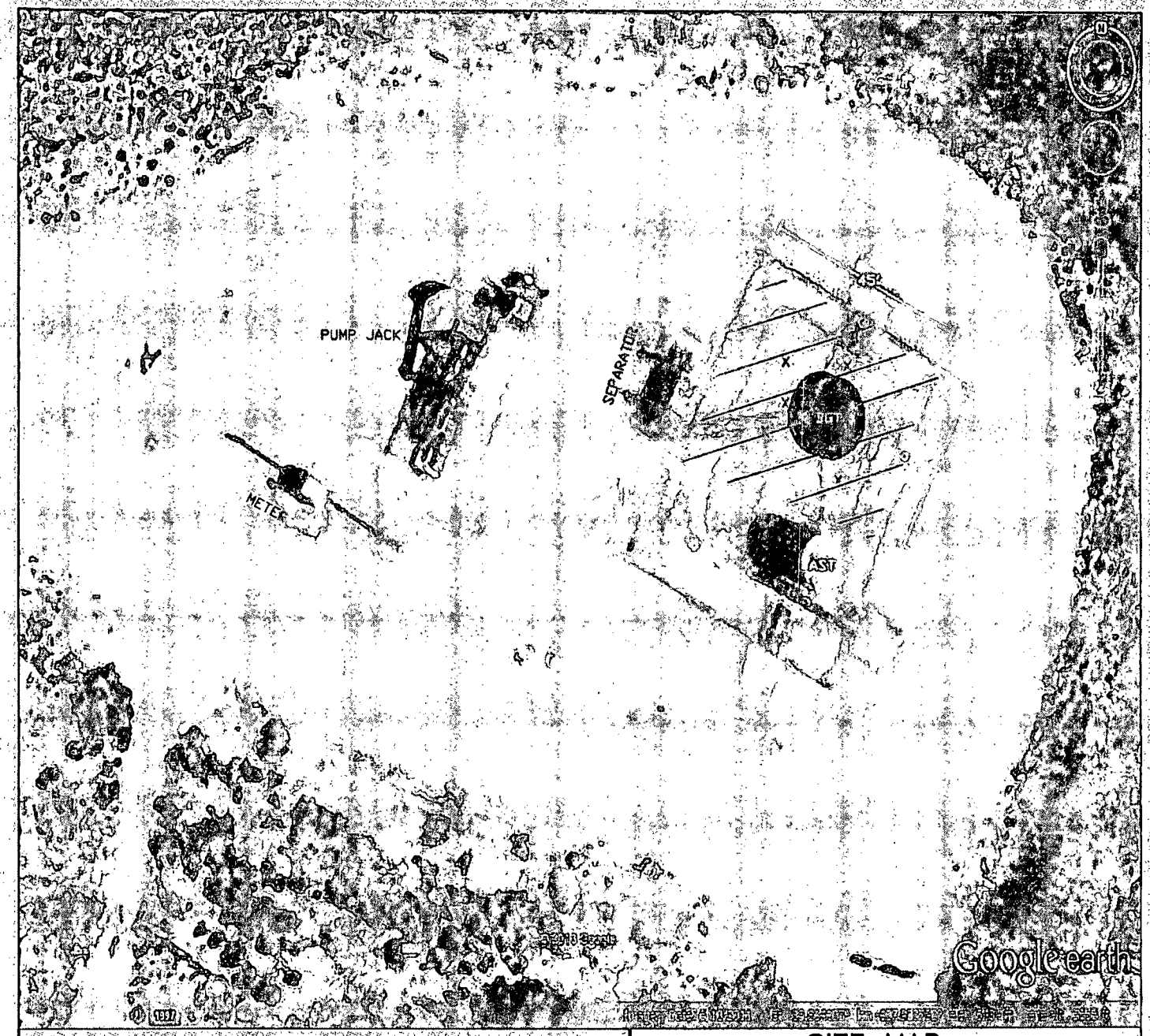
We appreciate the opportunity to be of service. If you have questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,
ENVIROTECH, INC.

Tiffany McIntosh
Staff Scientist
tmcintosh@envirotech-inc.com

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

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
Schumacher #1 (hBr)
SECTION 17, TWP 30 NORTH, RANGE 10 WEST
SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS	FIGURE NO. 2	REV
PROJECT NO92115-2523		

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

Table 1, Summary of Analytical Results
ConocoPhillips
Schumacher #1 (hBr)
Spill Assessment and Confirmation Sampling Report
San Juan County, New Mexico
Project Number 92115-2523

Sample Description	Sample Number	Date	TPH 418.1 (ppm)	Chloride - Field Strip (ppm)	OVM (ppm)
NMOCD/RCRA Standards	NA	NA	100	N/A	100
Surface Composite	1	11/6/2013	**864**	479	**2045**
4 Feet BGS	2	11/6/2013	8	ND	**200**
Perimeter Composite	3	11/6/2013	ND	ND	3.0
North Wall Composite	1	11/20/2013	76	NS	3.6
West Wall Composite	2	11/20/2013	80	NS	2.4
South Wall Composite	3	11/20/2013	72	NS	0.9
East Wall Composite	4	11/20/2013	56	NS	3.0
Bottom Composite	5	11/20/2013	52	NS	3.8

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

Client: ConocoPhillips (HBr)

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

Project No: 92115-2523

COC No: NONE

FIELD REPORT: SPILL CLOSURE VERIFICATION

PAGE NO: 1 OF 1

DATE STARTED: 11/6/13

DATE FINISHED: 11/6/13

ENVIRONMENTAL SPECIALIST: T. McIntosh

LOCATION: NAME: Schumacher WELL #: 1

QUAD/UNIT: G SEC: 17 TWP: 30N RNG: 10W PM: N/A 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: N/A LEASE: N/A LAND OWNER: N/A

CAUSE OF RELEASE: tank overflow MATERIAL RELEASED: produced water ~14 bbls

SPILL LOCATED APPROXIMATELY: 55' FT. 280° FROM pump jack

DEPTH TO GROUNDWATER: NEAREST WATER SOURCE: NEAREST SURFACE WATER: 50'

NMOCD RANKING SCORE: ~~tank overflow~~ NMOCD TPH CLOSURE STD: 100 PPM

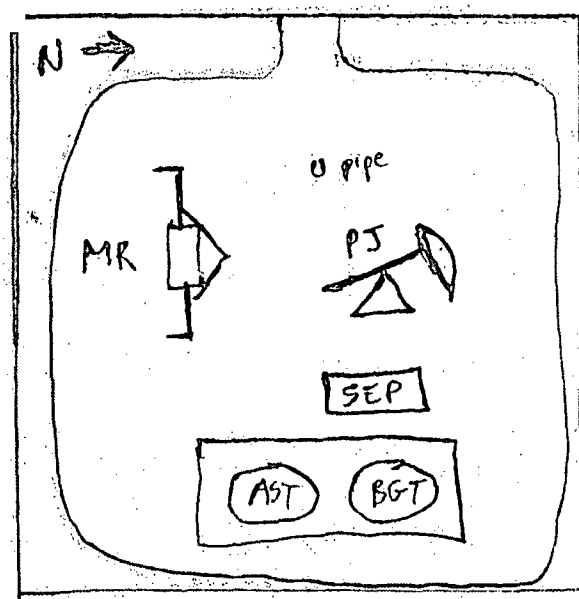
SOIL AND EXCAVATION DESCRIPTION: 11 of the 14 bbls of produced water were recovered.

Arrived on site, a heavy odor is very apparent.

NO samples submitted for laboratory analysis. Relayed results to Crystal, made the recommendation to excavate 45' x 35' x 4' BGS

SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
200 std	—	—	—	—	—	—	198	—
surface composite	1010	1	—	5	20	4	216	864
4' BGS	1033	2	—	5	20	4	8	8
perimeter composite	1050	3	—	5	20	4	1	4

SPILL PERIMETER



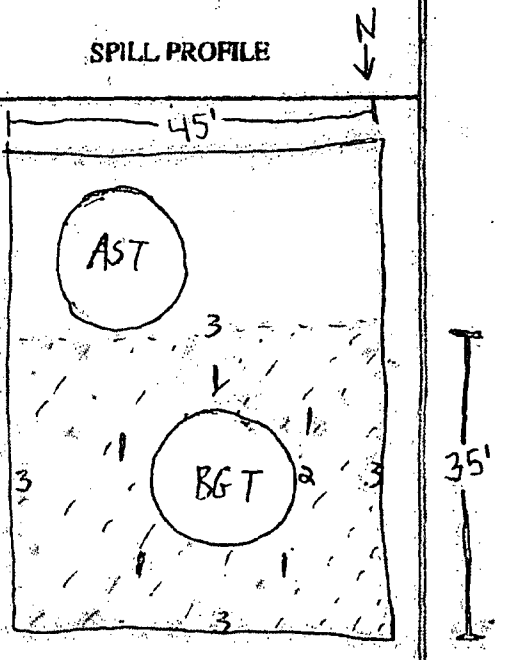
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1	2045
2	200
3	3.0
	chlorides
1	479
2	0
3	0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

SPILL PROFILE



1 = 5-pt surface composite
2 = 1-pt grab sample @ 4' BGS
3 = 4-pt perimeter composite surface

= recommended area to excavate to a depth of 4'

TRAVEL NOTES: CALLED OUT: ONSITE:

Client:	envirotech	Project No:
COPC (hBr)	(505) 632-0615 (800) 362-1879 5796 U.S. Hwy 64, Farmington, NM 87401	92115-2523 COC No: NONE

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: Schumacher WELL #:

QUAD/UNIT: G SEC: 17 TWP: 30N RNG: 10W PM: N/A 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: produced water ~14 BBLS

SPILL LOCATED APPROXIMATELY: 55' FT. 280° FROM pump jack

DEPTH TO GROUNDWATER: NEAREST WATER SOURCE: NEAREST SURFACE WATER: 50'

NMOCD RANKING SCORE: NMOCD TPH CLOSURE STD: 100 PPM

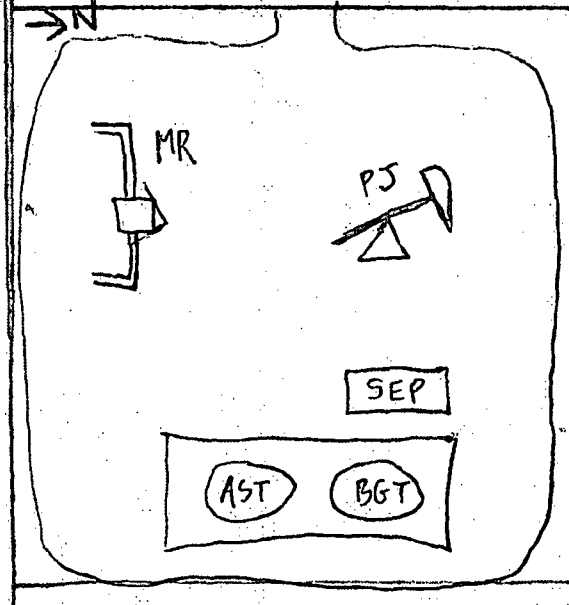
SOIL AND EXCAVATION DESCRIPTION: confirmation sampling after excavation

notified Crystal that everything passed in the field.

excavation was ~ 4' deep.

SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
200 standard	1520	—	—	—	—	—	191	—
North comp (wall)	1537	1	—	5	20	4	19	76
West comp (wall)	1539	2	—	5	20	4	20	80
South comp (wall)	1541	3	—	5	20	4	18	72
East comp (wall)	1543	4	—	5	20	4	14	56
Bottom comp	1545	5	—	5	20	4	13	52

SPILL PERIMETER



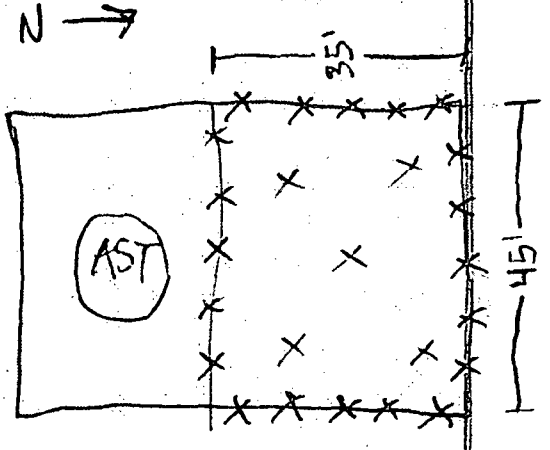
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1	3.6
2	2.4
3	0.9
4	3.0
5	3.8

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

SPILL PROFILE



5 - 5-pt composites

TR:

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-2523
Sample No.:	1	Date Reported:	11/8/2013
Sample ID:	Surface Composite	Date Sampled:	11/6/2013
Sample Matrix:	Soil	Date Analyzed:	11/6/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**864**	**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: **Schumacher #1 (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 #:	92115-2523
Sample No.:	2	Date Reported:	11/8/2013
Sample ID:	4 Feet BGS	Date Sampled:	11/6/2013
Sample Matrix:	Soil	Date Analyzed:	11/6/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**8**	**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: **Schumacher #1 (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 #:	92115-2523
Sample No.:	3	Date Reported:	11/8/2013
Sample ID:	Perimeter Composite	Date Sampled:	11/6/2013
Sample Matrix:	Soil	Date Analyzed:	11/6/2013
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: **Schumacher #1 (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
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301
Ph (505) 632-0615 Fx (505) 632-1865
Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 6-Nov-13

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	198
	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

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 #:	92115-2523
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	**76**	**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: **Schumacher #1 (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 #:	92115-2523
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	**80**	**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: **Schumacher #1 (hBr)**

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

Tiffany McIntosh
Analyst

Toni McKnight
Review

Tiffany McIntosh
Printed

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 #:	92115-2523
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	**72**	**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: **Schumacher #1 (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 #:	92115-2523
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	**56**	**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: **Schumacher #1 (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 #:	92115-2523
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	**52**	**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: **Schumacher #1 (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

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	191
	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

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