

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 October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

30-045-09101

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Burlington Resources, a Wholly Subsidiary of ConocoPhillips Company	Contact Kelsi Harrington	
Address 3401 E. 30th St., Farmington, NM 87402	Telephone No. 505-599-3403	
Facility Name Howell M 1	Facility Type Gas Well API#3004509101	
Surface Owner Federal	Mineral Owner Federal	Lease No. NM-012708

LOCATION OF RELEASE

Unit Letter M	Section 30	Township 30N	Range 08W	Feet from the 990'	North/South Line South	Feet from the 990'	East/West Line West	County San Juan
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Latitude 36.7776° N Longitude -107.71684° W

NATURE OF RELEASE

Type of Release – Unknown	Volume of Release – Unknown	Volume Recovered –
Source of Release: Below Grade Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 7/26/2011
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour –	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		RCVD SEP 6 '11
Describe Cause of Problem and Remedial Action Taken.* Below Grade Tank Closure.		OIL CONS. DIV.
Describe Area Affected and Cleanup Action Taken.* The sample returned results below the regulatory standards for Benzene, BTEX and Chlorides but above the regulatory standard of 100 ppm for TPH (168 ppm) using USEPA Method 418.1, confirming a release. However, as the closure standard for TPH at this site is 100 ppm and the laboratory sample returned results of Non-Detect TPH, no further action is required.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: <i>Kelsi Harrington</i>	OIL CONSERVATION DIVISION	
Printed Name: Kelsi Harrington	Approved by District Supervisor: <i>[Signature]</i>	
Title: Environmental Consultant	Approval Date: 10/11/11	Expiration Date:
E-mail Address: kelsi.g.harrington@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9/1/2011	Phone: 505-599-3403	

* Attach Additional Sheets If Necessary

15K1129429381



August 24, 2011

Project Number 92115-1847

Ms. Kelsi Harrington
Conoco Phillips
3401 East 30th Street
Farmington, New Mexico 87401

Phone: (505) 599-3403

**RE: BELOW-GRADE TANK CLOSURE DOCUMENTATION FOR THE HOWELL M #1 (hBr)
WELL SITE, SAN JUAN COUNTY, NEW MEXICO**

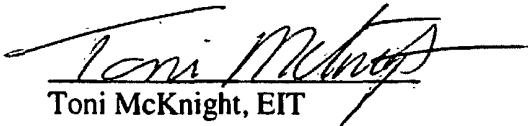
Dear Ms. Harrington,

Enclosed please find the field notes and analytical results for below-grade tank (BGT) closure activities performed at the Howell M #1 (hBr) well site located in Section 30, Township 30 North, Range 8 West, San Juan County, New Mexico. Prior to Envirotech's arrival on July 26, 2011, the BGT had been removed. A brief site assessment was conducted and the regulatory standards were determined to be 100 ppm TPH and 100 ppm organic vapors due to horizontal distance to surface water less than 200 feet and depth to groundwater less than 100 feet, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Spills, Leaks, and Releases. The sample from beneath the former BGT returned results below the regulatory standards for TPH using USEPA Method 8015; see attached *Analytical Results*. Envirotech, Inc. recommends no further action in regards to this assessment.

One (1) five (5)-point composite sample was collected from beneath the former BGT. The sample was analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, for organic vapors using a photoionization detector (PID), and for chlorides. Additionally, the sample was placed into a four (4)-ounce glass jar, capped headspace 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 BTEX using USEPA Method 8021 and for total chlorides using USEPA Method 4500. The sample returned results below the regulatory standards for benzene, BTEX and chlorides but above the regulatory standard of 100 parts per million (ppm) TPH using USEPA Method 418.1, confirming a release did occur.

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

Respectfully submitted,
ENVIROTECH, INC.



Toni McKnight, EIT
Environmental Project Manager
tmcknight@envirotech-inc.com

Enclosures: Analytical Results
Field Notes

Cc: Client File 92115



Field Chloride

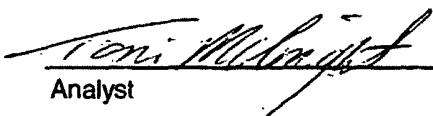
Client:	ConocoPhillips	Project #:	92115-1847
Sample No.:	1	Date Reported:	8/2/2011
Sample ID:	BGT Composite	Date Sampled:	7/26/2011
Sample Matrix:	Soil	Date Analyzed:	7/26/2011
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Field Chloride	ND	28.0

ND = Parameter not detected at the stated detection limit.

References: "Standard Methods for the Examination of Water and Wastewater", 18th ed., 1992
Hach Company Quantab Titrators for Chloride

Comments: **Howell M#1 (hBr)**


Analyst

Toni McKnight EIT
Printed


Review

Greg Crabtree PE
Printed

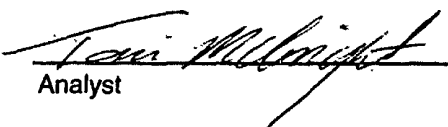


CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 26-Jul-11

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	193
	200	
	500	
	1000	

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


Analyst

Toni McKnight EIT

Print Name


Review

Greg Crabtree PE

Print Name

8/2/2011
Date

8/2/2011
Date



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1847
Sample No.:	1	Date Reported:	8/2/2011
Sample ID:	Surface Composite	Date Sampled:	7/26/2011
Sample Matrix:	Soil	Date Analyzed:	7/26/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		


Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	168	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: **Howell #1 (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Toni McKnight EIT
Printed


Review

Greg Crabtree PE
Printed

**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

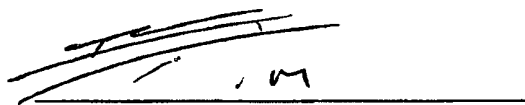
Client:	ConocoPhillips	Project #:	92115-1847
Sample ID:	5 Pt Composite	Date Reported:	07-27-11
Laboratory Number:	59083	Sampled:	07-26-11
Chain of Custody No:	12249	Date Received:	07-26-11
Sample Matrix:	Soil	Date Extracted:	07-27-11
Preservative:	Cool	Date Analyzed:	07-27-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Howell M #1 (hBr)**


Analyst
Review

**EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-27-11 QA/QC	Date Reported:	07-27-11
Laboratory Number:	59083	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-27-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	07/27/11	9.996E+02	1.000E+03	0.04%	0 - 15%
Diesel Range C10 - C28	07/27/11	1.002E+03	1.002E+03	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	1.4	0.2
Diesel Range C10 - C28	0.8	0.1

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Range
Gasoline Range C5 - C10	ND	ND	0.00%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.00%	0 - 30%

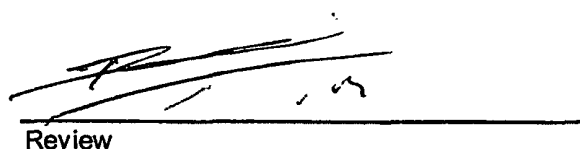
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	251	100%	75 - 125%
Diesel Range C10 - C28	ND	250	246	98.6%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,
SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 59082-59091


Analyst


Review

Client:	ConocoPhillips	Project #:	92115-1847
Sample ID:	5 Pt Composite	Date Reported:	07-27-11
Laboratory Number:	59083	Date Sampled:	07-26-11
Chain of Custody:	12249	Date Received:	07-26-11
Sample Matrix:	Soil	Date Analyzed:	07-27-11
Preservative:	Cool	Date Extracted:	07-27-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	ND	1.0
Ethylbenzene	ND	1.0
p,m-Xylene	ND	1.2
o-Xylene	ND	0.9
Total BTEX	ND	


ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.7 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	104 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Howell M #1 (hBr)**


 Analyst


 Review

Client:	N/A	Project #:	N/A
Sample ID:	0727BBLK QA/QC	Date Reported:	07-27-11
Laboratory Number:	59083	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-27-11
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF: Accept. Range 0 - 15%	%Diff.	Blank Conc	Detect. Limit
Benzene	2.4713E+006	2.4763E+006	0.2%	ND	0.1
Toluene	8.3329E+005	8.3496E+005	0.2%	ND	0.1
Ethylbenzene	5.4303E+005	5.4412E+005	0.2%	ND	0.1
p,m-Xylene	1.1597E+006	1.1620E+006	0.2%	ND	0.1
o-Xylene	4.1556E+005	4.1640E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	488	97.5%	39 - 150
Toluene	ND	500	544	109%	46 - 148
Ethylbenzene	ND	500	538	108%	32 - 160
p,m-Xylene	ND	1000	1,060	106%	46 - 148
o-Xylene	ND	500	529	106%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 59082-59091

Analyst

Review

Client:	ConocoPhillips	Project #:	92115-1847
Sample ID:	5 Pt Composite	Date Reported:	07/27/11
Lab ID#:	59083	Date Sampled:	07/26/11
Sample Matrix:	Soil	Date Received:	07/26/11
Preservative:	Cool	Date Analyzed:	07/27/11
Condition:	Intact	Chain of Custody:	12249

Parameter**Concentration (mg/Kg)****Total Chloride****60**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **Howell M #1 (hBr)**

Analyst

Review

RUSH

CHAIN OF CUSTODY RECORD

12249

Client: ConocoPhillips			Project Name / Location: Howell M#1 (hBr)				ANALYSIS / PARAMETERS													
Client Address:			Sampler Name: T. McKnight																	
Client Phone No.:			Client No.: 92115-1847																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	PCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
SPT Composite	7/26/11	11:30	59083	Soil Solid	Sludge Aqueous	1/4.2													✓	✓
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
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				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
Relinquished by: (Signature) T. McKnight				Date 7/26/11	Time 13:00	Received by: (Signature) [Signature]				Date 7/26/11	Time 13:00									
Relinquished by: (Signature)						Received by: (Signature)														
Relinquished by: (Signature)						Received by: (Signature)														

RUSH

PAGE NO: <u>1</u> OF <u>1</u> <u>92115-1847</u> DATE STARTED: <u>July 26, 2011</u> DATE FINISHED: <u>July 26, 2011</u>	ENVIROTECH INC ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 - 3014 FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615	ENVIRONMENTAL SPECIALIST: <u>T. McKnight</u> LAT: <u>36° 46.6'</u> LONG: <u>-107° 43.0'</u>
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FIELD REPORT: BGT / PIT CLOSURE VERIFICATION

LOCATION: NAME: <u>Howell M</u>	WELL #: <u>1</u>	TEMP PIT: <u>PERMANENT PIT:</u>	BGT: <u>X</u>
LEGAL ADD: UNIT: <u>M</u>	SEC: <u>30</u>	TWP: <u>30N</u>	RNG: <u>2W</u>
QTR/FOOTAGE: <u>990' FS - 990' FSL</u>	CNTY: <u>SAN JUAN</u>	ST: <u>NEW MEXICO</u>	PM: <u>NM</u>

EXCAVATION APPROX: <u>NA</u> FT. X <u>NA</u> FT. X <u>NA</u> FT. DEEP	CUBIC YARDAGE: <u>NA</u>
DISPOSAL FACILITY: <u>NA</u>	REMEDIAL METHOD: <u>NA</u>
LAND OWNER: <u>State</u>	API: <u>30-045-0901</u>
CONSTRUCTION MATERIAL: <u>Steel</u>	BGT / PIT VOLUME: <u>unknown</u>
DOUBLE-WALLED, WITH LEAK DETECTION: <u>NO</u>	

LOCATION APPROXIMATELY: 50 FT. 102° FROM WELLHEAD

DEPTH TO GROUNDWATER: ~38'

TEMPORARY PIT - GROUNDWATER 50-100 FEET DEEP	
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 500 mg/kg	
TEMPORARY PIT - GROUNDWATER ≥ 100 FEET DEEP	
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 1000 mg/kg	
<input checked="" type="checkbox"/> PERMANENT PIT OR BGT	
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, TPH (418.1) ≤ 100 mg/kg, CHLORIDES ≤ 250 mg/kg	

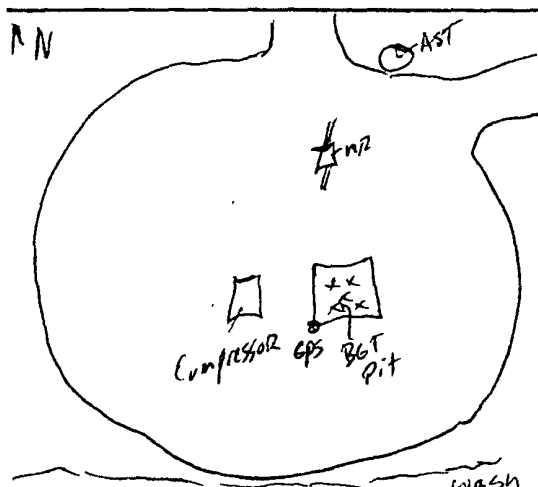
FIELD 418.1 ANALYSIS

TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (mg/kg)
11:32	200 STD					193	
11:43	Spt comp	1	5	20	4	42	168
		2					
		3					
		4					
		5					
		6					

PERIMETER

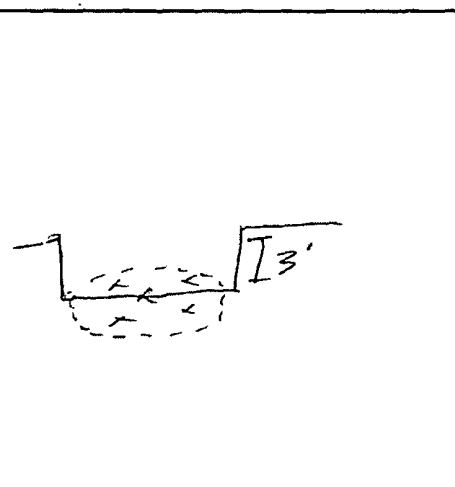
FIELD CHLORIDES RESULTS

PROFILE



SAMPLE ID	READING	CALC. (mg/kg)
Spt comp	0.00	< 28

PID RESULTS	
SAMPLE ID	RESULTS (mg/kg)
Spt comp	0.000



LAB SAMPLES <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>RESULTS</th> </tr> <tr><td> </td><td>BENZENE</td><td> </td></tr> <tr><td> </td><td>BTEX</td><td> </td></tr> <tr><td> </td><td>GRO & DRO</td><td> </td></tr> <tr><td> </td><td>CHLORIDES</td><td> </td></tr> </table>	SAMPLE ID	ANALYSIS	RESULTS		BENZENE			BTEX			GRO & DRO			CHLORIDES		NOTES: Large H NMNM 012708 GPS = N 36° 46.6419' W 107° 43.0509' Pit pulled by Sierra oil field Done @ 12:00 WORKORDER # _____ WHO ORDERED _____ Groundwater ~ 38' Surface water ~ 80' Closure STD = 100 ppm TPH
SAMPLE ID	ANALYSIS	RESULTS														
	BENZENE															
	BTEX															
	GRO & DRO															
	CHLORIDES															