<u>District I</u> r525 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

Revised October 10, 2003

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

Form C-141

Sle

Release Notification and Corrective Action

•				(OPERATOI	₹		☐ Ínitial I	Repo	rt 🛛 Final Report
	Name of Company Burlington Resources, A Wholly Owned Subsidiary of ConocoPhillips Company						Kelsi H	arrington	•	
Address	3401	E. 30 th St.	, Farmin	gton, NM 874	72 Telephone	No.	505-599	9-3403		
Facility Nar	ne San J ı	uan 10			Facility T	ype G a	as Well	A	PI#	3004509612
Surface Ow	ner Fe c	leral		Mineral Ov	vner Fed	eral		Leas	se No	. NMNM-03202
				LOCA	TION OF R	ELEA	SE	·		
Unit Letter M	Section 10	Township 30N	Range 10W	Feet from the 760'	North/South Lir South	ie Fe	et from the 1050'	East/West L West	ine	County San Juan
			Latitu	ıde <u> 36.82167° N</u>	Longitude	-107	.87643° W			
				NATU	JRE OF RE	LEAS	SE			
Type of Rele							– Unknov	vn		ume Recovered –
Source of Re	lease: Ab	ove Groun	d Storag	e Tank	Date and I-	lour of (Occurrence			e and Hour of Discovery 26/2010
· Was Immedia	ate Notice (es 🗌 No	Not Requir	If YES, To	Whom	?			
By Whom?					Date and I-	lour –				
Was a Water	course Read	ched?					npacting the '	Watercourse.		
			Yes 🔯	No						
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.*							
				Taken.* Histori ank. Upon dis						t of the manway
										area was excavated to
										sloped down from the
east wall t	oward th	ne west wa	I due to	encountering	sandstone. <i>I</i>	Analyt	ical results	s for the wa	alls v	were below the
										eleases; however the
										ocarbons. As ztec NMCOD & BLM,
				ore no further			iid With the	appiovai	UI A	ZIEC MINICOD & BLIN,
							vledge and un	derstand that	pursu	ant to NMOCD rules and
										ses which may endanger
										ve the operator of liability surface water, human health
										npliance with any other
	, or local la	ws and/or regu	ılations.				•			1
Signature:	Kelõn	Harrington				OIL CONSERVATION DIVISION				
				··						
Printed Name	e: K	elsi Harring	gton		Approved	Approved by District Supervisor: But bell				
Title:	Env	vironmenta	l Consul	tant	Approval I	Date:	5/6/11	Expirat	ion D	ate:
E mail Addre	kolei (n harringto	n@cono	cophillips.cor	n Conditions	of Ann	roval:			
E-man Addre	SS. KEISI.	g.iiaiiiiiqiC	ilacono	copininps.coi	A567	ROLAPP	iovai.			Attached
Date:	1/25	/11	Phone: 5	05-599-3403	A	30,	SITKI	12214313	37	
Attach Addi	tional She	ets If Necess	ary		7 %		3			
				/6	RECEIV	/ED	☑ \			
				<u>ရ</u>	MAY .2	111.	41			
				/82/	Conditions 134567 134567 RECEIV MAY 20 OIL CONS. DIV	DIOT	516			
				/5	OIL CONS. DIV	. มเรา. 3	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
RECEIVED MAY 2011. OIL CONS. DIV. DIST. 3										



January 13, 2011

Project No. 92115-1476

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

Phone: (505) 599-3403 Fax: (505) 599-4005

RE: SPILL ASSESSMENT AND CONFIRMATION SAMPLING DOCUMENTATION FOR THE SAN JUAN #10 (HBR) WELL SITE, SAN JUAN COUNTY, NEW MEXICO

Dear Ms. Harrington,

Enclosed please find the field notes and analytical results for spill assessment activities performed at the San Juan #10 (hBr) well site located in Section 10, Township 30 North, Range 10 West, San Juan County, New Mexico. Envirotech, Inc. personnel arrived on site on October 25, 2010 to delineate the affected area.

Upon Envirotech's arrival, a brief site assessment was conducted. Because distance to surface water was less than 200 feet from the well site, the regulatory standard for the site was 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. The leak was from an above-ground storage tank's drain valve. One (1) composite sample was collected from the surface of the stained area around the valve, one (1) composite sample was collected from seven (7) feet below ground surface (BGS) from the impacted area immediately beneath the tank's drain valve and one (1) four (4): point composite sample was collected from the surface of the non visually contaminated soil surrounding the stained area; see attached Site Map. Both surface samples collected from inside and outside the visually stained area were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a photoionization detector (PID). The sample collected from outside the stained area returned results below the regulatory limits for all constituents analyzed; see attached Field Notes. The sample collected from the surface of the stained area around the tank's drain valve returned results below the regulatory standard for organic vapors but above the 100 ppm TPH regulatory standard. Additionally, the sample collected from seven (7) feet BGS under the drain valve 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 and for benzene and BTEX using USEPA Method 8021. The sample returned results above the regulatory standards for TPH but below the regulatory standard for organic vapors; see attached Analytical Results. Envirotech, Inc. personnel determined the volume of soil impacted was approximately 20 feet by 20 feet around the aboveground storage tank (AST) and greater than seven (7) feet deep; see attached Site Map. Envirotech, Inc. recommended excavating the spill area and performing confirmation sampling.

ConocoPhillips San Juan #10 (hBr) Spill Assessment Project No. 92115-1476 Page 2

Envirotech, Inc. personnel returned to the site on December 21, 2010, to perform confirmation sampling activities. Prior Envirotech's arrival, the affected area had been excavated to extents of approximately 58 feet by 48 feet by 12 to 24 feet deep. The bottom of the excavation sloped down from the east wall toward the west wall due to the encountered sandstone; see attached Field Notes. Five (5) composite samples were collected from each of the north wall, south wall, east wall, west wall and bottom of the excavation. The samples were analyzed on the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. Samples collected from the walls of the excavation returned results below the regulatory standards for all constituents analyzed; see attached Field Notes and Analytical Results. In addition, two (2) samples were collected from the bottom and the north wall of the excavation and were placed into a four (4)ounce glass jars, 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, Additionally, the sample collected from the bottom of the excavation was also analyzed in Envirotech's Analytical Laboratory for benzene and BTEX using USEPA Method 8021. The sample collected from the bottom of the excavation returned results above the regulatory standards for all constituents analyzed; see attached Field Notes and Analytical Results. Approval was given to backfill from both Mr. Brandon Powell, with the NMOCD, and Ms. Shelly Landon with the Bureau of Land Management (BLM). Maximum reasonable extent was reached due to sandstone being encountered; 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.

Rene Garcia Reyes

Senior Environmental Field Technician

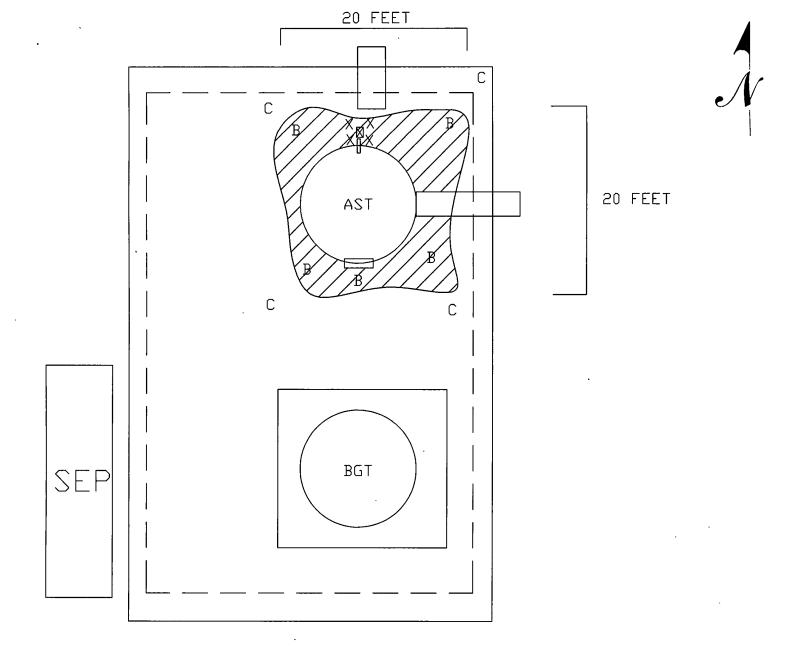
rgarcia@envirotech-inc.com

Enclosure(s): Analytical Results

Field Notes Site Map

Cc: C

Client File 92115





APPROXIMATE AREA OF CONTAMINATION

X - SURFACE COMPOSITE SAMPLE - 944 PPM TPH

O - 7 FEET DEEP SAMPLE - COLLECTED FOR LAB ANALYSIS

C - CLEAN SAMPLE COMPOSITE - 60 PPM TPH - 0.0 ORGANIC VAPOR

B - AUGER HIT BLACK SDIL WITHIN 1 FOOT DEEP

SITE MAP CONOCO PHILLIPS

SAN JUAN #10 SECTION 10 TOWNSHIP 30N RANGE 10W SPILL ASSESSMENT

SCA	CALE: NTS FIGURE NO.	1		REV				
PRO	JECT NO	92115-	-1476	HOOKE NO.				
				REVISION	ONS			
NO.	DATE	BY			DESCI	RIPTION		
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5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

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Location No:

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Client:

Conoco Phillips

Project #:

92115-1476

Sample No.:

Date Reported:

1/6/2011

Sample ID:

Under Drain Valve Composite

Date Sampled:

10/25/2010

Sample Matrix:

Soil

Date Sampled

10/25/2010

Preservative:

Cool

Date Analyzed: Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

200 (100 (100 (100 (100 (100 (100 (100 (Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons

944

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:

San Juan #10

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analiet

e • 7.

Review»

Barian Williamson, FT

Printed

Rene Garcia Reyes, FT



Client:

Conoco Phillips

Project #:

92115-1476

Sample Nost,

: **2**" |

Date Reported:

1/6/2011

Sample Matrix:

Clean Composite

Date Sampled:

10/25/2010

Preservative:

Soil Cool Date Analyzed: Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

			Det.
3		Concentration	Limit
	Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons

60

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:

San Juan #10

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Barian Williamson, FT

Printed

Rene Garcia Reyes, FT



CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:	25-Oct-10		•	
Paramete	Standard Concentration er mg/L	Concentration Reading mg/L		
TPH	100 180 500 1000	191		:

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

Burlett	1/6/2011	
Anelyst	Date	
Barian Williamson, FT		
Print Name		
_ Bek	1/6/2011	
Review	Date	
Pana Carrie Pause ET		
Rene Garcia Reyes, FT		



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

Client:	ConocoPhillips	Project #:	92115-1476
Sample ID:	7' BGS	Date Reported:	10-26-10
Laboratory Number:	56298	Date Sampled:	10-25-10
Chain of Custody No:	10610	Date Received:	10-26-10
Sample Matrix:	Soil	Date Extracted:	10-26-10
Preservative:	Cool	Date Analyzed:	10-26-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	524	0.2
Diesel Range (C10 - C28)	47.6	0.1
Total Petroleum Hydrocarbons	572	

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:

San Juan #10

Analyst

Review

25796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865. lab@envirotech-inc.com



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	
Cample	ID.

QA/QC

Project #:

N/A

Sample ID:

10-26-10 QA/QC

Date Reported:

10-26-10

Laboratory Number:

56291

Date Sampled:

N/A

Sample Matrix:

Methylene Chloride

Date Received:

N/A

Preservative:

Condition:

N/A N/A

Date Analyzed: Analysis Requested: 10-26-10 TPH

			ś
Gasoline	Range	C5 - C10	

I-Cal Date 10-26-10

I-Cal RF:) 9.9960E+002

1.0000E+003

0.04%

C-Cal RF: % Difference Accept Range 0 - 15%

Diesel Range C10 - C28

10-26-10

9.9960E+002

1.0000E+003

0.04%

0 - 15%

Blank C	onc. (mg/L	: - mg	Į
Gasoline	Range	C5 -	C10	

Concentration ND

Detection Limit 0.2

Gasoline	Range	C5 -	C10
Discol Do	naa C	40 . 4	20

ND

0.1

Duplicate	onc: (mg/K
Gasoline Rang	ge C5 - C10
Diesel Range	C10 - C28

Sample 154 5,300

Duplicate 154 5,290

0.0%

% Difference Accept. Range 0 - 30%

Spike Conc.	(mg/Kg)	
Gasoline Rang		
Diesel Range	C10 C28	

Sample -154

5,300

Spike Added

250

250

0.2%

Spike Result

416

5,510

0 - 30%

99.3%

% Recovery Accept, Range 103% 75 - 125%

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 56291, 56295-56302

Analyst

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	92115-1476
Sample ID:	7' BGS	Date Reported:	10-26-10
Laboratory Number:	56298	Date Sampled:	10-25-10
Chain of Custody:	10610	Date Received:	10-26-10
Sample Matrix:	Soil	Date Analyzed:	10 , 26-10
Preservative:	Cool	Date Extracted:	10-26-10
Condition	Intact	Analysis Requested:	BTEX
		Dilution:	. 10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
,		,
Benzene	228	0.9
Toluene	479	1.0

Ethylbenzene	1,620	1.0
p,m-Xylene	16,000	1.2
o-Xylene	398	0.9

Total BTEX 18,700

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	93.6 %
	Bromochlorobenzene	. 92.9 %

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:

San Juan #10

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

N/A Client: Project #: N/A 1026BBLK QA/QC Sample ID: Date Reported: 10-26-10 **Laboratory Number:** 56291 Date Sampled: N/A Sample Matrix: Solid Date Received: N/A Preservative: N/A Date Analyzed: 10-26-10 Condition: N/A **BTEX** Analysis: Dilution: 10

Calibration and	Heal RPs	©€©alRF:	%Diii.	Blank	Detect.					
Detection Limits (ug/L)		Accept Rang	je0=15%	Conc	Limit					
Benzene	5.3347E+005	5.3454E+005	0.2%	ND	0.1					

Toluene	6.0597E+005	6.0719E+005	0.2%	ND	0:1					
Ethylbenzene	5.4740E+005	5.4850E+005	0.2%	ND	0.1					
p,m-Xylene	1.3052E+006	1.3078E+006	0.2%	ND	0.1					
o-Xylene	4.9582E+005	4.9682E+005	0.2%	ND	0.1					

Duplicate Conc. (ug/Kg)	Sample D	uplicate	* %Diff.	Accept Range	Detecta Limit
Benzene	3.2	3.3	3.1%	0 - 30%	0.9
Toluene	52.9	53.6	1.3%	0 - 30%	1.0
Ethylbenzene	101	98.5	2.1%	0 - 30%	1.0
p,m-Xylene	129	129	0.0%	0 - 30%	1.2
o-Xylene	26.8	26.5	1.1%	0 - 30%	0.9

Spike Cone (ur/Kri)	Sample: Amo	ount(Spiked) Spi	ked Sample 🦠	Recovery	Accept Renge
Benzene	3.2	500	510	101%	39 - 150
Toluene	52.9	500	557	101%	46 - 148
Ethylbenzene	101	500	608	101%	32 - 160
p,m-Xylene	129	1000	1,130	100%	46 - 148
o-Xylene	26.8	500	526	100%	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 1998.

Comments:

QA/QC for Samples 56291-56293, 56295-56296, 56298-56302

Analyst

Review

CHAIN OF CUSTODY RECORD Kush 10610

Client: Conao P	hillips	P	San J											ANAL	YSĮS /	/ PAR	AME	TERS				
Client Address:			ampler Name: BARIAN				,	5	8015)	d 8021)	8260)	হ						 				
Client Phone No.:		.C	llent No.: 92115-	1470			.,		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		with H/I	РАН	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Sample No./ Identification	Sample Date	Sample Time	Lab No.	N	ample Aatrix	No./Volume of Containers	Pre:	Servative	TPH	BTEX	, 000 000	RCR4	Cation	ည္	TOLP.	AH.	TPH (SHO	~ .		Samp	Samp
7'865	10/25/10	11:28	56298	Solid		1-402		γ	X	X	<u> </u>					<u>.</u>			·		4	4
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			-	Soil Solid	Sludge Aqueous			-		<u> </u>												
			· · ·	Soil Solid	Sludge Aqueous		_			<u> </u>			Ĺ.		7	<u> </u>						
				Soil Solid	Sludge Aqueous																	
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				Soil Solid	Sludge Aqueous		L										<u></u>	3			,	
Relinquished by: (Signature)	ature)				10/26/10	Time 6:55	- '	Receive	ed by:	(Sign	ature			3				*	1	ate 26/j	Tir G	ne :53
Relinquished by: (Sign	alere)					}	F	Receive	od by:	(Sign	eture))					
Relinquished by: (Signa	ature)			<u>'</u>			+	Receive	ed by:	(Sign	ature)				· <u> </u>					<u> 454</u> 174	- G
Rush			5796 U	S Highwa	y 64 • Farmir	* *	al	ytica	l La	bor	ator	Ÿ . ,	h-inc	com							3	777

	A STATE OF THE STA				
Client: Cop			NVIFOTEC 632-0615 (800) 362-1 . Hwy 84, Farmington, NM	879 87401 C.Q.C.No	0300450561 36.8215840 07.876869118
QUAD/UNIT:	SEC: (O TWP: 2)	WELL#:	NO M: War CNTY:S	DATE STA DATE FIN TST: WAL ENVIRON	MENTAL
OTR/FOOTAGE:/OCO (L EXCAVATION APPROX: DISPOSAL FACILITY: LAND USE:	48 FT x	LEASE:	T. x /2 - 24 EMEDIATION MET	FT. DEEP CUBIC YA IOD: LAND OWNER: (ST: //OUO ARDAGE:
CAUSE OF RELEASE: SPILL LOCATED APPROX DEPTH TO GROUNDWAT NMOCD RANKING SCORI SOIL AND EXCAVATION	IMATELY: 70 ER: NEARES E: 70	FT. ST WATER SOU NMOCD TP	RCE: H CLOSURE STD:	Welliald NEAREST SURFACE 100 PPM	WATER: < ZOO
			10 losvesto	= (00) PPH	
SAMPLE DESCRIPTION 746 Ppm	TIME SAMPLE 14 00 2005T 14 40 N		WEIGHT (g) mL FREO	N DILUTION READING	CALC. ppm
al su consta	14.48 6.66 4.48 6.66 4.4.51 Both			20 G17	7.6 2.788
SPILL PER	RIMETER		OVM RESULTS TELD HEADSPACE PII (ppm)		ROFILE NJ
(Cxcore >io	- Ar. 62	Suall Eliall Whall Bottom	7.3 3.5 >3000	wwa! 48	58' F.W.
THE THE PROPERTY OF THE PROPER		SAMPLE	B SAMPLES ANALYSIS TIME	500	172
				sands 1	one.

CALLED OUT

TRAVEL NOTES.

ONSITE



Client:

Conoco Phillips

Project #:

92115-1476

Sample No.:

Date Reported:

1/6/2011

Sample ID:

North Wall

Date Sampled:

12/21/2010

Sample Matrix:

Soil

Date Analyzed:

12/21/2010

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

a i	and a differ to the sale of the contract of th		
ei ei			Det.
ه از		Concentration	Limit
	Parameter	(mg/kg)	(mg/kg)
۰			

Total Petroleum Hydrocarbons

92

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: San Juan #10

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Rene Garcia Reyes, FT

Printed

Barian Williamson, FT



Client:

Conoco Phillips

Project #:

92115-1476

Sample No.:

4

Date Reported:

1/6/2011

Sample ID:

South Wall

Date Sampled:

12/21/2010

Sample Matrix:

Soil

Date Analyzed:

12/21/2010

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

	1 11-		15 14 141				, ,					 		
å,	3				- 10 mg 4.		7,5	·	-,	· ·	1,17		Det.	3
ŝ								2-4	12,11	4		 	DCI.	9
) ·		*.	5. '		. "\		Cor	ncentra	ition	1		limit	
3	<u> </u>	٠.	15 3	31.7	· 'w'	•	5.77, 5	•.	1.			 24 1		
10	Pa	ram	eter				100	3 3	(mg/kg) . · · ·			(ma/ka)	
٠,									<u>, , , , , , , , , , , , , , , , , , , </u>			 A TOPA TO A	· · · · · · · · · · · · · · · · · · ·	(*

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:

San Juan #10

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Rene Garcia Reyes, FT

Printed

Barian Williamson, FT



Client:

Conoco Phillips

Project #:

92115-1476

Sample No.:

5ି

Date Reported:

1/6/2011

Sample ID:

East Wall

Date Sampled:

12/21/2010

Sample Matrix: Preservative:

Soil Cool Date Analyzed:

Analysis Needed:

12/21/2010 TPH-418.1

Condition:

Cool and Intact

,	to the said feel of the said o		Det.
7		Concentration	Limit
	Parameter	(mg/kg)	(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: San Juan #10

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Rene Garcia Reyes, FT

Printed

Barian Williamson, FT



Client:

Conoco Phillips

Project #:

92115-1476

Sample No.:

6

Date Reported:

1/6/2011

Sample ID: Sample Matrix: West Wall

Date Sampled:

Date Analyzed:

12/21/2010 12/21/2010

Preservative:

Soil Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

Ī		<u></u>	ί,	Det.
-		Concentration		Limit
0 11	Parameter	(mg/kg)		(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: San Juan #10

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Rene Garcia Reyes, FT

Printed

Barian Williamson, FT



Client:

Conoco Phillips

Project #:

92115-1476

Sample No.:

Date Reported:

1/6/2011

Sample ID:

Bottom

Date Sampled:

12/21/2010

Sample Matrix: Preservative:

Soil Cool Date Analyzed: Analysis Needed:

12/21/2010 TPH-418.1

Condition:

Cool and Intact

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons

2,790

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: San Juan #10

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Rene Garcia Reyes, FT

Printed

Barian Williamson, FT



CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	 	 · · · · · · · · · · · · · · · · · · ·	
TPH:	100				
The state of the s	246	246			u .
	500				
	1000			., .,	•

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

PHOK	1/6/2011
Analyst	Date
Rene Garcia Reyes, FT	
Print Name And	
Bolle	1/6/2011
Beview	Date
Barian Williamson, FT	

Print Name



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	92115-1476
Sample ID:	N Waii	Date Reported:	12-22-10
Laboratory Number:	56882	Date Sampled:	12-21-10
Chain of Custody No:	10963	Date Received:	12-21-10
Sample Matrix:	Soil	Date Extracted:	12 , 21-10
Preservative:	Cool	Date Analyzed:	12-22-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.4	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.4	

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:

San Juan #10/Confirmation Sampling

Analyst

Review

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com .envirotech-inc.com



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

- 11			
Client:	ConocoPhillips	Project #:	92115-1476
Sample ID:	Bottom	Date Reported:	12-22-10
Laboratory Number:	56883	Date Sampled:	12-21-10
Chain of Custody No:	10963	Date Received:	12-21-10
Sample Matrix:	Soil	Date Extracted:	12-21-10
Preservative:	Cool	Date Analyzed:	12-22-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	916	0.2
Diesel Range (C10 - C28)	200	0.1
Total Petroleum Hydrocarbons	1,120	

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.

San Juan #10/Confirmation Sampling Comments:



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

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	12-22-10 QA/C	C Date Reported:	12-22-10
Laboratory Number:	56877	Date Sampled:	N/A
Sample Matrix:	Methylene Chlori	de Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-22-10
Condition:	N/A	Analysis Requested	: TPH
	I-Cal Date	il-Cal RF: C-Cal RF: 9	6 Difference Accept Range
Gasoline Range C5 - C10	12-22-10	9.9960E+002 1.0000E+003	0.04% 0 - 15%
Diesel Range C10 - C28	12-22-10	9.9960E+002 1.0000E+003	0.04% 0 - 15%

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

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	41.0	40.5	1.2%	0 - 30%
Diesel Range C10 - C28	2.7	2.5	7.4%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	41.0	250	293	101%	75 - 125%
Diesel Range C10 - C28	2.7	250	258	102%	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 56877-56886

5796 ÚS-Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Toluene Ethylbenzene p,m-Xylene o-Xylene		730 1,220 12,700 181		1.0 1.0 1.2 0.9	
Benzene		331		0.9	
Parameter		Concentration (ug/Kg)		(ug/Kg)	· · · · · · · · · · · · · · · · · · ·
		Canantastian		Det. Limit	
			Dilution:		10
Condition:	Intact		Analysis Requested:		BTEX
Preservative:	Cool		Date Extracted:		12-21-10
Sample Matrix:	Soil		Date Analyzed:		12-22-10
Chain of Custody:	10963		Date Received:		12-21-10
Laboratory Number:	56883		Date Sampled:		12-21-10
Sample ID:	Bottom		Date Reported:		12-22-10
Client:	ConocoPhillips		Project#:		92115-1476

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.2 %
	1,4-difluorobenzene	101 %
	Bromochlorobenzene	97.5 %

15,200

References:

Total BTEX

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:

San Juan #10/Confirmation Sampling

Ánalyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	!	Project#:	:	N/A				
Sample ID:	1222BBLK QA/Q0	C 1	Date Reported:		12-22-10				
Laboratory Number:	56877	1	Date Sampled:		N/A				
Sample Matrix:	Soil	1	Date Received:		N/A				
Preservative:	N/A	1	Date Analyzed:		12-22-10				
Condition:	N/A		Analysis:		BTEX				
					•				
Calibration and	I-Cal RF:	C-Cal RF:	Dilution: %Diff:	Blank	Detect.				
Detection Limits (ug/L)	and the second s	C-Cal RF: Accept: Rang	%Diff e.0 -: 15%	Blank Conc	Detect. Limit				
Detection Limits (ug/L). Benzene	1.3546E+005	C-Cal RF: Accept: Rang 1.3573E+005	%Diff. e 0 = 15% 0.2%	Blank Conc.	Detect. Limit 0.1				
Detection Limits (ug/L). Benzene Toluene	and the second s	C-Cal RF: Accept: Rang	%Diff e.0 -: 15%	Blank Conc	Detect. Limit				
TO THE REPORT OF THE PARTY OF T	1.3546E+005 1.4276E+005	C-Cal RF: Accept. Rang 1.3573E+005 1.4305E+005	%Diff! e 0:-:15% 0.2% 0.2%	Blank Conc ND ND	Detect. Limit 0.1 0.1				

Duplicate Conc. (ug/Kg)	Sample	uplicate .	%Diff.	Accept Range	Detect: Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	1.4	1.2	14.3%	0 - 30%	1.0
p,m-Xylene	10.8	11.1	2.8%	0 - 30%	1.2
o-Xylene	3.9	4.4	12.8%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample Amo	ount Spiked Spi	ked Sample %	Recovery	Accept Range
Benzene	ND	500	507	101%	39 - 150
Toluene	ND	500	507	101%	46 - 148
Ethylbenzene	1.4	500	511	102%	32 - 160
p,m-Xylene	10.8	1000	1,020	101%	46 - 148
o-Xylene	3.9	500	494	98.0%	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: Met

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 56877-56881, 56883-56886

Analyst

Review

CHAIN OF CUSTODY RECORD

Client: CAPC		F	Project Name / L	ocation	-10/6	<u> </u>		· ·	<u> </u>	1.					ANAL'	/SIS	/ PAR	AMET	TERS					
			Sandoa	W+	FIO/U	21141	YM	<u>v</u>	ang	12	每	, .,	г	Γ—			· ·				П			
Client Address:			Sampler Name:	17	نين وا ه	6)	- :1	a	80157	802	3260)												
Client Phone No.:		-	Client No.:	7 9		/ ~	SKN7	<u>'</u> ر	<u>u.</u>		B	8	tals	등		4/P					}	1	ᇹᅵ	젍
			.Q	60	52=18	Z9	921				(Mett	Metho	8 Me	/ Ani		with I		418.1	RIDE				ပို့ စ	le Inte
Sample No./ Identification	Sample Date	Sample Time	Lab No.	1 . /	ample Vlatrix	No./Vo o Conta	olume f liners	Prese	rvative	TPH (Method	BTEX (Method 8024)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	껉	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
N Wall	12/1/16	15:00	56882	Soil Solid	Sludge Aqueous		52	a"	7	X		*								-		`	X	X
Bottom			50883	Soil	Sludge Aqueous	40	, Z	-	X	X	X				, ,	, ,	•						X	X
		÷.	-	Soil Solid	Sludge Aqueous	,										•								
				Soil Solid	Sludge Aqueous	ź							,											
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	State of the state	· .		Soil Solid	Sludge Aqueous	** **	7 .	* .								·	;	-						
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a marin sy har mark sa sa	en e	19.00	Sugar State	Soil Solid	Sludge Aqueous	17.			1.			Ď,			*.%		.,							
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Relinquished by: (Signa	ature)	0			1 1 2 2 1 2 2	1,5	7. * 5. * *	Re	eceive	d by:	(Signa	ature)	<u> </u>	A L	<u>~~</u>	<u>~ </u>	•			•		,		
the state of the s	, <u>, , , , , , , , , , , , , , , , , , </u>	Structure .		· · · · ·	Le King	,	<u>. :.</u>	_				٠,												
Relinquished by: (Signa	iture)	पुष्यक्षिमेरी जिल्हा प				- A 3	Ř. T	Re	eceive	d by:	(Signa	ature)												
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RUSH

