3003925752 District 1 1625 N French Dr., Hobbs, NM 88240 District II

District III

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

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

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

side of form

Revised October 10, 2003

Form C-141

Release Notification and Corrective Action

				OP:	ERATOR		☐ Initial	Report	
Name of Co		onocoPh			Contact	Gwen F	R. Frost		
Address 3401 E. 30th St., Farmington, NM 87402				Telephone N	o. 505-32 6	6-9549			
Facility Nar	ne S	an Juan 2	9-5 #10A		Facility Type	Gas We	ell	API # 30)-039-25752
Surface Ow	ner St	tate		Mineral Owner	State	-	Lease	No. E-28 9	9-3
	LOCATION OF RELEASE								
Unit Letter	Section	Township	Range	Feet from the Nor	rth/South Line	Feet from the	East/West Lin	County	
F	16	T29N	R05W	1640'	North	1850'	West	R	io Arriba
Latitude36.72824° N Longitude107. 364860° W									
- an i	NATURE OF RELEASE								
Type of Release						ease - 128 BE			vered – 0 BBL
		n valve on	product	ion tank froze	Date and Hour Unknown	of Occurrence		Date and Hour /9/09 – 10:	of Discovery
& cracked Was Immedia		1/2m2			If YES, To WI			RCVD MAY	
Was Infinedia ✓ Yes ☐						don Powell v	ia phone cal		20 00
By Whom?	(Gwen Fros	st		Date and Hour	- 4/09/09 - 5:	00 p.m.	OIL CONS	S. DIV.
Was a Water	course Reach	ed?	Yes 🛛	No	If YES, Volun	ne Impacting the V	Watercourse.	DIST	. 3
If a Watercou	irse was Imp	acted, Descri	be Fully.*		A				
Describe Cau	ise of Problei	n and Remed	lial Action	Taken.* On April 9	2009. COPO	discovered	a release of	approxima	tely 128 BBL of
				berm area on the					
				drain valve on t					
				ank was emptied				•	•
				n.* The spill impa					
				ected soils were					
				vas hauled to a c					
				' x 41' x 10' deep.					
				ill was brought b					
			ntirm tha	t all impacted so	ii was recove	erea. To preve	ent reoccurre	ence, COP	will continue
to perform			van ahava i	s true and complete to	the best of my l	rnowledge and un	darstand that nu	rought to NM(OCD rules and
regulations al	ll operators a	re required to	o report and	or file certain release	notifications an	d perform correct	ive actions for re	leases which	may endanger
public health	or the enviro	nment. The	acceptance	of a C-141 report by t	the NMOCD ma	rked as "Final Re	port" does not re	lieve the oper	ator of liability
				nvestigate and remedi					
	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.								
reactai, state,						OIL CONS	ERVATION	DIVICIO	N
Signature:	Aux	in R. Fr	084			OIL CONS	EKVATIOI	DIVISIO	
Printed Name	e: Gw	en R. Fro	st		Approved by I	District Superviso	1: Brand	8-ell	For: Charlie Perrin
Title:	Envi	ronmenta	l Engine	er	Approval Date	5/28/09	Expiration	Date:	
E-mail Addre	ess: gwend	olynne.frc	st@con	ocophillips.com	Conditions of	Approval:		Attached	
Date: 5/	/27/09		Phone: 5	05-326-9549					

Incident # nkmD eray 641895

^{*} Attach Additional Sheets If Necessary



May 21, 2009 Project Numbers: 96052-1419

96052-1548

Ms. Gwen Frost ConocoPhillips 3401 East 30th Street Farmington, NM 87401

Fax: (505) 599-4005

Phone: (505) 326-9549

RE: SPILL ASSESSMENT AND CONFIRMATION SAMPLING DOCUMENTATION FOR SAN JUAN 29-5 UNIT #10A WELL SITE, RIO ARRIBA COUNTY, NEW MEXICO

Dear Ms. Frost,

Enclosed please find the field notes and analytical results for the spill assessment and confirmation sampling activities conducted at the San Juan 29-5 Unit #10A well site located in Section 16, Township 29N, Range 5W, Rio Arriba County, New Mexico.

On April 9, 2009, Envirotech, Inc. personnel were on-site to perform spill assessment activities. A site assessment was performed and the site was ranked pursuant to the New Mexico Oil Conservation Division (NMOCD) Guidelines for the Remediation of Leaks, Spills, and Releases. The site was ranked a 10 due to a wash being located between 200 to 1000 feet to the south of the site. This set the closure limits to 1000 ppm total petroleum hydrocarbons (TPH) and 100 ppm organic vapors. Six (6) test holes were hand augered in the spill area to determine the horizontal and vertical extents of contamination. Three (3) samples were collected from test hole #1 at one (1) foot, five (5) feet, and ten (10) feet below ground surface (BGS) and analyzed in the field for TPH via USEPA Method 418.1 and for organic vapors using a Photo-Ionization Detector (PID). The samples returned results that were above the 1000 ppm TPH limit and above the 100 ppm organic vapor limit. Additionally, a sample from test hole #1, at ten (10) feet BGS, was placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody to Envirotech's laboratory. The sample was analyzed for TPH via USEPA Method 8015 and returned results above the regulatory limit for TPH at 2,690 ppm. The sample was also analyzed for benzene and BTEX via USEPA method 8021 and returned results below regulatory limits for benzene at 0.559 ppm and BTEX at 38.6 ppm. Samples were collected from test hole #2 and test hole #3 at five (5) feet BGS to determine the horizontal extents of the contamination. The sample collected from test hole #2 returned results that were above the standards of 1000 ppm TPH and 100 ppm organic vapors. The sample collected from test hole #3 was below the regulatory limits of 1000 ppm TPH and 100 ppm organic vapors. Three (3) additional samples were collected from test hole #4, test hole #5, and test hole #6 from outside the fenced area to the south, north, and west at five (5) feet BGS. These samples returned results that were below regulatory limits of 1000 ppm TPH and 100 ppm organic vapors. Sample locations can be referenced on the enclosed, Field Notes. The area of contamination was estimated to be approximately 33' x 27' x 10' deep where the vertical limit of the hand auger Envirotech, Inc. recommended that the AST on site be moved and the was reached. contaminated area be excavated and resampled for closure.

On April 17, 2009, Envirotech, Inc. personnel returned to the site to perform confirmation sampling activities. Prior to Envirotech's arrival, M&M Trucking had excavated the area of release to approximately 44' x 41' x 10' deep where sandstone was encountered on the bottom. Five (5) composite samples were collected from the excavation. One (1) sample was collected from the bottom at ten (10) feet below ground surface (BGS) and one (1) sample was collected from each of the four (4) walls. The samples were analyzed in the field for TPH via USEPA method 418.1 and for organic vapors using a Photo-Ionization Detector (PID). The samples collected from the walls were all below the regulatory limits of 1000 ppm TPH and 100 ppm organic vapors; however, the sample collected from the bottom at ten (10) feet BGS was above the regulatory limits of 1000 ppm TPH and 100 ppm organic vapors. The sample collected from the bottom was then placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice under chain of custody to Envirotech's laboratory to be analyzed for TPH via USEPA Method 8015 and for benzene and BTEX via USEPA Method 8021. The sample returned results below the regulatory limit of 10 ppm benzene and 50 ppm BTEX; however the sample was above the regulatory limit of 1000 ppm TPH. Additional excavation was not possible as maximum reasonable extents of excavation were reached due to sandstone being encountered on the bottom. Envirotech, Inc. recommends no further action in regards to this incident.

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

Sincerely,

ENVIROTECH, INC.

Rachel Nielsen Field Technician

rnielsen@envirotech-inc.com

Enclosures: Field Notes

Analytical Results

CC: Client File No. 96052

Client:	Conoco	Phillips
Client:	(Ionoco	Phillips



Location No:

96052-1419 LO.C. No:

	NW Street N	u.S. Kwy G4, Fam			C.O.C. No:		
FIELD REPORT: SPILL CLOS	URE VERIFICA	ATION			PAGE NO:		<u> </u>
OCATION: NAME: Sc. L	G-5 WEIT#	IAA			DATE STA	RTED: 4/9/)9
OCATION: NAME: SAIN JURY Z DUAD/UNIT: F SEC: 1/0 TV	WP: 29N RNG:54	PM. May Dm	CNITY: DA	CM/A ·TZ			
TR/FOOTAGE: 1640 FNL 1850	FU)/ CONTRAC	CTOR:	CIVIII. KA	(01. 1017)	SPECIALIS		
							Y
XCAVATION APPROX: F7 DISPOSAL FACILITY:	. X	FT. X RĚMEDIATI		FT. DEEP	CUBIÇ YA	RDAGE:	<u> </u>
AND USE: Grazing	LEASE:	KENEDIATI		LAND OW	VER: 54	ase	
AUSE OF RELEASE: Leake	ing AST.	METERIALI					
PILETOCATED APPROXIMATELY:	The second secon	A COLUMN TO A COLU		Contract of the Contract of th			
EPTH TO GROUNDWATER: > 100 'N		URCE: ->10	20/	NEAREST	SURFACE V	WATER: 200'-1	000/
MOCD RANKING SCORE: 1()	NMÔĆĎ T	PH CLOSURE	STD:	1000	PPM		
oil and excavation description: approximately 128 b ground. Spell a	Spill ass	sessmer	M, I	t is	belier	ed that	t
approximately 128 b	bls of co	nden50	te lu	aked.	onto	the.	
ground. Spill a	pprx. 27'	× 33′ x	110° d	ee ho .			
, ,	•		•	•			
3				e e	_ ` .		
SAMPLE DESCRIPITION TIME SA	AMPLE I.D. LAB NO.	WEIGHT (g)	mL FREON	DILUTION		CALC, ppr	a
200 STD 15:20 Fest hole #1-17865 15:45	1	K	20	4	218 4988	19952	
est note #1-5'865 16:00	2	<u>5</u> 5	. 20	4	2388	9552 6992	
Test hole # 1 - 10/865 16:50 Test have # 2 - 5/895 16:55	3 4	<u>5</u> 5	20 20	4	1748 989	<u> 6992</u>	
rest hole#3-5/895 17:00	5	5	20	4	1 /	395 <u>6</u> 4	
1634 Hole #4 - 5'BGS 18 10	<u> </u>	5	20	4	9	36	
est hole #15-5/ 1865 18:20 rest hole #16-5/ 1865 18:25	フ 8	55	20 20	4	12	48	
SPILL PERIMETER		OVM				ROFILE	
	CALED B	RESULTS	CD A CE DED				
spill	SAMPLE ID	FIELD HEAD (ppi					
3P \		266	7		. 0		
		2059		r*	Test Hole	#4 ** * * * *	e
	4	2143		* r			, *
	5	0	. <u>/</u> .5	9-11	O TeshHol	समा क्री	10
1 (E) (AST) (AST)	4	1	. 1	Prest Hore #3	Teshlo	AET + -	Test.
口 [AST] (AST)	8		. ([] 팔	[15]	Wore#	1 1_1
	SAMPLE	AB SAMPLI	ES	* c	(33)	7 42	#210H
	J SAMPLE ID	ANALYSIS	TIME	 Y W			1
				* /			1 46,
1				17		^ (-	_x*
Θ				***	X X Q	1. #F	-15
					Test Ho	ルドサン	
					N		
		<u> </u>	И	J			
AND NOTES. CALLED ONT			ONICION				

ļ	/
l	
	00 million 00 Uhillios
	cueic (CONDCO L La ocupo)
	client: Conoco Phillips



Location No: 96052-1548 C.O.C. No:

FIELD	REPORT:	SPILL	CLOSURE	VERIFICATION
				4 21 CLL X 2 1 1 1 1 1 1

NAME: San Juan 29-5 WELL#: 1() A

QTR/FOOTAGE: 1640'FNL

SEC: 14 TWP: 29N RNG: 5WPM: NMPMCNTY: RAST: NM ENVIRONMENTAL 850 FWL CONTRACTOR: M&M Trucking

LOF L PAGE NO: __

DATE STARTED: 4/17/09 DATE FINISHED: 4/17/09

SPECIALIST: K. NIELS EN

EXCAVATION APPROX:

41 FT.

FT. x 10 FT. DEEP CUBIC YARDAGE: 835

DISPOSAL FACILITY: LAND USE:

LOCATION:

QUAD/UNIT:

LEASE:

44

REMEDIATION METHOD: Landfarm LANDOWNER: State

CAUSE OF RELEASE: Leaking AST

METERAL RELEASED: Condensate

SPILL LOCATED APPROXIMATELY:

(15 FT.

FROM Wellhead

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

NEAREST SURFACE WATER: 200 '-1000)

NMOCD RANKING SCORE:

NMOCD TPH CLOSURE STD:

220°

LOOO PPM

SOIL AND EXCAVATION DESCRIPTION:

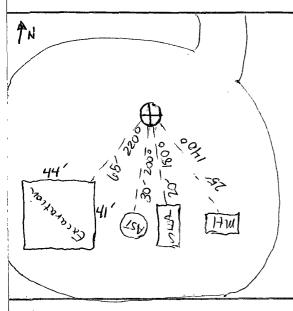
excavated it M&M trucking 41'x44'x10'deep.

								,
SAMPLE DESCRIPITION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
Standard	11:30	STD		_				198
N. Wall	11:40			5	- 20	4	0	, 0
5. Wall	11:50	2		5	20	4	3	. 12
Bottom	12:00	3	49721	5	20	4	713	2852
E. Wall	12:10	4		5	20	4	0	Ó
W. Wall	12:20	5		5	20	4	0	0
	1				1			

SPILL PERIMETER

OVM RESULTS

SPILL PROFILE



SAMPLE	FIELD HEADSPACE PI					
ID	(ppm)					
N. Wall	1.4	-				
5. Wall	16.4					
Bottom	289.4	c				
E. Wall	13.	/				
w. wall	18.2	2				
STD	100					
L	LAB SAMPLES					
SAMPLE	ANALYSIS	TIME				
ID	ANALISIS	TIVE				
.3	8921	5:15				
.3	8015	15:15				

	*
TIME	Sandstone
5:15 5:15	X
,	

CALLED OUT:

ONSITE:



Client:

ConocoPhillips

Project #:

96052-1548

Sample No.:

1

Date Reported:

4/28/2009

Sample ID:

Test Hole #1-1' BGS

. 4

4/9/2009

Sample Matrix:

Soil

Date Sampled: Date Analyzed:

4/9/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

Total Petroleum Hydrocarbons

20,000

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

San Juan 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Scott Gonzales

Printed

Sherry Auckland



Client:

Conoco Phillips

2

Project #:

96052-1419

Sample No.: Sample ID:

Test Hole #1-5' BGS

Date Reported:

4/28/2009

Sample Matrix:

Soil

Date Sampled:
Date Analyzed:

4/9/2009 4/9/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

	The state of the s	Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons

9,550

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

, ,

Reviev

Scott Gonzales

Printed

Sherry Auckland



Client:

Conoco Phillips

Sample No.: Sample ID:

Test Hole #1-10' BGS

Sample Matrix:

Soil

Preservative: Condition:

Cool

Cool and Intact

Project #:

96052-1419

Date Reported:

4/28/2009

Date Sampled:

4/9/2009

Date Analyzed:

4/9/2009

Analysis Needed:

TPH-418.1

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

Total Petroleum Hydrocarbons

6,990

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Scott Gonzales

Printed

Sherry Auckland

Printer



Client:

Conoco Phillips

96052-1419

Sample No.:

4

Project #:
Date Reported:

J000Z-1413

Sample ID:

Test Hole #2-5' BGS

4/28/2009

Sample Matrix:

Soil

Date Sampled:

4/9/2009

Preservative:

Cool

Date Analyzed: Analysis Needed:

4/9/2009 TPH-418.1

Condition:

Cool and Intact

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

Total Petroleum Hydrocarbons

3,960

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Scott Gonzales

Printed

Sherry Auckland



Client:

Conoco Phillips

96052-1419

Sample No.:

5

30002

Sample ID:

Test Hole #3-5' BGS

4/28/2009

Sample Matrix:

Soil

4/9/2009

Preservative:

Cool

Date Sampled: Date Analyzed: Analysis Needed:

Date Reported:

Project #:

4/9/2009 TPH-418.1

Condition:

Cool and Intact

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

Total Petroleum Hydrocarbons

4

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

,

Review

Scott Gonzales

Printed

Sherry Auckland



Client:

Conoco Phillips

96052-1419

Sample No.:

Project #:

Sample ID:

Test Hole #4-5' BGS

4/28/2009

Sample Matrix:

Soil

Date Sampled: 4/9/2009

Preservative:

Cool

Date Analyzed:

Date Reported:

Analysis Needed:

4/9/2009 TPH-418.1

Condition:

Cool and Intact

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

San Juan 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Scott Gonzales

Printed



Client:

Conoco Phillips

96052-1419

Sample No.:

Project #: Date Reported:

Sample ID:

Test Hole #5-5' BGS

4/28/2009

Sample Matrix:

Date Sampled:

4/9/2009

Soil

Date Analyzed:

4/9/2009

Preservative: Condition:

Cool Cool and Intact

TPH-418.1 Analysis Needed:

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

Total Petroleum Hydrocarbons

48

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Scott Gonzales

Printed



Client:

Conoco Phillips

96052-1419

Sample No.:

Project #:

Sample ID:

Test Hole #6-5' BGS

Date Reported:

4/28/2009

Sample Matrix:

Soil

Date Sampled:

4/9/2009

Preservative:

Cool

Date Analyzed: Analysis Needed:

4/9/2009 TPH-418.1

Condition:

Cool and Intact

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

San Juan 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Scott Gonzales

Printed



CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:

9-Apr-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	
ТРН	100		
	200	218	
	500		
	1000		

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

-74Tiaiysi

5-18-09

Date

Scott Gonzales

Print Name

1 mil ivanic

Review

Date

Sherry Auckland

Print Name



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

Client:	ConocoPhillips	Project #:	96052-1419
Sample ID:	10' Deep	Date Reported:	04-15-09
Laboratory Number:	49641	Date Sampled:	04-09-09
Chain of Custody No ⁻	6791	Date Received:	04-10-09
Sample Matrix:	Soil	Date Extracted:	04-10-09
Preservative:	Cool	Date Analyzed:	04-13-09
Condition ⁻	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,120	0.2
Diesel Range (C10 - C28)	1,570	0.1
Total Petroleum Hydrocarbons	2,690	0.2

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 29-5 #10A

Analyst

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**

Quality Assurance Report

101%

75 - 125%

Client:	QA/QC		Project #:		N/A
Sample ID:	04-13-09 QA/0	QC	Date Reported:		04-15-09
Laboratory Number.	49614		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		04-13-09
Condition:	N/A		Analysis Reques	ted:	TPH
	I-Cal Date	I-Cal RF;	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	1.0366E+003	1.0370E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0222E+003	1.0226E+003	0.04%	0 - 15%
U CALA PERMANANTAN MANANTAN MENANTAN AND AND AND AND AND AND AND AND AND A	~~~~				
Blank Conc. (mg/L - mg/Kg)	Page Street	Concentration		Detection Lim	ii.
Blank Conc. (mg/L - mg/Kg) Gasoline Range C5 - C10		Goncentration ND		Detection Lim 0.2	i k
23 % / 100 20 March 5 5 5 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		ALLES MANNES PER PROPERTY AND		13.300000000000000000000000000000000000	
Gasoline Range C5 - C10		ND		0.2	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons		ND ND		0.2 0.1	
Gasoline Range C5 - C10 Diesel Range C10 - C28	Sample	ND ND		0.2 0.1	salar.
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons	Sample ND	ND ND ND		0.2 0.1 0.2	salari.
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons Duplicate Conc. (mg/Kg)		ND ND ND Duplicate	% Difference	0.2 0.1 0.2 Accept, Range	salari.
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons Duplicate Conc. (mg/Kg) Gasoline Range C5 - C10 Diesel Range C10 - C28	ND	ND ND ND Duplicate ND	% Difference	0.2 0.1 0.2 Accept: Range 0 - 30%	salari.
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons Duplicate Conc. (mg/Kg) Gasoline Range C5 - C10	ND	ND ND ND Duplicate ND	% Difference	0.2 0.1 0.2 Accept: Range 0 - 30%	

ND - Parameter not detected at the stated detection limit.

References:

Diesel Range C10 - C28

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

250

SW-846, USEPA, December 1996.

343

Comments:

QA/QC for Samples 49614 - 49616, 49640, 49641, and 49643 - 49647.

Analyst

597



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-1419
Sample ID:	10' Deep	Date Reported:	04-15-09
Laboratory Number:	49641	Date Sampled:	04-09-09
Chain of Custody:	6791	Date Received:	04-10-09
Sample Matrix:	Soil	Date Analyzed:	04-13-09
Preservative:	Cool	Date Extracted:	04-10-09
Condition:	Intact	Analysis Requested:	BTEX

		Det.
Parameter	Concentration (ug/Kg)	Limit (ug/Kg)
r drameter	(ug/Ng/	(ug/i\g)
Benzene	559	0.9
Toluene	9,390	1.0
Ethylbenzene	2,630	1.0
p,m-Xylene	19,200	1.2
o-Xylene	6,780	0.9
Total BTEX	38,600	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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 29-5 #10A

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client.	N/A	Project #	N/A
Sample ID	04-13-BT QA/QC	Date Reported:	04-15-09
Laboratory Number	49614	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative ⁻	N/A	Date Analyzed [.]	04-13-09
Condition.	N/A	Analysis.	BTEX

Calibration and Detection Limits (ug/L)	I-Caf RF	C-Cal RF: Accept Rang	%Diff ge 0 = 15%	Blank Conc	Detect Limit
Benzene	5 3056E+006	5 3162E+006	0.2%	ND	0.1
Toluene	4 8891E+006	4.8989E+006	0.2%	ND	0.1
Ethylbenzene	4 2516E+006	4 2601E+006	0.2%	ND	0.1
p,m-Xylene	1 1300E+007	1 1323E+007	0.2%	ND	0.1
o-Xylene	4 0800E+006	4.0882E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample Di	uplicate	%Diff.	Accept Range	Detect. Limit	3
Benzene	1.6	1.5	6.3%	0 - 30%	0.9	
Toluene	4.6	4.4	4.3%	0 - 30%	1.0	
Ethylbenzene	6.8	6.6	2.9%	0 - 30%	1.0	
p,m-Xylene	15.1	14.9	1.3%	0 - 30%	1.2	
o-Xylene	8.4	8.2	2.4%	0 - 30%	0.9	

Spike Conc. (ug/Kg)	Sample Amo	ount Spiked Spik	ced Sample	% Recovery	Accept Range
Benzene	1.6	50.0	50.1	97.1%	39 - 150
Toluene	4.6	50.0	52.4	96.0%	46 - 148
Ethylbenzene	6.8	50.0	55.7	98.1%	32 - 160
p,m-Xylene	15.1	100	113	98.5%	46 - 148
o-Xylene	8.4	50.0	55.4	94.9%	46 - 148

ND - Parameter not detected at the stated detection limit

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 49614 - 49616, 49640 - 49641, and 49643 - 49647.

Analyst

CHAIN OF CUSTODY RECORD

Client:		Р	roject Name / L	ocation:	dest								,	ANAL	YSIS /	/ PAR	AMET	TERS				
(on or thilling	5		AN JUNN ampler Name: SUSH (29	7-5 H	10A				,									 			
Člient Address:		s	ampler Name:	iař					2)	21)	6											
			SOH 6	JON E	ales				801	80	826	<u>s</u>	_									
Client Phone No.:		C	lient No.:						boc	핥	ροι	leta	ie		È		≘	l W		l	70	igo:
			96052	-14	19				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Sample No./	Sample	Sample	Lab No.	S	ample	No./Volume of Containers	Preser	ative) H	Ä) ၁င)RA	lije.	~	년 년	PAH	Ĕ	일			du	du
Identification	Date	Time	200 110.			Containers	HgCl ₂ HCl	2		<u>B</u>	\(\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	RC	පී	RCI	2	₫	1	ㅎ			S	8
10 doep	4-909	18:40	49641	Solid	Sludge Aqueous	1-4-2		Veren		Î											س	-
v v	,			Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil	Sludge																	
				Solid Soil	Aqueous Sludge																	-
				Solid	Aqueous		\perp															
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
				Soil	Sludge																	
Relinquished by: (Signa	iture)		<u></u>	Solid	Aqueous Date	Time	Rec	eive	d by:	(Signa	ature)	 A							 l Da	aie	Tir	ne
546	(¹	2			4-10-09	7:10			•				gayan w Sandi California	Z	College of the Parket					109		10
Felinguished by: (Signa	iture)							eive	d by:	(Signa	ature)	0				<i>7</i>		<u>.</u>				
Relinquished by: (Signa	iture)						Rec	eive	d by:	(Signa	ature)											

ENVIROTECH INC.

5796 U.S. Highway 64 · Farmington, NM 87401 · Tel 505-632-0615



Client:

ConocoPhillips

96052-1548

Sample No.:

1

Date Reported:

Project #:

4/28/2009

Sample ID:

North Wall

4/17/2009

Sample Matrix:

Soil

Date Sampled:
Date Analyzed:

4/17/2009

Preservative: Condition:

Cool and Intact

Analysis Needed:

TPH-418.1

Pa	ram	ete	r

Concentration (mg/kg)

Det. Limit (mg/kg)

Total Petroleum Hydrocarbons

ND

5.0

Mellard

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Rachel Nielsen

Sherry Auckland
Printed



Client:

Conoco Phillips

Project #:

96052-1548

Sample No.:

2

Date Reported:

4/28/2009

Sample ID:

South Wall

Sample Matrix:

Date Sampled:

4/17/2009

Soil

Date Analyzed:

4/17/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

Total Petroleum Hydrocarbons

12

5.0

Michland

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Rachel Nielsen

Printed

Sherry Auckland



Client:

Conoco Phillips

Project #:

96052-1548

Sample No.:

3

Date Reported:

4/28/2009

Sample ID:

Bottom

4/17/2009

Sample Matrix:

Soil

Date Sampled: Date Analyzed:

4/17/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

Total Petroleum Hydrocarbons

2,850

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Rachel Nielsen

Printed

Sherry Auckland



Client:

Conoco Phillips

96052-1548

TPH-418.1

Sample No.:

4

4/00/0000

Sample ID:

East Wall

4/28/2009

Sample Matrix:

Soil

Date Sampled: 4/17/2009

Preservative:

Cool

Date Analyzed: 4/17/2009

Project #:

Date Reported:

Analysis Needed:

Condition:

Cool and Intact

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

San Juan 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Rachel Nielsen

Printed

Sherry Auckland



Client:

Conoco Phillips

96052-1548

Sample No.:

5

30002-10

Sample ID:

West Wall

4/28/2009

Sample Matrix:

Soil

4/17/2009

Preservative:

Cool

Date Analyzed: Analysis Needed:

Project #:

Date Reported:

Date Sampled:

4/17/2009 TPH-418.1

Condition:

Cool and Intact

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

Total Petroleum Hydrocarbons

ND

5.0

Muchland

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 29-5 #10A

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Rachel Nielsen

Printed

Sherry Auckland



CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Val. Date. 17-Apr-03	Cal.	Date:	17-Apr-09
----------------------	------	-------	-----------

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.

Jacul Nielsen	5/18/09
Analyst	Date
Rachel Nielsen Print Name	
Salla Much land	5/17/89
Review	Date

Print Name



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-1548
Sample ID:	Bottom Comp	Date Reported:	04-21-09
Laboratory Number:	49721	Date Sampled:	04-17-09
Chain of Custody:	6825	Date Received:	04-17-09
Sample Matrix:	Soil	Date Analyzed:	04-21-09
Preservative:	Cool	Date Extracted:	04-20-09
Condition.	Intact	Analysis Requested:	BTEX

	Concentration	Det. Limit	
Parameter	(ug/Kg)	(ug/Kg)	
Benzene	17.6	0.9	
Toluene	1,750	1.0	
Ethylbenzene	172	1.0	
p,m-Xylene	11,300	1.2	
o-Xylene	3,710	0.9	
Total BTEX	17,000		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	96.0 %

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 29-5 #10A

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client	N/A	Project #	N/A
Sample ID	04-21-BT QA/QC	Date Reported.	04-21-09
Laboratory Number	49724	Date Sampled	N/A
Sample Matrix	Soil	Date Received	N/A
Preservative.	N/A	Date Analyzed	04-21-09
Condition:	N/A	Analysis [.]	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF Accept Rang	%Diff. je 0 - 15%	Blank Conc	Detect. Limit
Benzene	6 4543E+006	6 4672E+006	0.2%	ND	0.1
Toluene	5 7868E+006	5 7984E+006	0.2%	ND	0.1
Ethylbenzene	5 0282E+006	5 0383E+006	0.2%	ND	0.1
p,m-Xylene	1 3266E+007	1 3293E+007	0.2%	ND	0.1
o-Xylene	4 9033E+006	4 9131E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample Du	plicate	%Diff.	Accept Range	Detect. Limit
Benzene	2.3	2.4	4.3%	0 - 30%	0.9
Toluene	5.0	4.8	4.0%	0 - 30%	1.0
Ethylbenzene	5.3	4.9	7.5%	0 - 30%	1.0
p,m-Xylene	10.7	9.5	11.2%	0 - 30%	1.2
o-Xylene	7.2	7.0	2.8%	0 - 30%	0.9

Sample Amo	ount Spiked Spik	red Sample	% Recovery	Accept Range
2.3	50.0	50.8	97.1%	39 - 150
5.0	50.0	52.8	96.0%	46 - 148
5.3	50.0	54.2	98.0%	32 - 160
10.7	100	109	98.5%	46 - 148
7.2	50.0	54.2	94.8%	46 - 148
	2.3 5.0 5.3 10.7	2.3 50.0 5.0 50.0 5.3 50.0 10.7 100	2.3 50.0 50.8 5.0 50.0 52.8 5.3 50.0 54.2 10.7 100 109	2.3 50.0 50.8 97.1% 5.0 50.0 52.8 96.0% 5.3 50.0 54.2 98.0% 10.7 100 109 98.5%

ND - Parameter not detected at the stated detection limit.

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 49712, 49717 - 49719, 49721, and 49723 - 49725.

Analyst



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1548
Sample ID:	Bottom Comp	Date Reported:	04-21-09
Laboratory Number:	49721	Date Sampled:	04-17-09
Chain of Custody No:	6825	Date Received:	04-17-09
Sample Matrix:	Soil	Date Extracted:	04-20-09
Preservative ⁻	Cool	Date Analyzed:	04-21-09
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	611	0.2
Diesel Range (C10 - C28)	735	0.1
Total Petroleum Hydrocarbons	1,350	0.2

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 29-5 #10A

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**

Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	04-21-09 QA	/QC	Date Reported:		04-21-09
Laboratory Number:	49724		Date Sampled:		N/A
Sample Matrix:	Methylene Chlo	oride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		04-21-09
Condition:	N/A		Analysis Reques	ted:	TPH
2017-3 C	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	9.9830E+002	9.9870E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0160E+003	1.0164E+003	0.04%	0 - 15%
Blank Conc. (mg/L - mg/Kg)		Concentration	and the second s	Detection Lim	
Gasoline Range C5 - C10		ND	The Control of the Co	0.2	
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND		0.2	
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range	À
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%	(%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%	
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	Oample ND	250	245	98.0%	75 - 125%
Gasonile Nange Go - G 10	ND	200	240	30.U /0	10-120/0

ND - Parameter not detected at the stated detection limit.

References:

Diesel Range C10 - C28

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

229

91.6%

75 - 125%

250

SW-846, USEPA, December 1996.

ND

Comments:

QA/QC for Samples 49717 - 49719, 49721, and 49723 - 49725.

Analyst

CHAIN OF CUSTODY RECORD

Soil Sludge Solid Aqueous		X Sample Cool
Client Address: Sampler Name: Client No.: Client No.: Client No./ Identification Sample Date Time Lab No. Sample No./ Identification Soil So		
Sample No./ Identification Date Time Lab No. Sample Matrix Of Containers Ho.		
Sample No./ Identification Date Time Lab No. Sample Matrix Of Containers Ho.		
Bottom Comp 4/17/01 13:13 49721 Soil Sludge Aqueous 1-402 X X X X Soil Sludge Solid Aqueous Soil Sludge Solid		
Bottom Comp 4/17/01 13:13 49721 Soil Sludge Aqueous 1-402 X X X X Soil Sludge Solid Aqueous Soil Sludge Solid		
Bottom Comp 4/17/01 13:13 49721 Soil Sludge Aqueous 1-402 X X X X Soil Sludge Solid Aqueous Soil Sludge Solid		
Soil Sludge Solid Aqueous		
Solid Aqueous Soil Sludge Solid Sludge Solid Sludge Solid Sludge Solid Sludge		
Solid Aqueous Solid Sludge Solid Aqueous Solid Sludge S		İ
Solid Aqueous Soil Sludge Solid Aqueous Solid Aqueous Solid Aqueous Solid Aqueous Solid Sludge Solid Aqueous		
Solid Aqueous Soil Sludge Solid Aqueous Soil Sludge		
Solid Aqueous Soil Sludge		
Solid Aqueous		
Soil Sludge Solid Aqueous		
Soil Sludge Solid Aqueous		
Relinquished by: (Signature) Date Time Received by: (Signature) 4/17/69 15: 15 Lead Agenture	4 Paie	Time 15:15
Relinquished by: (Signature)		
Relinquished by: (Signature) Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505-632-0615