

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

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Burlington Resources, A Wholly Owned Subsidiary of ConocoPhillips Company	Contact Kelsi Harrington
Address 3401 E. 30th St., Farmington, NM 87402	Telephone No. 505-599-3403
Facility Name San Juan 28-6 Unit 152M	Facility Type Gas Well API #3003929349
Surface Owner Federal	Mineral Owner Federal Lease No. NM-013657

LOCATION OF RELEASE

Unit Letter O	Section 24	Township 28N	Range 06W	Feet from the 240'	North/South Line South	Feet from the 2335'	East/West Line East	County Rio Arriba
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Latitude **36.64016 ° N** Longitude **-107.41688 ° W**

NATURE OF RELEASE

Type of Release – Condensate	Volume of Release – 2 BBL	Volume Recovered – 1 BBL
Source of Release: Production Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 8/16/2010 12:00 p.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	RCVD MAR 14 '11 OIL CONS. DIV. DIST. 3
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.*

Describe Cause of Problem and Remedial Action Taken.* **A closed valve on the fuel supply to the water liquid level controller diverted water into the oil side thus causing the Production tank to overflow. Upon discovery, the well was shut-in and a vacuum truck was called to location.**

Describe Area Affected and Cleanup Action Taken.* **All fluid remained within the berm and approximately 1 BBL of fluid was recovered. Excavation of approximately 70 cu/yds of impacted soil occurred. Analytical results from confirmation sampling were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases; therefore no further action is needed.**

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: 3-14-11	Expiration Date:
E-mail Address: kelsi.g.harrington@conocophillips.com	Conditions of Approval: nJK1122138255	Attached <input type="checkbox"/>
Date: 3/7/11 Phone: 505-599-3403		

* Attach Additional Sheets If Necessary

[Handwritten mark]



February 16, 2011

Project No. 92115-1440
92115-1519

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 28-6 #152M (hBr) WELL SITE, RIO ARriba COUNTY, NEW MEXICO**

Dear Ms. Harrington,

Enclosed please find the field notes and analytical results for spill assessment and confirmation sampling activities for a release of condensate and produced water from a leaking above ground storage tank (AST) at the San Juan 28-6 #152M (hBr) well site located in Section 24, Township 28 North, Range 6 West, Rio Arriba County, New Mexico. Upon Envirotech's arrival, a brief site assessment was conducted. Because horizontal distance to surface water was between 200 and 1,000 feet, the cleanup standard for the site was determined to be 1,000 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 September 27, 2010, Envirotech, Inc. personnel arrived on location to conduct spill assessment activities for a release of condensate and produced water from a leaking AST. Five (5) composite samples were collected from the area of release. One (1) composite sample was collected from the surface of the area of release, one (1) composite sample was collected from eight (8) to 12 inches below ground surface (BGS) where sandstone was encountered, one (1) composite sample was collected from two (2) feet diagonally beneath the AST, one (1) composite sample was collected from south, east, and west of the area of release, and one (1) composite sample was collected from just north of the AST. All samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a photoionization detector (PID). The surface composite, the eight (8) to 12 inch BGS composite, and the two (2) feet diagonal under the tank composite returned results above the regulatory standards for TPH and organic vapors. The south, east, and west composite sample and the composite sample from north of the AST returned results below the regulatory standards for TPH and organic vapors; see attached *Field Notes* and *Analytical Results*. The area of release was estimated to be approximately 12 inches deep and to the visual extent of the contamination.

Prior to Envirotech's arrival on December 1, 2010, Kelley Oilfield Services excavated the area of release to approximately 35 feet by 29 feet by 1.5 feet deep where sandstone was encountered on the bottom of the excavation; see attached *Field Notes*. One (1) five (5)-point composite sample was collected from the sandstone bottom of the excavation and one (1) composite sample was collected from the four (4) walls of the excavation. Both composite samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a photoionization detector (PID). The composite sample collected from the walls returned results below the regulatory standards for TPH and organic vapors; however, the composite sample collected from the bottom of the excavation returned results above the regulatory limits for TPH and organic


vapors; see attached *Analytical Results*. The composite sample from the bottom of the excavation was collected into a four (4)-ounce glass jar, capped headspace free, and transported with ice, under chain of custody, to Envirotech's Analytical Laboratory for analysis for TPH using USEPA Method 8015 and for benzene and BTEX using USEPA Method 8021. The sample returned results above the regulatory limits of 50 ppm BTEX and 1,000 ppm TPH; however, maximum reasonable extents were reached due to sandstone. No additional excavation was required

On December 3, 2010, Envirotech, Inc. personnel returned to the above site to treat the contaminated sandstone bottom of the excavation with a potassium-permanganate solution. Approximately 300 gallons of potassium-permanganate solution was sprayed over the sandstone bottom of the excavation in an area approximately 35 feet by 29 feet.

On December 10, 2010, Envirotech, Inc. personnel returned to the above site to re-sample the bottom of the excavation after treating the contaminated soil with a potassium-permanganate solution for in-situ remediation. One (1) five (5)-point composite sample was collected from the sandstone bottom of the excavation into a four (4)-ounce glass jar, capped headspace free, and transported with ice, under chain of custody to Envirotech's Analytical Laboratory for analysis for TPH using USEPA Method 8015 and for benzene and BTEX using USEPA Method 8021. The sample returned results below the regulatory standards for all constituents analyzed. 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 us at (505) 632-0615.

Respectfully Submitted,
ENVIROTECH, INC.


Toni McKnight, EIT
Staff Engineer
tmcknight@envirotech-inc.com

Enclosure(s): Field Notes
Analytical Results

Cc: Client File No. 92115

92115-1519



C.O.C. No:

PAGE NO: 1 OF 1

LOCATION: NAME: SAN JUAN 28-6 WELL #: 152 M
QUAD/UNIT: O SEC: 24 TWP: 28N RNG: 6W PM: NM CNTY: RA ST: NM
QTR/FOOTAGE: 240 FSL & 2335 FFL CONTRACTOR: KELLEY OILFIELD

DATE STARTED: 12/1/10

DATE FINISHED: 12/10/10

ENVIRONMENTAL

SPECIALIST: TONE M.

EXCAVATION APPROX: 35 FT. X 29 FT. X 1.5 FT. DEEP CUBIC YARDAGE: 256

DISPOSAL FACILITY: IFT

REMEDICATION METHOD: LAND FARM

LAND USE: GRAZING

LEASE: NA

LAND OWNER: FEDERAL

CAUSE OF RELEASE: LEAKING AST

MATERIAL RELEASED: CONDENSATE / PRODUCED # 0

SPILL LOCATED APPROXIMATELY: 100 FT. 317° FROM Wellhead

DEPTH TO GROUNDWATER: 7100 NEAREST WATER SOURCE: 7100 NEAREST SURFACE WATER: 275 Ft

INMOC D RANKING SCORE: 10

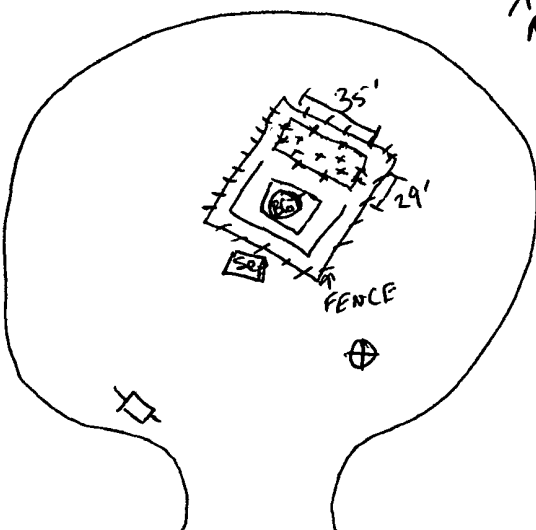
NMOCD TPH CLOSURE STD: 130 PPM

SOIL AND EXCAVATION DESCRIPTION:

SANDSTONE ENCOUNTERED ON BOTTOM OF EXCAVATION

GPS CENTER OF EXCAVATION N36.640401°
W107.417717°

SPILL PERIMETER	OVM RESULTS	SPILL PROFILE
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[illegible]

SANDSTONE

TRAVEL NOTES:	CALLED OUT:	ONSITE:
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Client: Conoco Phillips	 envirotech <small>(808) 632-0618 (800) 362-1670 8700 U.S. Hwy 04, Farmington, NM 87401</small>	Location No: 922 92115-1440 C.O.C. No:
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FIELD REPORT: SPILL CLOSURE VERIFICATION

LOCATION: NAME: San Juan 28-6 WELL #: 152 M	PAGE NO: 1 OF 1
AD/UNIT: SEC: 24 TWP: 28N RNG: 6W PM: CNTY: RA ST: NM	DATE STARTED: 9-27-10
TR/FOOTAGE: CONTRACTOR:	DATE FINISHED: ENVIRONMENTAL SPECIALIST: B. Williamson

CAVATION APPROX: N/A FT. X FT. X FT. DEEP CUBIC YARDAGE:
DISPOSAL FACILITY: REMEDIATION METHOD:
END USE: LEASE: 3003929349 LAND OWNER:
USE OF RELEASE: Leak over flow MATERIAL RELEASED: Condensate
WELL LOCATED APPROXIMATELY: FT. FROM
DEPTH TO GROUNDWATER: 356' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: 286'
NMOC D RANKING SCORE: 10 NMOC D TPH CLOSURE STD: 1000 PPM

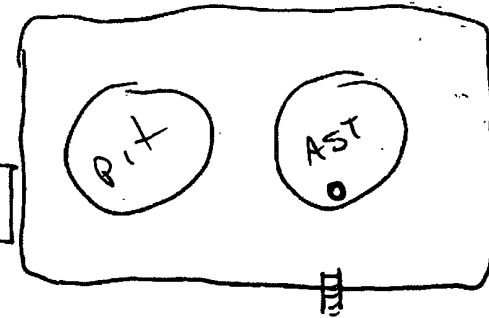
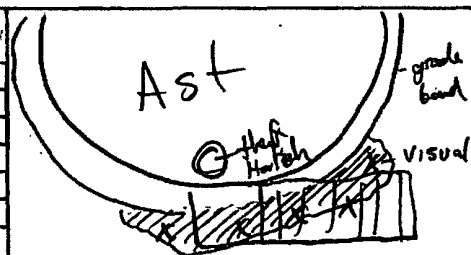

WELL AND EXCAVATION DESCRIPTION: collected 5pt Composite Ann surface in visual area, the augered down 12" hit sand stone and collected from sand stone top.

SAMPLE DESCRIPTION	TIME	SAMPLE ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
206 standard	10:47	SR0	-	-	-	-	205	
Surface Composite	10:52	(1)	-	5	20	4	1383	5532
12" BGS Comp	11:13	(2)	-	5	20	4	1196	4784
drill under tank	11:38	(3)	-	5	20	4	1244	4976
E/W of Visual Comp	11:48	(4)	-	5	20	4	13	52
at tank	12:07	(5)	-	5	20	4	15	60

SPILL PERIMETER

OVM RESULTS

SPILL PROFILE

	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>(1)</td><td>59.0</td></tr> <tr><td>(2)</td><td>660</td></tr> <tr><td>(3)</td><td>254</td></tr> <tr><td>(4)</td><td>29</td></tr> <tr><td>(5)</td><td>17</td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	(1)	59.0	(2)	660	(3)	254	(4)	29	(5)	17													
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ADDITIONAL NOTES: _____ CALLED OUT: _____ ONSITE: **@ 10:15** **left @ 12:45**



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1440
Sample No.:	1	Date Reported:	2/16/2011
Sample ID:	Surface Composite	Date Sampled:	9/27/2010
Sample Matrix:	Soil	Date Analyzed:	9/27/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

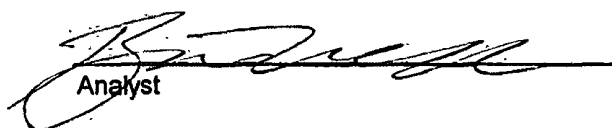
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	5,530	5.0

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 28-6 #152M (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Greg Crabtree, PE
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1440
Sample No.:	2	Date Reported:	2/16/2011
Sample ID:	8" to 12" BGS Composite	Date Sampled:	9/27/2010
Sample Matrix:	Soil	Date Analyzed:	9/27/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	4,780	5.0
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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 28-6 #152M (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Greg Crabtree, PE
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1440
Sample No.:	3	Date Reported:	2/16/2011
Sample ID:	2' Diagonal Under Tank	Date Sampled:	9/27/2010
Sample Matrix:	Soil	Date Analyzed:	9/27/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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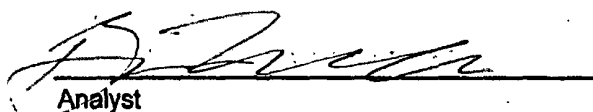
Total Petroleum Hydrocarbons	4,980	5.0
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ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 28-6 #152M (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Greg Crabtree, PE
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1440
Sample No.:	4	Date Reported:	2/16/2011
Sample ID:	S/E/W of Visual Composite	Date Sampled:	9/27/2010
Sample Matrix:	Soil	Date Analyzed:	9/27/2010
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: San Juan 28-6 #152M (hBr)

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Greg Crabtree, PE
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1440
Sample No.:	5	Date Reported:	2/16/2011
Sample ID:	N of Tank	Date Sampled:	9/27/2010
Sample Matrix:	Soil	Date Analyzed:	9/27/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (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 28-6 #152M (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Greg Crabtree, PE
Printed

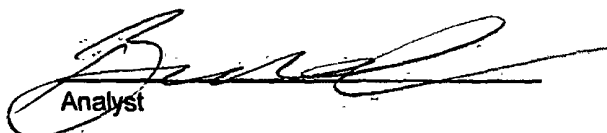


CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 27-Sep-10

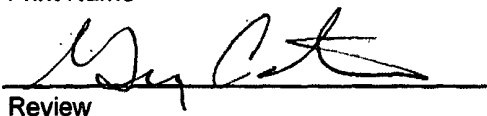
Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	206	205
	500	
	1000	

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


Analyst

Barian Williamson

Print Name


Review

Greg Crabtree, PE

Print Name

2/16/2011

Date

2/16/2011

Date



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1519
Sample No.:	1	Date Reported:	12/22/2010
Sample ID:	Five (5)-point Bottom	Date Sampled:	12/1/2010
Sample Matrix:	Soil	Date Analyzed:	12/1/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	3,930	5.0

ND = Parameter not detected at the stated detection limit.

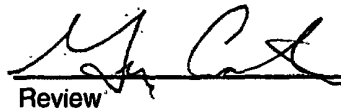
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 28-6 #152M (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Toni McKnight, EIT
Printed


Review

Greg Crabtree, PE
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 2
Sample ID: Wall Composite
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 92115-1519
Date Reported: 12/22/2010
Date Sampled: 12/1/2010
Date Analyzed: 12/1/2010
Analysis Needed: TPH-418.1

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: San Juan 28-6 #152M (hBr)

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Toni McKnight, EIT
Printed


Review

Greg Crabtree, PE
Printed

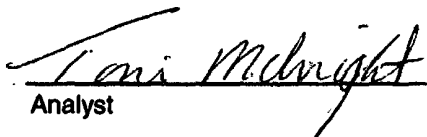


CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 1-Dec-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	246	245
	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

12/22/2010
Date

12/22/2010
Date

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

Client:	ConocoPhillips	Project #:	92115-1519
Sample ID:	5 Pt Bottom	Date Reported:	12-02-10
Laboratory Number:	56589	Date Sampled:	12-01-10
Chain of Custody No:	10826	Date Received:	12-01-10
Sample Matrix:	Soil	Date Extracted:	12-01-10
Preservative:	Cool	Date Analyzed:	12-02-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,800	0.2
Diesel Range (C10 - C28)	1,130	0.1
Total Petroleum Hydrocarbons	3,930	

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 28-6 #152M (hBr)


Analyst
Review

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

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	12-02-10 QA/QC	Date Reported:	12-02-10
Laboratory Number:	56589	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-02-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	12-02-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	12-02-10	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

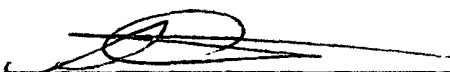
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	2,800	2,170	22.5%	0 - 30%
Diesel Range C10 - C28	1,130	817	27.7%	0 - 30%


Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	2,800	250	2,850	93.4%	75 - 125%
Diesel Range C10 - C28	1,130	250	1,170	84.8%	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 56589-56590, 56596


 Analyst


 Review

Client:	ConocoPhillips	Project #:	92115-1519
Sample ID:	5 Pt Bottom	Date Reported:	12-02-10
Laboratory Number:	56589	Date Sampled:	12-01-10
Chain of Custody:	10826	Date Received:	12-01-10
Sample Matrix:	Soil	Date Analyzed:	12-01-10
Preservative:	Cool	Date Extracted:	12-01-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	120	0.9
Toluene	14,800	1.0
Ethylbenzene	6,470	1.0
p,m-Xylene	57,600	1.2
o-Xylene	15,600	0.9
Total BTEX	94,600	

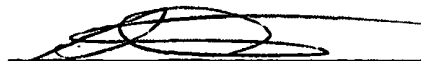
ND - Parameter not detected at the stated detection limit.

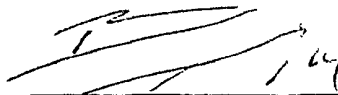
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	112 %

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 28-6 #152M (hBr)


 Analyst


 Review

Client:	N/A	Project #:	N/A
Sample ID:	1201BBLK QA/QC	Date Reported:	12-01-10
Laboratory Number:	56589	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-01-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank: Conc:	Detect. Limit
		Accept. Range 0 -15%			
Benzene	4.9308E+005	4.9407E+005	0.2%	ND	0.1
Toluene	5.8286E+005	5.8403E+005	0.2%	ND	0.1
Ethylbenzene	5.3308E+005	5.3415E+005	0.2%	ND	0.1
p,m-Xylene	1.2767E+006	1.2793E+006	0.2%	ND	0.1
o-Xylene	4.9853E+005	4.9953E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	120	127	5.4%	0 - 30%	0.9
Toluene	14,800	15,000	1.3%	0 - 30%	1.0
Ethylbenzene	6,470	6,540	1.1%	0 - 30%	1.0
p,m-Xylene	57,600	57,500	0.2%	0 - 30%	1.2
o-Xylene	15,600	15,800	1.3%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	120	500	618	100%	39 - 150
Toluene	14,800	500	15,300	100%	46 - 148
Ethylbenzene	6,470	500	6,950	100%	32 - 160
p,m-Xylene	57,600	1000	58,600	100%	46 - 148
o-Xylene	15,600	500	16,100	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 Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 56589-56590, 56596

Analyst

Review

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

Client:	ConocoPhillips	Project #:	92115-1519
Sample ID:	5 Pt Comp.	Date Reported:	12-14-10
Laboratory Number:	56708	Date Sampled:	12-10-10
Chain of Custody No:	10872	Date Received:	12-10-10
Sample Matrix:	Soil	Date Extracted:	12-10-10
Preservative:	Cool	Date Analyzed:	12-13-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	81.5	0.2
Diesel Range (C10 - C28)	175	0.1
Total Petroleum Hydrocarbons	257	

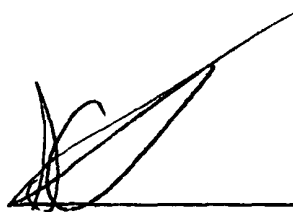
ND - Parameter not detected at the stated detection limit.

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

Comments: **San Juan 28-6 #152M**



Analyst



Review

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	12-13-10 QA/QC	Date Reported:	12-14-10
Laboratory Number:	56710	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-13-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	12-13-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	12-13-10	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	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	ND	250	266	106%	75 - 125%
Diesel Range C10 - C28	ND	250	237	94.9%	75 - 125%

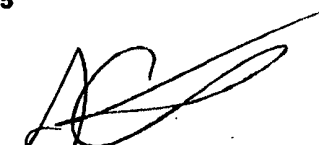
ND - Parameter not detected at the stated detection limit.

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

Comments: QA/QC for Samples 56708, 56710-56716, 56725



Analyst



Review



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**EPA METHOD 8021
AROMATIC VOLATILE ORGANICS**

Client:	ConocoPhillips	Project #:	92115-1519
Sample ID:	5 Pt Comp.	Date Reported:	12-14-10
Laboratory Number:	56708	Date Sampled:	12-10-10
Chain of Custody:	10872	Date Received:	12-10-10
Sample Matrix:	Soil	Date Analyzed:	12-13-10
Preservative:	Cool	Date Extracted:	12-10-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	19.8	1.0
Ethylbenzene	17.6	1.0
p,m-Xylene	460	1.2
o-Xylene	102	0.9
Total BTEX	599	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	106 %
	1,4-difluorobenzene	108 %
	Bromochlorobenzene	93.8 %

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 28-6 #152M

Analyst

Review

Client:	N/A	Project #:	N/A
Sample ID:	1213BBLK QA/QC	Date Reported:	12-14-10
Laboratory Number:	56708	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-13-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff	Blank Conc	Detect Limit
		Accept. Range 0 - 15%			
Benzene	4.7432E+005	4.7527E+005	0.2%	ND	0.1
Toluene	5.1652E+005	5.1755E+005	0.2%	ND	0.1
Ethylbenzene	4.6152E+005	4.6245E+005	0.2%	ND	0.1
p,m-Xylene	1.0964E+006	1.0986E+006	0.2%	ND	0.1
o-Xylene	4.1862E+005	4.1946E+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	19.8	18.9	4.5%	0 - 30%	1.0
Ethylbenzene	17.6	18.3	4.0%	0 - 30%	1.0
p,m-Xylene	460	448	2.7%	0 - 30%	1.2
o-Xylene	102	109	6.2%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	534	107%	39 - 150
Toluene	19.8	500	579	111%	46 - 148
Ethylbenzene	17.6	500	584	113%	32 - 160
p,m-Xylene	460	1000	1,560	107%	46 - 148
o-Xylene	102	500	685	114%	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 Photolization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 56708, 56710-56711, 56713, 56715-56716, 56724-56725

Analyst

Review

RUSH

CHAIN OF CUSTODY RECORD

10872

Client: <u>ConocoPhillips</u>			Project Name / Location: <u>SAN JUAN 28-6 #152M</u>			ANALYSIS / PARAMETERS													
Client Address:			Sampler Name: <u>Scott G.</u>			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Client Phone No.:			Client No.: <u>92115-1519</u>																
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative													
						HgCl ₂	HCl	ICF											
<u>Spt. Comp</u>	<u>12-10-10</u>	<u>10:40</u>	<u>56709</u>	<u>SOP</u> Solid Aqueous	<u>1-402</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								<u>Y</u>	<u>N</u>
				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														
Relinquished by: (Signature) <u>[Signature]</u>					Date	Time	Received by: (Signature) <u>RENON KROLL</u>					Date	Time						
					<u>12-10-10</u>	<u>12:09</u>						<u>12-10-10</u>	<u>12:09</u>						
Relinquished by: (Signature)							Received by: (Signature)												
Relinquished by: (Signature)							Received by: (Signature)												

RUSH


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