

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	ConocoPhillips Company	Contact	Kelsi Harrington
Address	3401 E. 30 th St., Farmington, NM 87402	Telephone No.	505-599-3403
Facility Name	Jicarilla B #9A	Facility Type	Gas Well
		API #	30-039-06327
Surface Owner	Jicarilla Tribe	Mineral Owner	Jicarilla Tribe
		Lease No	Jicarilla Tribe

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	26	T26N	R04W	1130'	North	1055'	West	Rio Arriba

Latitude 36.4616600° N Longitude 107.21812° W

NATURE OF RELEASE

Type of Release –	Produced Water	Volume of Release –	11 BBL	Volume Recovered –	0 BBL
Source of Release	Production Tank leak	Date and Hour of Occurrence	11/12/09	Date and Hour of Discovery	11/12/09
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Jicarilla Tribe – Dixon Sandoval via phone message		
By Whom?	Shelly Cook-Cowden	Date and Hour –	11/13/09 – 10:00 a.m.		
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 * Approximately 11 BBL of produced water was spilled to the ground as a result of a small hole in the lower portion of the production tank. Upon discovery, the well was shut in and the hole was plugged to stop the leak. All of the produced water remained on location.

Describe Area Affected and Cleanup Action Taken.* To prevent reoccurrence, the production tank will be inspected & repaired. Excavation and confirmation sampling occurred. Analytical results 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>		
Printed Name:	Kelsi Harrington		
Title	Environmental Consultant	Approved by District Supervisor.	<i>[Signature]</i>
		Approval Date:	1-26-11
		Expiration Date	
E-mail Address	kelsi.g.harrington@conocophillips.com	Conditions of Approval	
Date:	1/25/11	Phone:	505-326-95493
			njk 1122339042

* Attach Additional Sheets If Necessary





August 19, 2010

Project No. 96052-1680

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

Phone: (505) 599-3403
Cell: (505) 320-2461

**RE: SPILL ASSESSMENT DOCUMENTATION FOR THE JICARILLA B #9A WELL SITE,
RIO ARriba COUNTY, NEW MEXICO**

Dear Ms. Harrington,

Enclosed please find the field notes and analytical results for spill assessment activities conducted due to the release of approximately eleven (11) barrels of produced water from a leaking above ground storage tank (AST) at the Jicarilla B #9A well site located in Section 26, Township 26N, Range 4W, Rio Arriba County, New Mexico. Because the site is on the Jicarilla Apache Indian Reservation, the cleanup standard for the site was 100 ppm total petroleum hydrocarbons (TPH) and 100 ppm organic vapors.

Prior to Envirotech's arrival on April 30, 2010, the leaking AST had been removed and a new AST had been installed. One (1) composite sample was collected from within the bermed area around the new AST; see enclosed *Site Map* and *Field Notes*. The sample was analyzed in the field for TPH via USEPA Method 418.1 and for organic vapors using a photoionization detector (PID). The sample returned results above the regulatory standards of 100 ppm TPH and 100 ppm organic vapors; see enclosed *Analytical Results*. Therefore, excavation was required.

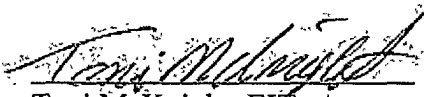
Prior to Envirotech's return on July 14, 2010, M & M Trucking had excavated the area of release to extents of approximately 20 feet by 22 feet by four (4) feet deep. Five (5) composite samples were collected from the excavation – one (1) sample from the bottom at four (4) feet below ground surface (BGS) and one (1) sample 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 PID. All of the samples returned results below the cleanup standard for organic vapors. The samples collected from the south wall and east wall returned results below the cleanup standard for TPH, but the samples collected from the bottom at four (4) feet BGS, north wall and west wall returned results above the cleanup standard for TPH; see enclosed *Analytical Results*. Therefore, further excavation was required.

M & M Trucking proceeded to expand the excavation to the north, west and bottom to final excavation extents of approximately 35 feet by 40 feet by nine (9) feet deep. Three (3) composite samples were collected from the excavation – one (1) sample from the bottom at nine (9) feet BGS, one (1) sample from the north wall and one (1) sample from the west wall. The samples were analyzed in the field for TPH via USEPA Method 418.1 and for organic vapors

using a PID. All of the samples returned results below the cleanup standard for organic vapors and TPH. Therefore, Envirotech, Inc. recommends no further action in regards to this incident. The excavated soil was disposed of at the TNT disposal facility.

We appreciate the opportunity to be of service. If you have any questions, please do not hesitate to contact our office at (505) 632-0615.

Sincerely,
ENVIROTECH, INC.


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

Enclosures: Field Sheets
Site Map
Analytical Results

Cc: Client File 96052

Client: <u>COPE</u>	 envirotech (505) 632-0615 (800) 362-1879 5788 U.S. Hwy 64, Farmington, NM 87401	Location No: <u>16052-1680</u> C.O.C. No:
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FIELD REPORT: SPILL CLOSURE VERIFICATION

PAGE NO: <u>1</u> OF <u>2</u>
DATE STARTED: <u>7/14/10</u>
DATE FINISHED: <u>7/14/10</u>
ENVIRONMENTAL SPECIALIST: <u>Scott</u>

LOCATION: NAME: <u>Ticorilla B.</u> WELL #: <u>9A</u>
QUAD/UNIT: <u>D</u> SEC: <u>26</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RAT</u> ST: <u>NM</u>
DEPT/FOOTAGE: <u>1130 N + 1055 W</u> CONTRACTOR: <u>M & M Trucking</u>

EXCAVATION APPROX: <u>FT. X</u> <u>FT. X</u> <u>FT. X</u> DEEP CUBIC YARDAGE: <u> </u>
DISPOSAL FACILITY: <u>TNT</u> REMEDIATION METHOD: <u>Landfill</u>
LAND-USE: <u> </u> LEASE: <u> </u> LAND OWNER: <u> </u>
CAUSE OF RELEASE: <u>Leak</u> MATERIAL RELEASED: <u>Petroleum products & chemicals</u>

SPILL LOCATED APPROXIMATELY: <u>41</u> FT. <u>40</u> FROM <u>wallhead</u>
DEPTH TO GROUNDWATER: <u> </u> NEAREST WATER SOURCE: <u> </u> NEAREST SURFACE WATER: <u> </u>

NMOC D RANKING SCORE: <u> </u> NMOC D TPH CLOSURE STD: <u> </u> PPM: <u> </u>
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OIL AND EXCAVATION DESCRIPTION: 20' x 22' x 4' deep @ first sample On Ticorilla B. - 100' FTA closure

196.6 std

SAMPLE DESCRIPTION	TIME	SAMPLE ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
<u>200 std</u>	<u>10:15</u>	<u>200 std</u>					<u>190</u>	
<u>Bottom Sp. Comp</u>	<u>10:45</u>	<u>Bottom</u>	<u>1</u>	<u>50.5</u>	<u>20</u>	<u>4</u>	<u>580</u>	<u>2320</u>
<u>North Wall Comp</u>	<u>10:48</u>	<u>N Wall</u>	<u>2</u>	<u>50.5</u>	<u>20</u>	<u>4</u>	<u>423</u>	<u>1692</u>
<u>South Wall Comp</u>	<u>10:51</u>	<u>S Wall</u>	<u>3</u>	<u>50.5</u>	<u>20</u>	<u>4</u>	<u>106</u>	<u>69</u>
<u>East Wall Comp</u>	<u>10:55</u>	<u>E Wall</u>	<u>4</u>	<u>50.5</u>	<u>20</u>	<u>4</u>	<u>9</u>	<u>36</u>
<u>West Wall Comp</u>	<u>10:58</u>	<u>W Wall</u>	<u>5</u>	<u>50.5</u>	<u>20</u>	<u>4</u>	<u>114</u>	<u>456</u>

SPILL PERIMETER 	OVM RESULTS <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><u>Bottom</u></td> <td><u>36.1 ppm</u></td> </tr> <tr> <td><u>N Wall</u></td> <td><u>11.1 ppm</u></td> </tr> <tr> <td><u>S Wall</u></td> <td><u>3.3 ppm</u></td> </tr> <tr> <td><u>E Wall</u></td> <td><u>ND</u></td> </tr> <tr> <td><u>W Wall</u></td> <td><u>8.1 ppm</u></td> </tr> </tbody> </table> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">LAB SAMPLES</th> </tr> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	<u>Bottom</u>	<u>36.1 ppm</u>	<u>N Wall</u>	<u>11.1 ppm</u>	<u>S Wall</u>	<u>3.3 ppm</u>	<u>E Wall</u>	<u>ND</u>	<u>W Wall</u>	<u>8.1 ppm</u>	LAB SAMPLES			SAMPLE ID	ANALYSIS	TIME																									SPILL PROFILE <u>26' x 28' x 4' deep</u> <p><u>X = Sample points</u></p>
SAMPLE ID	FIELD HEADSPACE PID (ppm)																																											
<u>Bottom</u>	<u>36.1 ppm</u>																																											
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SAMPLE ID	ANALYSIS	TIME																																										

TRAVEL NOTES: <u> </u>	CALLED OUT: <u> </u>	ONSITE: <u> </u>
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Client: COPC



envirotech
(505) 632-0615 (800) 362-1879
5798 U.S. Hwy 64, Farmington, NM 87401

Location No: 96052-1680
C.O.C. No:

FIELD REPORT: SPILL CLOSURE VERIFICATION

PAGE NO: 2 OF 2

LOCATION: NAME: Jicarilla R WELL #: 9A
QUAD/UNIT: D SEC: 26 TWP: 26N RNG: 4W PM: NM CNTY: RA ST: NM
QTR/FOOTAGE: 130N 1055W CONTRACTOR: Wm. Trevino

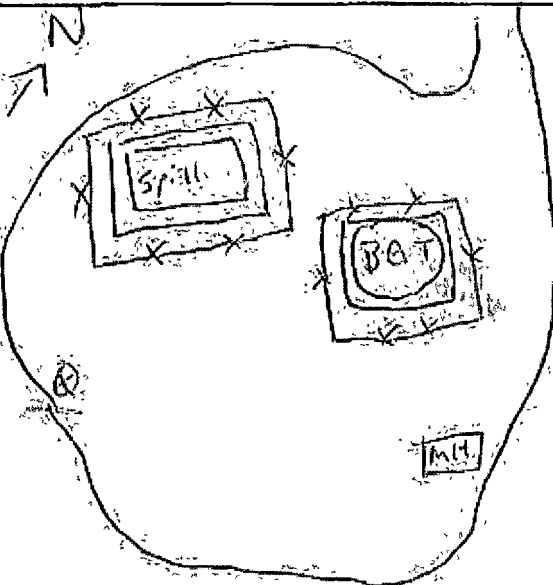
DATE STARTED: 7/14/10
DATE FINISHED: 7/14/10
ENVIRONMENTAL SPECIALIST: Scott

EXCAVATION APPROX: 35 FT. X 40 FT. X 9 FT. DEEP CUBIC YARDAGE:
DISPOSAL FACILITY: TNT REMEDIATION METHOD: Landfill
LAND USE: LEASE: LAND OWNER:
CAUSE OF RELEASE: Truck Leaking MATERIAL RELEASED: Propane Gas

SPILL LOCATED APPROXIMATELY: 41 FT. 40 FROM Wellhead
DEPTH TO GROUNDWATER: NEAREST WATER SOURCE: NEAREST SURFACE WATER:
NMOCD RANKING SCORE: NMOCD TPH CLOSURE STD: PPM
SOIL AND EXCAVATION DESCRIPTION: 100 TPH closure due to Jicarilla State Lands

SAMPLE DESCRIPTION	TIME	SAMPLE ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
200 Std.	10:15	200 Std					190	
Bottom 5th Comp	12:10	Bottom	1	5	20	4	41	44 ppm
N Wall Comp	12:13	N Wall	2	5	20	4	4	10 ppm
West Wall Comp	12:15	W Wall	3	5	20	4	5	20 ppm

SPILL PERIMETER



OVM RESULTS

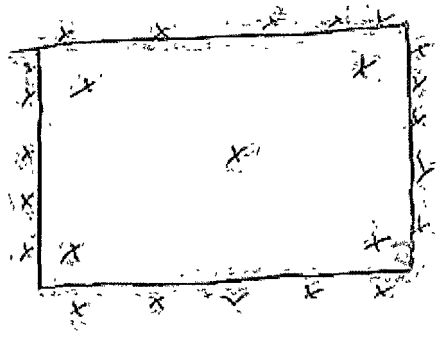
SAMPLE ID	FIELD HEADSPACE PID (ppm)
Bottom	212
N Wall	N.D.
W Wall	N.D.

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

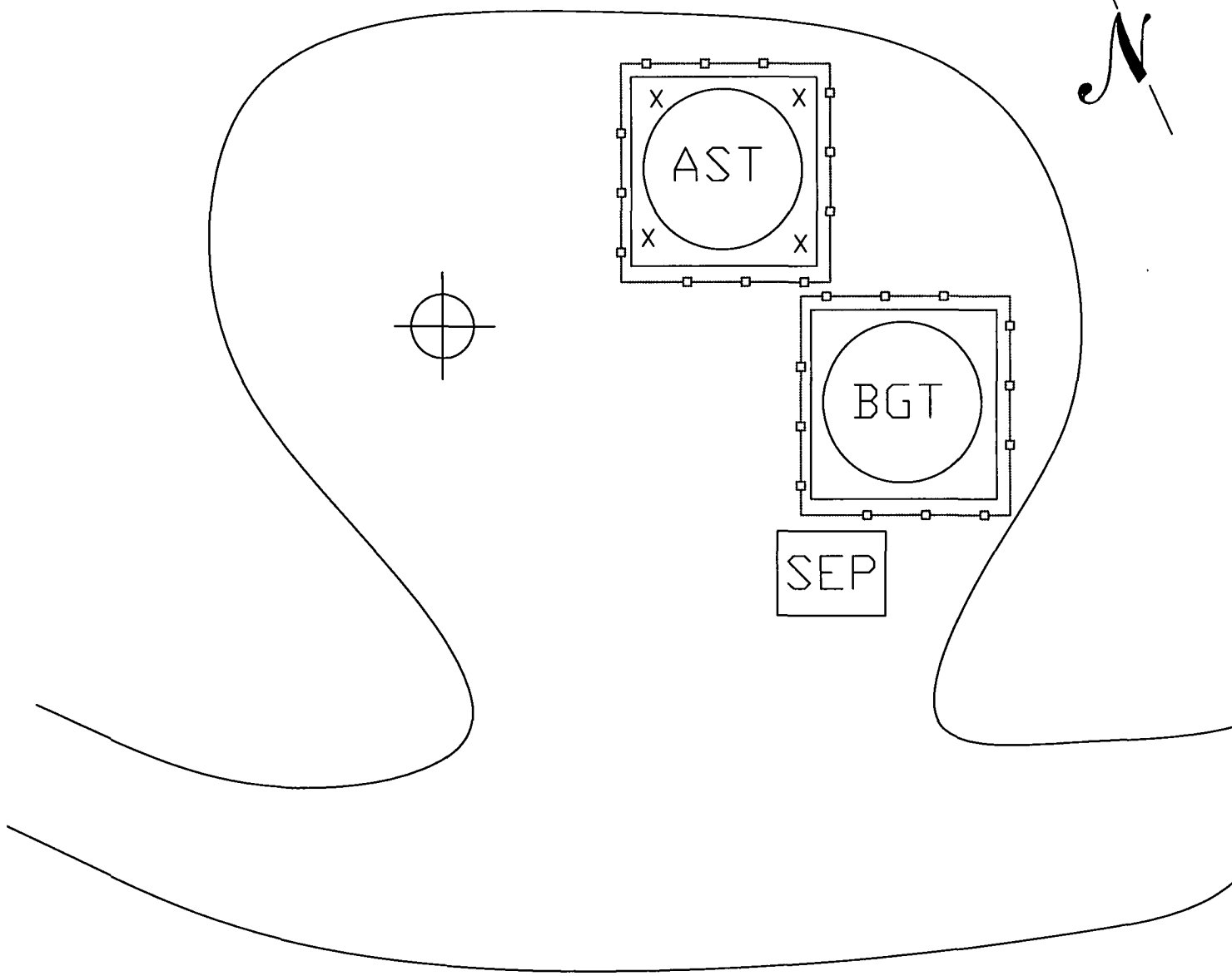
SPILL PROFILE

35' x 40' x 9' deep



x = sample points

TRAVEL NOTES: CALLED OUT: ONSITE:



LEGEND



Berm



Fence

Composite Sample

X 418.1 TPH = 1,168 ppm

Site Map

ConocoPhillips
Jicarilla B #9A
Section 26, Township 26N, Range 4W

SCALE: NTS	FIGURE NO. 2	REV
PROJECT NO96052-1680		

REVISIONS

NO.	DATE	BY	DESCRIPTION
MAP	DRWN	TLM	DATE 5/6/10



envirotech

Table 1, Summary of Analytical Results

ConocoPhillips

Jicarilla B 9A

Confirmation Sampling Report

Project No. 96052-1680

Date	Sample Description	Sample Number	PID OV (ppm)	USEPA Method 418.1 TPH (ppm)
NA	Jicarilla Apache Environmental Protection Office	NA	100	100
4/30/2010	Composite Around AST	1	2500	1170
7/14/2010	Bottom at 4 feet	2	36.6	2320
7/14/2010	North Wall 1	3	11.1	1690
7/14/2010	South Wall	4	3.3	64
7/14/2010	East Wall	5	ND	36
7/14/2010	West Wall 1	6	8.1	456
7/14/2010	Bottom at 9 feet	7	2.2	44
7/14/2010	North Wall 2	8	ND	16
7/14/2010	West Wall 2	9	ND	20

*Values in **BOLD** above regulatory limits

*ND - Parameter not detected



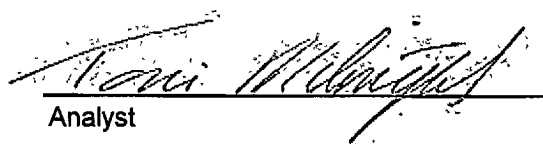
envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 30-Apr-10

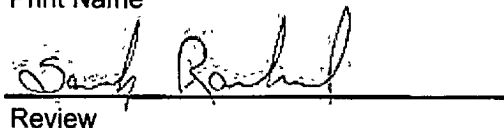
Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	182	181
	500	
	1000	

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


Analyst

6/30/10
Date

Toni McKnight
Print Name


Review

6/30/10
Date

Sarah Rowland
Print Name



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client: ConocoPhillips
Sample No.: 1
Sample ID: 5-pt Composite
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 6/25/2010
Date Sampled: 4/30/2010
Date Analyzed: 4/30/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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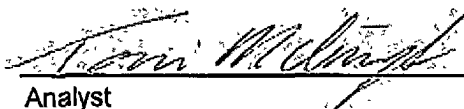
Total Petroleum Hydrocarbons	1,170	5.0
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ND = Parameter not detected at the stated detection limit.


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

Comments: Jicarilla B 9A

Instrument calibrated to 182 ppm standard. Zeroed before each sample


Analyst

Toni McKnight
Printed


Review

Sarah Rowland
Printed

ENVIROTECH INC.

Practical Solutions for a Better Tomorrow

Method 418.1 Analysis Log

Total Petroleum Hydrocarbons

Date April 30, 2010

Analyst Toni McKnight

Location Sicaria B #9A

Instrument InfraCal PID

Job No. 96052-1680

Sample No.	Sample Description	Weight (g)	mL. Freon	Dilution	Reading	Calc. TPH (ppm)	OVM (ppm)
1	Spt composite	5	20	4	292	1168	2500

Infrared Spectrophotometer Calibration

New Freon NA

Date Standards Prepared NA

Standard Concentration (ppm)

100 NA
~~182-200~~ 181

500 NA
1000 NA

I-Cal RF: NA

C-Cal RF: NA

RSD: NA

% Difference: NA

QA/QC Acceptance Criteria: I-Cal RSD +/- 20%

C-Cal Difference +/- 10%



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 1
Sample ID: Bottom at 4 feet
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 8/2/2010
Date Sampled: 7/14/2010
Date Analyzed: 7/14/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	2,320	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: **Jicarilla B 9A**

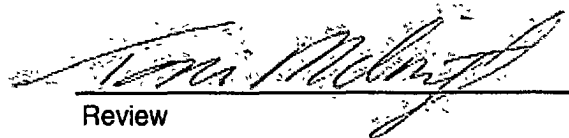
Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Scott Gonzales

Printed



Review

Toni McKnight, EIT

Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 2
Sample ID: North Wall 1
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 8/2/2010
Date Sampled: 7/14/2010
Date Analyzed: 7/14/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	1,690	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: Jicarilla B 9A

Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Scott Gonzales

Printed



Review

Toni McKnight, EIT

Printed



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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 3
Sample ID: South Wall
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 8/2/2010
Date Sampled: 7/14/2010
Date Analyzed: 7/14/2010
Analysis Needed: TPH-418.1

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

Total Petroleum Hydrocarbons

64


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: **Jicarilla B 9A**


Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Scott Gonzales

Printed



Review

Toni McKnight, EIT

Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 4
Sample ID: East Wall
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 8/2/2010
Date Sampled: 7/14/2010
Date Analyzed: 7/14/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	36	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: **Jicarilla B 9A**

Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Scott Gonzales

Printed



Review

Toni McKnight, EIT

Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 5
Sample ID: West Wall 1
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 8/2/2010
Date Sampled: 7/14/2010
Date Analyzed: 7/14/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	456	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: **Jicarilla B 9A**

Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Scott Gonzales

Printed



Review

Toni McKnight, EIT

Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 6
Sample ID: Bottom at 9 feet
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 8/2/2010
Date Sampled: 7/14/2010
Date Analyzed: 7/14/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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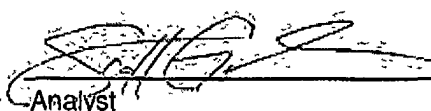
Total Petroleum Hydrocarbons	44	5.0
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ND = Parameter not detected at the stated detection limit.

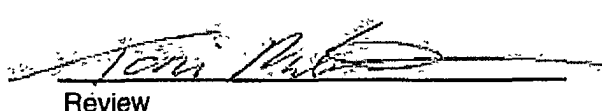
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Jicarilla B 9A**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Scott Gonzales
Printed


Review

Toni McKnight, EIT
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 7
Sample ID: North Wall 2
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 8/2/2010
Date Sampled: 7/14/2010
Date Analyzed: 7/14/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons

16

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: **Jicarilla B 9A**

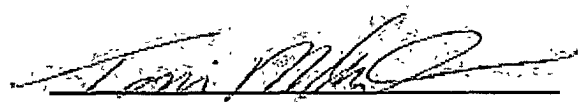
Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Scott Gonzales

Printed



Review

Toni McKnight, EIT

Printed



envirotech

**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 8
Sample ID: West Wall 2
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 96052-1680
Date Reported: 8/2/2010
Date Sampled: 7/14/2010
Date Analyzed: 7/14/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	20	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: **Jicarilla B 9A**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Scott Gonzales
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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 14-Jul-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	190
	197	
	500	
	1000	

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



Analyst

8/2/2010
Date

Scott Gonzales

Print Name



Review

8/2/2010
Date

Toni McKnight, EIT

Print Name