

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	San Juan 32-9 Unit Tank Battery in the Vicinity of San Juan 32-9 Unit #71	Facility Type	Tank Battery
Surface Owner	Federal	Mineral Owner	Federal
		Lease No.	

LOCATION OF RELEASE

San Juan 32-9 Unit #71 Information

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	33	32N	09W	950'	North	890'	East	San Juan

Latitude Tank Battery Coordinates 36.94615° N Longitude 107.781° W

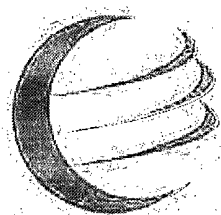
NATURE OF RELEASE

Type of Release – Produced Water & Lube Oil	Volume of Release – 12 BBL (10 BBL PW & 2 BBL Lube Oil)	Volume Recovered – 10 BBL
Source of Release: Tank Overflow	Date and Hour of Occurrence unknown	Date and Hour of Discovery 6/28/10 – 1:00 p.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell (voicemail and email)	RCVD SEP 15 '10
By Whom? Gwen Frost	Date and Hour – 6/29/10 a.m.	OIL CONS. DIV.
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	DIST. 3
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* On June 28, 2010, it was discovered that the water tanks were overflowing as the result of an equipment malfunction. Upon discovery, the water pumps going to the tank battery and the inlet to the produced water tanks were shut in and a water truck was called to location.		
Describe Area Affected and Cleanup Action Taken.* Approximately 10 BBL produced water and oil was recovered from the berm area and approximately 2 BBL of water/oil left location & traveled approximately 160 ft off location. 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>	OIL CONSERVATION DIVISION	
Printed Name: Kelsi Harrington	Approved by District Supervisor: <i>Bob Ball</i> for: CR	
Title: Environmental Consultant	Approval Date: 9/21/10	Expiration Date:
E-mail Address: kelsi.g.harrington@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9/13/10 Phone: 505-599-3403		

* Attach Additional Sheets If Necessary

uBP1026439853

3



envirotech

SPILL ASSESSMENT AND CLOSURE REPORT

LOCATION:

CONOCO PHILLIPS

SAN JUAN 32-9 TANK BATTERY (HBR)

SECTION 33, TOWNSHIP 32 NORTH, RANGE 9 WEST

SAN JUAN COUNTY, NEW MEXICO

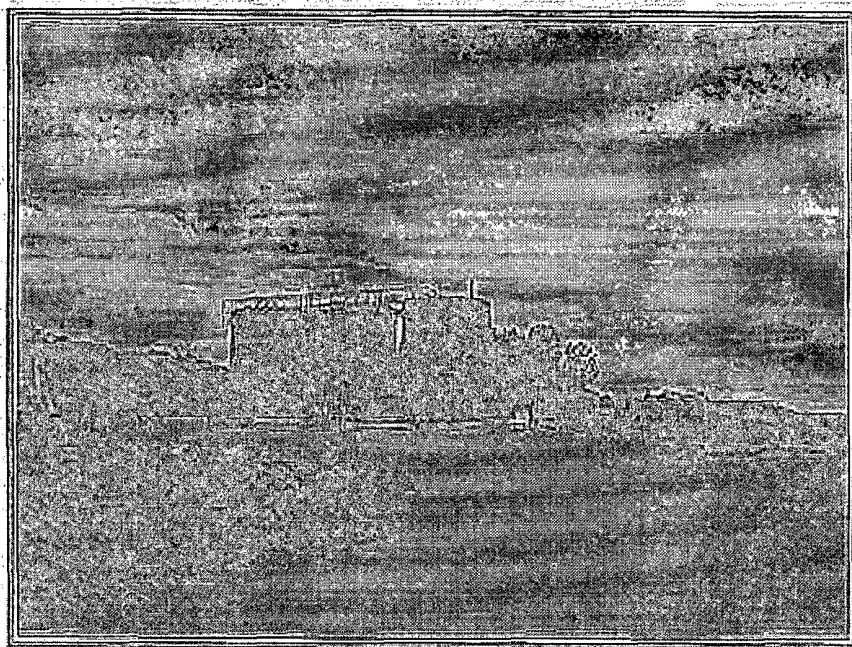
CONTRACTED BY:

CONOCO PHILLIPS

MS. KELSI HARRINGTON

3401 EAST 30TH STREET

FARMINGTON, NEW MEXICO 87401



PROJECT NUMBER 92115-1346

JULY 2010



August 25, 2010

Project No. 92115-1346

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

Phone: (505) 599-3403


**RE: SPILL ASSESSMENT AND CLOSURE REPORT FOR THE SAN JUAN 32-9 TANK
BATTERY (hBr), SAN JUAN COUNTY, NEW MEXICO**

Dear Ms. Harrington,

Enclosed please find the *Spill Assessment and Closure Report* detailing assessment and closure activities at the San Juan 32-9 Tank Battery (hBr) located in Section 33, Township 32N, Range 9W, San Juan County, New Mexico.

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

Respectfully Submitted,
ENVIROTECH, INC.


Robyn Jones, EIT
Staff Engineer
rjones@envirotech-inc.com

Enclosure: Spill Assessment and Closure Report

Cc: Client File 92115

CONOCOPHILLIPS
SPILL ASSESSMENT AND CLOSURE REPORT
SAN JUAN 32-9 TANK BATTERY (HBR)
SECTION 33, TOWNSHIP 32N, RANGE 9W
SAN JUAN COUNTY, NEW MEXICO

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INTRODUCTION

Envirotech, Inc. of Farmington, New Mexico, was contracted by ConocoPhillips to provide spill assessment and confirmation sampling services for a release of produced water and lube oil from the San Juan 32-9 Tank Battery located in Section 33, Township 32N, Range 9W, San Juan County, New Mexico; see enclosed **Figure 1, Vicinity Map**. Approximately ten (10) barrels of produced water and two (2) barrels of lube oil were reported to be released from an overflow at the tank battery. The release ran through a hole in the berm and to the east for approximately 100 feet, then south across the road for approximately 60 feet; see enclosed **Figure 2, Initial Map – Site Assessment**. Activities included sample collection and analysis, documentation and reporting.

ACTIVITIES PERFORMED

Envirotech, Inc. was contacted on June 29, 2010, with a request to respond to a release that occurred at the above-referenced location. Upon arrival, a brief site assessment was conducted. Because distance to surface water is between 200 and 1000 feet from the well site and the depth to groundwater is between 50 and 100 feet below ground surface (BGS), the regulatory standard for the site was determined to be 100 parts per million (ppm) total petroleum hydrocarbons (TPH) and 100 ppm organic vapors, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases.

On June 29, 2010, five (5) composite samples were collected from the area of the release. One (1) sample was collected from the surface within the bermed area. One (1) sample was collected from four (4) inches BGS within the bermed area. One (1) sample was collected from four (4) inches BGS along the flow path. One (1) sample was collected from the flow path north of the road. One (1) sample was collected from the visual end of the flow path. All samples were screened in the field for TPH using USEPA Method 418.1 and for organic vapors using a photoionization detector (PID). All samples returned results above the regulatory standard for TPH and below the regulatory standard for organic vapors.

Upon Envirotech's return on July 2, 2010, Kelley Oilfield Services had excavated the flow path to the east to the extents of approximately 36 feet by 23 feet by one (1) to 1.5 feet deep. Along the remaining flow path, four (4) to six (6) inches were excavated from the surface. Four (4) composite samples were collected from the flow path. One (1) sample was collected from the area south of the road. One (1) sample was collected from the flow path north of the road. One (1) sample was collected from the flow path within the fenced area at four (4) inches BGS. One (1) sample was collected from the flow path within the fenced area at one (1) to 1.5 feet BGS. All samples were screened in the field for TPH using USEPA Method 418.1, for organic vapors using a PID, and for chlorides. Additionally, the sample from south of the road, the sample from north of the road, and the sample from the fenced area at one (1) to 1.5 feet BGS were placed into four (4)-ounce glass jars, capped head space free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for chlorides. The sample collected from south of the road and the sample collected from the fenced area at one (1) to 1.5 feet BGS were also analyzed for TPH using USEPA Method 8015; see **Table 1, Summary of Analytical Results**. All samples except the sample collected from the fenced area at four (4)

inches BGS returned results below regulatory standards for all constituents analyzed. Chloride concentrations ranged from 40 to 110 ppm.

Upon Envirotech's return on July 6, 2010, Kelley Oilfield Services had excavated four (4) areas within the berm around the above-ground storage tanks (ASTs). Each excavation had extents of approximately nine (9) to sixteen (16) feet by two (2) to three (3) feet by two (2) feet deep. One (1) sample was collected from each excavation – one (1) in the northeast corner, one (1) in the northwest corner, one (1) in the southeast corner, and one (1) in the southwest corner of the bermed area. All samples were screened in the field for TPH using USEPA Method 418.1, for organic vapors using a PID, and for chlorides. Additionally, the samples were placed into four (4)-ounce glass jars, capped head space free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for chlorides. The sample collected from northwest excavation and the sample collected from the southwest excavation were also analyzed for TPH using USEPA Method 8015; see **Table 1, Summary of Analytical Results**. All samples returned results below the regulatory standards for all constituents analyzed. Chloride concentrations ranged from 40 to 100 ppm.

Upon Envirotech's return on July 13, 2010, Kelley Oilfield Services had removed the south AST and excavated the areas to the north, west and south of the ASTs to extents of approximately twenty-three (23) feet by fifty-seven (57) feet by three (3) feet deep. Kelley Oilfield Services also excavated an area to the south of the road. Eight (8) samples were collected from the area within the berm around the ASTs. One (1) sample was collected from a stained area to the west of the ASTs. One (1) sample was collected from the northern part of the excavation. One (1) sample was collected from the southern part of the excavation. One (1) sample was collected from the western part of the excavation. One (1) sample was collected from under the north AST. One (1) sample was collected from under the south remaining AST. One (1) sample was collected from the excavation to the south of the road. One (1) sample was collected from six (6) inches below a stained area to the east of the south remaining AST. All samples were screened in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID; see enclosed **Table 1, Summary of Analytical Results**. All samples except the sample collected from the stained area to the west of the ASTs returned results below the regulatory standards for all constituents analyzed.

Upon Envirotech's return on July 23, 2010, Kelley Oilfield Services had removed the remaining ASTs and excavated the entire area within the berm to extents of approximately sixty (60) feet by thirty (30) feet by three (3) feet deep. Additionally, Kelley Oilfield Services excavated the southeast corner of the berm; see enclosed **Figure 3, Site Map – Confirmation**. A two (2)-inch riser pipe remained in the excavation. Four (4) composite samples were collected from the excavated area. One (1) sample was collected from around the riser. One (1) sample was collected from the excavated area in the southeast corner of the berm. One (1) sample was collected from the west side of the berm. One (1) sample was collected from the source area in the middle of the excavated area. All samples were screened in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. Additionally, the samples collected from the excavated area in the southeast corner, the west side of the berm, and the source area were placed into four (4)-ounce glass jars, capped head space free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015 and for benzene and BTEX using USEPA Method 8021; see enclosed **Table 1, Summary**

of Analytical Results. All samples except the sample collected around the riser returned results below the regulatory standards for all constituents analyzed.

All excavated soil was transported to IEI's NMOCD permitted soil remediation facility.

SUMMARY AND CONCLUSIONS

Spill assessment and confirmation sampling activities were performed for a release from the San Juan 32-9 Tank Battery located in Section 33, Township 32N, Range 9W, San Juan County, New Mexico. Contaminated soil was transported to IEI's NMOCD permitted soil remediation facility. Envirotech, Inc. recommends that no further action is required in regards to this incident.

STATEMENT OF LIMITATIONS

Envirotech, Inc. has completed spill assessment and confirmation sampling activities for a release from the San Juan 32-9 Tank Battery located in Section 33, Township 32N, Range 9W, San Juan County, New Mexico. The work and services provided by Envirotech, Inc. were in accordance with the New Mexico Oil Conservation Division standards. All observations and conclusions provided here are based on the information and current site conditions found at the site of the incident.

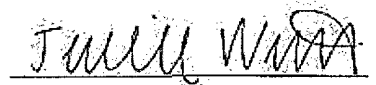
The undersigned has conducted this service at the above referenced site. This work has been conducted and reported in accordance with generally accepted professional practices in geology, engineering, environmental chemistry, and hydrogeology.

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

Respectfully Submitted,

ENVIROTECH, INC.

Reviewed by:

 FOR

Robyn S. Jones, EIT
Staff Engineer
rjones@envirotech-inc.com



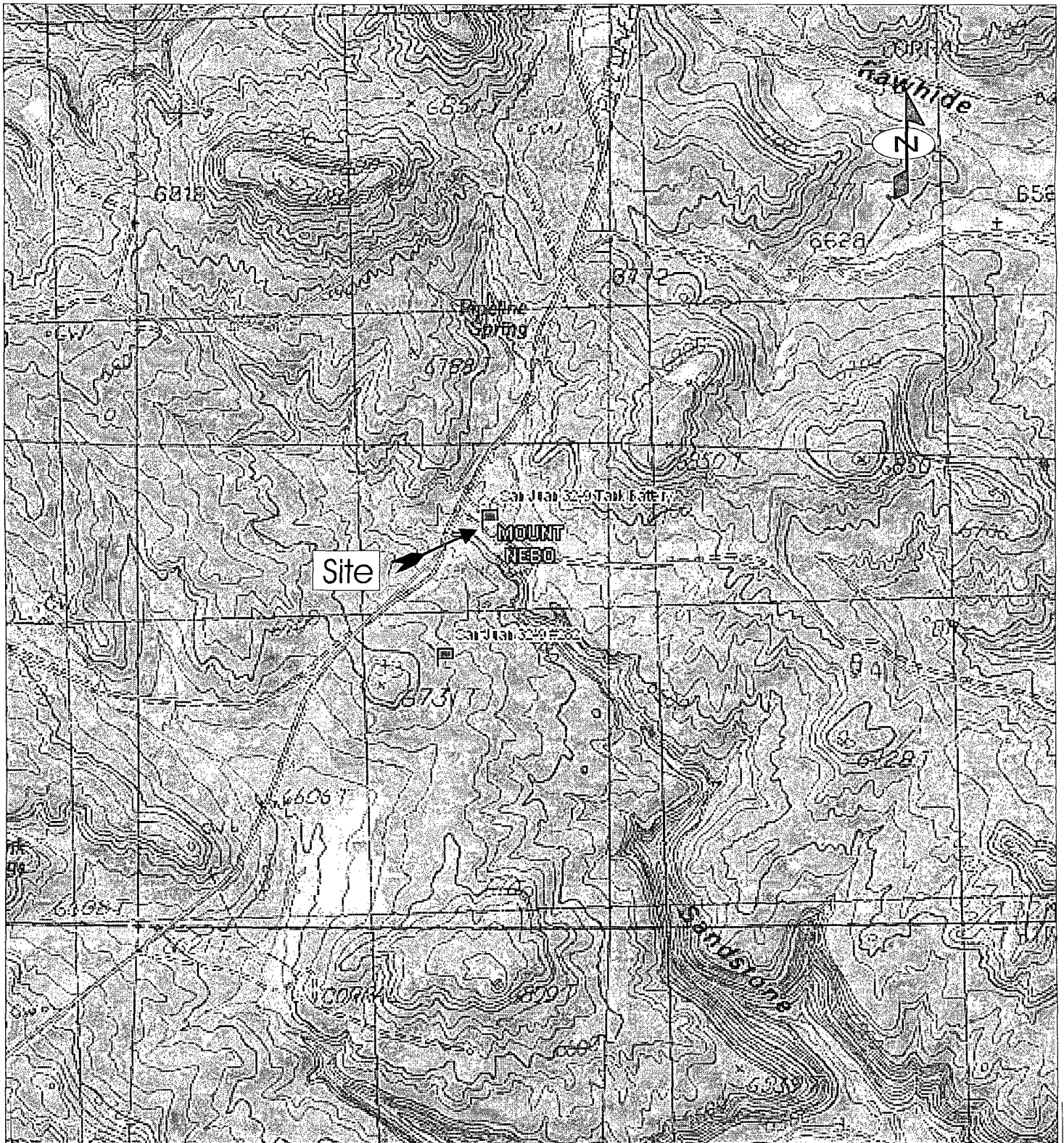
Greg Crabtree, P.E.
Environmental Manager
gcrabtree@envirotech-inc.com

FIGURES

Figure 1, Vicinity Map

Figure 2, Initial Map – Site Assessment

Figure 3, Site Map – Confirmation



ConocoPhillips
 Spill Assessment and Closure Report
 San Juan 32-9 Tank Battery (hBr)
 Sec. 33, Twn. 32N, Rge. 9W
 San Juan County, New Mexico

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS

5796 U.S. HIGHWAY 64
 FARMINGTON, NEW MEXICO 87401

PHONE (505) 632-0615

Vicinity Map

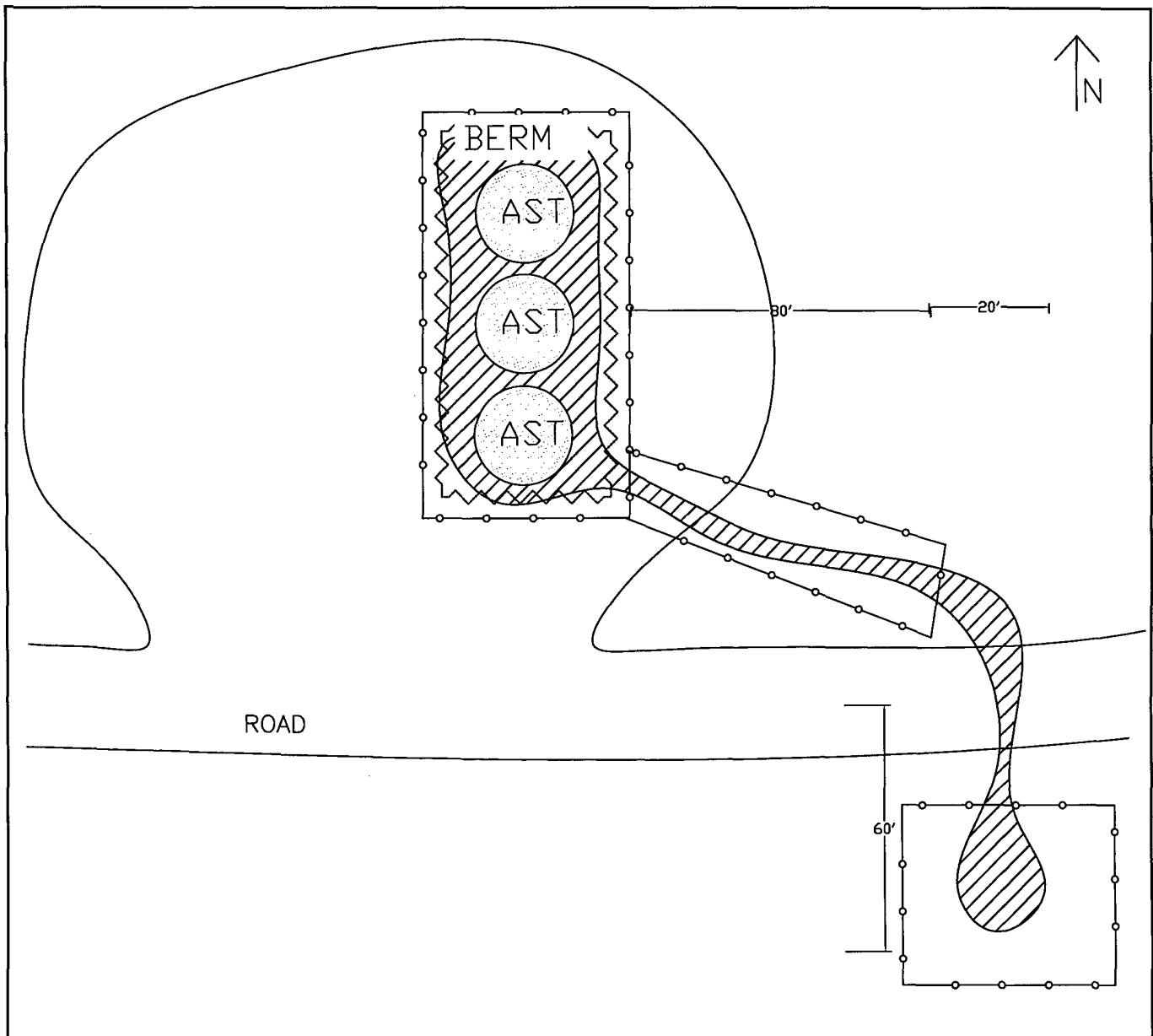
Figure 1

Project# 92115-1346

Date Drawn: 8-13-10

Drawn By:
 Sarah Rowland

Project Manager:
 Greg Crabtree



LEGEND



RELEASE FLOW PATH



FENCE

INITIAL MAP – SITE ASSESSMENT CONOCOPHILLIPS

SAN JUAN 32-9 TANK BATTERY (HBR)
SEC 33 TWN 32N RNG 9W
SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS

PROJECT NO92115-1346

FIGURE NO. 2

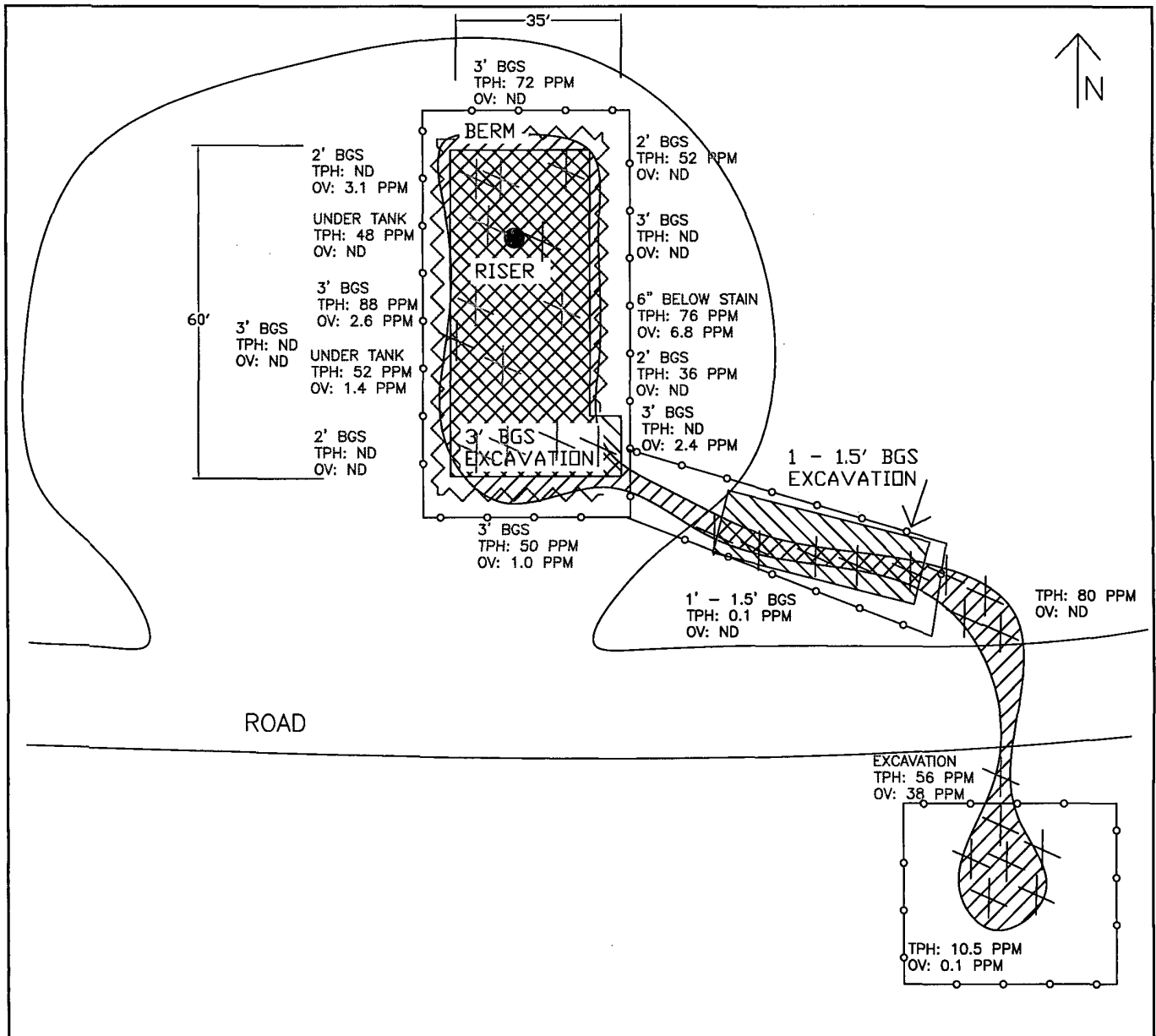
REV

REVISIONS

NO.	DATE	BY	DESCRIPTION
MAP DRWN	SR	8/13/10	BASE DRWN

ENVIRONMENTAL SCIENTISTS & ENGINEERS
ENVIROTECH

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87410 505-632-0615



LEGEND



RELEASE FLOW PATH



FENCE



7/2/2010 CLOSURE SAMPLE



7/6/2010 CLOSURE SAMPLE



7/13/2010 CLOSURE SAMPLE



7/23/2010 CLOSURE SAMPLE

SITE MAP - CONFIRMATION CONOCOPHILLIPS

SAN JUAN 32-9 TANK BATTERY (HBR)
SEC 33 TWN 32N RNG 9W
SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS

PROJECT N092115-1346

FIGURE NO. 3

REV

REVISIONS

NO.	DATE	BY	DESCRIPTION
MAP DRWN	SR	8/13/10	BASE DRWN

ENVIRONMENTAL SCIENTISTS & ENGINEERS
ENVIROTECH

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87410 505-632-0615

TABLES

Table 1, Summary of Analytical Results

Table 1, Summary of Analytical Results

ConocoPhillips

San Juan 32-9 Tank Battery (hBr)

Spill Assessment and Closure Report

Project Number 92115-1346

Date	Sample Description	Sample Number	PID (ppm)	OV (ppm)	USEPA Method 418.1 TPH (ppm)	USEPA Method 8015 TPH (ppm)	Chlorides (ppm)	USEPA Method 8021	
								Benzene (ppm)	BTEX (ppm)
NA	New Mexico Oil Conservation Division Standards	NA	100		100	100	NA	10	50
6/29/2010	Surface (Inside Berm)	1	27.4		7610	NS	NS	NS	NS
6/29/2010	4" BGS (Inside Berm)	2	1.6		128	NS	NS	NS	NS
6/29/2010	Path 4" BGS	3	5.6		5888	NS	NS	NS	NS
6/29/2010	Path North of Road	4	3.2		640	NS	NS	NS	NS
6/29/2010	Visual End (of Flow Path)	5	2.4		2208	NS	NS	NS	NS
7/2/2010	Visual End (South of Road)	1	0.1		124	10.5	110	NS	NS
7/2/2010	Path North of Road	2	ND		80	NS	60	NS	NS
7/2/2010	Path 4" BGS (Fenced Area)	3	1.6		18560	NS	NS	NS	NS
7/2/2010	Path 1' - 1.5' BGS (Fenced Area)	4	ND		152	0.1	40	NS	NS
7/6/2010	North East Excavation	1	ND		52	NS	50	NS	NS
7/6/2010	North West Excavation	2	3.1		124	ND	40	NS	NS
7/6/2010	South East Excavation	3	ND		36	NS	100	NS	NS
7/6/2010	South West Excavation	4	ND		192	ND	60	NS	NS
7/13/2010	West Stain	1	128		3960	NS	NS	NS	NS
7/13/2010	North Excavation	2	ND		72	NS	NS	NS	NS
7/13/2010	South Excavation	3	1		60	NS	NS	NS	NS
7/13/2010	West Excavation	4	2.6		88	NS	NS	NS	NS
7/13/2010	Under North AST	5	ND		48	NS	NS	NS	NS
7/13/2010	Under South AST	6	1.4		52	NS	NS	NS	NS
7/13/2010	South Excavation (Surface)	7	38		56	NS	NS	NS	NS
7/13/2010	Stain 6" BGS (by South AST)	8	6.8		76	NS	NS	NS	NS
7/23/2010	2" Riser (Source)	1	ND		2680	NS	NS	NS	NS
7/23/2010	Excavated Area (Southeast Berm)	2	2.4		236	ND	NS	ND	0.0049
7/23/2010	West Berm	3	ND		376	ND	NS	ND	0.0011
7/23/2010	Source Area	4	NS		368	ND	NS	ND	ND

*Values in **BOLD** above regulatory limits

*Closure sample

*NS - Parameter not sampled *ND - Parameter not detected

APPENDIX A

Analytical Results



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	1	Date Reported:	8/13/2010
Sample ID:	Surface (Inside Berm)	Date Sampled:	6/29/2010
Sample Matrix:	Soil	Date Analyzed:	6/29/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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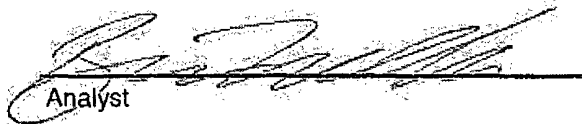
Total Petroleum Hydrocarbons	7,610	5.0
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ND = Parameter not detected at the stated detection limit.


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

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Sarah Rowland, EIT
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	2	Date Reported:	8/13/2010
Sample ID:	4" BGS (Inside Berm)	Date Sampled:	6/29/2010
Sample Matrix:	Soil	Date Analyzed:	6/29/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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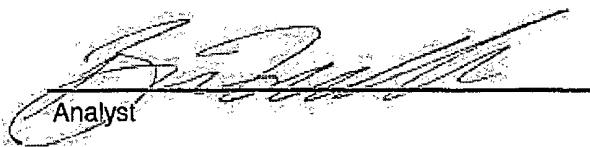
Total Petroleum Hydrocarbons	128	5.0
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ND = Parameter not detected at the stated detection limit.

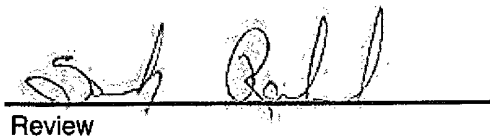
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Sarah Rowland, EIT
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	3	Date Reported:	8/13/2010
Sample ID:	Path 4" BGS	Date Sampled:	6/29/2010
Sample Matrix:	Soil	Date Analyzed:	6/29/2010
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	5,890	5.0
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ND = Parameter not detected at the stated detection limit.

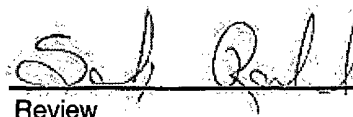
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Sarah Rowland, EIT
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	4	Date Reported:	8/13/2010
Sample ID:	Path North of Road	Date Sampled:	6/29/2010
Sample Matrix:	Soil	Date Analyzed:	6/29/2010
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	640	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Sarah Rowland, EIT
Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	5	Date Reported:	8/13/2010
Sample ID:	Visual End (of Flow Path)	Date Sampled:	6/29/2010
Sample Matrix:	Soil	Date Analyzed:	6/29/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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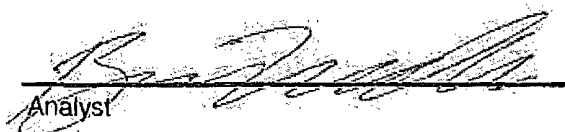
Total Petroleum Hydrocarbons	2,210	5.0
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ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Barian Williamson
Printed


Review

Sarah Rowland, EIT
Printed



CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 29-Jun-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	196	195
	500	
	1000	

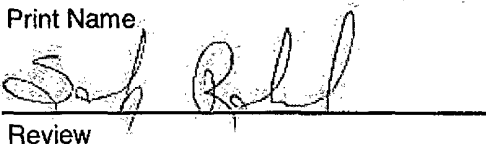
The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.


Analyst

8/13/2010
Date

Barian Williamson

Print Name


Review

8/13/2010
Date

Sarah Rowland, EIT

Print Name



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	1	Date Reported:	8/13/2010
Sample ID:	Visual End (South of Road)	Date Sampled:	7/2/2010
Sample Matrix:	Soil	Date Analyzed:	7/2/2010
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	124	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Rene Garcia Reyes
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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	2	Date Reported:	8/13/2010
Sample ID:	Path North of Road	Date Sampled:	7/2/2010
Sample Matrix:	Soil	Date Analyzed:	7/2/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

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

Total Petroleum Hydrocarbons	80	5.0
-------------------------------------	-----------	------------

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Rene Garcia Reyes

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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client: ConocoPhillips
Sample No.: 3
Sample ID: Path 4" BGS
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 92115-1346
Date Reported: 8/13/2010
Date Sampled: 7/2/2010
Date Analyzed: 7/2/2010
Analysis Needed: TPH-418.1

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

Total Petroleum Hydrocarbons	18,600	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Rene Garcia Reyes

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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	4	Date Reported:	8/13/2010
Sample ID:	Path 1' - 1.5' BGS	Date Sampled:	7/2/2010
Sample Matrix:	Soil	Date Analyzed:	7/2/2010
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	152	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 2-Jul-10

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	197	196
	500	
	1000	

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



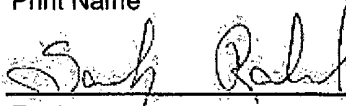
Analyst

8/13/2010

Date

Rene Garcia Reyes

Print Name



Review

8/13/2010

Date

Sarah Rowland, EIT

Print Name



Field Chloride

Client: ConocoPhillips
Sample No.: 1
Sample ID: Background
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 92115-1346
Date Reported: 8/13/2010
Date Sampled: 7/2/2010
Date Analyzed: 7/2/2010
Analysis Needed: Chloride

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Field Chloride	ND	27.0

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**



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Field Chloride

Client: ConocoPhillips
Sample No.: 2
Sample ID: South of Road
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 92115-1346
Date Reported: 8/13/2010
Date Sampled: 7/2/2010
Date Analyzed: 7/2/2010
Analysis Needed: Chloride

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Field Chloride	90	27.0

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**

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Field Chloride

Client: ConocoPhillips
Sample No.: 3
Sample ID: North of Road
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

Project #: 92115-1346
Date Reported: 8/13/2010
Date Sampled: 7/2/2010
Date Analyzed: 7/2/2010
Analysis Needed: Chloride

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

Field Chloride

47

27.0

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**

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Field Chloride

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	4	Date Reported:	8/13/2010
Sample ID:	Fenced Area	Date Sampled:	7/2/2010
Sample Matrix:	Soil	Date Analyzed:	7/2/2010
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

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

Field Chloride	153	27.0
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ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**

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Field Chloride

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	5	Date Reported:	8/13/2010
Sample ID:	Fenced Area 1'-1.5' BGS	Date Sampled:	7/2/2010
Sample Matrix:	Soil	Date Analyzed:	7/2/2010
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Field Chloride	47	27.0

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**

Analyst

Rene Garcia Reyes

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client: ConocoPhillips
Sample ID: South of Road
Laboratory Number: 55011
Chain of Custody No: 9876
Sample Matrix: Soil
Preservative: Cool
Condition: Intact


Project #: 92115-1346
Date Reported: 07-06-10
Date Sampled: 07-02-10
Date Received: 07-02-10
Date Extracted: 07-05-10
Date Analyzed: 07-05-10
Analysis Requested: 8015 TPH

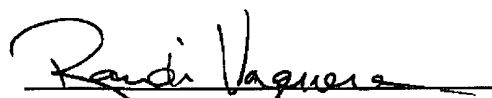
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.0	0.2
Diesel Range (C10 - C28)	9.5	0.1
Total Petroleum Hydrocarbons	10.5	0.2

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 32-9 Tank Btry (hBr)



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

Client: ConocoPhillips
Sample ID: Fenced Area 1'-1.5'
Laboratory Number: 55013
Chain of Custody No: 9876
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

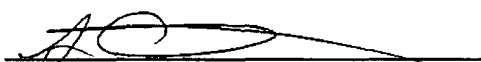
Project #: 92115-1346
Date Reported: 07-06-10
Date Sampled: 07-02-10
Date Received: 07-02-10
Date Extracted: 07-05-10
Date Analyzed: 07-05-10
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	0.1	0.1
Total Petroleum Hydrocarbons	0.1	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 32-9 Tank Btry (hBr)**


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EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-05-10 QA/QC	Date Reported:	07-06-10
Laboratory Number:	54932	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-05-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	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
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	6.5	6.9	6.2%	0 - 30%
Diesel Range C10 - C28	1.5	1.9	26.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	6.5	250	260	101%	75 - 125%
Diesel Range C10 - C28	1.5	250	254	101%	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 54932-54933, 54948, 54951, 54954-54955, 54976, 54988, 55011, 55013


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Review

Chloride

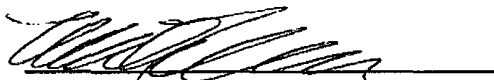
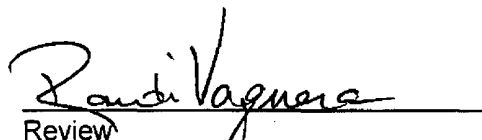
Client: ConocoPhillips
Sample ID: South of Road
Lab ID#: 55011
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Project #: 92115-1346
Date Reported: 07-06-10
Date Sampled: 07-02-10
Date Received: 07-02-10
Date Analyzed: 07-06-10
Chain of Custody: 9876

Parameter**Concentration (mg/Kg)****Total Chloride****110**

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

Comments: **San Juan 32-9 Tank Btry (hBr)**


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Chloride

Client: ConocoPhillips
Sample ID: North of Road
Lab ID#: 55012
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Project #: 92115-1346
Date Reported: 07-06-10
Date Sampled: 07-02-10
Date Received: 07-02-10
Date Analyzed: 07-06-10
Chain of Custody: 9876

Parameter


Concentration (mg/Kg)

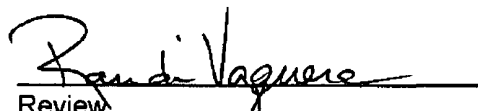
Total Chloride

60

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

Comments: **San Juan 32-9 Tank Btry (hBr)**


Analyst


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Chloride

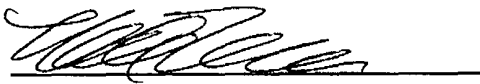
Client: ConocoPhillips
Sample ID: Fenced Area 1'-1.5'
Lab ID#: 55013
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

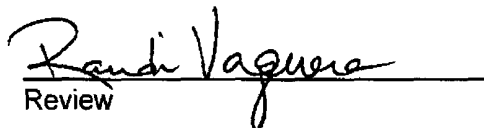
Project #: 92115-1346
Date Reported: 07-06-10
Date Sampled: 07-02-10
Date Received: 07-02-10
Date Analyzed: 07-06-10
Chain of Custody: 9876

Parameter	Concentration (mg/Kg)
Total Chloride	40

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

Comments: San Juan 32-9 Tank Btry (hBr)


Analyst


Review

09876

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RUSH



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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	1	Date Reported:	8/13/2010
Sample ID:	Northeast Excavation	Date Sampled:	7/6/2010
Sample Matrix:	Soil	Date Analyzed:	7/6/2010
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	52	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Rene Garcia Reyes

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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	2	Date Reported:	8/13/2010
Sample ID:	Northwest Excavation	Date Sampled:	7/6/2010
Sample Matrix:	Soil	Date Analyzed:	7/6/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

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

Total Petroleum Hydrocarbons	124	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	3	Date Reported:	8/13/2010
Sample ID:	Southeast Excavation	Date Sampled:	7/6/2010
Sample Matrix:	Soil	Date Analyzed:	7/6/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Rene Garcia Reyes

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EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	4	Date Reported:	8/13/2010
Sample ID:	Southwest Excavation	Date Sampled:	7/6/2010
Sample Matrix:	Soil	Date Analyzed:	7/6/2010
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	192	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 6-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

Rene Garcia Reyes

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Print Name

Date

8/13/2010

Date

8/13/2010



Field Chloride

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	1	Date Reported:	8/13/2010
Sample ID:	Northeast Excavation	Date Sampled:	7/6/2010
Sample Matrix:	Soil	Date Analyzed:	7/6/2010
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

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

Field Chloride

40

27.0

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**

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Field Chloride

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	2	Date Reported:	8/13/2010
Sample ID:	Northwest Excavation	Date Sampled:	7/6/2010
Sample Matrix:	Soil	Date Analyzed:	7/6/2010
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Field Chloride	33	27.0

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**

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Field Chloride

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	3	Date Reported:	8/13/2010
Sample ID:	Southeast Excavation	Date Sampled:	7/6/2010
Sample Matrix:	Soil	Date Analyzed:	7/6/2010
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

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

Field Chloride	47	27.0
----------------	----	------

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**

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Field Chloride

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	4	Date Reported:	8/13/2010
Sample ID:	Southwest Excavation	Date Sampled:	7/6/2010
Sample Matrix:	Soil	Date Analyzed:	7/6/2010
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

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

Field Chloride

33

27.0

ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery**

Analyst

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

Client: ConocoPhillips
Sample ID: NW
Laboratory Number: 55017
Chain of Custody No: 9883
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

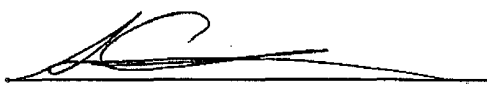
Project #: 92115-1346
Date Reported: 07-07-10
Date Sampled: 07-06-10
Date Received: 07-06-10
Date Extracted: 07-06-10
Date Analyzed: 07-07-10
Analysis Requested: 8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	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 32-9 Tank Btry (hBr)**


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

Client: ConocoPhillips
Sample ID: SW
Laboratory Number: 55019
Chain of Custody No: 9883
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

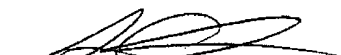
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Date Reported: 07-07-10
Date Sampled: 07-06-10
Date Received: 07-06-10
Date Extracted: 07-06-10
Date Analyzed: 07-07-10
Analysis Requested: 8015 TPH

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

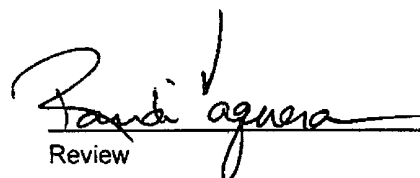
ND - Parameter not detected at the stated detection limit.

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

Comments: San Juan 32-9 Tank Btry (hBr)



Analyst



Review



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Analytical Laboratory

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-06-10 QA/QC	Date Reported:	07-07-10
Laboratory Number:	55017	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-07-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	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
Total Petroleum Hydrocarbons	ND	0.2

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	254	102%	75 - 125%
Diesel Range C10 - C28	ND	250	253	101%	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 54981, 54956-54957, 55017, 55019-55022.


Analyst


Review



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Chloride

Client: ConocoPhillips
Sample ID: NE
Lab ID#: 55016
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Project #: 92115-1346
Date Reported: 07-07-10
Date Sampled: 07-06-10
Date Received: 07-06-10
Date Analyzed: 07-07-10
Chain of Custody: 9883

Parameter


Concentration (mg/Kg)

Total Chloride


50

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

Comments: **San Juan 32-9 Tank Btry (hBr)**



Analyst



Review



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Chloride

Client: ConocoPhillips
Sample ID: NW
Lab ID#: 55017
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Project #: 92115-1346
Date Reported: 07-07-10
Date Sampled: 07-06-10
Date Received: 07-06-10
Date Analyzed: 07-07-10
Chain of Custody: 9883

Parameter


Concentration (mg/Kg)

Total Chloride

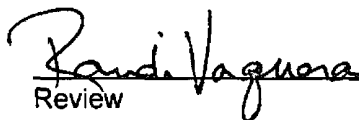
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Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **San Juan 32-9 Tank Btry (hBr)**



Analyst



Review



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Analytical Laboratory

Chloride

Client:	ConocoPhillips	Project #:	92115-1346
Sample ID:	SE	Date Reported:	07-07-10
Lab ID#:	55018	Date Sampled:	07-06-10
Sample Matrix:	Soil	Date Received:	07-06-10
Preservative:	Cool	Date Analyzed:	07-07-10
Condition:	Intact	Chain of Custody:	9883

Parameter

Concentration (mg/Kg)

Total Chloride

100

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

Comments: **San Juan 32-9 Tank Btry (hBr)**

Analyst

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Chloride

Client: ConocoPhillips
Sample ID: SW
Lab ID#: 55019
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Project #: 92115-1346
Date Reported: 07-07-10
Date Sampled: 07-06-10
Date Received: 07-06-10
Date Analyzed: 07-07-10
Chain of Custody: 9883

Parameter

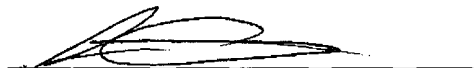
Concentration (mg/Kg)

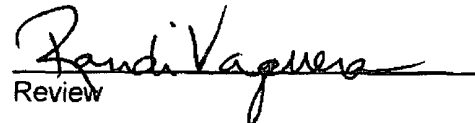
Total Chloride

60

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

Comments: San Juan 32-9 Tank Btry (hBr)


Analyst


Review

0983

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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

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

Project #: 92115-1346
Date Reported: 8/13/2010
Date Sampled: 7/13/2010
Date Analyzed: 7/13/2010
Analysis Needed: TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (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 32-9 Tank Battery (hBr)**

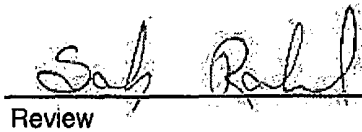
Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Toni McKnight, EIT

Printed



Review

Sarah Rowland, EIT

Printed



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	2	Date Reported:	8/13/2010
Sample ID:	North Excavation	Date Sampled:	7/13/2010
Sample Matrix:	Soil	Date Analyzed:	7/13/2010
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	72	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Toni McKnight, EIT
Printed



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Sarah Rowland, EIT
Printed



EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	3	Date Reported:	8/25/2010
Sample ID:	South Excavation	Date Sampled:	7/13/2010
Sample Matrix:	Soil	Date Analyzed:	7/13/2010
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	60	5.0
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ND = Parameter not detected at the stated detection limit.

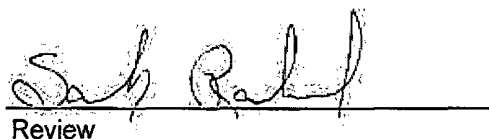
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Toni McKnight, EIT
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Sarah Rowland, EIT
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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	4	Date Reported:	8/13/2010
Sample ID:	West Excavation	Date Sampled:	7/13/2010
Sample Matrix:	Soil	Date Analyzed:	7/13/2010
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	88	5.0
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ND = Parameter not detected at the stated detection limit.

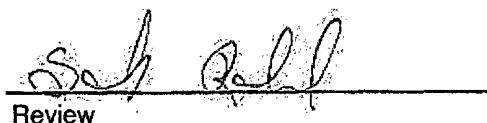
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

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EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	5	Date Reported:	8/13/2010
Sample ID:	Under North AST	Date Sampled:	7/13/2010
Sample Matrix:	Soil	Date Analyzed:	7/13/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	6	Date Reported:	8/13/2010
Sample ID:	Under South AST	Date Sampled:	7/13/2010
Sample Matrix:	Soil	Date Analyzed:	7/13/2010
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	52	5.0
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ND = Parameter not detected at the stated detection limit.

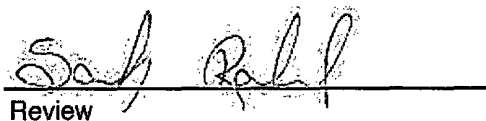
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	7	Date Reported:	8/13/2010
Sample ID:	South Excavation (South of Road)	Date Sampled:	7/13/2010
Sample Matrix:	Soil	Date Analyzed:	7/13/2010
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	56	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 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Toni McKnight, EIT
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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	ConocoPhillips	Project #:	92115-1346
Sample No.:	8	Date Reported:	8/13/2010
Sample ID:	Stain 6" BGS (by South AST)	Date Sampled:	7/13/2010
Sample Matrix:	Soil	Date Analyzed:	7/13/2010
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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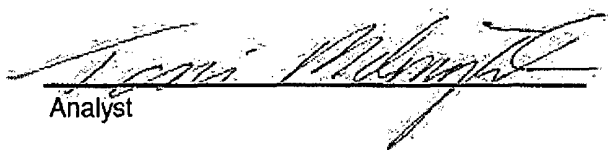
Total Petroleum Hydrocarbons	76	5.0
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ND = Parameter not detected at the stated detection limit.

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

Comments: **San Juan 32-9 Tank Battery (hBr)**

Instrument calibrated to 200 ppm standard. Zeroed before each sample.


Analyst

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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 13-Jul-10

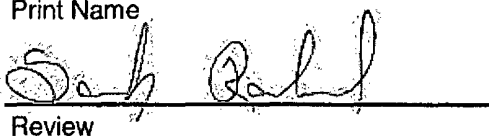
Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	220
	200	
	500	
	1000	

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


Analyst

8/13/2010
Date

Toni McKnight, EIT
Print Name


Review

8/13/2010
Date

Sarah Rowland, EIT
Print Name