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 August 8, 2011

Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 East 30th St, Farmington, NM**	Telephone No. **(505) 258-1607**
Facility Name: **AXI Apache K #5**	Facility Type: **Gas Well**

Surface Owner **Jicarilla**	Mineral Owner **Jicarilla**	API No. **3003906600**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	**10**	**26N**	**05W**	**1569**	**North**	**1190**	**East**	**Rio Arriba**

Latitude 36.504783 Longitude -107. 341860

NATURE OF RELEASE

Type of Release **BGT Closure - Historic**	Volume of Release **Unknow**	Volume Recovered **103 c/yds**
Source of Release **BGT**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **01/25/2011**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **N/A**	
By Whom? **N/A**	Date and Hour **N/A**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

If a Watercourse was Impacted, Describe Fully.*
N/A

OIL CONS. DIV DIST. 3
AUG 03 2016

Describe Cause of Problem and Remedial Action Taken.*
Historic contamination discovered during BGT closure activities.

Describe Area Affected and Cleanup Action Taken.*
Excavation was 20' x 20' x 7.5' Deep. Approximately 103 c/yds contaminated soil was transported to Envirotech Land Farm. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review.

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:	OIL CONSERVATION DIVISION
Printed Name: **Lisa Hunter**	Approved by Environmental Specialist:
Title: **Field Environmental Specialist**	Approval Date: 9/2/2016 Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval: NVF1624641683 Attached ☐
Date: **August 1, 2016** Phone: **(505) 258-1607**	

* Attach Additional Sheets If Necessary

70

envirotech

BELOW GRADE TANK CLOSURE AND CONFIRMATION SAMPLING REPORT

LOCATION:
CONOCOPHILLIPS
AXI APACHE K #5
SECTION 10, TOWNSHIP 26 NORTH, RANGE 5 WEST
RIO ARRIBA COUNTY, NEW MEXICO

CONTRACTED BY:
CONOCOPHILLIPS
MS. KELSI HARRINGTON
3401 EAST 30TH STREET
FARMINGTON, NEW MEXICO 87401

PROJECT NUMBER 96052-1875
JANUARY 2011

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

envirotech

July 11, 2011

Project No. 96052-1875

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

Phone: (505) 599-3403

RE: BELOW GRADE TANK CLOSURE AND CONFIRMATION SAMPLING REPORT FOR THE AXI APACHE K #5 WELL SITE, RIO ARRIBA COUNTY, NEW MEXICO

Dear Ms. Harrington,

Enclosed please find the *Below Grade Tank Closure and Confirmation Sampling Report* detailing activities conducted at the Axi Apache K #5 located in Section 10, Township 26 North, Range 5 West, Rio Arriba 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.

Brian Williamson
Senior Environmental Field Technician
bwilliamson@envirotech-inc.com

Enclosures: *Spill Assessment and Closure Report*

Cc: Client File 96052

CONOCOPHILLIPS
BGT CLOSURE AND CONFIRMATION SAMPLING REPORT
AXI APACHE K #5
SECTION 10, TOWNSHIP 26 NORTH, RANGE 5 WEST
RIO ARRIBA COUNTY, NEW MEXICO

TABLE OF CONTENTS

INTRODUCTION

Envirotech, Inc. of Farmington, New Mexico, was contracted by ConocoPhillips to conduct below grade tank (BGT) closure and confirmation sampling activities at the Axi Apache K #5 well site located in Section 10, Township 26 North, Range 5 West, Rio Arriba County, New Mexico; see enclosed ***Figure 1, Vicinity Map***. Activities included sample collection and analysis, documentation and reporting.

ACTIVITIES PERFORMED

Envirotech, Inc. personnel arrived on site January 25, 2011, to perform BGT closure activities. A five (5)-point composite sample was collected from beneath the former BGT. The sample was screened in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, for organic vapors using a photoionization detector (PID), and chlorides. Additionally, the sample was placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015, for benzene and BTEX using USEPA Method 8021, and for total chlorides using USEPA Method 4500. The sample returned results below the regulatory standards for benzene and BTEX and for chlorides, but above the regulatory standard for TPH, confirming a release had occurred; see enclosed ***Appendix A, Analytical Results***.

Envirotech, Inc. personnel returned to the site January 28, 2011, to perform spill assessment activities for a condensate leak on an above ground storage tank (AST). Upon Envirotech personnel's arrival, a brief site assessment was conducted. Due to the location of the site on the Jicarilla Apache Indian Reservation, the cleanup standard was determined to be 100 ppm TPH and 100 ppm organic vapors. Eight (8) samples were collected for the spill assessment in the above ground storage tank footprint. One (1) five (5)-point composite sample was collected from the surface of the visual staining, one (1) sample was collected two (2) feet below ground surface (BGS) in the tank footprint where sandstone was encountered, one (1) sample was collected from each of the north, south, east and west sides of the tank footprint approximately 2.5 feet BGS. Two (2) samples were also collected from the southwest of the southern AST. The samples collected between the tank footprint and the final samples collected in the north, south, east, west and southwest directions were screened in five foot intervals with a PID at 2.5 feet deep. The results of the spill assessment concluded that the spill area was approximately 65 feet by 40 feet by 2.5 feet deep to remove the contaminated soil resulting from the AST condensate leak.

Prior to Envirotech's arrival on January 28, 2011, the below grade tank pit was excavated an additional one (1) foot to approximately 20 feet by 20 feet by 5 feet deep. One (1) five (5)-point composite sample was collected from the bottom of the BGT excavation, one (1) composite sample was collected from walls of the BGT excavation. The bottom composite sample returned results above the regulatory limits for TPH however the wall composite results were above the regulatory limits indicating the need for deeper excavation. The BGT area was excavated an additional two (2) feet for a total depth of seven (7) feet. One (1) bottom composite sample was collected and analyzed in the field for TPH. The sample returned results above the regulatory limits for TPH indicating the need for further excavation. The BGT pit was excavated an

additional 6" deep for a total of 7.5 feet deep. One composite sample was collected from the bottom and one (1) composite sample was collected from the walls of the BGT excavation. The samples were screened in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The samples returned results above the regulatory limits for TPH and organic vapors indicating the need for further excavation. Additionally the bottom composite and the wall composite samples collected from the 7.5 foot bottom and walls of the BGT pit were placed into four (4)-ounce glass jars, capped headspace free, and transported on ice under chain of custody to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015 and for benzene and BTEX using USEPA Method 8021. The samples returned results above the regulatory standards for TPH, and below the regulatory standard for benzene and BTEX. Envirotech, Inc. recommended further excavation of the BGT pit.

Prior to the return of Envirotech, Inc. personnel on February 14, 2011, the above ground storage tank area of release was excavated to an area of approximately 80' x 50' x 4' deep and the BGT pit was excavated an additional 2 feet to an area of 20 feet by 20 feet by 9.5 feet deep. Nine (9) samples were collected from the above ground storage tank excavation and two (2) samples were collected from the BGT excavation; see enclosed ***Field Notes*** for sample locations. The samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. All samples returned results below the regulatory standard for organic vapors. The Section 1 East Wall and Section 3 East Wall samples returned results below the regulatory standard for TPH, while the remaining samples were above the regulatory standard for TPH. In addition, the nine (9) samples that failed in the field; see enclosed ***Analytical Summary***, were collected into four (4)-ounce glass jars, capped headspace free, and transported with ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015. All the samples returned results below the regulatory standard for TPH using USEPA Method 8015; see attached ***Analytical Results***. Therefore, Envirotech, Inc. recommends no further action in regards to this incident.

SUMMARY AND CONCLUSIONS

Below grade tank closure and above ground tank confirmation sampling activities were performed at the Axi Apache K #5 well site located in Section 10, Township 26 North, Range 5 West, Rio Arriba County, New Mexico. The soil from the excavated area was removed to the TNT soil remediation facility. Envirotech, Inc. recommends no further action in regards to this incident.

STATEMENT OF LIMITATIONS

Envirotech, Inc. has completed below grade tank closure and confirmation sampling activities at the Axi Apache K #5 well site located in Section 10, Township 26 North, Range 5 West, Rio Arriba 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,

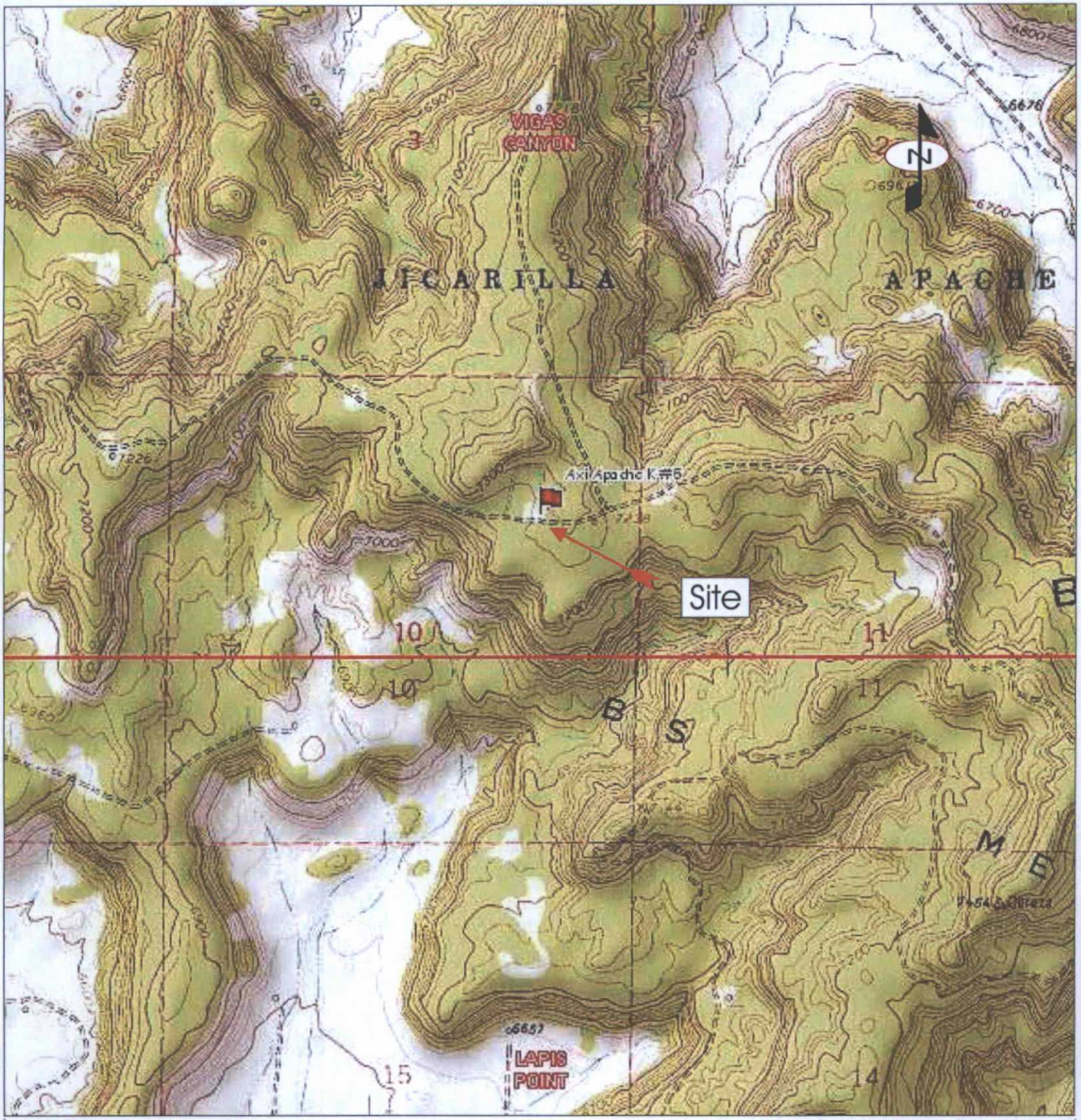
ENVIROTECH, INC.

Barian Williamson
Senior Environmental Field Technician
bwilliamson@envirotech-inc.com

Reviewed by:

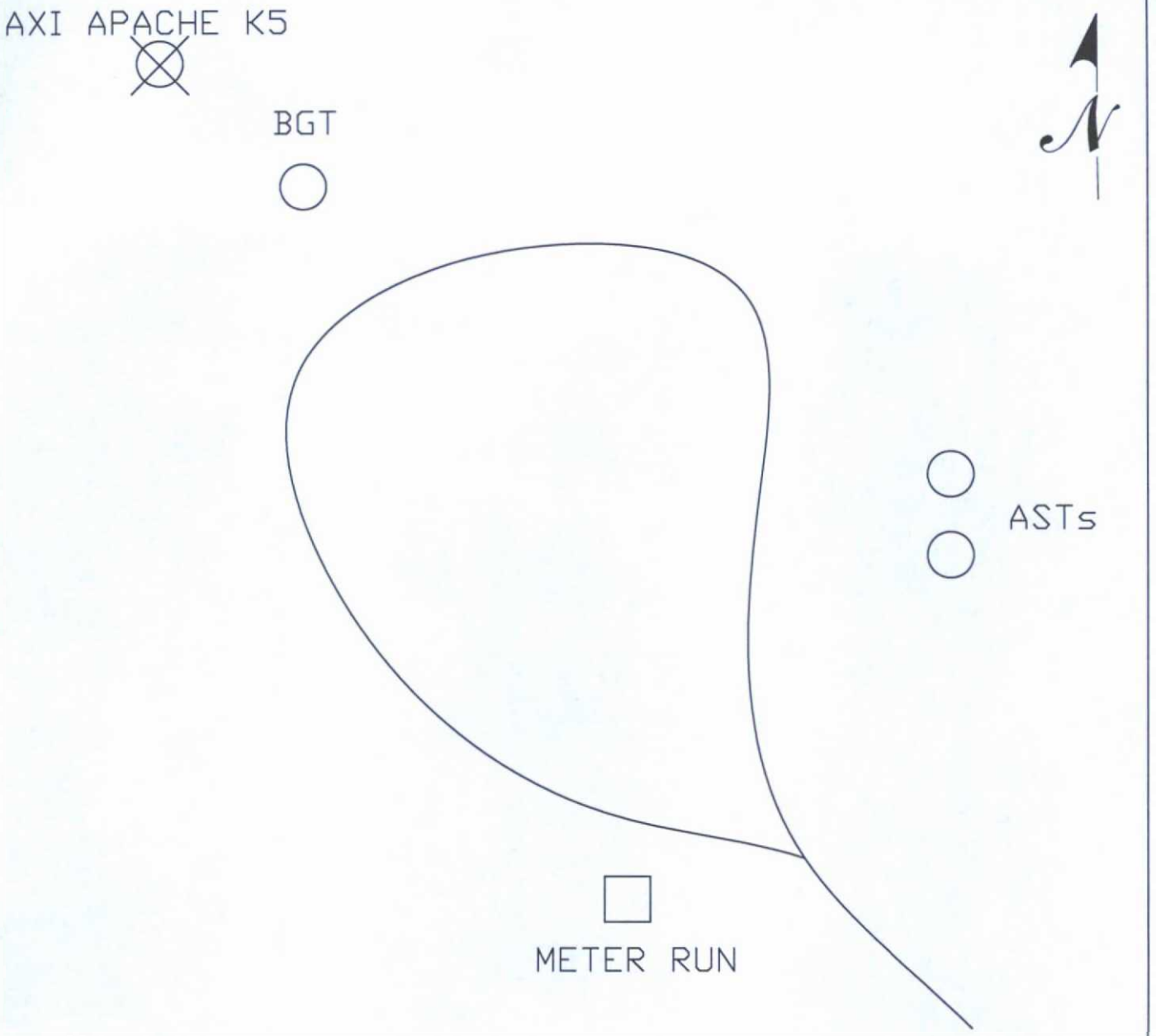
Greg Crabtree, PE
Environmental Manager
gcrabtree@envirotech-inc.com

FIGURES



Source: Jicarilla Apache Indian Reservation, NM 7.5 Minute U.S.G.S. Topographic Quadrangle Map
Scale: 1:24,000 1" = 2000'

ConocoPhillips Axi Apache K #5 Well Site Section 10, Township 26N, Range 5W Rio Arriba County, New Mexico	envirotech 5796 U.S. HIGHWAY 64 Farmington, New Mexico 87401 505.632.0615	Vicinity Map	
PROJECT No 96052-1875 / Date Drawn: 3/3/11		Figure 1	
		DRAWN BY: Torie Thompson	PROJECT MANAGER: Greg Crabtree



SITE MAP
CONOCOPHILLIPS
AXI APACHE K#5
SECTION 10 TOWNSHIP 26N RANGE 5W
RIO ARRIBA COUNTY, NEW MEXICO

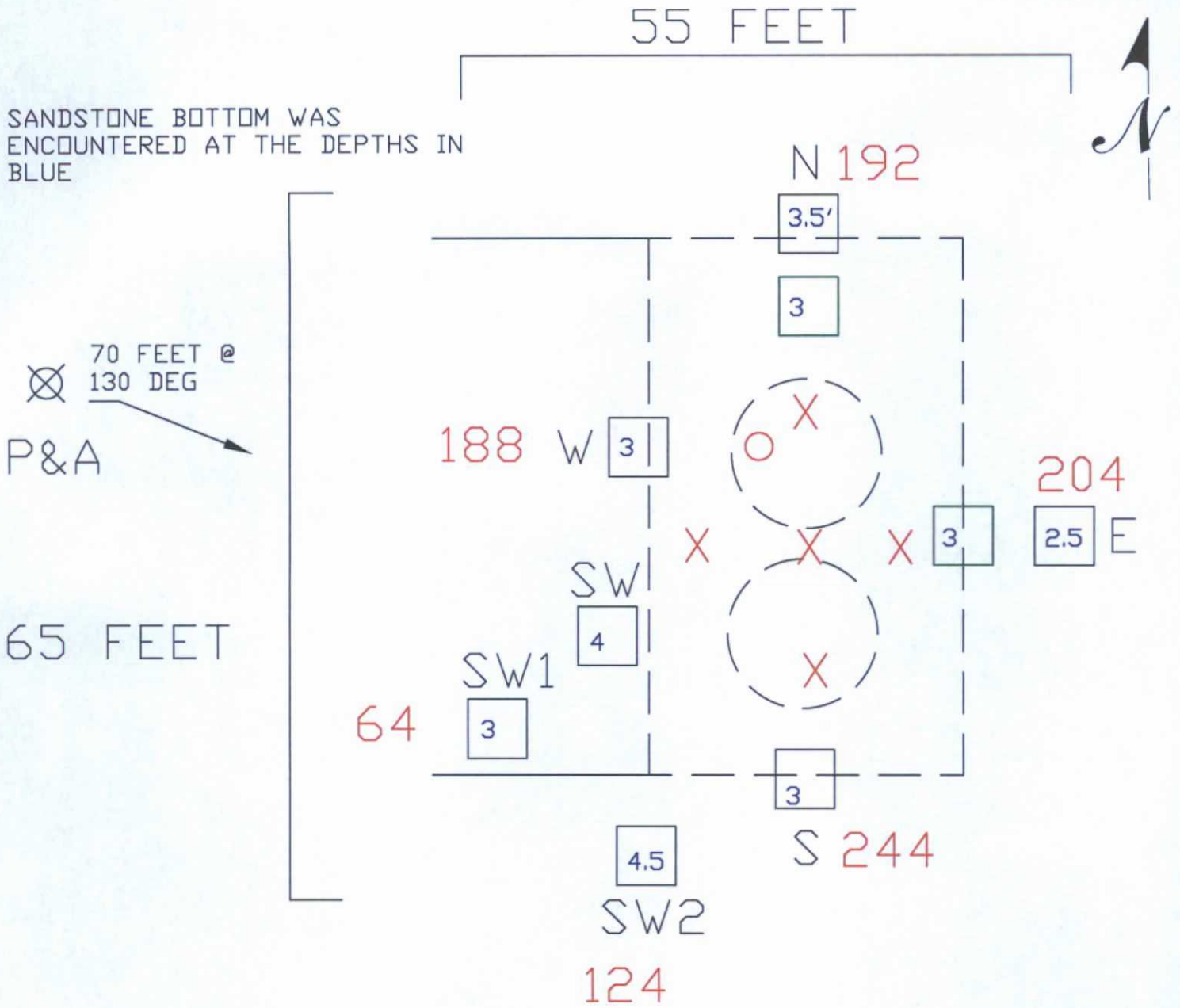
SCALE: NTS	FIGURE NO. 2	REV
PROJECT NO96052-1875		

REVISIONS

NO.	DATE	BY	DESCRIPTION

MAP DRWN	BWW	2-3-11	BASE DRWN		

envirotech
5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615



124 - TPH PPM

SW2 - SAMPLE ID

2.5 - DEPTH OF HOLE IN FEET

○ SAMPLE @ 2.5 FEET

X - 5 POINT SURFACE COMPOSITE

☐ HIGH OV SAMPLES

☐ NO OV SAMPLES

SITE MAP–AST SPILL ASSESS.
CONOCOPHILLIPS
AXI APACHE K#5
SECTION 10 TOWNSHIP 26N RANGE 5W
RIO ARRIBA COUNTY, NEW MEXICO

SCALE: NTS	FIGURE NO. 3	REV
PROJECT NO96052–1875		

REVISIONS

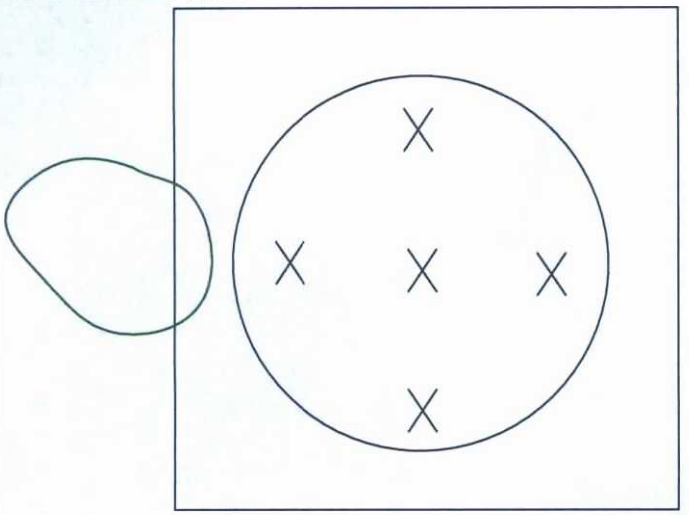
NO.	DATE	BY	DESCRIPTION

MAP DRWN	BWW	1–31–11	BASE DRWN		

envirotech
5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

TOP

SANDSTONE FACE



WALL COMPOSITES

5 FEET BGS 144 PPM; TPH/ 0.0 PPM OV

7.5 FEET BGS; 867 PPM OV

BOTTOM COMPOSITES

3052 PPM TPH; 1250 PPM OV

2728 PPM TPH; 1264 PPM OV

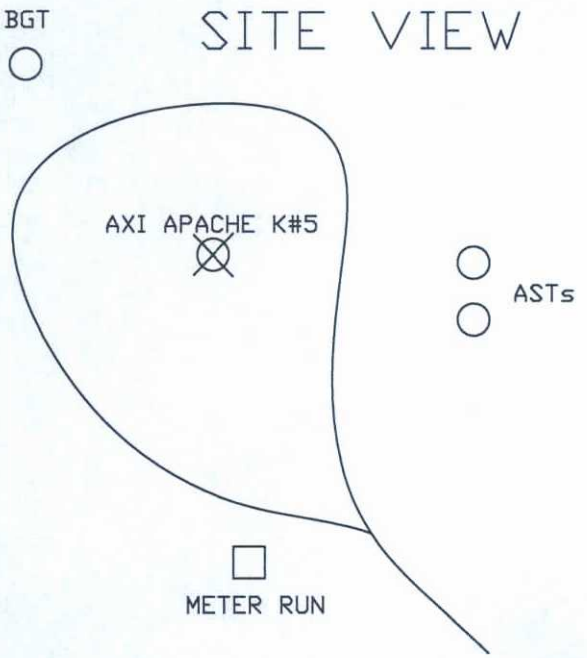
700 PPM TPH; 830 PPM OV

2192 PPM TPH; 1071 PPM OV

PROFILE

BENEATH BGT = 4 FEET BELOW SURFACE
5 FEET BELOW SURFACE
7 FEET BELOW SURFACE
7.5 FEET BELOW SURFACE

SITE VIEW



SITE MAP–BGT EXCAVATION CONOCOPHILLIPS

AXI APACHE K#5

SECTION 10 TOWNSHIP 26N RANGE 5W

RIO ARRIBA COUNTY, NEW MEXICO

SCALE: NTS	FIGURE NO. 4	REV
PROJECT NO96052–1875		

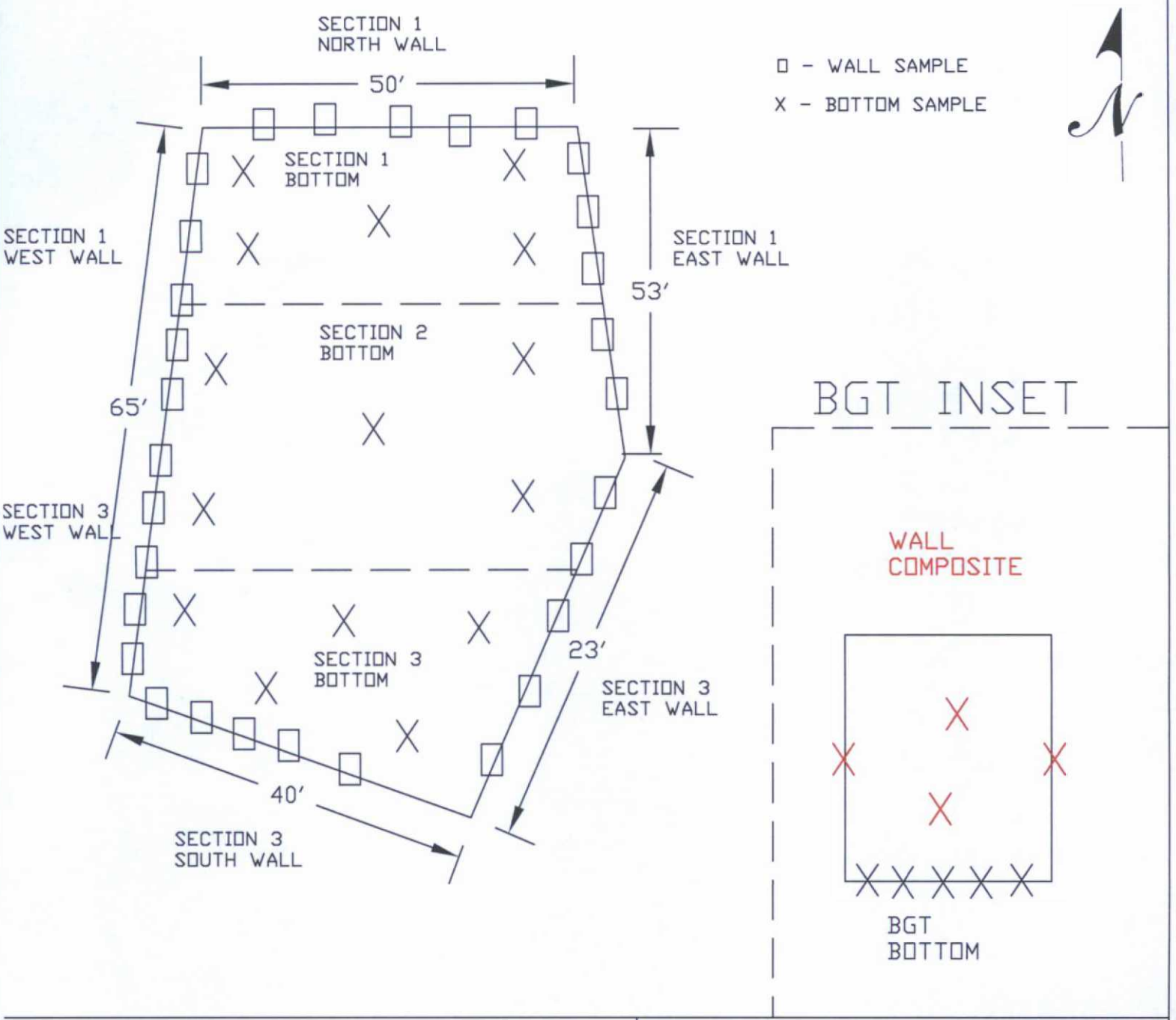
REVISIONS

NO.	DATE	BY	DESCRIPTION

MAP DRWN	BWW	2–3–11	BASE DRWN		

envirotech

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615



— — — SECTIONS

——— WALLS

SITE MAP–FINAL EXCAVATION
CONOCOPHILLIPS
AXI APACHE K#5
SECTION 10 TOWNSHIP 26N RANGE 5W
RIO ARRIBA COUNTY, NEW MEXICO

SCALE: NTS	FIGURE NO. 5	REV
PROJECT N096052–1875		

REVISIONS

NO.	DATE	BY	DESCRIPTION

MAP DRWN	BWW	2–16–11	BASE DRWN		

envirotech
5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

TABLES

Table 1, Summary of Analytical Results
ConocoPhillips
Axi Apache K #5
Below Grade Tank Closure and Confirmation Samplling Report
Project Number 96052-1875

Date	Sample Description	Sample Number	Organic Vapors (ppm)	USEPA Method 418.1 TPH (ppm)	USEPA Method 8015 TPH (ppm)	Method 4500 Chlorides (ppm)	USEPA Method 8021	
							Benzene (ppm)	BTEX (ppm)
NA	New Mexico Oil Conservation Division Standards	NA	100	100	100	NA	10	50
1/25/2011	5 Point Composite	1	**1250**	**3050**	**324**	35	ND	2.83
1/28/2011	5 Point Composite Surface	1	**349**	**3980**	NS	NS	NS	NS
1/28/2011	2' Deep Under AST	2	ND	100	NS	NS	NS	NS
1/28/2011	East 2.5' Deep	3	ND	**204**	NS	NS	NS	NS
1/28/2011	South 2.5' Deep	4	ND	**244**	NS	NS	NS	NS
1/28/2011	West 2.5' Deep	5	ND	**188**	NS	NS	NS	NS
1/28/2011	North 2.5' Deep	6	ND	**192**	NS	NS	NS	NS
1/28/2011	Southwest 1 2.5' Deep	7	ND	64	NS	NS	NS	NS
1/28/2011	Southwest 2 2.5' Deep	8	ND	**124**	NS	NS	NS	NS
1/28/2011	BGT Bottom Composite	9	**1260**	**2730**	NS	NS	NS	NS
1/28/2011	BGT Wall Composite	10	ND	**144**	NS	NS	NS	NS
1/28/2011	BGT Bottom 2' Deeper	11	**830**	**700**	NS	NS	NS	NS
1/28/2011	BGT Bottom @ 7.5'	12	**1070**	**2190**	NS	NS	NS	NS
1/28/2011	BGT Walls @ 7.5'	13	**867**	NS	NS	NS	NS	NS
2/14/2011	Section 1 Bottom	1	0.7	**276**	13.1	NS	NS	NS
2/14/2011	Section 2 Bottom	2	13.5	**508**	45.4	NS	NS	NS
2/14/2011	Section 1 West Wall	3	9.4	**448**	16.1	NS	NS	NS
2/14/2011	Section 1 North Wall	4	1.4	**204**	ND	NS	NS	NS
2/14/2011	Section 1 East Wall	5	30	88	NS	NS	NS	NS
2/14/2011	Section 3 Bottom	6	17.2	**572**	2.6	NS	NS	NS
2/14/2011	Section 3 South Wall	7	17.0	**192**	5.5	NS	NS	NS
2/14/2011	Section 3 East Wall	8	1.6	88	NS	NS	NS	NS
2/14/2011	Section 3 West Wall	9	19.4	**464**	4.9	NS	NS	NS
2/14/2011	BGT Walls	10	0.9	**160**	ND	NS	NS	NS
2/14/2011	BGT Bottom	11	23.3	**368**	ND	NS	NS	NS

*Values in **BOLD** above regulatory limits

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

APPENDIX A

Analytical Results

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	1	Date Reported:	4/27/2011
Sample ID:	5 Pt. Comp	Date Sampled:	1/25/2011
Sample Matrix:	Soil	Date Analyzed:	1/25/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**3,050**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Scott Gonzales
Printed

Review

Robyn Jones
Printed

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

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 25-Jan-11

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	212
	500	
	1000	

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

Analyst

4/27/2011
Date

Scott Gonzales
Print Name

Review

4/27/2011
Date

Robyn Jones
Print Name

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

envirotech

Field Chloride

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	1	Date Reported:	4/27/2011
Sample ID:	BGT Composite	Date Sampled:	1/25/2011
Sample Matrix:	Soil	Date Analyzed:	1/25/2011
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Field Chloride	**40**	**33.0**

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: **Axi Apache K #5**

Analyst

Scott Gonzales
Printed

Review

Robyn Jones
Printed

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	5pt. Comp BGT	Date Reported:	01-26-11
Laboratory Number:	57085	Date Sampled:	01-25-11
Chain of Custody No:	11048	Date Received:	01-25-11
Sample Matrix:	Soil	Date Extracted:	01-25-11
Preservative:	Cool	Date Analyzed:	01-26-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**191**	**0.2**
Diesel Range (C10 - C28)	**132**	**0.1**
Total Petroleum Hydrocarbons	**324**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	01-26-11 QA/QC	Date Reported:	01-26-11
Laboratory Number:	57084	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-26-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	01-26-11	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	01-26-11	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	23.7	23.3	1.7%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	256	103%	75 - 125%
Diesel Range C10 - C28	23.7	250	291	106%	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 57084-57085, 57088-57089, 57092**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	5pt. Comp BGT	Date Reported:	01-26-11
Laboratory Number:	57085	Date Sampled:	01-25-11
Chain of Custody:	11048	Date Received:	01-25-11
Sample Matrix:	Soil	Date Analyzed:	01-26-11
Preservative:	Cool	Date Extracted:	01-25-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**320**	**1.0**
Ethylbenzene	**131**	**1.0**
p,m-Xylene	**1,010**	**1.2**
o-Xylene	**1,370**	**0.9**
Total BTEX	**2,830**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**105 %**
	1,4-difluorobenzene	**109 %**
	Bromochlorobenzene	**111 %**

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	0126BBLK QA/QC	Date Reported:	01-26-11
Laboratory Number:	57084	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-26-11
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	8.4201E+003	8.4370E+003	0.2%	ND	0.1
Toluene	2.7544E+005	2.7599E+005	0.2%	ND	0.1
Ethylbenzene	3.2473E+005	3.2538E+005	0.2%	ND	0.1
p,m-Xylene	3.0645E+005	3.0707E+005	0.2%	ND	0.1
o-Xylene	7.1670E+005	7.1814E+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	10.2	9.2	9.8%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	4.8	4.7	2.1%	0 - 30%	1.2
o-Xylene	3.1	3.0	3.2%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	545	109%	39 - 150
Toluene	10.2	500	513	101%	46 - 148
Ethylbenzene	ND	500	518	104%	32 - 160
p,m-Xylene	4.8	1000	1,120	112%	46 - 148
o-Xylene	3.1	500	549	109%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 57084-57086, 57088-57089, 57092

Analyst

Review

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

envirotech
Analytical Laboratory

Chloride

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	5 Pt. Comp BGT	Date Reported:	01-26-11
Lab ID#:	57085	Date Sampled:	01-25-11
Sample Matrix:	Soil	Date Received:	01-25-11
Preservative:	Cool	Date Analyzed:	01-26-11
Condition:	Intact	Chain of Custody:	11048

Parameter	Concentration (mg/Kg)
Total Chloride	**35**

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., 199

Comments: **Axi apache K #5**

Analyst

Review

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

CHAIN OF CUSTODY RECORD

11048 Rush

Client: ConocoPhillips	Project Name / Location: Axi Apache K #5
Client Address:	Sampler Name: Scott G.
Client Phone No.:	Client No.: 96052-1875

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Preservative ICE	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
5pt. Comp BGT	1-25-11	10:30	57085	(Soil circled) Sludge Solid Aqueous	1-4oz			✓	✓	✓								✓				Y	Y
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	10-25-11	14:16	Trenton Kaol [signature]	10/25/11	14:16
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH

envirotech
Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

ACCENT Printing • Form 28-0807

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	1	Date Reported:	4/27/2011
Sample ID:	5 Pt. Comp. Surface	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**3,980**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	2	Date Reported:	4/27/2011
Sample ID:	2' deep under AST	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**100**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	3	Date Reported:	4/27/2011
Sample ID:	East 2.5' deep	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**204**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	4	Date Reported:	4/27/2011
Sample ID:	South	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**244**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	5	Date Reported:	4/27/2011
Sample ID:	West	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**188**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	6	Date Reported:	4/27/2011
Sample ID:	North	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	7	Date Reported:	4/27/2011
Sample ID:	SW 1	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	8	Date Reported:	4/27/2011
Sample ID:	SW 2	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	9	Date Reported:	4/27/2011
Sample ID:	Bottom Composite	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**2,730**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	10	Date Reported:	4/27/2011
Sample ID:	Wall Composite	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**144**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	11	Date Reported:	4/27/2011
Sample ID:	Bottom 2' deeper	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**700**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1875
Sample No.:	12	Date Reported:	4/27/2011
Sample ID:	Bottom Composite 7.5' deep	Date Sampled:	1/28/2011
Sample Matrix:	Soil	Date Analyzed:	1/28/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**2,190**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 28-Jan-11

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	201
	500	
	1000	

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

Analyst

4/27/2011
Date

Crystal Delgai
Print Name

Review

4/27/2011
Date

Robyn Jones
Print Name

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Bottom	Date Reported:	01-31-11
Laboratory Number:	57122	Date Sampled:	01-28-11
Chain of Custody No:	11079	Date Received:	01-28-11
Sample Matrix:	Soil	Date Extracted:	01-28-11
Preservative:	Cool	Date Analyzed:	01-31-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**1,590**	**0.2**
Diesel Range (C10 - C28)	**206**	**0.1**
Total Petroleum Hydrocarbons	**1,800**	

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: **Axi Apache K #5/BGT**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Wall	Date Reported:	01-31-11
Laboratory Number:	57123	Date Sampled:	01-28-11
Chain of Custody No:	11079	Date Received:	01-28-11
Sample Matrix:	Soil	Date Extracted:	01-28-11
Preservative:	Cool	Date Analyzed:	01-31-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**241**	**0.2**
Diesel Range (C10 - C28)	**103**	**0.1**
Total Petroleum Hydrocarbons	**344**	

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: **Axi Apache K #5/BGT**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	01-31-11 QA/QC	Date Reported:	01-31-11
Laboratory Number:	57116	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-31-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	01-31-11	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	01-31-11	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	6,240	6,470	3.7%	0 - 30%
Diesel Range C10 - C28	451	441	2.2%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	6,240	250	6,970	107%	75 - 125%
Diesel Range C10 - C28	451	250	715	102%	75 - 125%

ND - Parameter not detected at the stated detection limit.

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

Comments: **QA/QC for Samples 57116, 57120-57123**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Bottom	Date Reported:	01-31-11
Laboratory Number:	57122	Date Sampled:	01-28-11
Chain of Custody:	11079	Date Received:	01-28-11
Sample Matrix:	Soil	Date Analyzed:	01-31-11
Preservative:	Cool	Date Extracted:	01-28-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**901**	**1.0**
Ethylbenzene	**1,330**	**1.0**
p,m-Xylene	**23,600**	**1.2**
o-Xylene	**5,330**	**0.9**
Total BTEX	**31,200**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**111 %**
	1,4-difluorobenzene	**109 %**
	Bromochlorobenzene	**108 %**

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: **Axi Apache K #5/BGT**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Wall	Date Reported:	01-31-11
Laboratory Number:	57123	Date Sampled:	01-28-11
Chain of Custody:	11079	Date Received:	01-28-11
Sample Matrix:	Soil	Date Analyzed:	01-31-11
Preservative:	Cool	Date Extracted:	01-28-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**206**	**1.0**
Ethylbenzene	**139**	**1.0**
p,m-Xylene	**2,790**	**1.2**
o-Xylene	**766**	**0.9**
Total BTEX	**3,900**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**94.9 %**
	1,4-difluorobenzene	**90.4 %**
	Bromochlorobenzene	**101 %**

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: **Axi Apache K #5/BGT**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	0131BBLK QA/QC	Date Reported:	01-31-11
Laboratory Number:	57116	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-31-11
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	1.5675E+005	1.5706E+005	0.2%	ND	0.1
Toluene	1.7457E+005	1.7492E+005	0.2%	ND	0.1
Ethylbenzene	1.5361E+005	1.5392E+005	0.2%	ND	0.1
p,m-Xylene	3.5525E+005	3.5596E+005	0.2%	ND	0.1
o-Xylene	1.4429E+005	1.4458E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	2,310	2,250	2.6%	0 - 30%	0.9
Toluene	14,200	13,900	2.1%	0 - 30%	1.0
Ethylbenzene	5,280	5,380	1.9%	0 - 30%	1.0
p,m-Xylene	82,100	82,000	0.1%	0 - 30%	1.2
o-Xylene	15,200	15,800	3.9%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	2,310	500	2,800	100%	39 - 150
Toluene	14,200	500	14,700	100%	46 - 148
Ethylbenzene	5,280	500	5,800	100%	32 - 160
p,m-Xylene	82,100	1000	82,800	99.6%	46 - 148
o-Xylene	15,200	500	15,700	100%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 57116, 57120-57123

Analyst

Review

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

CHAIN OF CUSTODY RECORD

11079

Client: COPC	Project Name / Location: Axi Apache K#5 / BGT
Client Address:	Sampler Name: BBW / C Delgai
Client Phone No.:	Client No.: 96052-1875

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Cool	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
Bottom	1-28-11	14:00	57122	(Soil) Sludge Solid Aqueous	1-4oz			/	/	/												Y	Y
Wall	1-28-11	14:00	57123	(Soil) Sludge Solid Aqueous	1-4oz			/	/	/												Y	Y
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	1-28-11	17:07	[signature]	1/28/11	17:07
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH

envirotech
Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 14-Feb-11

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	197
	500	
	1000	

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

Analyst

4/27/2011
Date

Crystal Delgai
Print Name

Review

4/27/2011
Date

Robyn Jones
Print Name

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	1	Date Reported:	4/27/2011
Sample ID:	Section 1 Bottom	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**276**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	2	Date Reported:	4/27/2011
Sample ID:	Section 2 Bottom	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**508**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	3	Date Reported:	4/27/2011
Sample ID:	Section 1 West Wall	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**448**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	4	Date Reported:	4/27/2011
Sample ID:	Section 1 North Wall	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**204**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	5	Date Reported:	4/27/2011
Sample ID:	Section 1 East Wall	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**88**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	6	Date Reported:	4/27/2011
Sample ID:	Section 3 Bottom	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**572**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	7	Date Reported:	4/27/2011
Sample ID:	Section 3 South Wall	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	8	Date Reported:	4/27/2011
Sample ID:	Section 3 East Wall	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**88**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	ConocPhillips	Project #:	96052-1875
Sample No.:	9	Date Reported:	4/27/2011
Sample ID:	Section 3 West Wall	Date Sampled:	2/14/2011
Sample Matrix:	Soil	Date Analyzed:	2/14/2011
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**464**	**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: **Axi Apache K #5**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Crystal Delgai
Printed

Review

Robyn Jones
Printed

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Section 1 Bottom	Date Reported:	02-16-11
Laboratory Number:	57202	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**13.1**	**0.1**
Total Petroleum Hydrocarbons	**13.1**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Section 1 West Wall	Date Reported:	02-16-11
Laboratory Number:	57203	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**4.9**	**0.2**
Diesel Range (C10 - C28)	**11.2**	**0.1**
Total Petroleum Hydrocarbons	**16.1**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Section 2 Bottom	Date Reported:	02-16-11
Laboratory Number:	57204	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**18.2**	**0.2**
Diesel Range (C10 - C28)	**27.2**	**0.1**
Total Petroleum Hydrocarbons	**45.4**	

ND - Parameter not detected at the stated detection limit.

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

Comments: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Section 3 South Wall	Date Reported:	02-16-11
Laboratory Number:	57205	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**5.5**	**0.1**
Total Petroleum Hydrocarbons	**5.5**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	BGT Bottom Composite	Date Reported:	02-16-11
Laboratory Number:	57206	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	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**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Section 3 Bottom	Date Reported:	02-16-11
Laboratory Number:	57207	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**0.3**	**0.2**
Diesel Range (C10 - C28)	**2.3**	**0.1**
Total Petroleum Hydrocarbons	**2.6**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Section 1 North Wall	Date Reported:	02-16-11
Laboratory Number:	57208	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	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**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	Section 3 West Wall	Date Reported:	02-16-11
Laboratory Number:	57209	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**2.0**	**0.2**
Diesel Range (C10 - C28)	**2.9**	**0.1**
Total Petroleum Hydrocarbons	**4.9**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1875
Sample ID:	BGT Wall Composite	Date Reported:	02-16-11
Laboratory Number:	57210	Date Sampled:	02-14-11
Chain of Custody No:	11137	Date Received:	02-15-11
Sample Matrix:	Soil	Date Extracted:	02-15-11
Preservative:	Cool	Date Analyzed:	02-15-11
Condition:	Intact	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**	

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: **Axi Apache K #5**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	02-15-11 QA/QC	Date Reported:	02-15-11
Laboratory Number:	57194	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	02-15-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	02-15-11	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	02-15-11	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	114	116	1.8%	0 - 30%
Diesel Range C10 - C28	1,360	1,520	11.4%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	114	250	363	100%	75 - 125%
Diesel Range C10 - C28	1,360	250	1,680	104%	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 57192-57196, 57202-57210**

Analyst

Review

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

CHAIN OF CUSTODY RECORD RUSH 11137

Client:	Project Name / Location:
Conocophillips	Axi Apache #5
Client Address:	**Sampler Name:** Barin Williamson
Client Phone No.:	**Client No.:** 96052-1875

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Preservative Cool	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
Section 1 Bottom	2/14/11	12:15	57202	Soil Solid Sludge Aqueous	1-4oz			X	X													Y	Y
Section 1 west wall	2/14/11	12:26	57203	Soil Solid Sludge Aqueous	↓			X	X													↓	↓
Section 2 Bottom	↓	12:18	57204	Soil Solid Sludge Aqueous	↓			X	X														
Section 3 South wall	↓	12:50	57205	Soil Solid Sludge Aqueous	↓			X	X														
BGT Bottom Composite	↓	13:43	57206	Soil Solid Sludge Aqueous	↓			X	X														
Section 3 Bottom	↓	12:47	57207	Soil Solid Sludge Aqueous	↓			X	X														
Section 1 North wall	↓	12:31	57208	Soil Solid Sludge Aqueous	↓			X	X														
Section 3 West wall	↓	13:00	57209	Soil Solid Sludge Aqueous	↓			X	X														
BGT Wall Composite	↓	13:41	57210	Soil Solid Sludge Aqueous	↓			X	X													↓	↓
				Soil Solid Sludge Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	2/14/11		TRENTON KNOCK	2/15/11	7:15
Relinquished by: (Signature)	2/15/11	7:15	Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH

envirotech
Analytical Laboratory
5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

ACCENT Printing • Form 28-0807

APPENDIX B

Field Notes

PAGE NO: 1 OF 2

DATE STARTED: 1-25-11
DATE FINISHED: 1-25-11

ENVIROTECH INC

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64 - 3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

ENVIRONMENTAL SPECIALIST: SR

LAT:
LONG:

FIELD REPORT: BGT / PIT CLOSURE VERIFICATION

LOCATION: NAME: Axi Apache K WELL #: 5 TEMP PIT: PERMANENT PIT: BGT: X
LEGAL ADD: UNIT: SEC: 10 TWP: 26N RNG: 5W PM: NMPM
QTR/FOOTAGE: CNTY: Rio Arriba ST: NM

EXCAVATION APPROX: FT. X FT. X FT. DEEP CUBIC YARDAGE:
DISPOSAL FACILITY: REMEDIATION METHOD:
LAND OWNER: API: BGT / PIT VOLUME: —
CONSTRUCTION MATERIAL: Steel DOUBLE-WALLED, WITH LEAK DETECTION: No

LOCATION APPROXIMATELY: 48 FT. 315° FROM WELLHEAD
DEPTH TO GROUNDWATER:

___ TEMPORARY PIT - GROUNDWATER 50-100 FEET DEEP
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 500 mg/kg

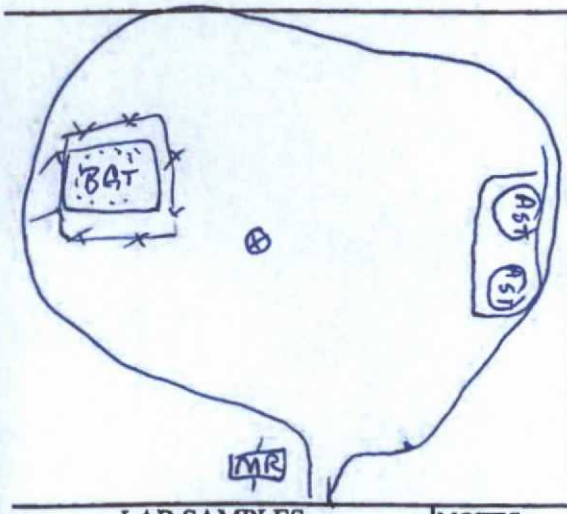
___ TEMPORARY PIT - GROUNDWATER ≥100 FEET DEEP
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 1000 mg/kg

X PERMANENT PIT OR BGT
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, TPH (418.1) ≤ 100 mg/kg, CHLORIDES ≤ 250 mg/kg

FIELD 418.1 ANALYSIS

TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g	mL FREON	DILUTION	READING	CALC. (mg/kg)
10:00	200 STD		-	-	-	212	
10:30	Spl Comp	1	5	20	4	743	3052
		2					
		3					
		4					
		5					
		6					

PERIMETER



FIELD CHLORIDES RESULTS

SAMPLE ID	READING	CALC. (mg/kg)
Spl Comp	1.6	40

PID RESULTS

SAMPLE ID	RESULTS (mg/kg)
Spl. Comp	1250

PROFILE

LAB SAMPLES

SAMPLE ID	ANALYSIS	RESULTS
	BENZENE	
	BTEX	
	GRO & DRO	
	CHLORIDES	

NOTES:
36.50448202 site GPS BGT GPS - 36.504783° Pit well
-107.341123 - 107.341860°
Site located on Jicarilla land, closure 100 ppm TPH 100 ppm OV

WORKORDER # WHO ORDERED

nt: Conoco Phillips

envirotech
(505) 632-0615 (800) 362-1879
5796 U.S. Hwy 64, Farmington, NM 87401

Location No:

C.O.C. No:

ELD REPORT: SPILL CLOSURE VERIFICATION

PAGE NO: 1 OF 1

DATE STARTED: 1-28-11

DATE FINISHED: 1-28-11

ENVIRONMENTAL SPECIALIST: BWW/CD

CATION: NAME: Apache K#5 WELL #: K#5

AD/UNIT: SEC: 10 TWP: 26N RNG: 5 W PM: CNTY: RA ST: NM

/FOOTAGE: CONTRACTOR:

CAVATION APPROX: N/A FT. X FT. X FT. DEEP CUBIC YARDAGE:

POSAL FACILITY: REMEDIATION METHOD:

ND USE: LEASE: LAND OWNER:

USE OF RELEASE: Tank leak MATERIAL RELEASED: Condensate

L LOCATED APPROXIMATELY: 70 FT. 130° FROM

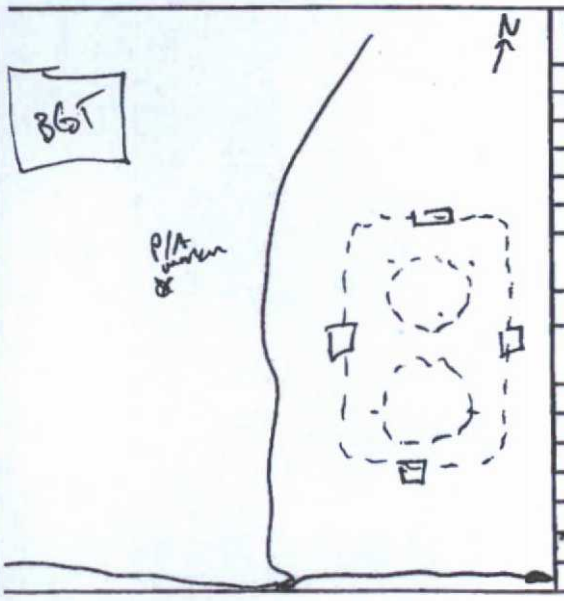
TH TO GROUNDWATER: NEAREST WATER SOURCE: NEAREST SURFACE WATER:

OCD RANKING SCORE: NMOCD TPH CLOSURE STD: PPM

AND EXCAVATION DESCRIPTION: tank had holes in it

SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
200 STD	10:38	—	—	—	—	—	201	
Spt Comp Surface	10:56	(1)		5	20	4	995	3980
2' Deep under Ast	10:58	(2)		5	20	4	25	100
East 2.5' Deep	11:20	(3)		5	20	4	51	204
South	11:35	(4)		5	20	4	61	244
West	11:38	(5)		5	20	4	47	188
NORTH	11:51	(6)		5	20	4	48	192

SPILL PERIMETER



OVM RESULTS

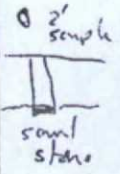
SAMPLE ID	FIELD HEADSPACE PID (ppm)
(1)	3.49
(2)	0.0
(3)	0.0
(4)	0.0
(5)	0.0
(6)	0.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

SPILL PROFILE

x - Spt Surface / 0 - 2' Deep



AVEL NOTES: CALLED OUT: ONSITE:

ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Method 418.1 Analysis Log

Total Petroleum Hydrocarbons

Date 1-28-11 Analyst BWW / CD

Location Ax; Apach KH 5 Instrument INFRACAL # 4

Job No. 96052-1875

Sample No.	Sample Description	Weight (g)	mL. Freon	Dilution	Reading	Calc. TPH (ppm)	OVM (ppm)
7	SW 1	5	20	4	16	64	0.0
8	SW 2	5	20	4	31	124	0.0
9	Bottom Composite	5	20	4	682	2728	1264
10	Wall Composite	5	20	4	36	144	0.0
11	Bottom 2' Deeper	5	20	4	175	700	830
12	Bottom @ 7.5'	5	20	4	548	2192	1071
13	Walls @ 7.5'	5	20	4			867

55

Infrared Spectrophotometer Calibration

New Freon _____

Date Standards Prepared _____

Standard Concentration (ppm)

100 _____ 500 _____

200 _____ 1000 _____

I-Cal RF: _____ C-Cal RF: _____

RSD: _____ % Difference: _____

QA/QC Acceptance Criteria: I-Cal RSD +/- 20% C-Cal Difference +/- 10%