

District I  
 625 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

19

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 <b>ConocoPhillips Company</b>	Contact <b>Shelly Cook-Cowden</b>
Address <b>3401 E. 30<sup>th</sup> St., Farmington, NM 87402</b>	Telephone No. <b>505-324-5140</b>
Facility Name: <b>Krause WN Federal #5E</b>	Facility Type: <b>Gas Well API#3004524121</b>
Surface Owner: <b>Federal</b>	Mineral Owner: <b>Federal</b>
Lease No. <b>NMSF - 078863</b>	

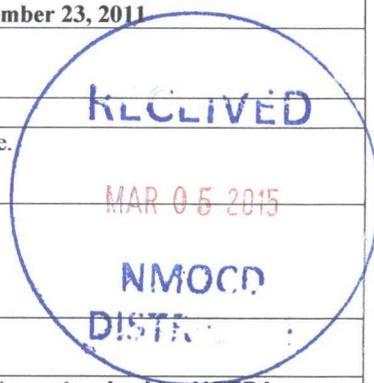
**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>E</b>	<b>28</b>	<b>028N</b>	<b>011W</b>	<b>1785'</b>	<b>North</b>	<b>880'</b>	<b>West</b>	<b>San Juan</b>

Latitude **36.635559° N** Longitude **-108.01458° W**

**NATURE OF RELEASE**

Type of Release - <b>Unknown</b>	Volume of Release - <b>Unknown</b>	Volume Recovered
Source of Release - <b>Below Grade Tank</b>	Date and Hour of Occurrence - <b>Unknown</b>	Date and Hour of Discovery - <b>September 23, 2011</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	



If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* **Below grade tank closure activities.**

Describe Area Affected and Cleanup Action Taken.\* **The below grade tank sample results were above regulatory standard by USEPA method 418.1 for TPH and Organic Vapors, confirming a release. The sample was then transported to the lab and analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required.**

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>Shelly Cook-Cowden</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Shelly Cook-Cowden	Approved by District Supervisor: <i>[Signature]</i>	
Title: Field Environmental Specialist	Approval Date: <i>4/30/15</i>	Expiration Date:
E-mail Address: Shelly.g.Cook-Cowden@ConocoPhillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: November 9, 2011	Phone: 505-324-5140	

\* Attach Additional Sheets If Necessary

#NCS1512041661

16



October 31, 2011

Project Number 96052-2035

Ms. Shelly Cook-Cowden  
Conoco Phillips  
3401 East 30<sup>th</sup> Street  
Farmington, New Mexico 87401

Phone: (505) 599-3403

**RE: BELOW-GRADE TANK CLOSURE DOCUMENTATION FOR THE KRAUSE WN FED 5E  
WELL SITE, SAN JUAN COUNTY, NEW MEXICO**

Dear Ms. Cook-Cowden,

Enclosed please find the field notes and analytical results for below-grade tank (BGT) closure activities performed at the Krause WN Fed 5E well site located in Section 28, Township 28 North, Range 11 West, San Juan County, New Mexico. Prior to Envirotech's arrival on September 23, 2011, the BGT had been removed. One (1) five (5)-point composite sample was collected from beneath the former BGT. The sample was analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, for organic vapors using a photoionization detector (PID), and for 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, BTEX and chlorides but above the regulatory standard of 100 parts per million (ppm) TPH using USEPA Method 418.1, confirming a release did occur.

A brief site assessment was conducted and the regulatory standards were determined to be 100 ppm TPH and 100 ppm organic vapors due to horizontal distance to surface water less than 200 feet and depth to groundwater less than 50 feet, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Spills, Leaks, and Releases. The sample from beneath the former BGT returned results below the regulatory standards for TPH using USEPA Method 8015; see attached *Analytical Results*. Envirotech, Inc. recommends no further action in regards to this incident.

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

Respectfully submitted,  
**ENVIROTECH, INC.**



Noel Burciaga  
Environmental Technician  
[nburciaga@envirotech-inc.com](mailto:nburciaga@envirotech-inc.com)

Enclosures: Analytical Results  
Field Notes

Cc: Client File 96052



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client: ConocoPhillips Project #: 96052-2035  
Sample No.: 1 Date Reported: 9/29/2011  
Sample ID: Bottom 5pt composite Date Sampled: 9/23/2011  
Sample Matrix: Soil Date Analyzed: 9/23/2011  
Preservative: Cool Analysis Needed: TPH-418.1  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	200	5.0

ND = Parameter not detected at the stated detection limit.

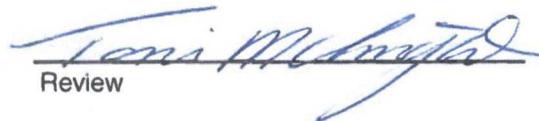
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: Krause WN Fed 5E

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
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CONTINUOUS CALIBRATION  
EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Cal. Date: 23-Sep-11

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	193
	200	
	500	
	1000	

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

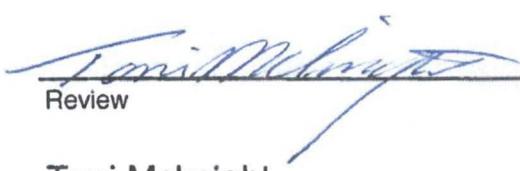
  
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Analyst

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Date

9/29/2011

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\_\_\_\_\_  
Date

9/29/2011

Toni Mcknight  
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Print Name

Print Name



Field Chloride

Client: ConocoPhillips Project #: 96052-2035  
Sample No.: 1 Date Reported: 10/7/2011  
Sample ID: BGT Composite Date Sampled: 9/23/2011  
Sample Matrix: Soil Date Analyzed: 9/23/2011  
Preservative: Cool Analysis Needed: Chloride  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Field Chloride ND 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: Krause WN Fed 5E

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

Client:	ConocoPhillips	Project #:	96052-2035
Sample ID:	Bottom 5pt Comp	Date Reported:	09-26-11
Laboratory Number:	59742	Date Sampled:	09-23-11
Chain of Custody No:	12629	Date Received:	09-23-11
Sample Matrix:	Soil	Date Extracted:	09-23-11
Preservative:	Cool	Date Analyzed:	09-24-11
Condition:	Intact	Analysis Requested:	8015 TPH

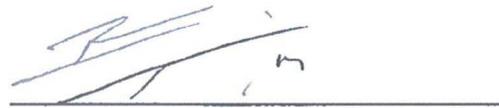
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
<b>Gasoline Range (C5 - C10)</b>	<b>ND</b>	<b>0.2</b>
<b>Diesel Range (C10 - C28)</b>	<b>ND</b>	<b>0.1</b>
<b>Total Petroleum Hydrocarbons</b>	<b>ND</b>	

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: **BGT Closure / Krouse WN Fed 5E**

  
Analyst

  
Review

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

**Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	09-24-11 QA/QC	Date Reported:	09-26-11
Laboratory Number:	59742	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	09-24-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
<b>Gasoline Range C5 - C10</b>	40810	9.996E+02	1.000E+03	0.04%	0 - 15%
<b>Diesel Range C10 - C28</b>	40810	9.996E+02	1.000E+03	0.04%	0 - 15%

<b>Blank Conc. (mg/L - mg/Kg)</b>	Concentration	Detection Limit
<b>Gasoline Range C5 - C10</b>	8.63	0.2
<b>Diesel Range C10 - C28</b>	1.42	0.1

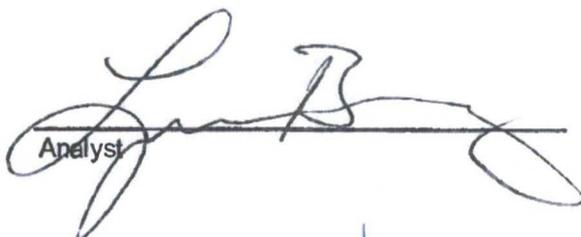
<b>Duplicate Conc. (mg/Kg)</b>	Sample	Duplicate	% Difference	Range
<b>Gasoline Range C5 - C10</b>	ND	ND	0.00%	0 - 30%
<b>Diesel Range C10 - C28</b>	ND	ND	0.00%	0 - 30%

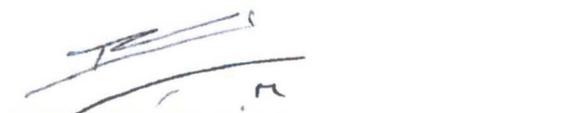
<b>Spike Conc. (mg/Kg)</b>	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
<b>Gasoline Range C5 - C10</b>	ND	250	200	80.0%	75 - 125%
<b>Diesel Range C10 - C28</b>	ND	250	219	87.7%	75 - 125%

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 59733-59738, 59742.

  
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**EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS**

Client:	ConocoPhillips	Project #:	96052-2035
Sample ID:	Bottom 5pt Comp	Date Reported:	09-28-11
Laboratory Number:	59742	Date Sampled:	09-23-11
Chain of Custody:	12629	Date Received:	09-27-11
Sample Matrix:	Soil	Date Analyzed:	09-27-11
Preservative:	Cool	Date Extracted:	09-27-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	1.5	1.0
Ethylbenzene	2.2	1.0
p,m-Xylene	4.9	1.2
o-Xylene	3.5	0.9
<b>Total BTEX</b>	<b>12.1</b>	

ND - Parameter not detected at the stated detection limit.

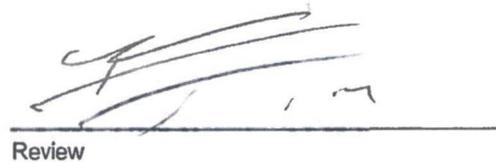
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	87.6 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.4 %

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: **BGT Closure/ Krouse WN Fed. 5E**

  
Analyst

  
Review

Client:	N/A	Project #:	N/A
Sample ID:	0927BBLK QA/QC	Date Reported:	09-28-11
Laboratory Number:	59698	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	09-27-11
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	3.4675E+006	3.4744E+006	0.2%	ND	0.1
Toluene	3.5462E+006	3.5533E+006	0.2%	ND	0.1
Ethylbenzene	3.1438E+006	3.1501E+006	0.2%	ND	0.1
p,m-Xylene	8.5492E+006	8.5664E+006	0.2%	ND	0.1
o-Xylene	2.9831E+006	2.9891E+006	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	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

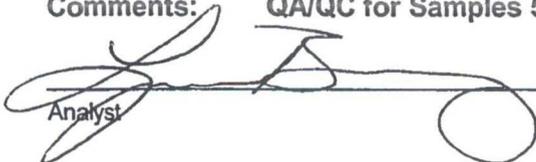
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	474	94.8%	39 - 150
Toluene	ND	500	472	94.4%	46 - 148
Ethylbenzene	ND	500	457	91.4%	32 - 160
p,m-Xylene	ND	1000	939	93.9%	46 - 148
o-Xylene	ND	500	474	94.7%	46 - 148

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 59698-59701, 59742, 59727-59730, 59637-59642**

  
Analyst

  
Review

Client:	ConocoPhillips	Project #:	96052-2035
Sample ID:	Bottom 5pt Comp	Date Reported:	09/26/11
Laboratory Number:	59742	Date Sampled:	09/23/11
Chain of Custody No:	12629	Date Received:	09/23/11
Sample Matrix:	Soil	Date Extracted:	09/26/11
Preservative:	Cool	Date Analyzed:	09/26/11
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>232</b>	<b>36.2</b>

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: **BGT Closure / Krouse WN Fed 5E**




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Analyst




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**EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS  
QUALITY ASSURANCE REPORT**

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	09/26/11
Laboratory Number:	09-26-TPH.QA/QC 59742	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	09/26/11
Preservative:	N/A	Date Extracted:	09/26/11
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	07/25/11	09/26/11	1,810	1,670	7.8%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	36.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	232	217	6.3%	+/- 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	232	2,000	2,530	113%	80 - 120%

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: **QA/QC for Samples 59742.**

  
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Client:	ConocoPhillips	Project #:	96052-2035
Sample ID:	Bottom 5pt Comp	Date Reported:	09/26/11
Lab ID#:	59742	Date Sampled:	09/23/11
Sample Matrix:	Soil	Date Received:	09/23/11
Preservative:	Cool	Date Analyzed:	09/26/11
Condition:	Intact	Chain of Custody:	12629

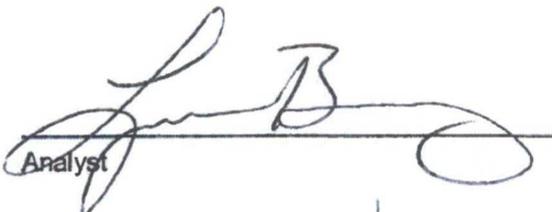
Parameter	Concentration (mg/Kg)
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**Total Chloride**

**10**

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: **BGT Closure / Krouse WN Fed 5E**

  
Analyst

  
Review

# CHAIN OF CUSTODY RECORD

12629

Client: <b>Canoco</b>	Project Name / Location: <b>BGT Closure / Krouse Wn Fed St</b>	<b>Kosh</b>	ANALYSIS / PARAMETERS
Client Address:	Sampler Name: <b>Area B.</b>		
Client Phone No.:	Client No.:		
	<b>96052-2035</b>		

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative			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
						H <sub>2</sub> O <sub>2</sub>	HCl	Other												
<b>Bottom Site Cont</b>	<b>09-23-11</b>	<b>1225</b>	<b>59942</b>	<b>Soil Sludge Aqueous</b>	<b>4oz</b>				<b>X</b>	<b>X</b>							<b>X</b>	<b>X</b>	<b>Y</b>	<b>Y</b>
				Soil Sludge Aqueous																
				Soil Sludge Aqueous																
				Soil Sludge Aqueous																
				Soil Sludge Aqueous																
				Soil Sludge Aqueous																
				Soil Sludge Aqueous																
				Soil Sludge Aqueous																
				Soil Sludge Aqueous																

added  
9/27/11  
Noel  
X PWH

envirotech Analytical Laboratory

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	<b>09-23-11</b>	<b>1:40 PM</b>	<b>Jennifer Nimitz</b>	<b>9-23-11</b>	<b>1:40</b>
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

**Kosh**



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

Ph (505) 632-0615 Fx (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

Client: Conoco



Project No: 96052-2035  
COC No:

**FIELD REPORT: SPILL CLOSURE VERIFICATION**

PAGE NO: 1 OF 1

LOCATION: NAME: Rigose wN fed WELL #: SE  
QUAD/UNIT: SEC: 28 TWP: 28N RNG: 11W PM: CNTY: ST ST: NM  
QTR/FOOTAGE: CONTRACTOR:

DATE STARTED: 09-23-11  
DATE FINISHED: 09-23-11  
ENVIRONMENTAL SPECIALIST: Alper B

EXCAVATION APPROX:      FT. X      FT. X      FT. DEEP CUBIC YARDAGE:  
DISPOSAL FACILITY:      REMEDIATION METHOD:       
LAND USE: LEASE: LAND OWNER:  
CAUSE OF RELEASE: BGT removal MATERIAL RELEASED: produce water  
SPILL LOCATED APPROXIMATELY: FT. FROM  
DEPTH TO GROUNDWATER: < 50' NEAREST WATER SOURCE: NEAREST SURFACE WATER: < 200'  
NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: PPM 100  
SOIL AND EXCAVATION DESCRIPTION:

SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
<u>Top soil</u>	<u>12:12</u>						<u>193</u>	<u>193</u>
<u>Bottom soil Comp</u>	<u>12:25</u>			<u>5g</u>	<u>20mL</u>	<u>1:4</u>	<u>50</u>	<u>200</u>

**SPILL PERIMETER**

**OVM RESULTS**

**SPILL PROFILE**

SAMPLE ID	FIELD HEADSPACE PID (ppm)
<u>Bottom</u>	<u>11</u>

**LAB SAMPLES**

SAMPLE ID	ANALYSIS	TIME

TRAVEL NOTES: \_\_\_\_\_ CALLED OUT: \_\_\_\_\_ ONSITE: \_\_\_\_\_

