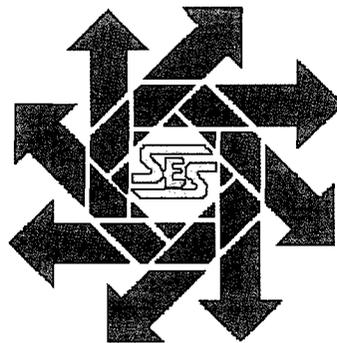


**Cimarex Energy Company  
Palmillo State #2  
Unit J Section 32, Township 18S, Range 29E  
Eddy County, New Mexico**

**Delineation Report/Work Plan**

**April 18, 2011**



**DENIED**

**Prepared for:**

***Cimarex Energy Company  
600 North Marienfeld, Suite 600  
Midland, Texas 79701***

**By:**

***Safety & Environmental Solutions, Inc.  
703 East Clinton Street  
Hobbs, New Mexico 88240  
(575) 397-0510***

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## I. Company Contacts

Company Representative	Company	Telephone	E-mail
James Tinney	Cimarex Energy Co.	575-706-0095	jtinney@cimarex.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

## II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by Cimarex Energy Company to perform a site assessment at the Palmillo State Com #2 located in Unit J Section 32, Township 18 South, and Range 29 East, Eddy County New Mexico.

According the C-141 dated 3.13.11, Mr. Tinney states that a internal corrosion of the 2" x 4" connection on back of oil tank ruptured, in which 285 barrels of crude oil was release and 20 barrels were recovered.

## III. Surface and Ground Water

According the database provided by the New Mexico Office of State Engineer's online database, the closest depth of water in this area located 2.2 miles southwest in section 7 of Township 19 South, Range 29 East. The depth of water is 150' October 1981, primarily used for livestock watering.

## IV. Soils

According to the United States Department of Agriculture Soil Survey for Eddy Area, New Mexico, the surface soils in the area are from the Tonuco Series: Tonuco loamy fine sand. These soils are consisted of moderately dark colored non calcareous soils that have been worked by the wind. This soil occurs on ridges and in swales of uplands east of the Pecos River. All acreage is used for native pasture and wildlife habitat. The root zone is restricted by the depth to caliche. Revegetation is difficult because temperatures are high and rainfall is undependable.

## V. Characterization

The target cleanup levels are reached by the application of the "Guidelines for Remediation of Leaks, Spills and Releases New Mexico Oil Conservation Division (NMOCD) – August 13, 1993 to this site is 5,000 parts per million (ppm) Total Petroleum Hydrocarbons (TPH).

Application of the New Mexico Oil Conservation Division's ranking criteria for contaminated soils at this site is presented below:

<b>Depth to Ground Water:</b>			
(Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	20 points	
	50 feet to 99 feet	10 points	
	>100 feet	0 points	X
<b>Wellhead Protection Area:</b>			
(Less than 200 feet from a private domestic water source; or less than 1000 feet from all other water sources)	Yes	20 points	
	No	0 points	X
<b>Distance to Surface Water:</b>			
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet	20 points	
	200 feet to 1000 feet	10 points	
	>1000 feet	0 points	X
<b>RANKING SCORE (TOTAL POINTS)</b>			<b>0</b>

**VI. Work Performed**

On March 29, 2011 SESI arrived at the location with Gandy's Construction to install test trenches from release area. A representative for Enterprise was onsite to spot and witness excavation around Enterprise line. Three (3) test trenches were installed to depths ranging from 0-10 feet (ft.) below ground surface (bgs). The extent of the back hoe was 10 ft.

TT#1 (east of the tank battery) was excavated to a depth of 3 ft bgs. Heavy staining with minimal was encountered on the surface, at 1-10 ft. there was no visible staining and minimal odor encountered. Three samples were obtained from test trench #1 at depths of 3, 5 and 10 ft.

TT#2 (northeast of the north end of the tank battery) and was excavated to a depth of 5 ft below ground surface. Heavy staining was encountered from the 0-1 ft, from 3-5 ft there was no visible staining and minimal odor encountered. Two samples were obtained from test trench #2 at depths of 3 and 5 ft.

TT#3 (northwest of the tank battery off location pad) and was excavated to a depth of three feet below ground surface. Heavy staining with heavy odor was encountered 0-1 ft; at 3 ft. there was no visible staining and no odor encountered. Two samples were obtained from test trench #3 at depths of 3 and 5 ft.

Mr. Steve King and Mr. James Tinney, Cimarex representatives were onsite. Mr. King requested a background sample outside of the release area. A sample was retrieved at three (3) feet below ground surface.

A total of eight (8) samples were properly preserved and transported under chain of custody to Cardinal Laboratories, Hobbs, New Mexico. The samples were analyzed Chlorides (EPA Method 4500-ClB), Total Petroleum Hydrocarbons (TPH) (EPA Method 418.1) and Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) (EPA Method SW846 8021B). The results of the analysis are as follows:

Lab ID	Sample ID	Cl <sup>-</sup> (mg/kg)	TPH 418.1 (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
Analysis Date:	-	04/01/11	3/31/11	04/01/11	04/01/11	04/01/11	04/01/11
H100630-01	TT#1 3' bgs	1,790	<100	<0.050	<0.050	<0.050	<0.150
H100630-02	TT#1 5' bgs	640	<100	<0.050	<0.050	<0.050	<0.150
H100630-03	TT#1 10' bgs	128	<100	<0.050	<0.050	<0.050	<0.150
H100630-04	TT#2 3' bgs	48.0	1,330	<0.050	<0.050	<0.050	<0.150
H100630-05	TT#2 5' bgs	272	<100	<0.050	<0.050	<0.050	<0.150
H100630-06	TT#3 3' bgs	16.0	8,520	5.56	23.9	6.32	12.2
H100630-07	TT#3 5' bgs	64.0	337	<0.050	<0.050	<0.050	<0.150
H100630-08	Background Sample	256	<100	<0.050	<0.050	<0.050	<0.150

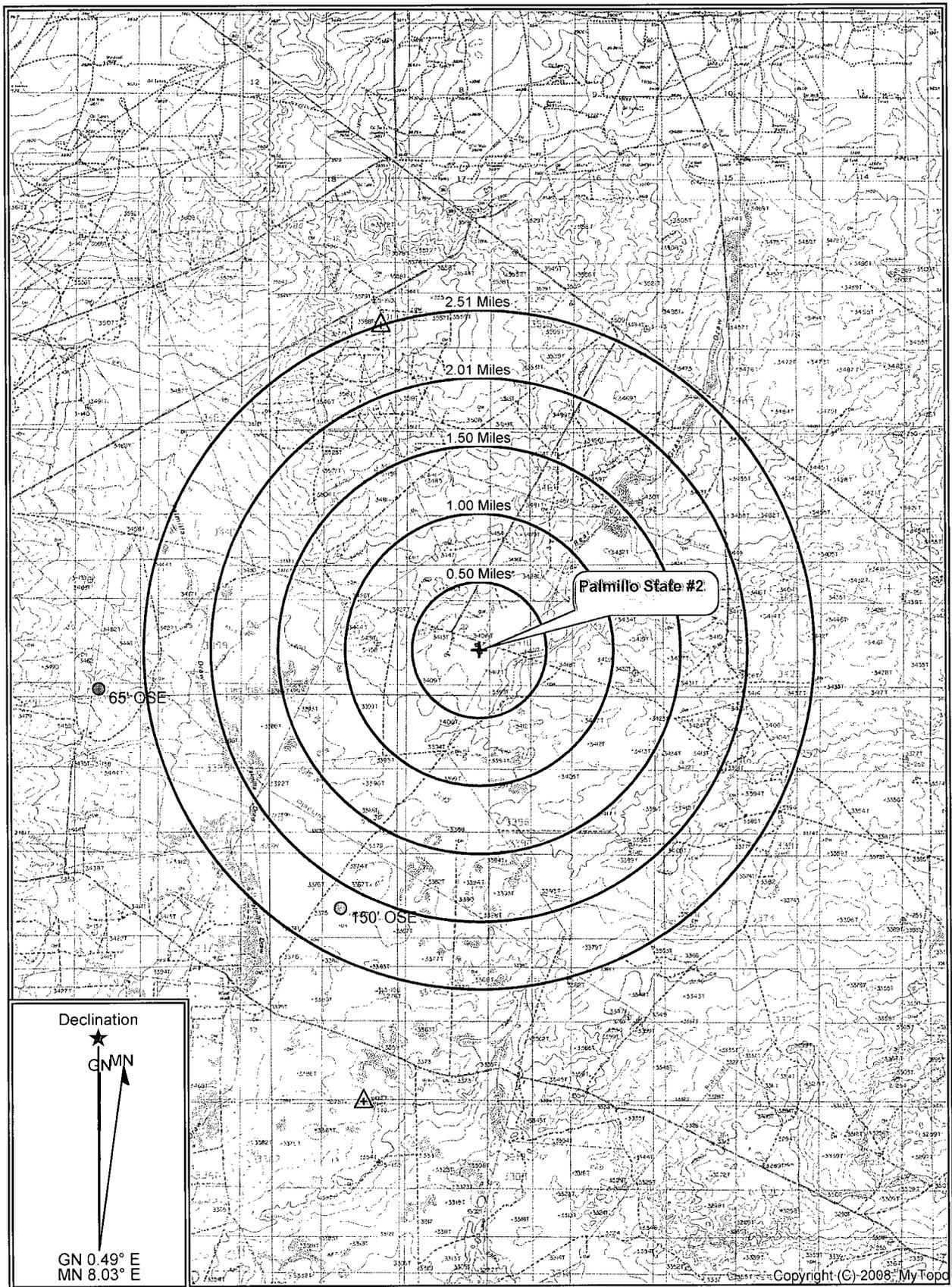
**VII. Action Plan**

Cimarex proposes that the affected area be excavated to a depth of 1' below ground level, removing the most highly contaminated soils. The excavated soils will be transported to Controlled Recovery Inc. (CRI), a New Mexico Oil Conservation Division (NMOCD) approved facility for disposal. The excavated area will then be backfilled with clean soils and contoured to original grade.

**VIII. Figures and Appendices**

- Figure 1 – Vicinity Map
- Figure 2 – Site Map
- Appendix A – Analytical Results
- Appendix B – Site Photographs
- Appendix C – C-141

**Figure 1  
Vicinity Map**

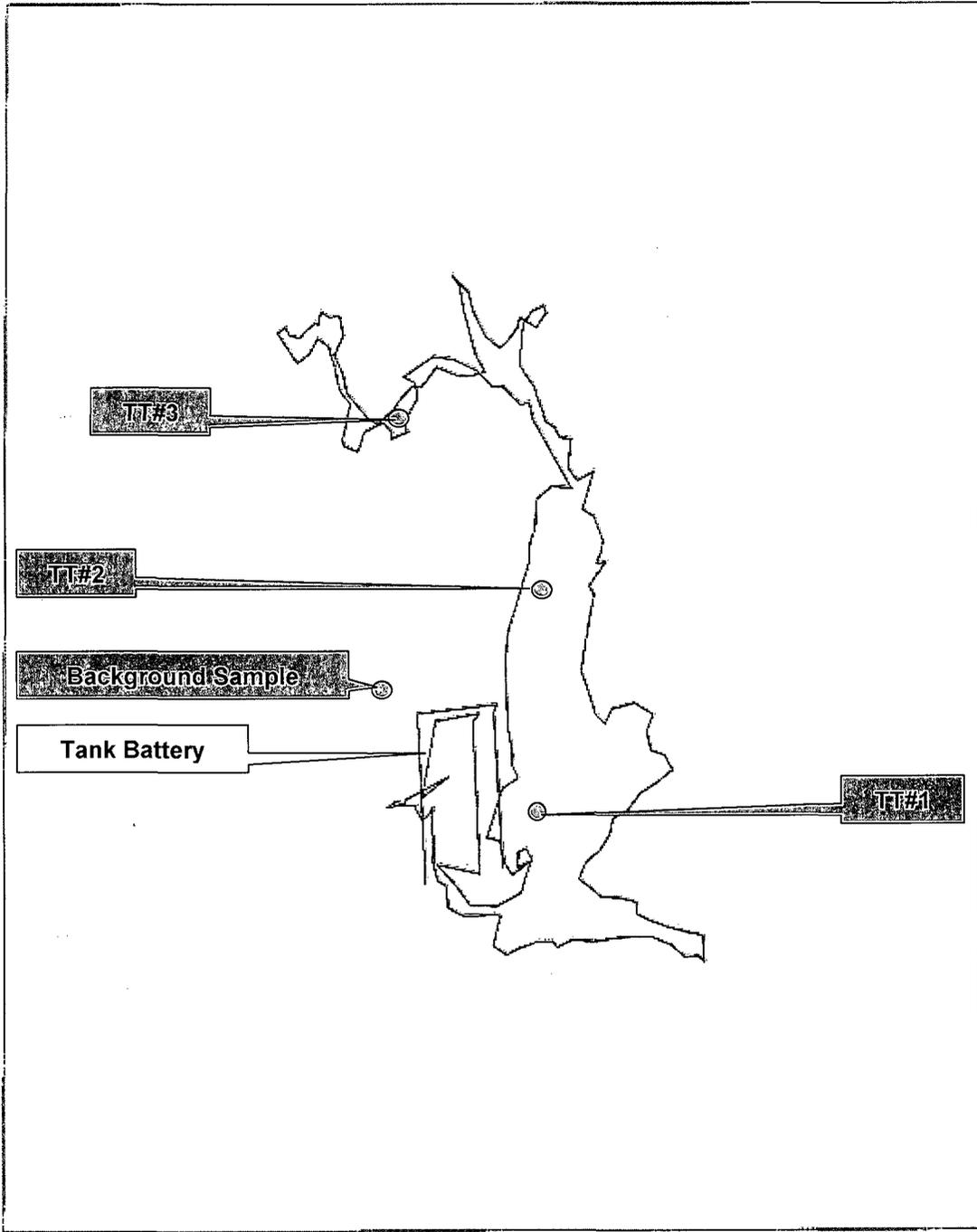


Map Name: ILLINOIS CAMP NE,  
Scale: 1 inch = 5,750 ft.

Map Center: 032° 42' 08.26" N 104° 05' 42.43" W  
Horizontal Datum: WGS84

Copyright (C) 2008 MyTopo

**Figure 2**  
**Site Map**



Lat/Long  
WGS 1984



Scale 1 in : 100 ft



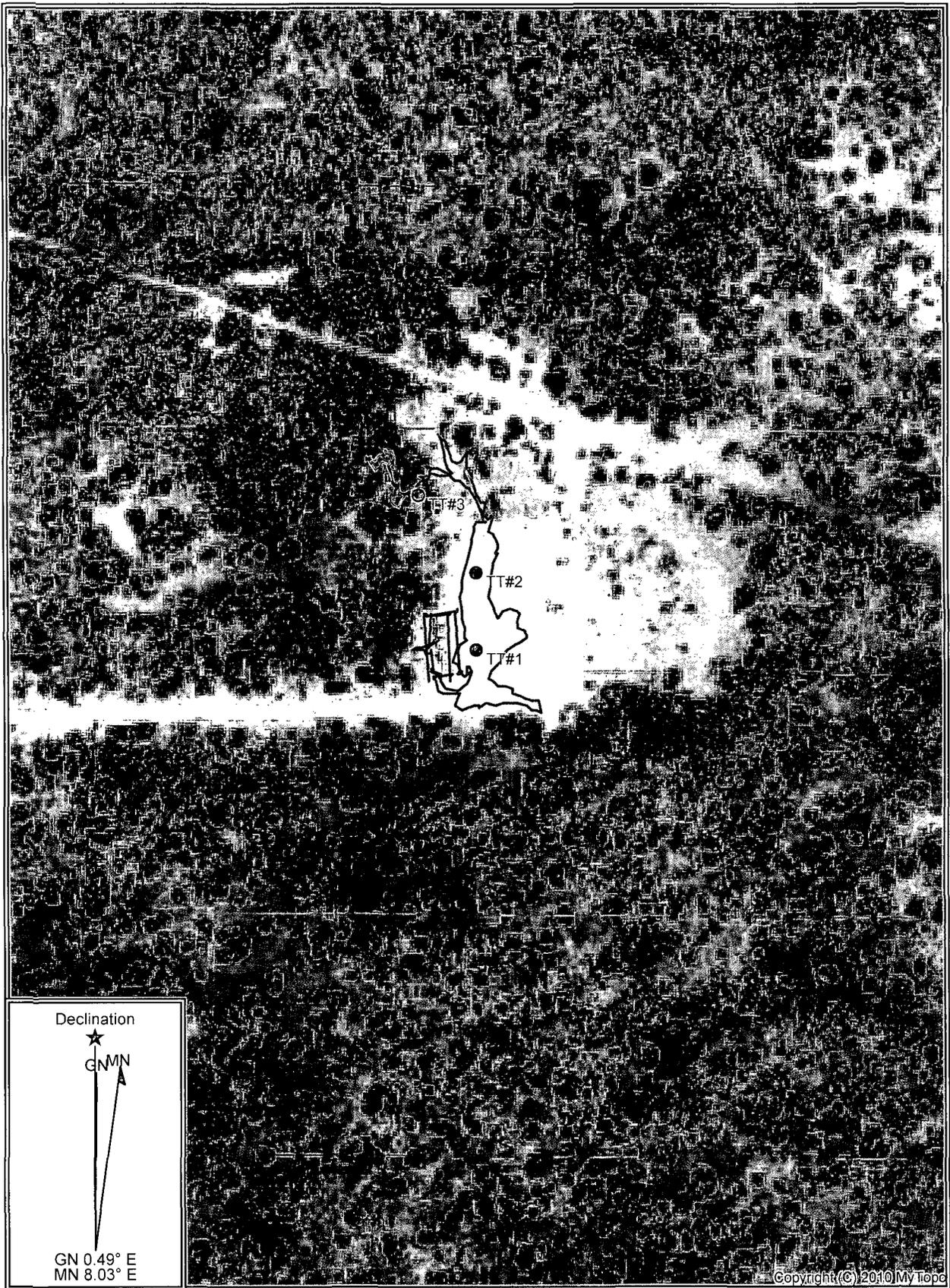
Feet

CIMAREX03131.cor

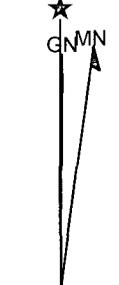
4/19/2011

GPS Pathfinder<sup>®</sup> Office





Declination



GN 0.49° E  
MN 8.03° E

Copyright (C) 2010 My Topo

Map Name: NW ILLINOIS CAMP NE, NM  
Scale: 1 inch = 200 ft.

Map Center: 032° 42' 07.15" N 104° 05' 42.25" W  
Horizontal Datum: WGS84



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q Q Q			Sec	Tws	Rng	X	Y	Depth	Depth	Water
				64	16	4						Well	Water	Column
CP 00646	STK	ED		1	1	4	07	19S	29E	583155	3615551	199	150	49
CP 00681	PRO	ED		1	1	3	34	19S	29E	587230	3609127*			
CP 00703	PRO	ED			4	1	36	19S	29E	590945	3609441*	225	115	110
CP 00739	PRO	ED		3	4	4	35	19S	29E	589246	3608217	200	110	90
CP 00741	PRO	ED		1	3	2	34	19S	29E	588030	3609533*	230	60	170
CP 00820	STK	LE			2	4	13	19S	29E	591713	3613870*	120		
CP 00821	STK	LE			4	4	25	19S	29E	591743	3610248*	120		

Average Depth to Water: **108 feet**

Minimum Depth: **60 feet**

Maximum Depth: **150 feet**

**Record Count: 7**

**PLSS Search:**

Township: 19S

Range: 29E

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

**Appendix A**  
**Analytical Results**

April 05, 2011

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: CIM-11-005

Enclosed are the results of analyses for samples received by the laboratory on 03/30/11 16:03.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Halocetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

 Received: 03/30/2011  
 Reported: 04/05/2011  
 Project Name: CIM-11-005  
 Project Number: PALMILLO STATE #2  
 Project Location: EDDY CO, NM

 Sampling Date: 03/30/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: JT #1 3' BGS (H100630-01)**

BTX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/01/2011	ND	1.81	90.6	2.00	3.31	
Toluene*	<0.050	0.050	04/01/2011	ND	1.88	94.1	2.00	3.78	
Ethylbenzene*	<0.050	0.050	04/01/2011	ND	1.93	95.7	2.00	3.41	
Total Xylenes*	<0.150	0.150	04/01/2011	ND	5.72	95.4	6.00	3.22	

Surrogate: 4-Bromofluorobenzene (PIL) 90.8% 70-130

Chloride, SW4500C-B		mg/kg		Analyzed By: NM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1790	16.0	04/01/2011	ND	432	168	400	3.77	

TPH 418.1		mg/kg		Analyzed By: AE					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	03/31/2011	ND	1200	101	1190	0.830	

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

 Received: 03/30/2011  
 Reported: 04/05/2011  
 Project Name: CIM-11-005  
 Project Number: PALMILLO STATE #2  
 Project Location: EDDY CO, NM

 Sampling Date: 03/30/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: TT #1 5' BGS (H100630-02)**

STEX 6021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/01/2011	ND	1.81	90.5	2.00	3.31	
Toluene*	<0.050	0.050	04/01/2011	ND	1.88	94.1	2.00	3.76	
Ethylbenzene*	<0.050	0.050	04/01/2011	ND	1.93	96.7	2.00	3.41	
Total Xylenes*	<0.150	0.150	04/01/2011	ND	5.72	95.4	6.00	3.22	

Surrogate: 4-Bromofluorobenzene (PII) 94.6 % 70-130

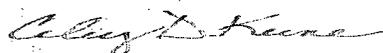
Chloride, SM4500Cl-B		mg/kg		Analyzed By: NM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	04/01/2011	ND	432	105	400	3.77	

TPH 418.1		mg/kg		Analyzed By: AS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	03/31/2011	ND	1200	101	1190	0.830	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

 Received: 03/30/2011  
 Reported: 04/05/2011  
 Project Name: CIM-11-005  
 Project Number: PALMILLO STATE #2  
 Project Location: EDDY CO, NM

 Sampling Date: 03/30/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: TT #1 10' SGS (H100630-03)**

BTEX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/01/2011	ND	1.81	90.6	2.00	3.31	
Toluene*	<0.050	0.050	04/01/2011	ND	1.86	94.1	2.00	3.75	
Ethylbenzene*	<0.050	0.050	04/01/2011	ND	1.93	96.7	2.00	3.41	
Total Xylenes*	<0.150	0.150	04/01/2011	ND	5.72	95.4	6.00	3.22	

Surrogate: 4-Bromofluorobenzene (PH) 95.6% 70-130

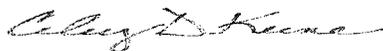
Chloride, SM4560Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	120	16.0	04/01/2011	ND	432	108	400	3.77	

TPH 418.1		mg/kg		Analyzed By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	03/31/2011	ND	1200	101	1190	0.830	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

Received:	03/30/2011	Sampling Date:	03/30/2011
Reported:	04/05/2011	Sampling Type:	Soil
Project Name:	CIM-11-005	Sampling Condition:	Cool & Intact
Project Number:	PALMILLO STATE #2	Sample Received By:	Jodi Henson
Project Location:	EDDY CO, NM		

**Sample ID: TT #2 3' SGS (#100630-04)**

BYEX 80218		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/01/2011	ND	1.81	90.6	2.00	3.31		
Toluene*	<0.050	0.050	04/01/2011	ND	1.88	94.1	2.00	3.78		
Ethylbenzene*	<0.050	0.050	04/01/2011	ND	1.93	96.7	2.00	3.41		
Total Xylenes*	<0.150	0.150	04/01/2011	ND	5.72	95.4	6.00	3.22		

Surrogate: 4-Bromofluorobenzene (PHL) 98.8 % 70-130

Chloride, SM4500CF-B		mg/kg		Analyzed By: MM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	46.0	16.0	04/01/2011	ND	432	108	400	3.77		

TPH 418.1		mg/kg		Analyzed By: AS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TPH 418.1	1330	100	03/31/2011	ND	1200	101	1190	0.830		

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Cefey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

Received:	05/30/2011	Sampling Date:	03/30/2011
Reported:	04/05/2011	Sampling Type:	Soil
Project Name:	CIM-11-005	Sampling Condition:	Cool & Intact
Project Number:	PALMILLO STATE #2	Sample Received By:	Jodi Henson
Project Location:	EDDY CO, NM		

**Sample ID: TT #2 5' BGS (H100630-05)**

BTEX B0218		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/01/2011	ND	1.31	90.6	2.00	3.31		
Toluene*	<0.050	0.050	04/01/2011	ND	1.88	94.1	2.00	3.79		
Ethylbenzene*	<0.050	0.050	04/01/2011	ND	1.93	96.7	2.00	3.41		
Total Xylenes*	<0.150	0.150	04/01/2011	ND	5.72	95.4	6.00	3.22		

Surrogate: 4-bromofluorobenzene (PIL) 94.7% 70-130

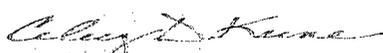
Chloride, SM4260Cl-B		mg/kg		Analyzed By: HPM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	15.0	04/01/2011	ND	432	108	400	3.77		

TPH 418.1		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TPH 418.1	<100	100	03/31/2011	ND	1200	101	1190	0.830		

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs, NM, 88240  
 Fax To: (575) 393-4388

Received:	03/30/2011	Sampling Date:	03/30/2011
Reported:	04/05/2011	Sampling Type:	Soil
Project Name:	CIM-11-005	Sampling Condition:	Cool & Intact
Project Number:	PALMILLO STATE #2	Sample Received By:	Jodi Hanson
Project Location:	EDDY CO, NM		

**Sample ID: TT #3 3' BGS (H100630-06)**

BTEX 0021B		mg/kg		Analyzed By: CMS					S-LOW	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	5.56	1.00	04/04/2011	ND	1.81	90.6	2.00	3.31		
Toluene*	23.9	1.00	04/04/2011	ND	1.88	94.1	2.00	3.75		
Ethylbenzene*	6.32	1.00	04/04/2011	ND	1.93	96.7	2.00	3.41		
Total Xylenes*	12.2	3.00	04/04/2011	ND	5.72	95.4	6.00	3.22		

Surrogate: 4-Bromofluorobenzene (PIE) 57.1 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	04/01/2011	ND	432	108	400	3.77	

TPH 418.1		mg/kg		Analyzed By: AS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	8530	500	03/31/2011	ND	1200	101	1190	0.830	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Allen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

Received:	03/30/2011	Sampling Date:	03/30/2011
Reported:	04/05/2011	Sampling Type:	Soil
Project Name:	CIM-11-005	Sampling Condition:	Cool & Intact
Project Number:	PALMILLO STATE #2	Sample Received By:	Jodi Henson
Project Location:	EDDY CO, NM		

**Sample ID: TT #3 5' BGS (H190630-07)**

BTX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/04/2011	ND	1.91	95.5	2.00	5.78		
Toluene*	<0.050	0.050	04/04/2011	ND	1.97	98.6	2.00	5.39		
Ethylbenzene*	<0.050	0.050	04/04/2011	ND	2.05	102	2.00	5.44		
Total xylenes*	<0.150	0.150	04/04/2011	ND	6.10	102	6.00	5.83		

Surrogate: 4-Bromofluorobenzene (PIE) 93.1% 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: MM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	04/01/2011	ND	432	108	400	3.77		

TPH 418.1		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TPH 418.1	337	100	03/31/2011	ND	1200	101	1190	0.830		

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Safety & Environmental Solutions  
 Bob Ailen  
 703 East Clinton  
 Hobbs NM, 88240  
 Fax To: (575) 393-4388

Received:	03/30/2011	Sampling Date:	03/30/2011
Reported:	04/05/2011	Sampling Type:	Soil
Project Name:	CIM-11-005	Sampling Conditions:	Cool & Intact
Project Number:	PALMILLO STATE #2	Sample Received By:	Jodi Henson
Project Location:	EDDY CO, NM		

**Sample ID: BACKGROUND 3' BGS (H100630-98)**

BTEX 8021E		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/04/2011	ND	1.91	95.5	2.00	5.78		
Toluene*	<0.050	0.050	04/04/2011	ND	1.97	98.6	2.00	5.39		
Ethylbenzene*	<0.050	0.050	04/04/2011	ND	2.05	102	2.00	5.11		
Total Xylenes*	<0.150	0.150	04/04/2011	ND	6.10	102	6.00	5.63		

Surrogate: 4-Bromofluorobenzene (PIL) 93.8% 70-130

Chloride, SM4500Cl-R		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	04/01/2011	ND	432	108	400	3.77		

TPH 413.1		mg/kg		Analyzed By: AH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TPH 413.1	<100	100	03/31/2011	ND	1290	101	1190	0.830		

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- S-LOW Low surrogate recovery confirmed as a matrix effect by a second analysis.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



# CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240  
(505) 393-2326 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page \_\_\_ of \_\_\_

Company Name: <b>Safety &amp; Environmental Solutions, Inc.</b>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>									
Project Manager: <b>Bob Allen</b>		P.O. #:											
Address: <b>703 East Clinton</b>		Company: <b>Same</b>											
City: <b>Hobbs</b> State: <b>NM</b> Zip: <b>88240</b>		Attn:											
Phone #: <b>575-397-0510</b> Fax #: <b>575-393-4388</b>		Address:											
Project #: <b>Q-11725</b> Project Owner: <b>CIMOLET</b>		City:											
Project Name: <b>Palmillo State #2</b>		State: Zip:											
Project Location: <b>Edaly, NM</b>		Phone #:											
Sampler Name: <b>Isaac Ornel</b>		Fax #:											

Lab I.D.	Sample I.D.	SIGTAGS OR ICAMP # CONTAINERS	MATRIX										DATE	TIME	REMARKS		
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	MOBILE	ICE/COOL	OTHER	PRESERV				SAMPLING	
H100030	TT# 1 3' bss	✓												✓	10/28/00	✓	TPH 4181
	2 TT# 1 5' bss														08:55		
	3 TT# 1 10' bss														08:55		
	4 TT# 2 3' bss														08:15		
	5 TT# 2 5' bss														08:20		
	6 TT# 3 3' bss														10:10		
	7 TT# 3 5' bss														10:25		
	8 TT# 3 Palm ground 3' bss	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10:45	✓	Chlorides

PLEASE NOTE: Liability and Damages. Cardinal's liability and their's exclusive remedy for any claim arising with this contract or test, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless received by Cardinal within 30 days after completion of the substance analysis. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions of Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collection, including attorney fees.

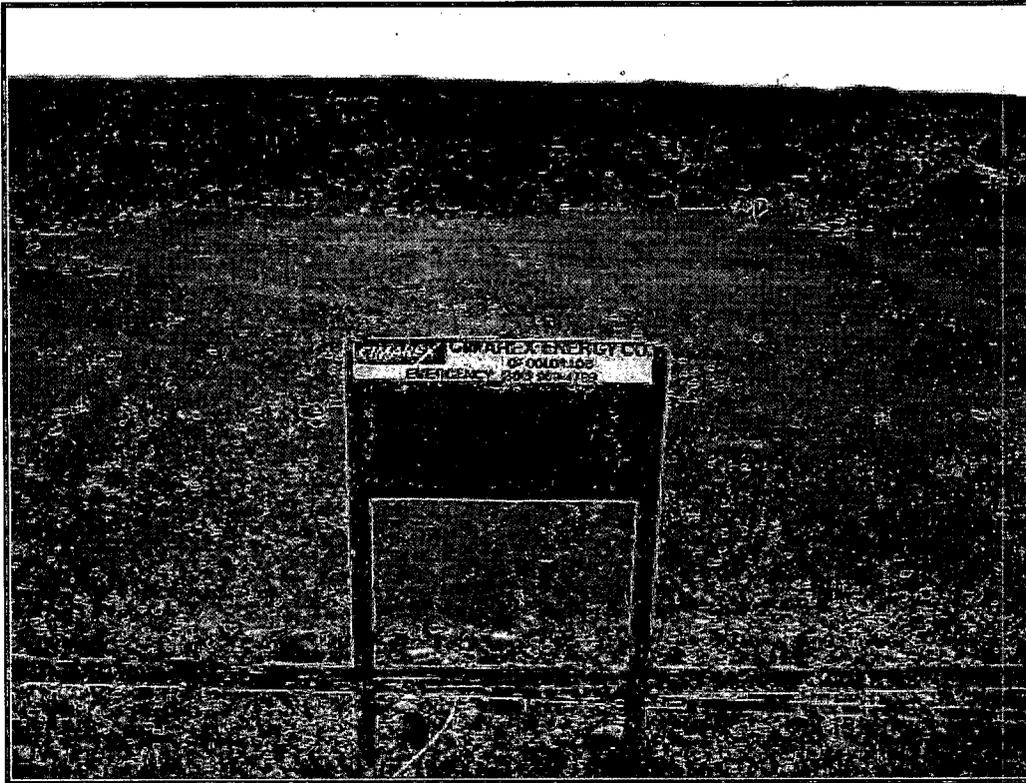
Sampler Relinquished:	Date: <b>10/28/00</b>	Received By: <b>Wade Henson</b>	Phone Request: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Addr. Phone #: _____
	Time: <b>10:30</b>		Fax Request: <input type="checkbox"/> Yes <input type="checkbox"/> No	Addr. Fax #: _____
Relinquished By: _____	Date: _____	Received By: _____	REMARKS:	
Delivered By: (Circle One) <b>Sampler - DPS - Bus - Other:</b>	Temp: <b>15°C</b>	Sample Condition: Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: _____ (Initials)	

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

# Appendix B

## Site Photographs

Cimarex Palmillo State #2 site photos 3-30-11



Well Sign



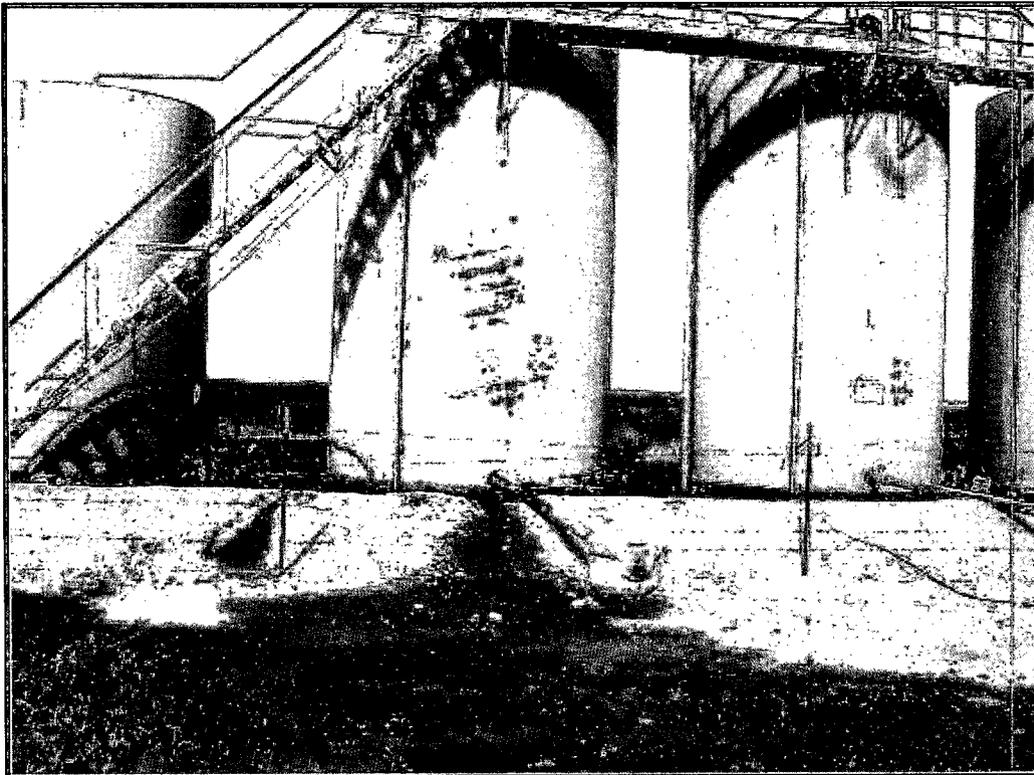
Release area with TT #1 facing southwest



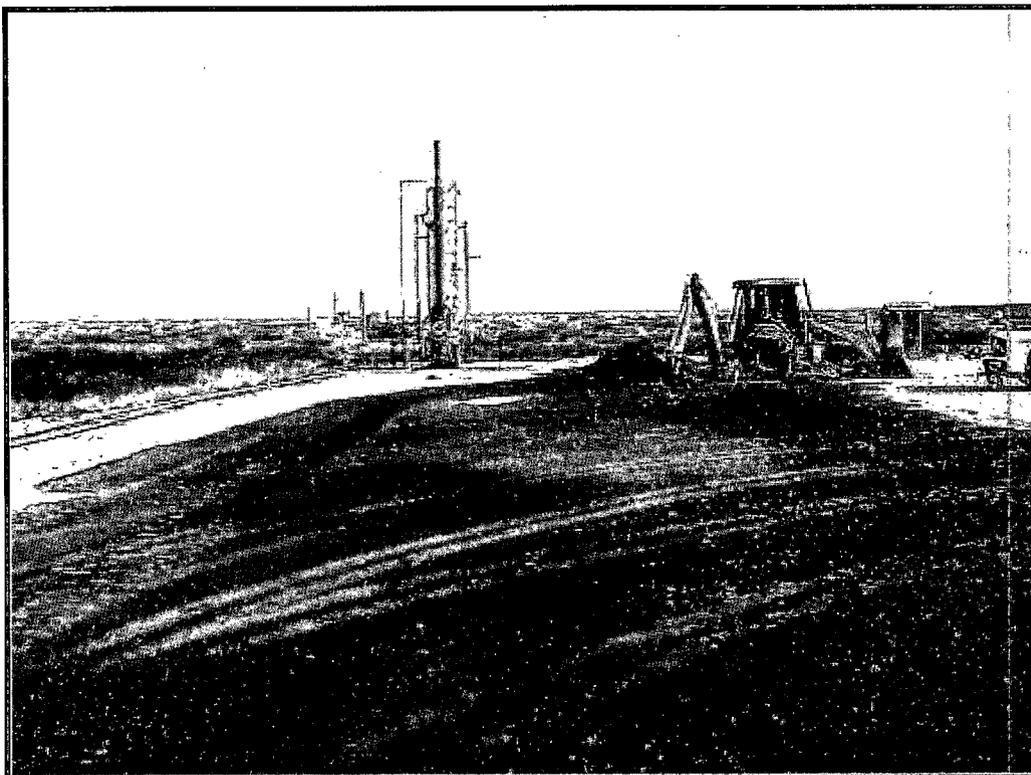
Test Trench #1 10' bgs



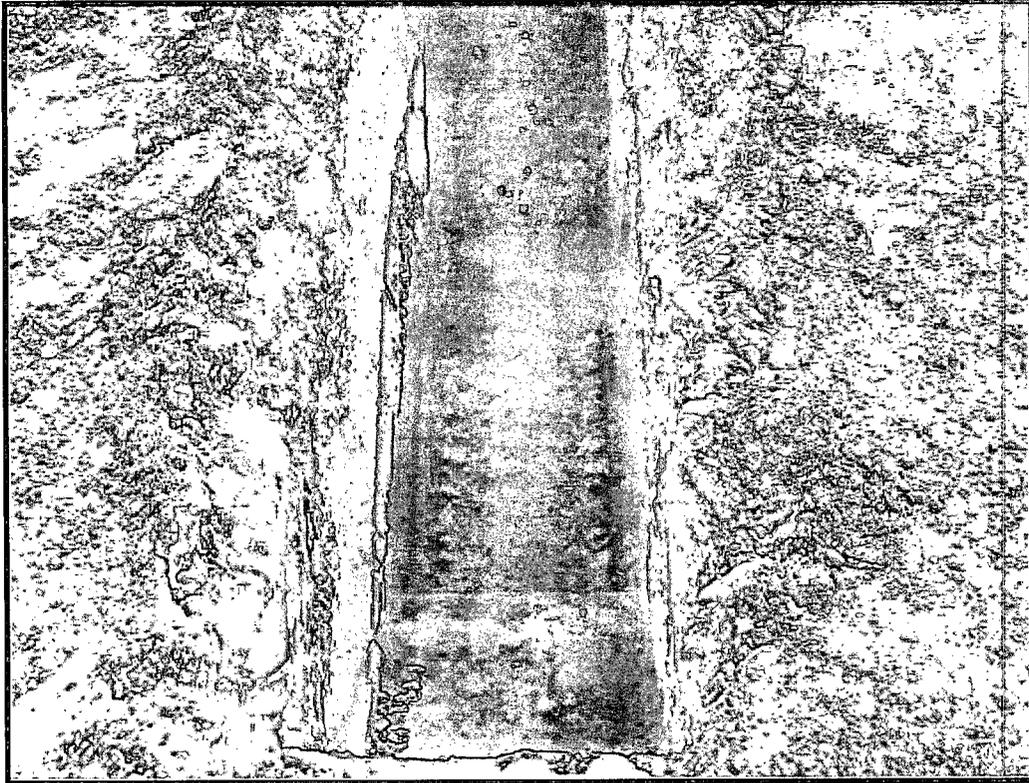
Test Trench #1 west wall



Release area facing west



Test Trench #2 area facing north



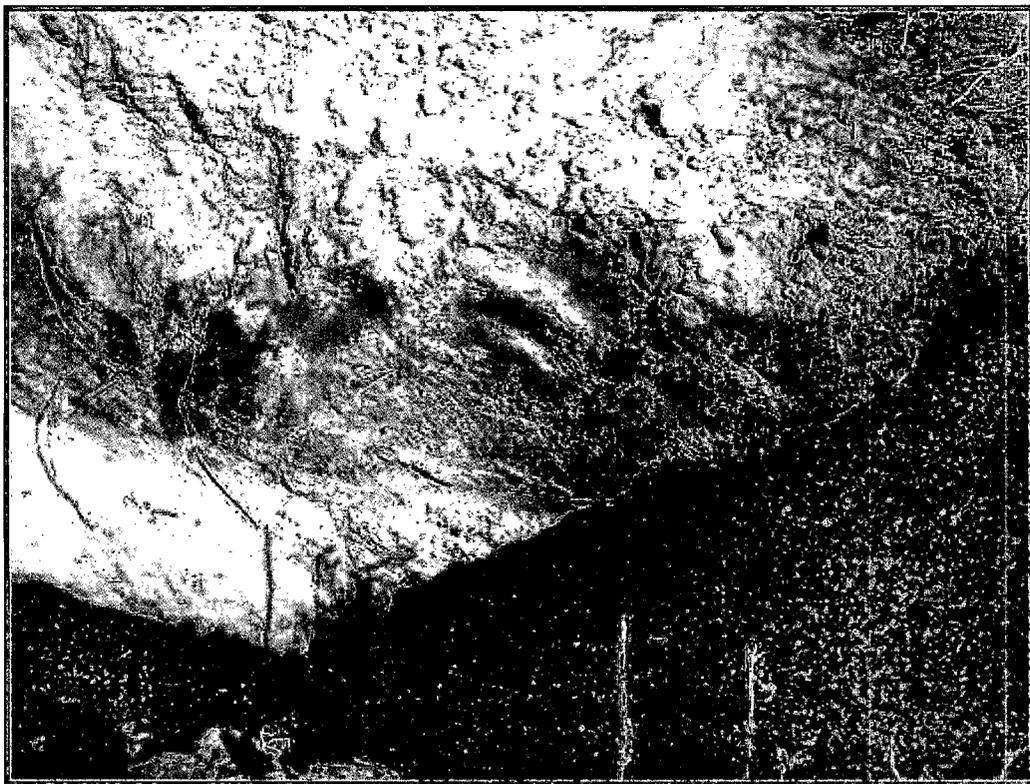
Test Trench #2 5' bgs



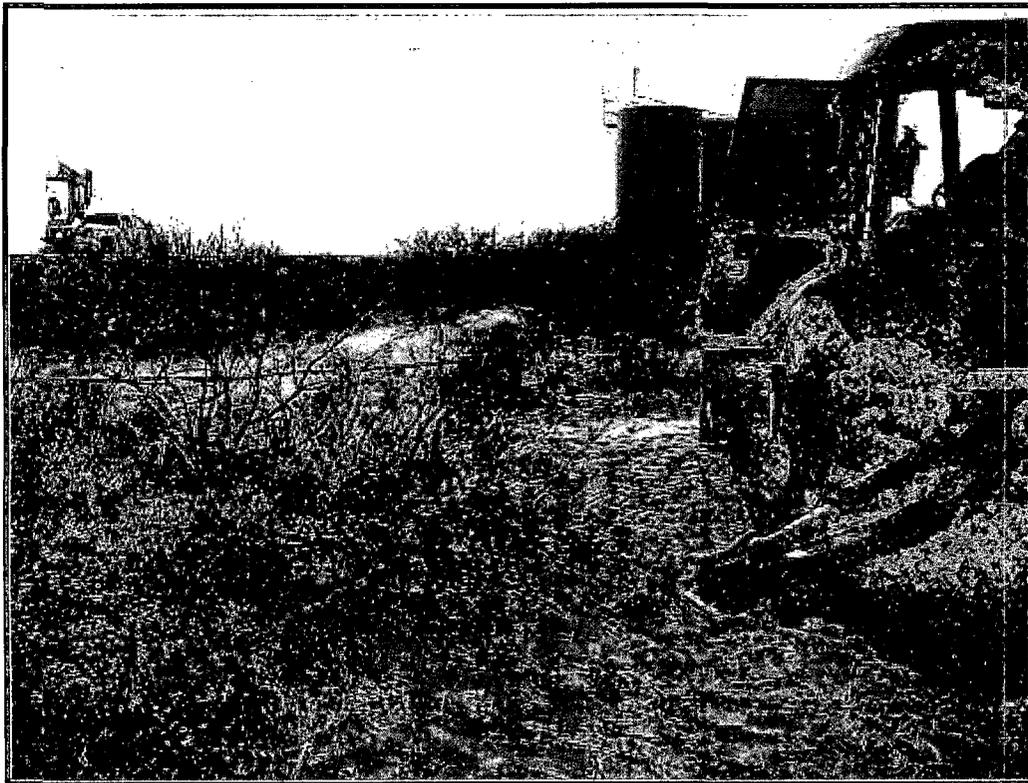
Test Trench #2 south wall



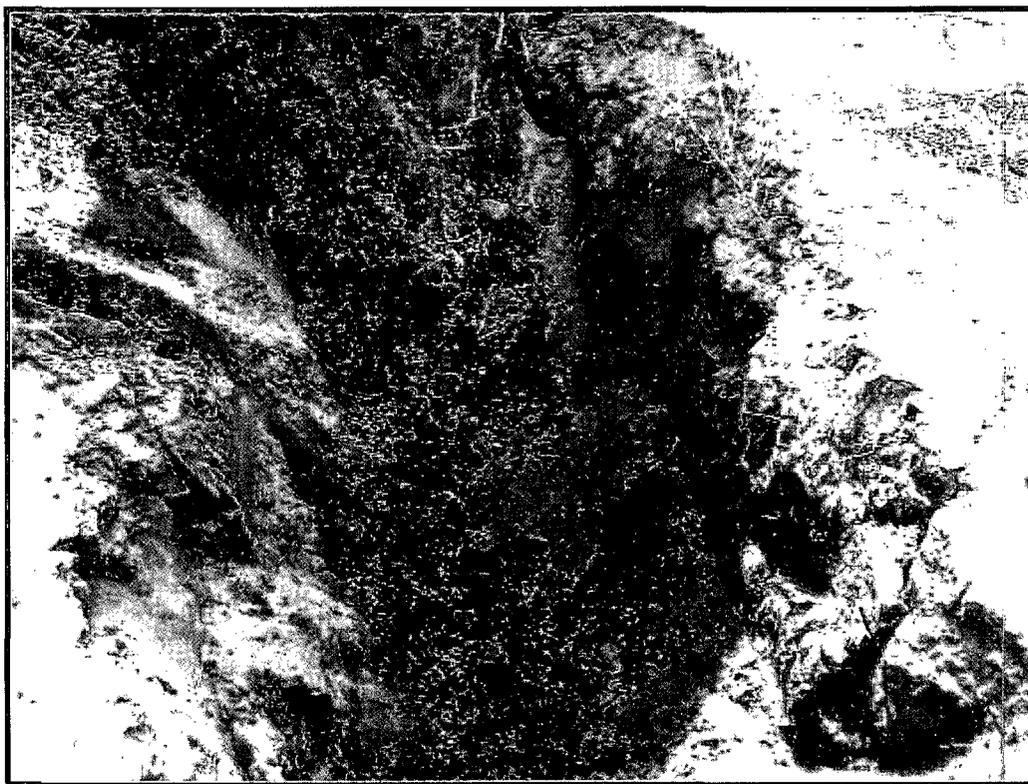
Test Trench #3 location facing northwest



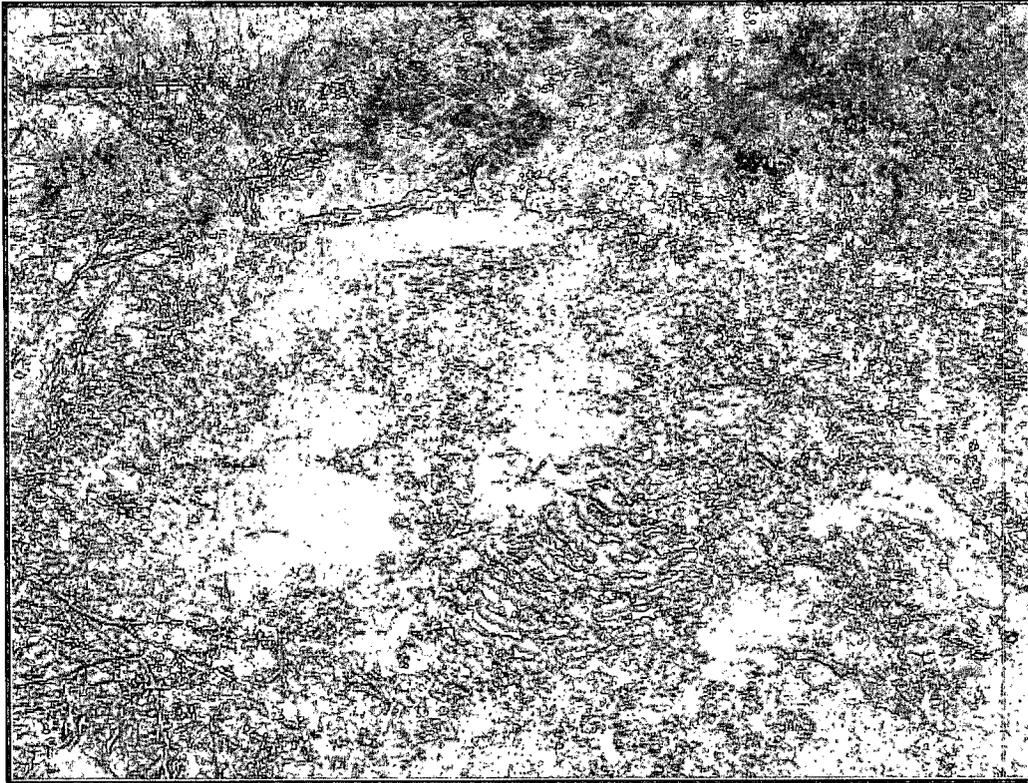
Test Trench #3 5' bgs



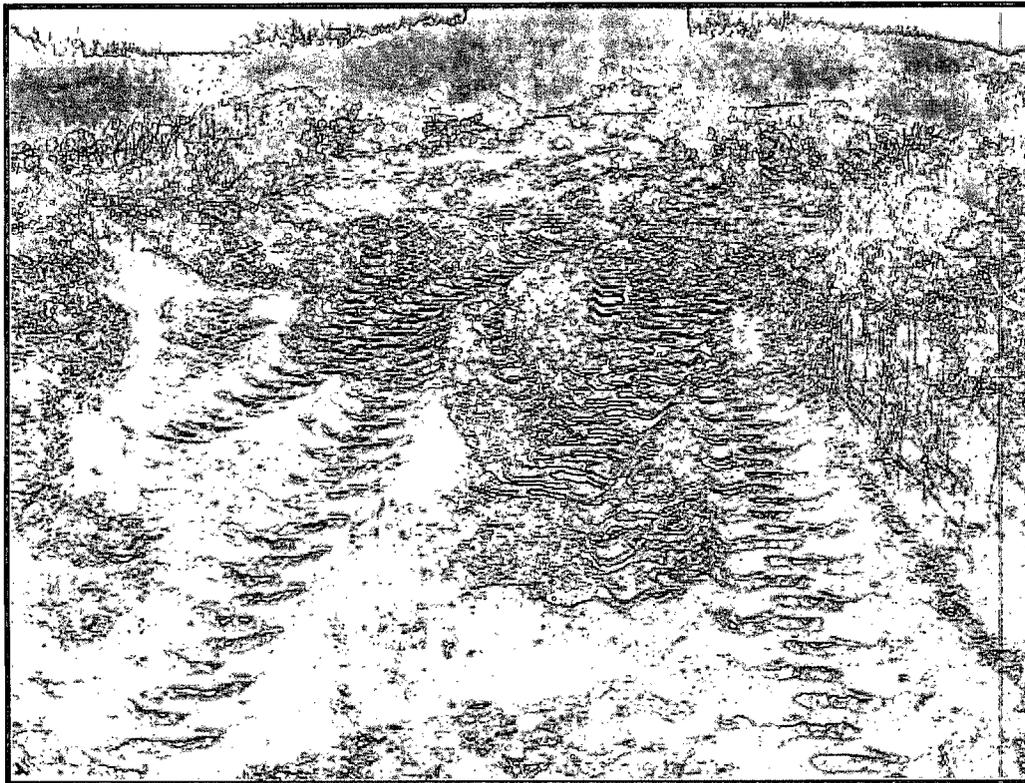
Background location facing southeast



Background at 3'bgs



Test Trench #3 backfilled



Background backfilled

**Appendix C**  
**C-141**

**RECEIVED**  
 APR 27 2011  
 NMOCD ARTESIA

District I  
 1625 N. French Dr., Hobbs, NM 88240  
 District II  
 1301 W. Grand Avenue, Artesia, NM 88210  
 District III  
 1000 Rio Brazos Road, Aztec, NM 87410  
 District IV  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy Minerals and Natural Resources  
 Oil Conservation Division  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-141  
 Revised October 10, 2003  
 Submit 2 Copies to appropriate  
 District Office in accordance  
 with Rule 116 on back  
 side of form

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report     Final Report

Name of Company-Cimarex Energy	Contact- James Tinney
Address-600 N Marienfeld Ste 600, Midland Tx 79701	Telephone No. 575 706 0095
Facility Name- Palmillo State Com # 2	Facility Type- Tank battery

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

**30-015-22343**

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County - Eddy
J	32	18S	29E	1796	South	1980	East	

Latitude-32° 42' 07.16"      Longitude-104° 05' 42.87" W

**NATURE OF RELEASE**

Type of Release- crude oil	Volume of Release-385 bbls	Volume Recovered-20 bbls
Source of Release- 2" X 4" connection on back of oil tank (corrosion)	Date and Hour of Occurrence- 3-13-11	Date and Hour of Discovery: 3-13-11 9:30 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mr. Mike Bratcher, NMOCD	
By Whom? Bill Hops (pumper) James Tinney (APF)	Date and Hour 3-13-11 9:30 AM called OCD @ 12:00pm	
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.\*  
 Internal corrosion caused a rupture in the back of the tank. Vac truck onsite to recover standing fluid.

Describe Area Affected and Cleanup Action Taken.\*  
 SESI was contacted for assessment. Area will be delineated and an appropriate work plan will be submitted to NMOCD.

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: James Tinney <i>James Tinney</i> Printed Name: James Tinney Title: Assistant Production Foreman E-mail Address: jtinney@cimarex.com Date: 3-13-11    Phone: 575-706-0095	<b>OIL CONSERVATION DIVISION</b> Approved by District Supervisor:- Approval Date:      Expiration Date: Conditions of Approval: Attached <input type="checkbox"/>
---	---

\* Attach Additional Sheets If Necessary