

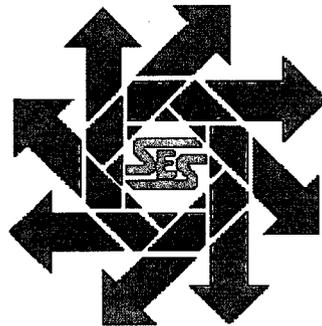
RECEIVED

NOV 05 2010
HOBBSUCD

**Cimarex Energy Company
Ticonderoga 16 State Com #4
Section 16, Township 15S, Range 31E
Chaves County, New Mexico**

Delineation Report/Work Plan

October 7, 2010



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**

continue to delineate
vertically for TPH to
Clean +1 @ AH#1 AND
AH#4.

Stephany Leimig
Environmental Engineer
NMUCD-Hobbs
11/05/10

30-005-3000

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I. Company Contacts

Company Representative	Company	Telephone	E-mail
Marty Davis	Cimarex Energy Co.	575-605-5509	mdavis@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 Ticonderoga 16 State Com #4, located in Section 16, Township 15 South, and Range 31 East. The blowout preventer on the pulling unit went out causing the casing to leak and releasing approximately 15 barrels of hydrocarbon fluid and recovered approximately 5 barrels. There was also an area affected with overspray.

III. Surface and Ground Water

According to the database provided by the New Mexico Office of State Engineer's online database, the average depth of water in this area is 280 feet since March 1955 and is located 1.6 miles north of the Ticonderoga 16 State Com #4. (See Figure 1)

IV. Characterization

The target cleanup levels are reached by the application of the "Unlined Surface Impoundment Closure Guidelines New Mexico Oil Conservation Division (NMOCD) – February, 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:

Depth to Ground Water:			
(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
Wellhead Protection Area:			
(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
Distance to Surface Water:			
(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
RANKING SCORE (TOTAL POINTS)			0

V. Soils

The surface soils in the area are predominantly sand and sandy loam.

VI. Work Performed

On October 1, 2010 SESI was onsite to install auger holes to delineate release area. Auger Hole (AH) #1 and AH #4 are located on location pad and a surface sample was obtained but had auger refusal at a depth of six (6) inches below grade surface (bgs). AH #2 and AH #3 were located in pasture area and northeast of location and samples were obtained at surface and one (1) foot below grade surface.

Samples were properly preserved and transported under chain of custody to Cardinal Labs of Hobbs, New Mexico. The samples were analyzed for Chlorides (EPA Method 4500-ClB), Benzene, Toluene, Ethyl Benzene, Total Xylenes (BTEX EPA Method 8021) and Total Petroleum Hydrocarbons (TPH EPA Method 418.1).

The results of the analysis are as follows:

Lab ID	Sample ID	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)	TPH (mg/kg)	Chlorides (mg/kg)
Analysis Date:		10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10
H020969-01	AH #1 Surface	<0.025	0.036	0.048	0.181	5,920	896
H020969-02	AH #2 Surface	<0.025	0.355	0.500	2.94	4,790	80.0
H020969-03	AH #2 1'bgs	<0.025	0.065	0.047	0.158	<100	112
H020969-04	AH #3 Surface	<0.025	0.032	0.029	0.103	<100	80.0
H020969-05	AH #3 1'bgs	<0.025	0.026	<0.025	<0.075	<100	128
H020969-06	AH #4 1'bgs	<0.025	0.051	0.370	0.863	6,550	160

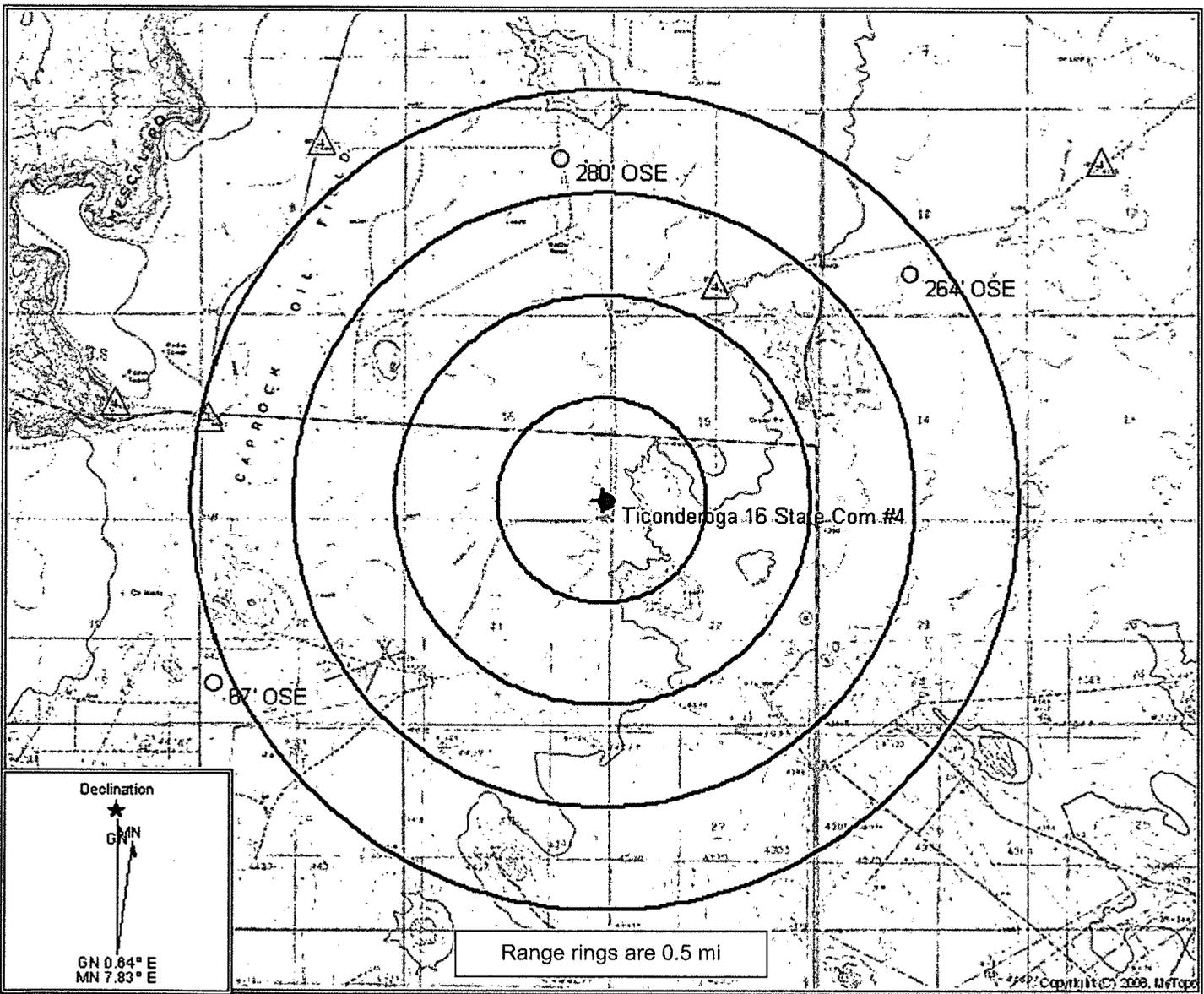
VII. Action Plan

Cimarex proposes that the affected area on location pad be excavated to a depth of 2" bgs and the affected area in the pasture be mowed and ripped to let area aerate out. The area near auger hole #4 will be excavated and the most highly contaminated soils removed and taken to an approved NMOCD facility. The excavated areas 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

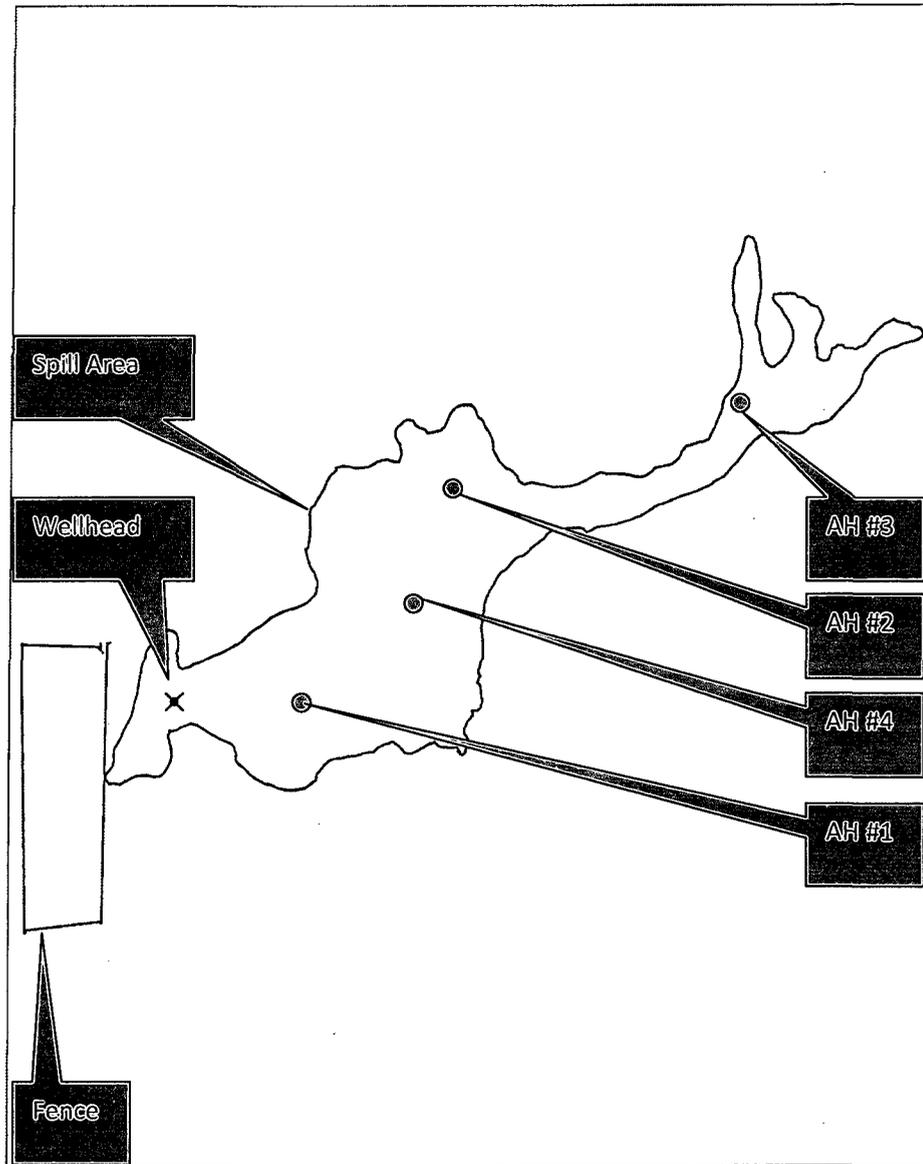
Figure 1
Vicinity Map



Map Name: MALJAMAR NE
 Scale: 1 inch = 4,000 ft.

Map Center: 033.0099552° N 103.8192454° W
 Horizontal Datum: WGS84

Figure 2
Site Map



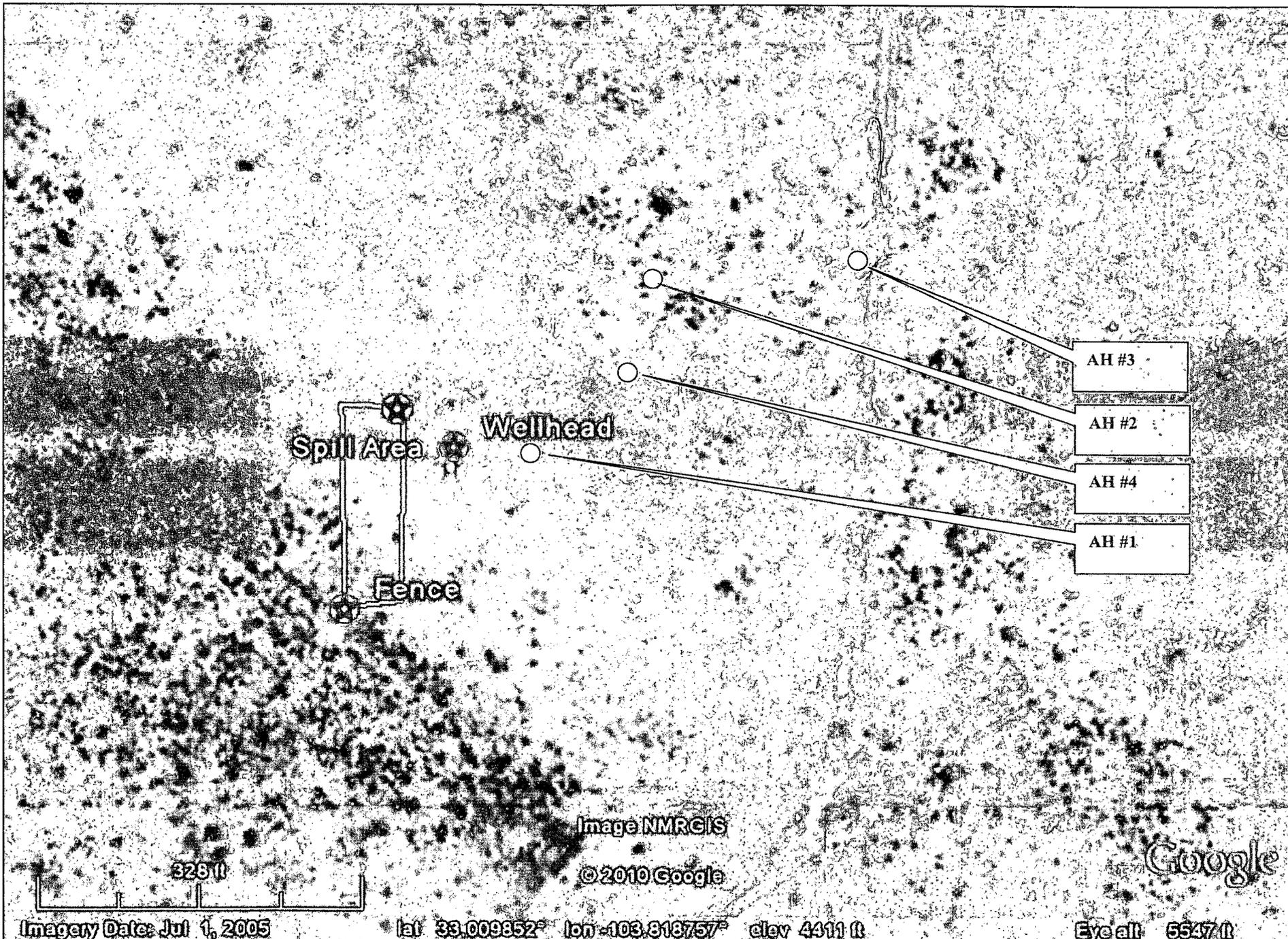
CIM-10-015 Ticonderoga 16 State Com #4

Lat/Long
WGS 1984



Scale 1 in : 125 ft
0 175.0
Feet

sitemap.cor
9/21/2010
GPS Pathfinder® Office

Spill Area

Wellhead

Fence

AH #3

AH #2

AH #4

AH #1

328 ft

Image NMRCIS

© 2010 Google

Google

Imagery Date: Jul 1, 2005

lat 33.009852° lon -103.813757° elev 4311 ft

Eye alt 6547 ft

Appendix A

Analytical Results

October 06, 2010

Bob Allen
Safety & Environmental Solutions
703 East Clinton
Hobbs, NM 88240

RE: CIM-10-015

Enclosed are the results of analyses for samples received by the laboratory on 10/01/10 14:23.

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	Haloacetic 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:	10/01/2010	Sampling Date:	10/01/2010
Reported:	10/06/2010	Sampling Type:	Soil
Project Name:	CIM-10-015	Sampling Condition:	Cool & Intact
Project Number:	TICONDEROGA 16 ST. COM #4	Sample Received By:	Jodi Henson
Project Location:	LEA, NM		

Sample ID: AH #1 SURFACE (H020969-01)

BTEX 8021B		mg/kg		Analyzed By: cms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	10/04/2010	ND	2.08	104	2.00		
Toluene*	0.036	0.025	10/04/2010	ND	2.08	104	2.00		
Ethylbenzene*	0.048	0.025	10/04/2010	ND	2.15	108	2.00		
Total Xylenes*	0.181	0.075	10/04/2010	ND	6.26	104	6.00		

Surrogate: 4-Bromofluorobenzene (PIL) 110 % 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	10/04/2010	ND	416	104	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	5920	100	10/05/2010	ND	970	95.1	1020	9.51	

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:	10/01/2010	Sampling Date:	10/01/2010
Reported:	10/06/2010	Sampling Type:	Soil
Project Name:	CIM-10-015	Sampling Condition:	Cool & Intact
Project Number:	TICONDEROGA 16 ST. COM #4	Sample Received By:	Jodi Henson
Project Location:	LEA, NM		

Sample ID: AH #2 SURFACE (H020969-02)

BTX 8021B		mg/kg		Analyzed By: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	10/04/2010	ND	2.08	104	2.00			
Toluene*	0.344	0.025	10/04/2010	ND	2.08	104	2.00			
Ethylbenzene*	0.500	0.025	10/04/2010	ND	2.15	108	2.00			
Total Xylenes*	2.94	0.075	10/04/2010	ND	6.26	104	6.00			

Surrogate: 4-Bromofluorobenzene (PIL) 97.6% 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	10/04/2010	ND	416	104	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	4790	100	10/05/2010	ND	970	95.1	1020	9.51		

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	10/01/2010	Sampling Date:	10/01/2010
Reported:	10/06/2010	Sampling Type:	Soil
Project Name:	CIM-10-015	Sampling Condition:	Cool & Intact
Project Number:	TICONDEROGA 16 ST. COM #4	Sample Received By:	Jodi Henson
Project Location:	LEA, NM		

Sample ID: AH #2 1' BGS (H020969-03)

BTEX 8021B		mg/kg		Analyzed By: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	10/04/2010	ND	2.08	104	2.00			
Toluene*	0.065	0.025	10/04/2010	ND	2.08	104	2.00			
Ethylbenzene*	0.047	0.025	10/04/2010	ND	2.15	108	2.00			
Total Xylenes*	0.158	0.075	10/04/2010	ND	6.26	104	6.00			

Surrogate: 4-Bromofluorobenzene (PIL) 98.1 % 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	10/04/2010	ND	416	104	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	10/05/2010	ND	970	95.1	1020	9.51		

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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:	10/01/2010	Sampling Date:	10/01/2010
Reported:	10/06/2010	Sampling Type:	Soil
Project Name:	CIM-10-015	Sampling Condition:	Cool & Intact
Project Number:	TICONDEROGA 16 ST. COM #4	Sample Received By:	Jodi Henson
Project Location:	LEA, NM		

Sample ID: AH #3 SURFACE (H020969-04)

BTEX 8021B		mg/kg		Analyzed By: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	10/04/2010	ND	2.08	104	2.00			
Toluene*	0.032	0.025	10/04/2010	ND	2.08	104	2.00			
Ethylbenzene*	0.029	0.025	10/04/2010	ND	2.15	108	2.00			
Total Xylenes*	0.103	0.075	10/04/2010	ND	6.26	104	6.00			

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	10/04/2010	ND	416	104	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	10/05/2010	ND	970	95.1	1020	9.51		

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 Fax To: (575) 393-4388

Received:	10/01/2010	Sampling Date:	10/01/2010
Reported:	10/06/2010	Sampling Type:	Soil
Project Name:	CIM-10-015	Sampling Condition:	Cool & Intact
Project Number:	TICONDEROGA 16 ST. COM #4	Sample Received By:	Jodi Henson
Project Location:	LEA, NM		

Sample ID: AH #3 1' BGS (H020969-05)

BTX 8021B		mg/kg		Analyzed By: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	10/04/2010	ND	2.08	104	2.00			
Toluene*	0.026	0.025	10/04/2010	ND	2.08	104	2.00			
Ethylbenzene*	<0.025	0.025	10/04/2010	ND	2.15	108	2.00			
Total Xylenes*	<0.075	0.075	10/04/2010	ND	6.26	104	6.00			

Surrogate: 4-Bromofluorobenzene (PIL) 97.9% 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	10/04/2010	ND	416	104	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	10/05/2010	ND	970	95.1	1020	9.51		

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Analytical Results For:

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

Received: 10/01/2010
 Reported: 10/06/2010
 Project Name: CIM-10-015
 Project Number: TICONDEROGA 16 ST. COM #4
 Project Location: LEA, NM

Sampling Date: 10/01/2010
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: AH #4 SURFACE (H020969-06)

BTEX 8021B		mg/kg		Analyzed By: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	10/04/2010	ND	2.08	104	2.00			
Toluene*	0.051	0.025	10/04/2010	ND	2.08	104	2.00			
Ethylbenzene*	0.370	0.025	10/04/2010	ND	2.15	108	2.00			
Total Xylenes*	0.863	0.075	10/04/2010	ND	6.26	104	6.00			

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 80-120

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	10/04/2010	ND	416	104	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	6550	100	10/05/2010	ND	970	95.1	1020	9.51		

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- 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

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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: Safety & Environmental Solutions, Inc.		BILL TO		ANALYSIS REQUEST																							
Project Manager: Bob Allen		P.O. #:																									
Address: 703 East Clinton		Company: Same																									
City: Hobbs State: NM Zip: 88240		Attn:																									
Phone #: 575-397-0510 Fax #: 575-393-4388		Address:																									
Project #: Cim-10-015 Project Owner: Cimarep		City:																									
Project Name: Tienderoga 16 St. Com #4		State: Zip:																									
Project Location: Levy AM		Phone #:																									
Sampler Name: Isaac Kincaid		Fax #:																									
FOR LAB USE ONLY				MATRIX				PRESERV.			SAMPLING																
Lab I.D.	Sample I.D.	(GRAB OR) (COMP.)	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER:	DATE	TIME													
A20969-1	TKL SP AH #1 SURFACE	6	1			✓					✓		10/1/10	0935	TPH 418.1	BTEX	Cl-										
	2 AH #2 SURFACE													0950													
	3 AH #2 1'bg S													0955													
	4 AH #3 SURFACE													1010													
	5 AH #3 1'bg S													1015													
	6 AH #4 SURFACE	✓	✓			✓					✓			1025													

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Terms and Conditions: 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 collections, including attorney's fees.

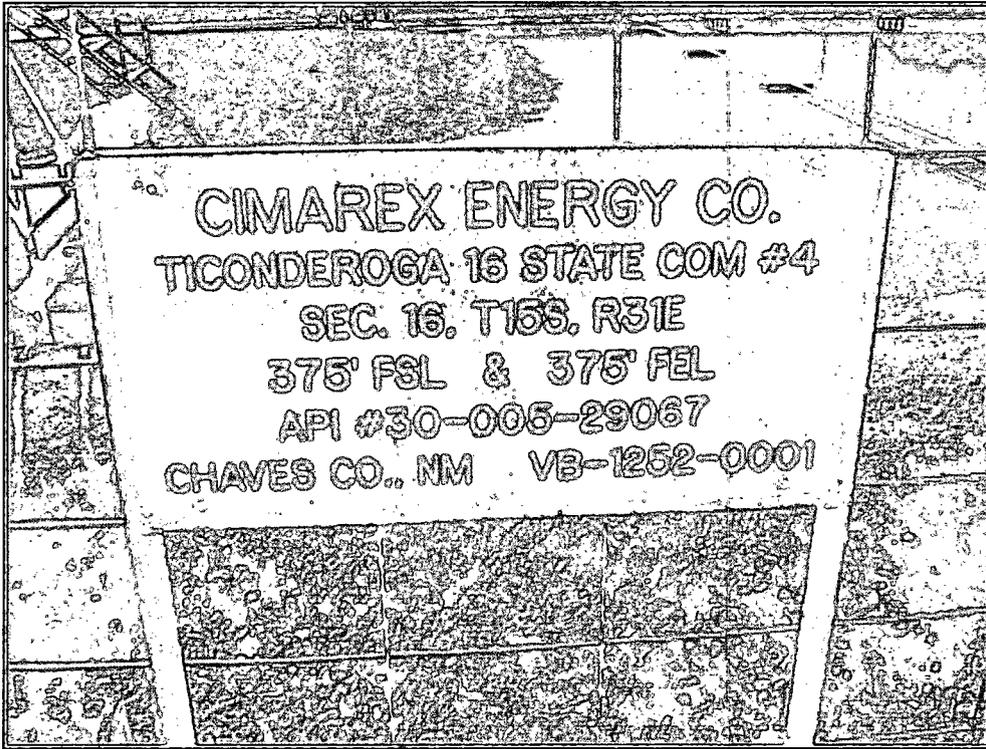
Sampler Relinquished:	Date: 10/1/10 Time: 4:23	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By:	Date: 10/1/10 Time: 4:23	Received By: <i>Andi Newson</i>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. <i>D. 5°C</i>	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) <i>GA</i>
REMARKS:			

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

#26

Appendix B

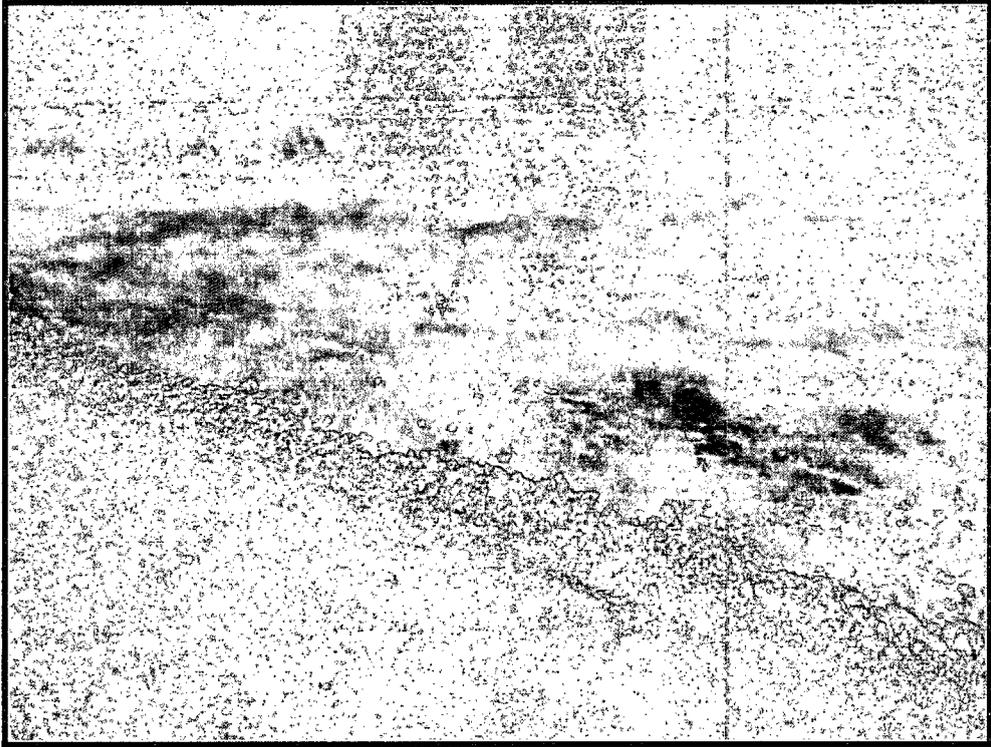
Site Photographs



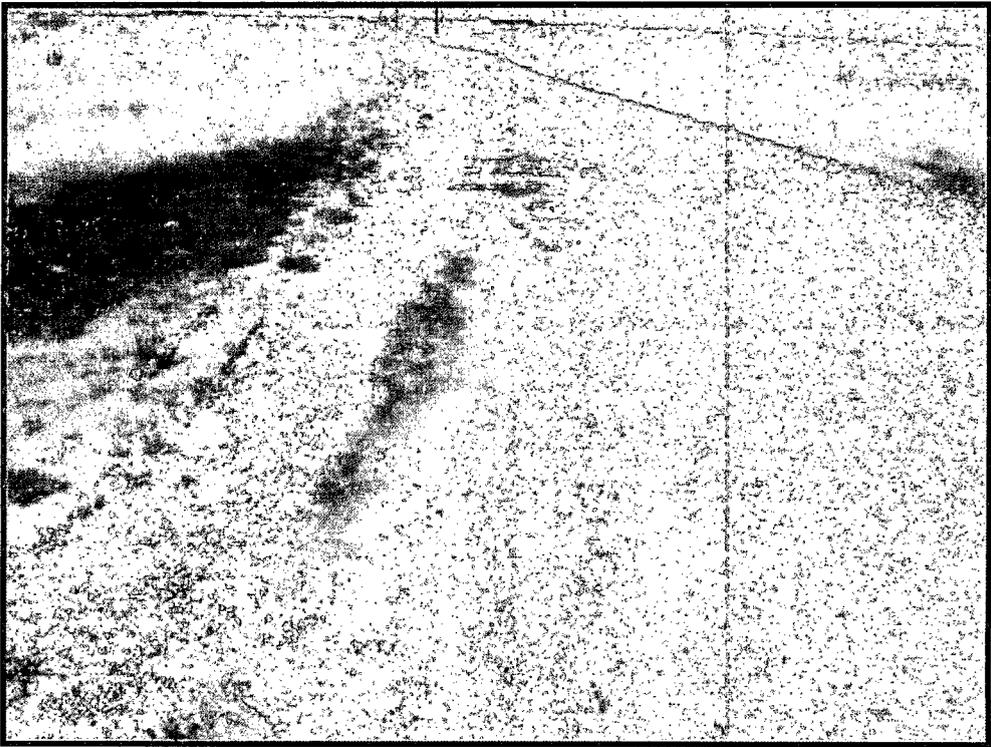
Lease sign



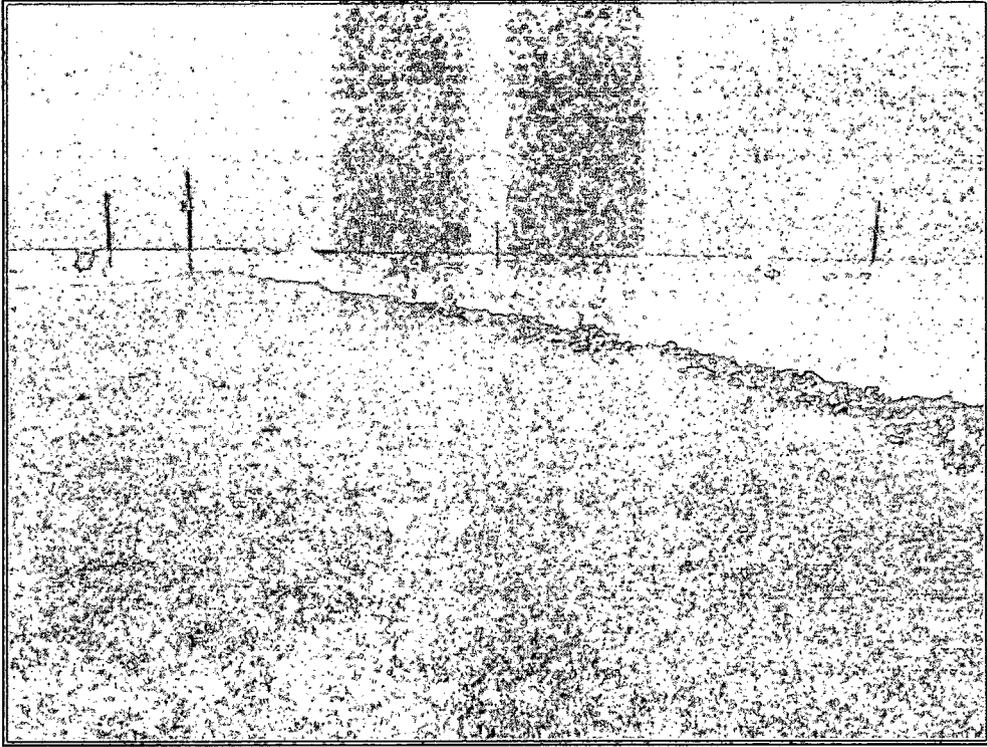
East of lease road



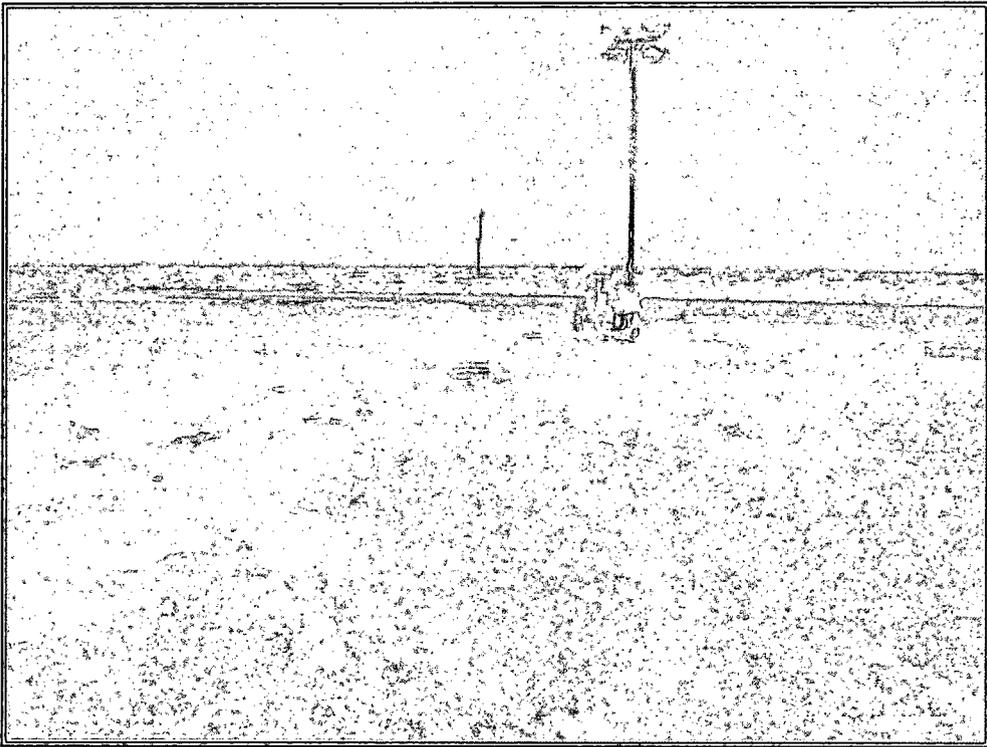
East of lease road facing NE



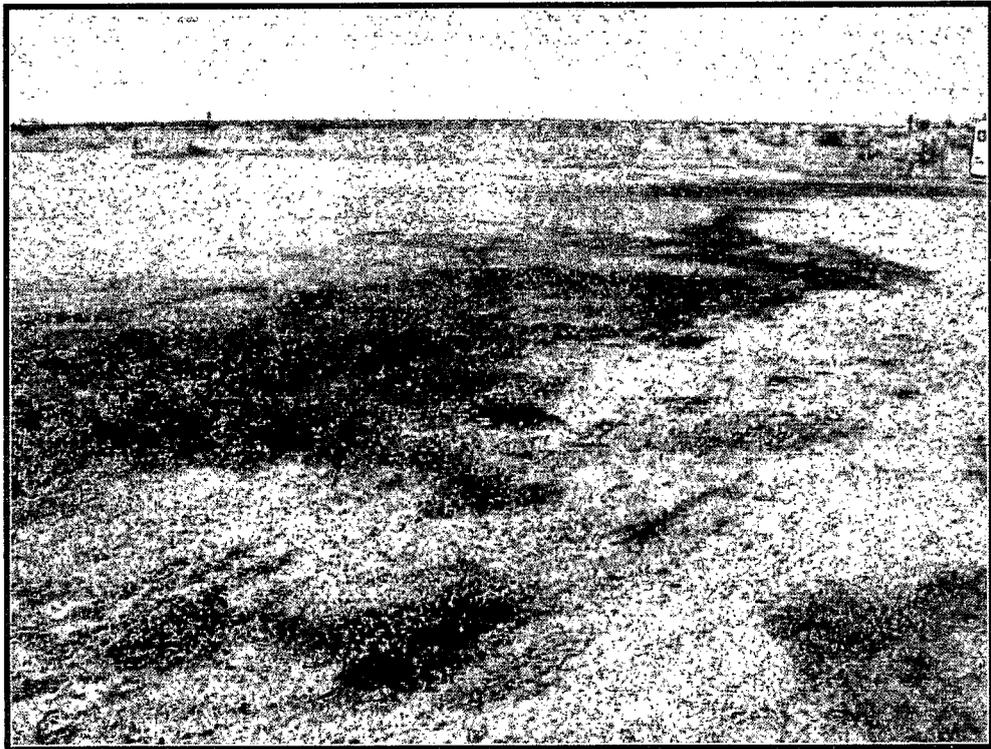
Lease road facing north



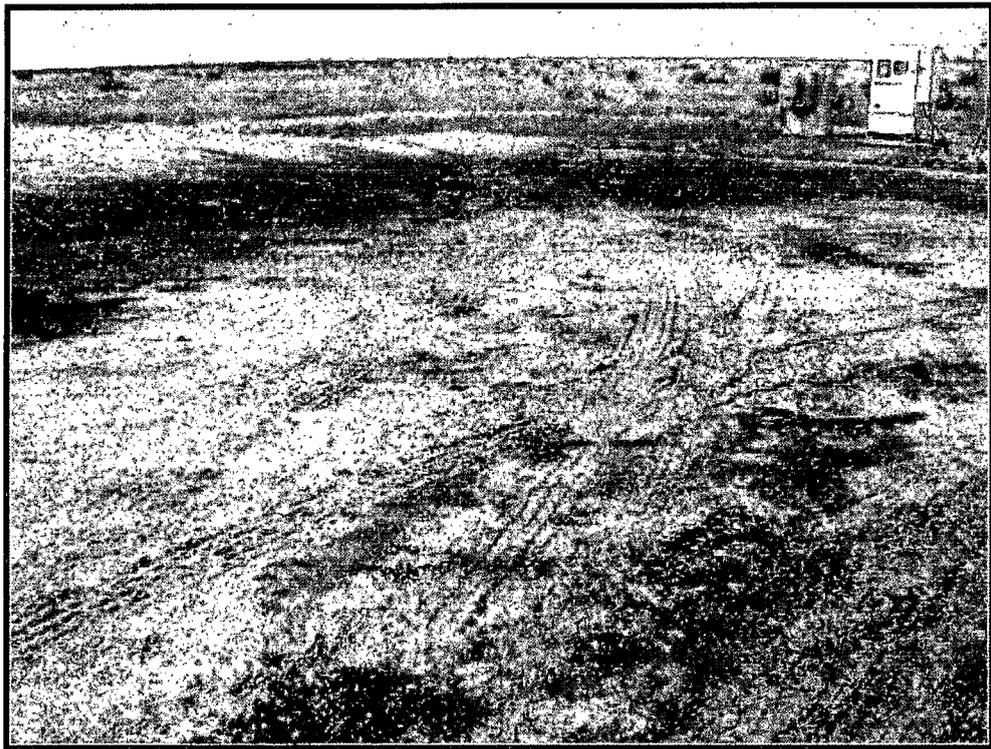
East end of location facing north



Location facing northeast



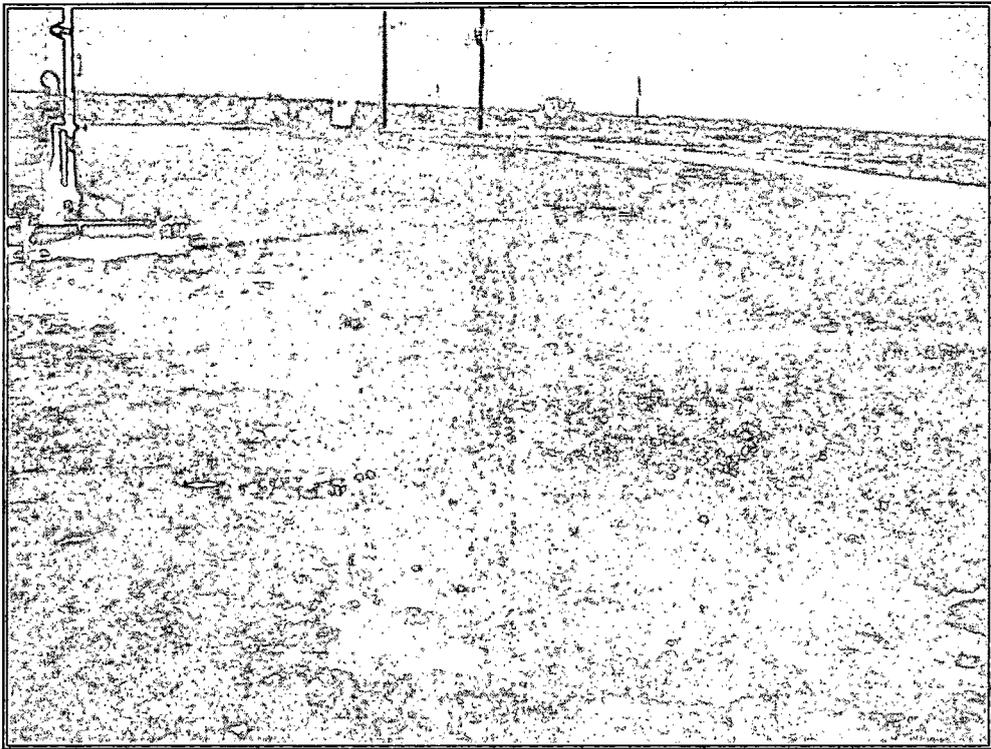
Location facing north



Location facing northwest



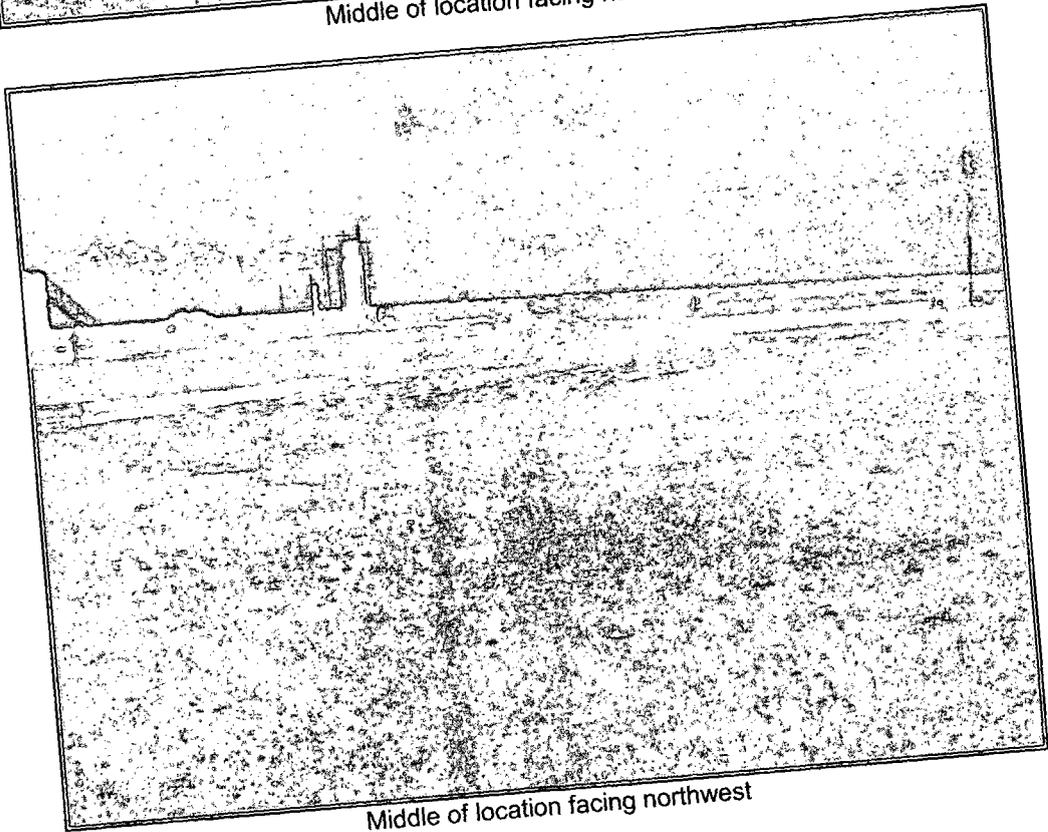
Location facing southwest



Center of location facing northeast



Middle of location facing north



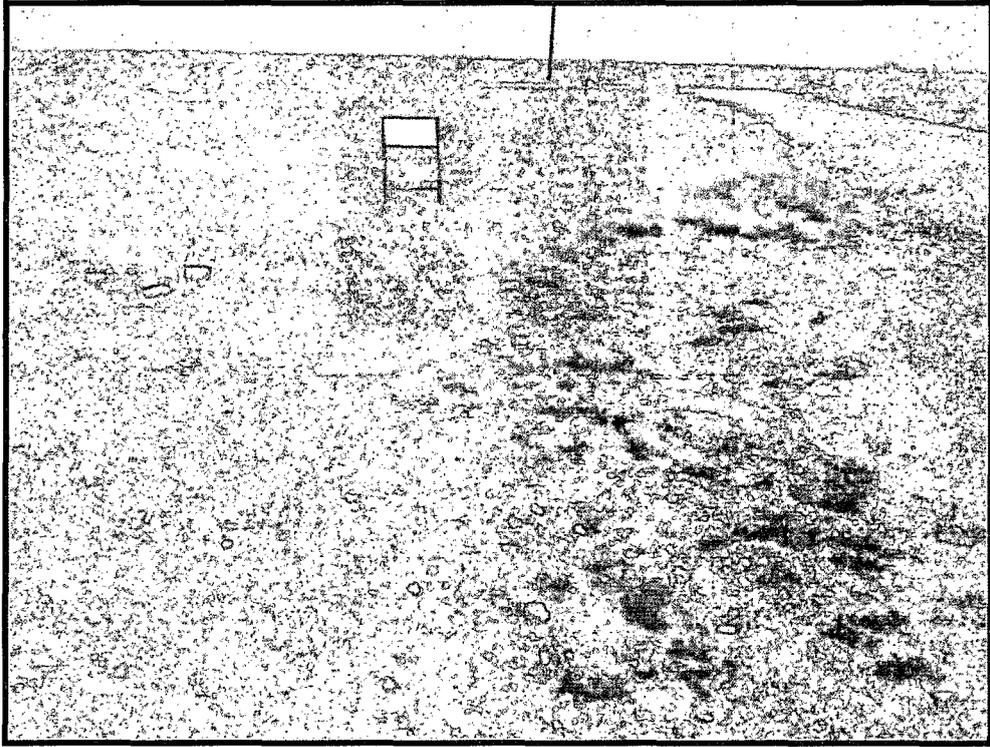
Middle of location facing northwest



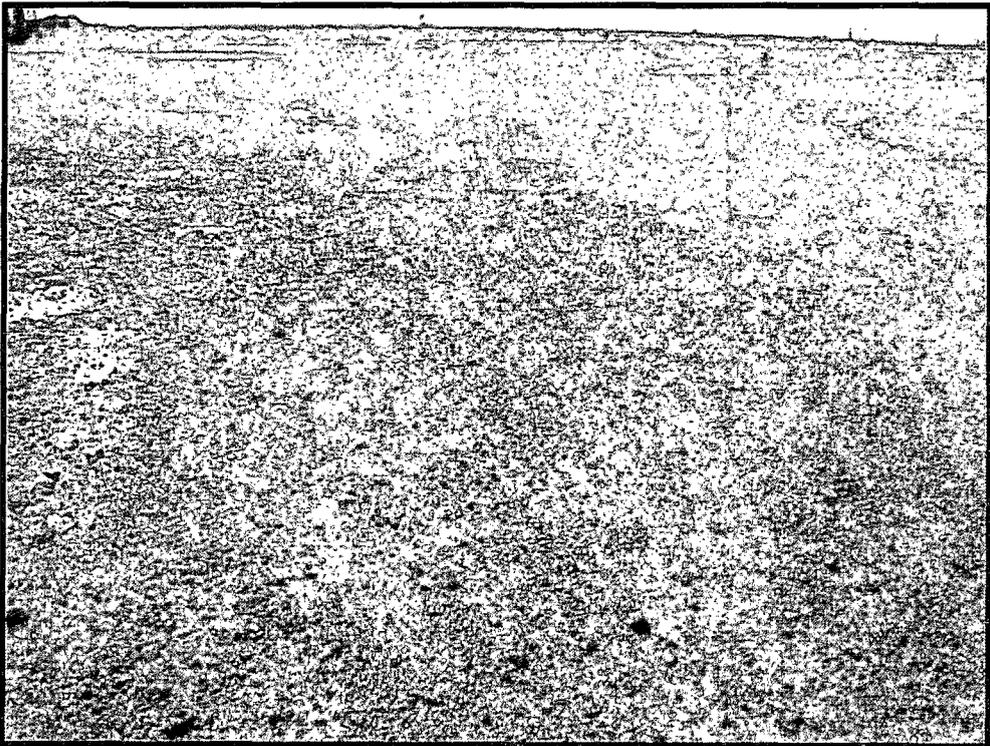
North of lease road



North of lease road facing east



North of location facing east



North of location facing west



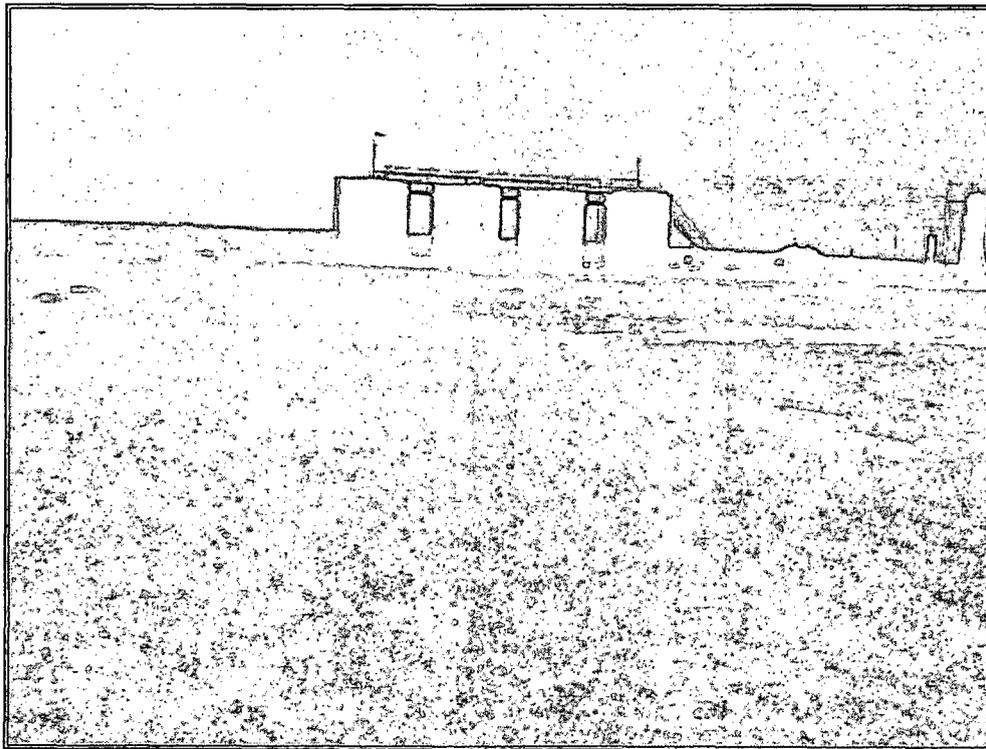
Puddle north of location



Lease road on south side of location



South of lease rd facing east



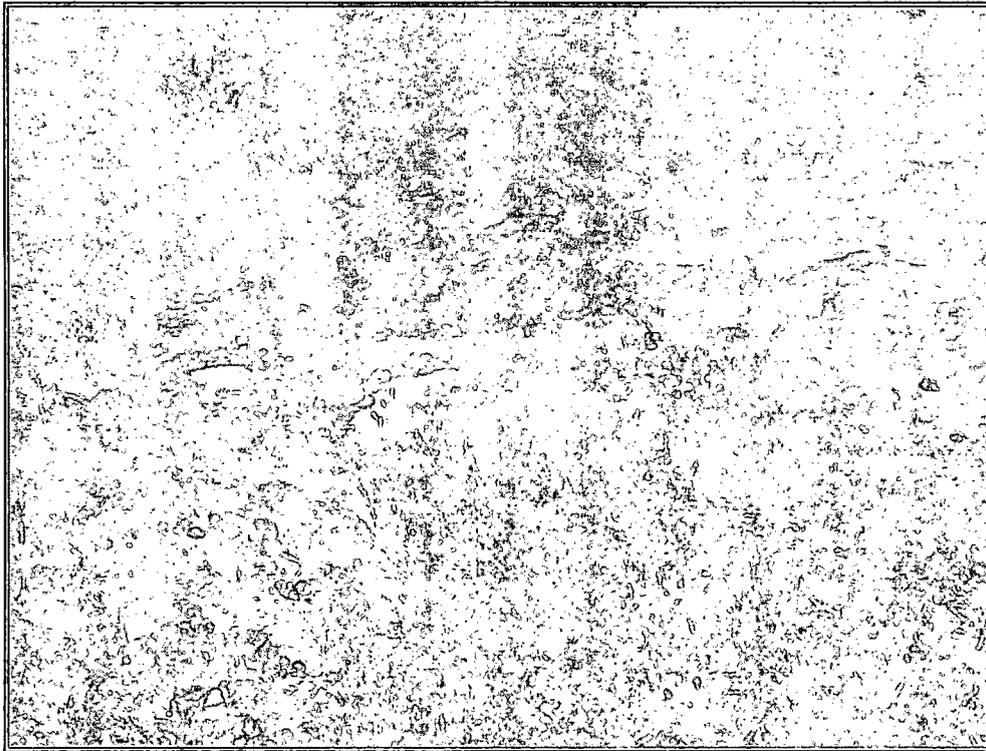
South of location facing west



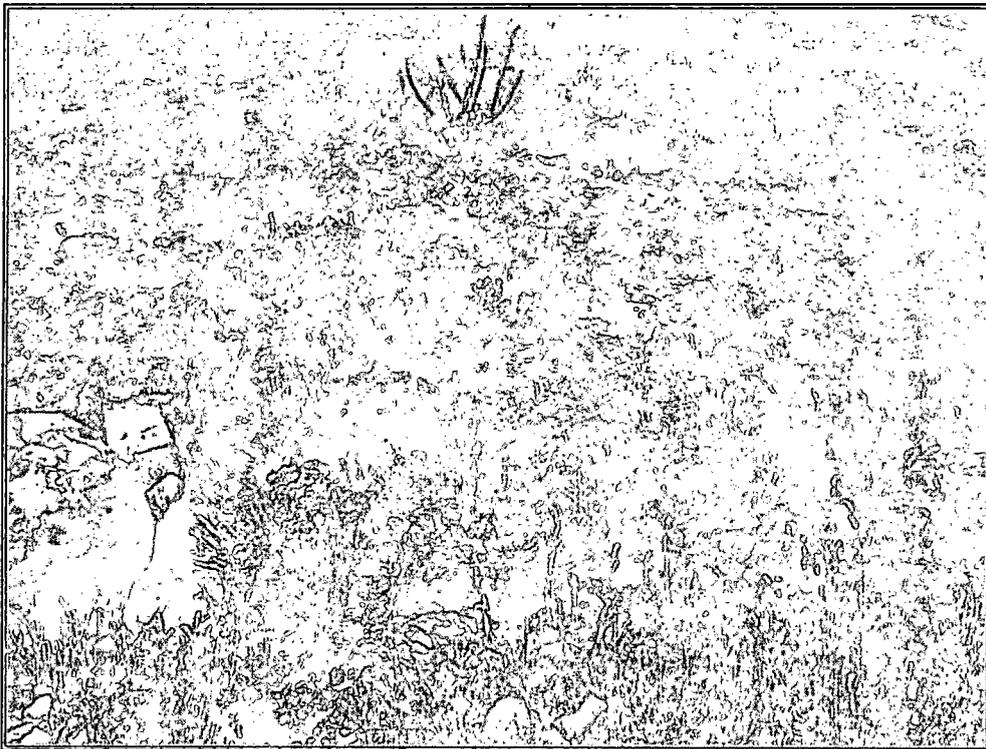
Stained vegetation northeast of location



Staining on vegetation



Staining on vegetation east of lease road



West of lease road running north and south

Appendix C
C-141

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

RECEIVED

Form C-141
Revised October 10, 2003

SEP 23 2010
Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form
HOBSOCD

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

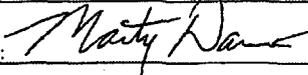
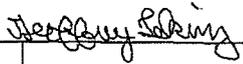
Name of Company: Cimarex Energy	Contact: Marty Davis
Address: 600 N Maricfeld Suite 600, Midland TX 79701	Telephone No. (575) 605-5509
Facility Name: Ticonderoga 16 Sate Com #4	Facility Type: Battery
Surface Owner:	Mineral Owner:
	Lease No.:

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	16	15S	31E					Chaves

Latitude: 32.009640 Longitude: 103.819428

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release 15 bbls	Volume Recovered \$ bbls
Source of Release: Casing leaked	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 9/17/10 8:00 am
Was immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Geoff Leking, NMOCD	
By Whom? Sergio Contreras, SESI	Date and Hour 9/20/10, 8:00 am	
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.*		
Casing leak; Vacuum truck removed free standing product.		
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: 	OIL CONSERVATION DIVISION	
Printed Name: Marty Davis	Approved by District Supervisor: 	
Title: Field Foreman	Approval Date: 9/23/10	Expiration Date: 11/23/10
E-mail Address: mdavis@cimarex.com	Conditions of Approval: SUBMIT FINAL	Attached <input type="checkbox"/>
Date: 9-20-10 Phone: (575) 605-5509	C-141 BY 11/23/10.	IRP-10-9-2615

* Attach Additional Sheets If Necessary

RECEIVED

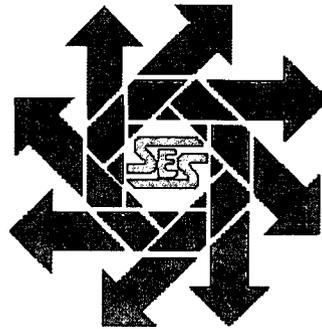
OCT 28 2010

HOBBSOCD

**Cimarex Energy Company
Ticonderoga 16 State Com #4
Section 16, Township 15S, Range 31E
Chaves County, New Mexico**

Delineation Report/Work Plan

October 7, 2010



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**

- sect loc diff from
lat/long
- depth to gw correct?
- delineate further
① AH#1 & AH#2
- especially taking
environmental eye
NMOCs-Hobbs
11/05/10

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I. Company Contacts

Company Representative	Company	Telephone	E-mail
Marty Davis	Cimarex Energy Co.	575-605-5509	mdavis@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 Ticonderoga 16 State Com #4, located in Section 16, Township 15 South, and Range 31 East. The blowout preventer on the pulling unit went out causing the casing to leak and releasing approximately 15 barrels of hydrocarbon fluid and recovered approximately 5 barrels. There was also an area affected with overspray.

III. Surface and Ground Water

According to the database provided by the New Mexico Office of State Engineer's online database, the average depth of water in this area is 67 feet since February 2007.

IV. Soils

The surface soils in the area are predominantly sand and sandy loam.

V. Work Performed

On October 1, 2010 SESI was onsite to install auger holes to delineate release area. Auger Hole (AH) #1 and AH #4 was located on location pad and a surface sample was obtained but had auger refusal at a depth of six (6) inches below grade surface (bgs). AH #2 and AH #3 were located in pasture area and northeast of location and samples were obtained at surface and one (1) foot below grade surface.

Samples were properly preserved and transported under chain of custody to Cardinal Labs of Hobbs, New Mexico. The samples were analyzed for Chlorides (EPA Method 4500-ClB), Benzene, Toluene, Ethyl Benzene, Total Xylenes (BTEX EPA Method 8021) and Total Petroleum Hydrocarbons (TPH EPA Method 418.1).

The results of the analysis are as follows:

Lab ID	Sample ID	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)	TPH (mg/kg)	Chlorides (mg/kg)
Analysis Date:		10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10
H020969-01	AH #1 Surface	<0.025	0.036	0.048	0.181	5920	896
H020969-02	AH #2 Surface	<0.025	0.355	0.500	2.94	4790	80.0
H020969-03	AH #2 1'bgs	<0.025	0.065	0.047	0.158	<100	112
H020969-04	AH #3 Surface	<0.025	0.032	0.029	0.103	<100	80.0
H020969-05	AH #3 1'bgs	<0.025	0.026	<0.025	<0.075	<100	128
H020969-06	AH #4 1'bgs	<0.025	0.051	0.370	0.863	6550	160

VI. Action Plan

Cimarex proposes that the affected area on location pad be excavated to a depth of 2” bgs and the affected area in the pasture be mowed and ripped to let area aerate out. The area near auger hole #4 will be excavated and the most highly contaminated soils removed and taken to an approved NMOCD facility. The excavated areas will then be backfilled with clean soils and contoured to original grade.

VIII. Figures and Appendices

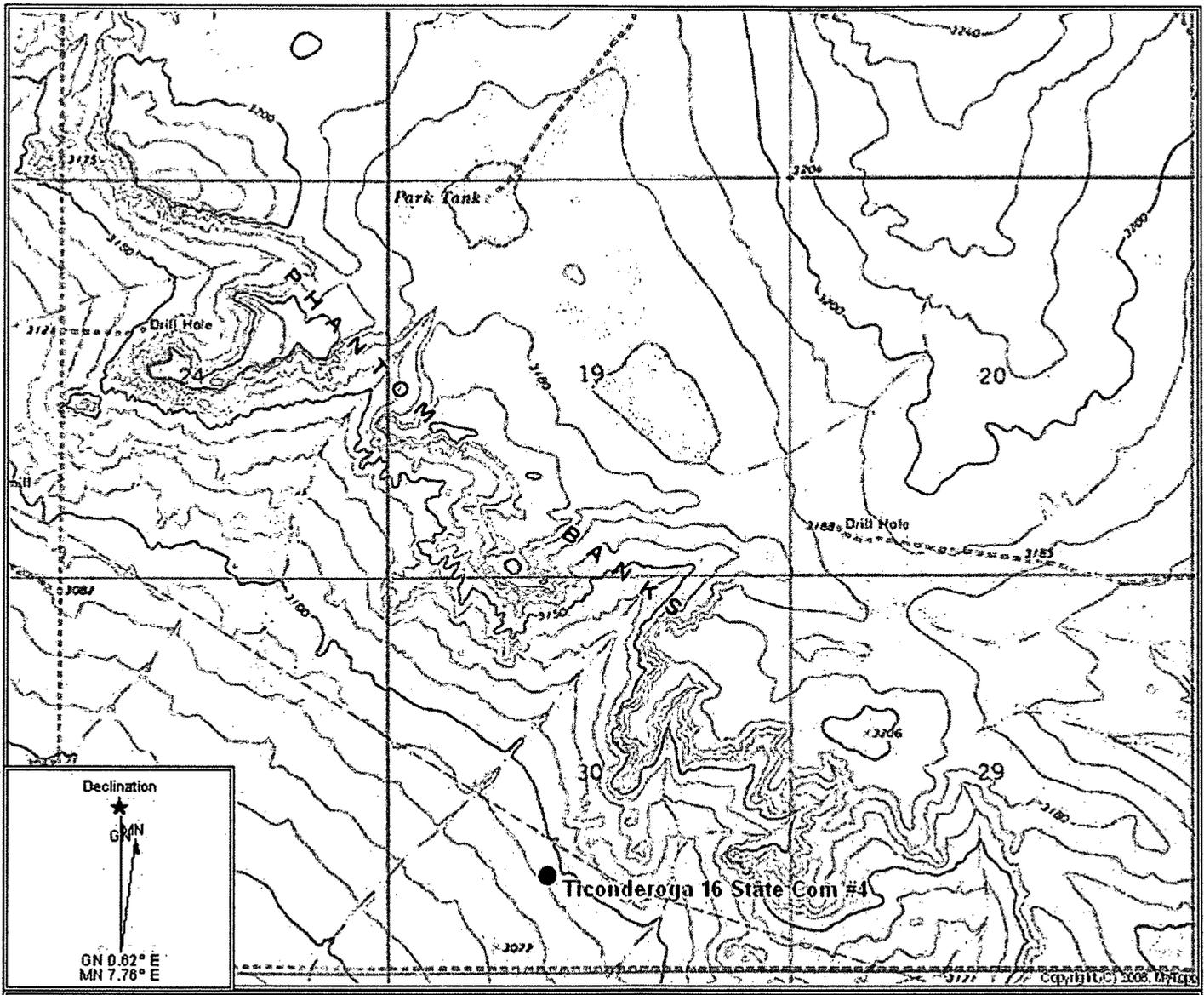
Figure 1 – Vicinity Map

Figure 2 – Site Map

Appendix A – Analytical Results

Appendix B – Site Photographs

Appendix C – C-141



Map Name: PHANTOM BANK Scale: 1 inch = 2,083 ft. Map Center: 032.0236369° N Horizontal Datum: WGS84