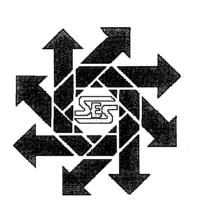
Cimarex Energy Company Palmillo State #2 Unit J Section 32, Township 18S, Range 29E Eddy County, New Mexico

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

TABLE OF CONTENTS

I.	COMPANY CONTACTS	1
II.	BACKGROUND	1
III.	SURFACE AND GROUND WATER	1
IV.	soils	1
V.	CHARACTERIZATION	1
VI.	WORK PERFORMED	2
VII.	ACTION PLAN	3
	FIGURES AND APPENDICES	. 4 . !
	Appendix B– Site Photographs	. 7

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:

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

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-Cl⁻B), 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	CI (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

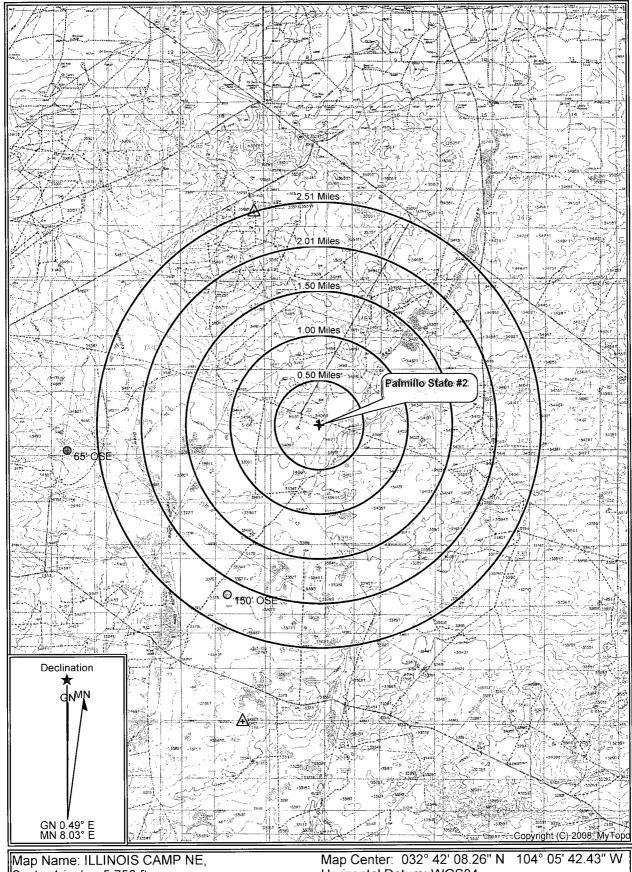
Figure 2 – Site Map

Appendix A - Analytical Results

Appendix B – Site Photographs

Appendix C - C-141

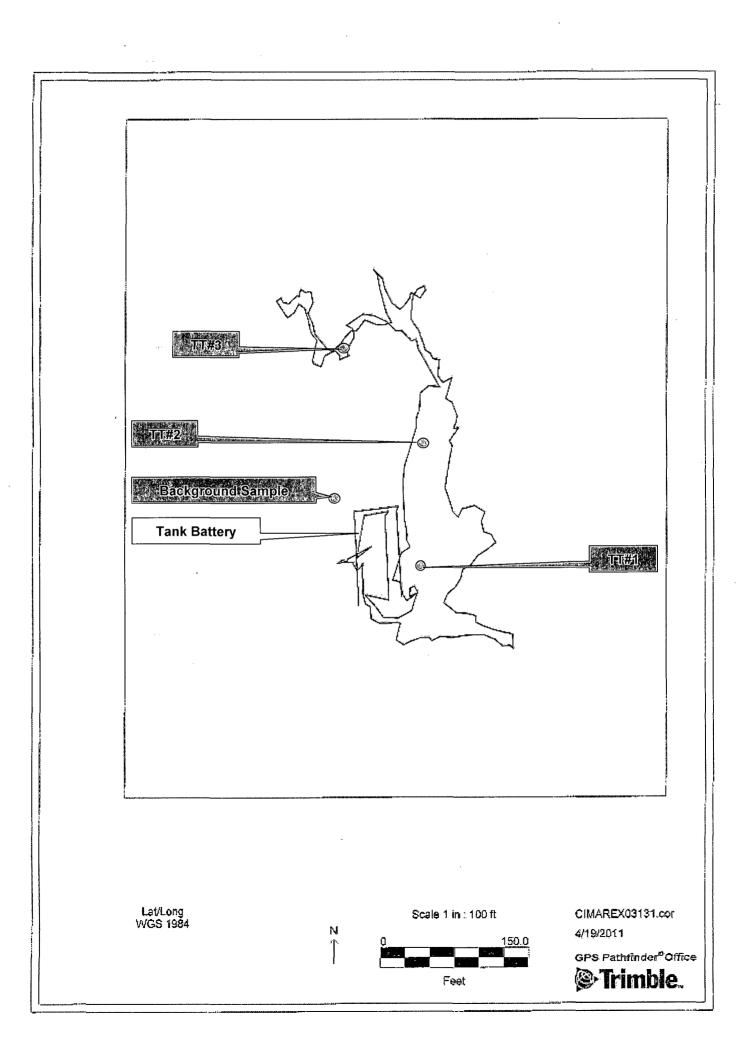
Figure 1 Vicinity Map

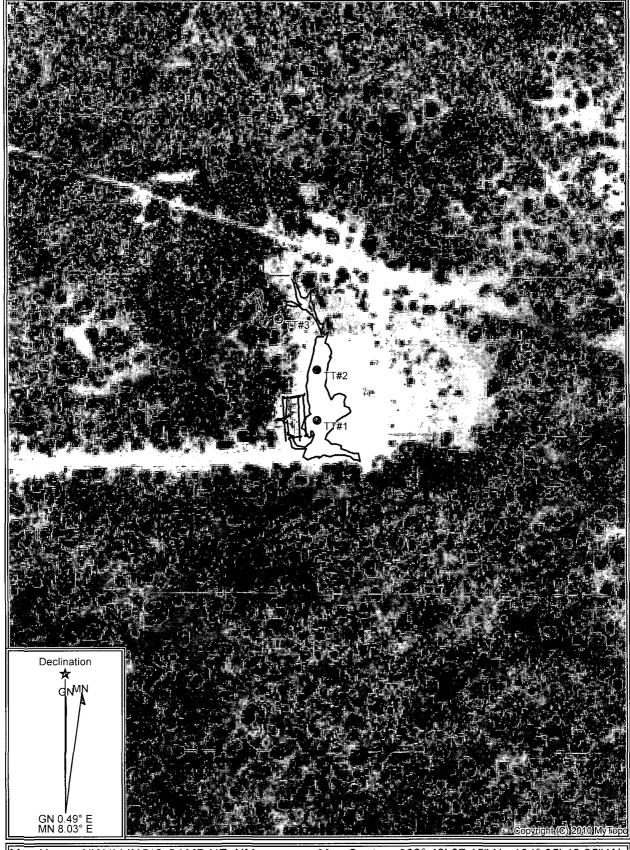


Scale: 1 inch = 5,750 ft.

Horizontal Datum: WGS84

Figure 2 Site Map





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

E CONTRACTOR OF THE CONTRACTOR	The second second second second		(quarte	rs a	re s	sma	allest	to larg	est) (I	NAD83 UTM	f in meters)		(In fee	et)
POD Number	Sub basin	*	County			Q 4		Tws	Rng	x				Water Column
CP 00646	;	STK	ED	1	1	4	07	198	29E	583155	3615551	199	150	49
CP 00681	i	PRO	ED	1	1	3	34	198	29E	587230	3609127*			
CP 00703	i	PRO	ED		4	1	36	198	29E	590945	3609441*	225	115	110
CP 00739	i	PRO	ED	3	4	4	35	198	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	198	29E	591713	3613870*	120		
CP 00821	;	STK	LE		4	4	25	198	29E	591743	3610248*	120		
										Average Depth to Water:		108 f	eet	
	·									Minimum Depth:			60 f	eet
											Maximum	Depth:	150 f	eet

Record Count: 7

PLSS Search:

Township: 19S Range: 29E

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-845 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

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

Cardinal Laboratories is accreditated 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





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:

CTM-11-005

Project Number:

PALMILLO STATE #2

Project Location:

EDDY CO, NM

Sampling Date:

Sampling Type:

Soli

Sampling Condition: Sample Received By:

Cool & Intact

Jodi Henson

03/30/2011

Sample ID: TF-\$1 3' BGS (H100530-01)

_ 2000012301	ther a bookers	noon-nr	.)							
STEX SOZIB	THE STATE OF THE S	rig/	Kg	Abalyze	d By: CMS	Nille av ald årnen råtigkt omgan at	NASA AMMONTON KAKSTOONIAMIAA	De deciminame weign is prin brief a com l'an estat a comparte.	o migra estada e e estada esta e local e estada e	ani di kuma na mangana mana a ma
A	nalyte	Result	Reporting Limit	Anaiyzed	Method Blank	BS	% Ranovery	True Value QC	990	Qualifier
Benzene*		<9.050	0.050	04/01/2011	ND	1.81	0.00	2.00	3.31	•
Foluene*		< 0.050	0.050	04/01/2011	ND	1.83	94,1	2.00	3.78	· H.
Ethylbenzene*		< 0.050	0.050	04/01/2011	ND	1.93	. 96.7	2.00	3.41	6
Total Xylenes*	,	< 0.150	0.150	04/01/2011	MD	5.72	95.4	6.00	3.22	A. A
Surragate: 4-B	romofluorobenzene (PIL	96.8 %	% 70- <u>1</u> 36	,					MANTE SET ATTER STATES	
Chloride, SM45	500C!-9	स्तर्।/	kg	Analyzo	d By: HM	Thirt is not . The admix labels	- Tarrieria per la estratorio satroparricana, es associatorio		**************************************	LANGUA SITA INDINANI ITTA PIN
A	nalyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	ዴዮክ	Qualitier
Chlorida	Å.	1790	16.0	04/01/2011	ND:	432	.108	400	3.77	
TPH 418.1	mer tillholden þett til eine af eile eile stær stællare í lællikkein skriver í lælli (1975) á þ. A.	mg/i	kg	Analyze	d Sy: AB		harte arte o coma nomen consumpti i name			:
· As	ralyte	Result	Reporting Limit	Analyced	Method Blank	95	% Recovery	True Value QC	RPD -	Qualifier
TPH 418.1		<100	100	03/31/2011	ND	1200	101	11,90	0.830	
1	.5e							12 1		

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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:

Soll

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 10: TT #1 5' 8G5 (H100630-02)

	SYEX 5021B		ing/kg		Analyze	Analyzed By: CMS		en e	nersenia mercernisco communicações autorit de	Phartes, vicepacerrisispes na	ar to are an extensive to the action of the control
	Analyte 👾	. •	Result	Reporting Limit	Analyzed	Method Black	BS	% Recovery	True Value QC	RPD	Qualifier
	Benzene*		<0.050	0.950	04/01/2011	an	1,81	90.5	2.00	3.31	
	Toluene [®]		<0.050	0.050	04/01/2014	ND	1,88	94.1	2.00	3,78,	*
	Ethylbenzene*		<0.050	0.050	04/01/2011	90	1.93	96.7	2,00	3.42	* 3.
	Total Xylenes*	٠	<0.150	0.150	04/01/2011	MD	5.72	95.4	6.00	3.22	
	Surrogate: 4-Bromoftnorobe	enzene (PIL	94.6	36 70-130	·						
	Chloride, SM4500CI-B		mg/	kg	Analyze	d By: HIA	n ni samhak aran ma		rt og for skall skriver i kritigede præsent, en $rac{1}{2} r_{max} = r^{max}$	Carlo province of province spring	ción antenna, ar sprincipio; activo en pri
	Analyte		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPO	Qualifier
200	Chloride		640	16.0	04/01/2011	(M)	432	. 108	400 .	3.77	
	TPH 418.1		mg/	ка	Analyse	d By: AS	ABAN > Tomas and	engelikk ferilling f. et d'andhalanin anna	m namma, program observance o process (f. 1811)	ni e tradicio (tradicio de la completación)	nimar man samma samt magai a misa a a a a a a a sams, ar sams
.;	Analyte		Result	Reporting Limit	Analyzed	Method Slank	88	% Recovery	True Value QC	RPO	Qualifier
	TPH 418.1		<100	100	03/31/2011	ND	1200	101	1190	0.830	

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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 1D: TT #1 10' BGS (H100630-03)

BTEX 80218		my/		Aosiyze	d By: CMS	TO THE PARTY OF TH				
Analyte	<u>.</u>	Result	Reporting Limit	Analyzed	Method Blank	83	% Recovery	Truc Value QC	KPD	Qualifier
Benzene*		<0.050	0.050	04/01/2011	ND	1.81	190.6	2.00	3.31	٠.
Toluene*	State Control of the	<0.050	0,050	04/01/2011	ND	1.88	94.1	2.00	3.78	
Ethyibenzene*	7	< 0.050	0.050	04/01/2011	ОИ	1.93	96.7	2.00	3.41	. 4
Total Xylenes*	• :	<0.150	0.150	04/01/2011	ND	5,72	95.4	6.00	3.22	\$ 150 \$ 150 \$ 150
Surrogate: 4-Bromo	oftkorobenzene (P1.	I 95.60	6 70-130	}						
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a Chloride		128	16.0	04/01/2011	ND	43211	103	400	3.77	
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- Anaiyte	:	Result	Reporting Limit	Analyzed	Method Blank	88	% Recovery	True Valua QC	RPD	Qualifier
TPH 418.1		<100	100	03/31/2013	ND	1200 -	101	1190	0.830	

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aleg & Keene



Safety & Environmental Solutions Bob Allen 703 East Clinton

Hobbs NM, 88240

(575) 393-4388

Received:

03/30/2011

Sampling Date:

03/30/2011

Reported:

04/05/2011

Sampling Type:

Soil

Project Name:

CEM-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' RGS (H100630-04)

BYEK 80218	mg/kg	Analyzed Sy: Člěš	TE INCOMPANIEN SEGON STOLLENGE STOLLENGE AND SEGON SEGONS SEGONS SEGONS SEGONS SEGONS SEGONS SEGONS SEGONS SEG	N ANDROIL NA ANT AND INCOMESTABLE AND
Antilyte	Result Reporting Limit	Amalyzad Method Blank	BS % Recovery : True Value	QC RPD Qualifier
Benzene*	<0.050 0.050	04/01/2011 ND	1.81 . 90.6 2.08	3.31
Toluene*	<0.050 - 0.050	04/01/2011 ND	1.88 94.1 2.60	3.78
Ethylbanzone*	<0.050 0.050	04/01/2011 ND	1.93	3.41
Total Xylenss*	<0.150 0.150	04/01/2011 ND	5.72 95.4. 6.00	3.22
Surrégate: 4-Bromofluorabenzene (PIL				
Chioride, Si445/10CI-E	ang/kg '	- Analysisil By: Wild	na na katawa na manakana na matawa na manakana na manaka na manaka na manaka na manaka na manaka na manaka na Manaka na manaka na m	พระสายเทพเพลเลง เมษายนเลก มนเพลเลงสาย เกราะการเกราะการเกราะการเกราะการเกราะการเกราะการเกราะการเกราะการเกราะการ
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any other cause whatsoever shall be disensed waived stilless made in whiting and received by Cardinal within thiny (X) days after completion of the applicable service, including, without limitation, business internations, loss of use, or vious july profits incurren by client, its subsidiaries, difflictors or accessors crising out of or related to the

aly & Ken



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

Fax To:

o: (575) 393-4388

Received:

95/30/2011

Sampling Date:

03/30/2011 F

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' 8GS (H100630-05)

BTEX 89218	mg	/kg	Anaiyze	d By: CMS	Mark Aldridor - Now room of the	TOTAL TOTAL TOTAL CONTRACTOR CONTRACTOR	Substitutive of the control of the c	e vista de o la compromest	gen i de la companya
Analyte Analyte	Result	Reporting Limit	Atialysed	Method Blank	ธร	% Recuvery	True Value QC	RPD	Qualifie
Seitzene*	₹9.056	0.050	04/01/2011	- ND	1.31	90.6	3 2.00	3310	• ,
Toluene*	<0.050	0:050	04/01/2011	MD	1.88.	94.1	2.00	3.78	
Ethylbenzenes	< 9.050	0.050	.04/01/2011	ND	1.93	96.7	2.00	3.41	
Total Xylenes*	<0.150.	0.150	04/61/2011	, ND	5.72	95.4	6.00	3,22	# <u> </u>
Surrogate: 4-Bromofluoročenze	me (PIL) - 94.7	% - 70-130)						
Chloride, SM4509Cl-8	mg	/kg	Analyza	d By: HM	entre mense se en semblem har when	The same of the sa	◆七の八下 A. AESE ASSE / ヤア BEST 4. ** ** ** ** ** ** ** ** ** ** ** ** **	og sine fler kysterse er e bosser och	in santa Trans (1970), wasay girab da 41 a 1981 w
Analyte	Result	Reporting Limit	Analyzed	Method Slank	BŚ	% Recovery	True Value QC	RPD	Qualitier
Chloride	272	1.6,0	04/03/2011	ONC	432	108	400	3.77	
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Analyte :	Result	Reporting Limit	. Analyzed	Method Blank	BS	% Recovery	True Value QC	RPO '	Quelifiér
TPH 418.1	<100	100	03/31/2011	ND.	1200	r. 101	1190	0.830	

*=Accredited Analyte

PLEASE NOTE: Diability and Caranges. Cardinal's liability and clients exclusive rainedy for any client bins, including those for negligence and any other cause whatcover shall be deemed walked unless made in writing and received by Cardinal within thick. (30) data after completion of the applicable service. In no event shall Cardinal to the individence of the applicable service in no event shall cardinal to the individence of the applicable service. In no event shall cardinal to the performance of the services betterpitons, loss of use, or loss of profits incurred by client, its autostiance, affiliates or successors arising out of or related to the performance of the services hereigned by Cardinal, reportless of whether such claims based upon any of the above stered masons or otherwise. Results related only to the samples described eavile. This report shall not be reproduced becent in fail with written approval of Cardinal Liborationies.

Clay & Kuna



Safety & Environmental Solutions

Bob Allen

703 Sast 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-1,1-005

Sampling Condition:

Cool & Intact

Project Number:

PALMILLO STATE #2

Sample Received By:

Jodi Henson

Project Location:

EDDY CO, NM

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

8TEX 0021B	mg/kg	Analyzed By: CMS	C) AN STRANDO MARTINOS CONTEST. I S. AL DE M. TO SE SEGMENTA DIRECTOR MARTINOS MAREFIRMAS MARTINOS MARTINOS MARTINOS MARTINOS MARTINOS MARTINOS MAR	n de anticologie de a	S-LOW
Analyte	Result Reporting Limit	Analyzed Method Blank	89 %:Recovery	True Value QC	RPD Qualifier
Benzene*	. 5.56 1.00	04/04/2011 ND	1.81 90.6	2.06	3.31
Toluene*	23.9 1.00	04/04/2011 ND	1.88 94.1	2.60	3.79
Ethylbenzene*	6.32 1.00	64/04/2011 ND	1.93	2.00	3.41
Total Xylanes*	12.2 3.00	04/04/2011 ND	5.72 95.4	6.00	3.22
Surrogate: 4-Rromofluorobenzene (PIE	57.1 % 70-130		W.		
Critoride, SM4500CI-B	mg/kg	Analyzed By: HM	- Pe V. n Charlesschristschrist wieder 12. yn 15. n gest 18.27 kfranskritter i	Andertalentariamia direkt rakari bat elektrikari	ought the professional commence reported the state of the
Analyte .	Result Reporting Limit	Analyzed Method Blank	BS % Recovery	Trise Value QC	RPD Qualifier
Chioride	16.0 16.0	04/03/2011 ND	432 108	400	3.77
TPH 418.1	mg/kg	Analyzed By: All	al Personal Parks (Accessory 1988, as the enamerous of entire and endered the	d'	parts of the Spiritual States and the Spiritual Spiritua
Analyte	Result Reporting Limit	Analyzed Method Slank	BS % Recovery	True Value QC	RPD Qualifler
TPH 413.1	8520 500	03/31/2011 ND	1200 101	1190	0.830

Cardinal Laboratories

*=Accredited Analyte

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aleg to Krine



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:

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: TT #3 5' BGS (H100630-07)

ETEX 8021B	ing/kg	Analyzed Sy: CMS	E.J. dell. et a.c. y S., Ambillonynd. in Neuto syntymynys, regyny y gyryng P.T. h Killethia. I B. Errett P. F. y v	e companie, maneri en aun as antes se autre annes e sente e sente con testis este en entre en entre en entre e	men avissa esservent per estrenera ina perie
r , Analyte	Result Reporting Limit	Analyzed Method Blank	6S % Recovery	True Value QC RPD	Qualifier
Berizene*	<0.050 0.050	04/04/2011 ND	1.91 95.5	2,00 5,78	
Toluene*	<0.050 0.050	04/94/2011 ND	1.97 98.6	2.00 5.39	*
Ethylbenzene*	<0.050 0.050	04/04/2011 ND	2.05 102	2.00 (3 5.41	
Total Xyienes*	<0.150 0.150	04/04/2011 ND	6.10 102	5.63	
Surrogate: 4-Bromofluorobenzene (FIL	93:1% 70-130)			
Chloride, SM4500CI-8	mg/kg	Analyzed By: HM	Mark the little of the first to take persons a second tree of the content of the	G MANAGEMENT PERSON WERE PARKET WERE ALLEGED VALUE OF A MANAGE DATE OF THE STATE OF	OF BACK COLOR SET TO BE SEEN THE BEST OF THE SEEN.
Analyte	Result Reporting Limit	Analyzad Method Blank	BS % Recevery	True Value QC RAQ	Qualifie
Chloride	6 4.0 16.0	04/61/2011 ND .	432 108	400 3.77	
YPH 418.1	mg/kg	Asalyzed By: AB	and and the second of the seco	e pro-desse in security from a charge way of marger in , constraint and market in pro-	en a magas da ar magas en esta lon a magas alampana del esta en esta en esta en esta en esta en esta en esta e
Analyte	Result Reporting Limit	Analyzed Method Blank	BS % Recevery	True Value QC RPD	Qualifier
TPH 418,1	337 100	03/31/2011 ND	1200 101	1190 0.830	

Cardinal Laboratories *=Accredited Analyte

any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within timity (30) day; after competition of the applicable service. In no event shall Cordinal he bable for incidental or consequencial 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 the services hereunder by Cardinal, regardless of whether such

aley & trunc



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:

Soli

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: BACKGROUND 3' BGS (H100630-08)

BTEX 80218	annes (v. minerales), labor hima	mg,	/kg	Analyze	d By: CMS		- Marie o Santonio de la Reserva describiran	marka (m. 1.1.).		ermedonister mairmante e es
Analyte		Result	Reporting Limit	Anatyzed	Method Blank	B5	% Recovery	True Value QC	RPD	Qualité
Benzene*		<0.050	0.050	04/04/2011	ND	1.91	95.5	2.00	5,78-	4*
Toluene*		< 0.050	0.050	04/04/2011	ND	1.97	98.5	2.00	8,39	
Ethylbenzene*		<0.050	0.050	04/04/2013	ND	2.05	. 402	2.00	5,11	
Total Xylenes*	** .	<0.150	0.150	04/04/2011	ND	6.10	102	8.00	5,63	e de f

Surrogate: 4-Bromofluorobenzene (PIL

93.8 %

70-130

Chloride, SM	14500Cl-B	·,	mg,	ikg	Analyze	d By: HM	 Const. Mr. House of Grandelling	g global ye market kapangan ng alipmata, na kapata sa maga	had no arminism relision listens a 160 serve of 160 sportures a passinia, sayone an	r na så skulorenas kerstörsade	anakata da di Salah di di dakata bahasa da sirah		
	Analyte		Result	Reporting Limit	Analyzed	Method Blank	65	% Recovery	True Value QC	RPO	Qualifier.		
Chloride	• *.		256	16.0	04/01/2011	ND	432	108	. 400	3.77			
TPH 418.1		. II - Mahana wata wa 2004, Ta arawa a ta	mg/kg		Analyza	d By: AB	Por exchine Petro Press is much	i. In 1786, yn hen ou a serom mene poer poer anneren 'mpenere	ent material in protests of the critical paper," for more process.	-	an india a ant ar ordered homely on the extension		
	Analyte	200	Result	Reporting Limit	Analyzed	Method Blank	as	% Recovery	True Value QC	RPD	Qualifier		
TPH 413.1			<100	100	03/31/2011	ND	1200	- 101	1190	0.830			

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PLEASE NOTE: Lubbility and Damages. Cardinal's fiability and client's exclusive remerly for any client arising, whother based in contract or turt, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (20) days after completion of the applicable service. In no event shall Cardinal including, consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subdistances, affiliates or successions aimsing out of or related to the performance of the services twe-currier by Cardinal, regardless of whether such dains is based upon any of the above stated reasons or otherwise. Results relate only to the samples ident field above. This report shall not be reproduced except in full with written approval of Cardinal Laboratonies.

aleg Dreine



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

PPO

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 astreceived basis (wet) unless otherwise noted on report

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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any client arising, whether based is contact or tors, shell ce limited to the amount paid by client for analyses. any other cause whatboever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days area constitution of the applicable service. In no event shall Cordinal be flable for incidental or consequential damages, including, without limitation, business internuotions, loss of use, or loss of profits incurred by client, the subsidiaries, affiliates or successors areany out of or related to the performance of the services because the performance of the services because the subsidiaries of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not Le reproduced except in full with written approval of Cardinal Laboratories.

Celeg & Keena

ARDINAL LABORATORIES

CHAIN-OF CUSTODY AND ANALYSIS REQUEST

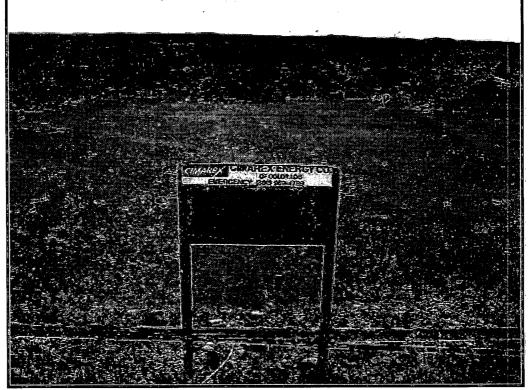
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

THE RESERVE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE PERSON NAME	(500) 393-2326 Fa	THE RESERVE THE PROPERTY OF TH		-	program de la magnesia de la compositione de la com	CALCAN TON	erena seriente			manifest bom and a		الدرومسانيدنوا ود	e e e e e e e e e e e e e e e e e e e	.:		Literatura (Statella Journ	T. V. V. Day	rage	·	OI		Nanagaan / Nan -	
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Project Manager:							9.0.#																Jang-Jang-
Address:	703 East Clint	on				[6	Compan	y:	Same		4	4			11			1	i				STANSATO
City:	Hobbs	State: NM	Zip:	8824	IC	T. C.	Affini				- Andrews	1		9.00		1		İ					Table Back
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Project Name:	Palmillo 5	Project Owner					Siale:		Zlp:					ļ		1		You.					9
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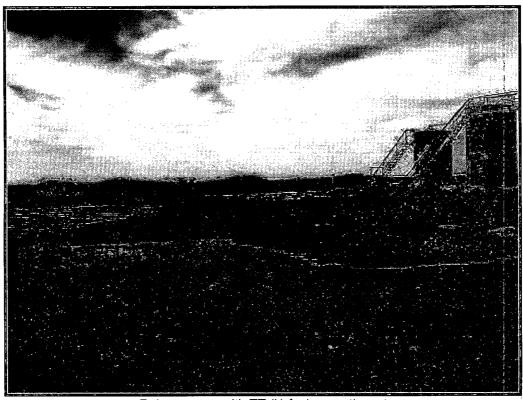
† Cardinal cannot accept verbal changes. Places fax written changes to 675-593-2476.

Page 14 of 11

Appendix B Site Photographs



Well Sign



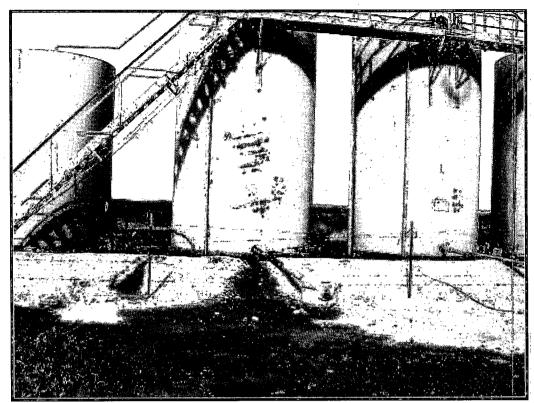
Release area with TT #1 facing southwest



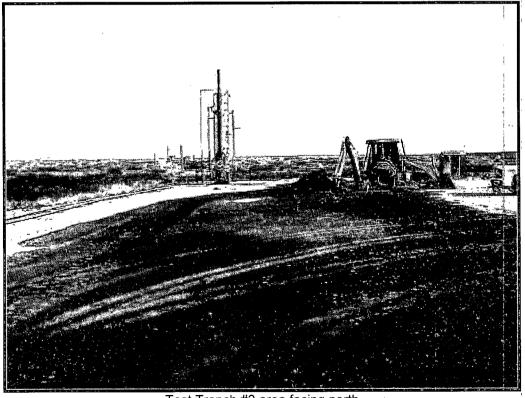
Test Trench #1 10'bgs



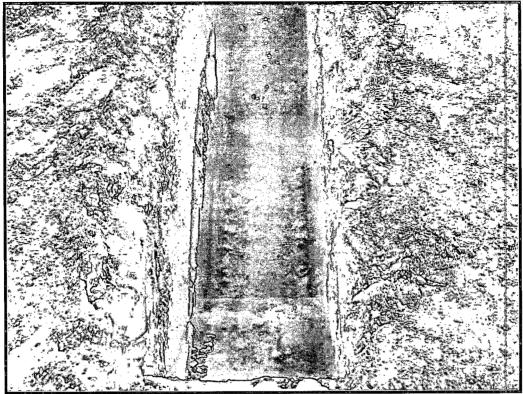
Test Trench #1 west wall



Release area facing west



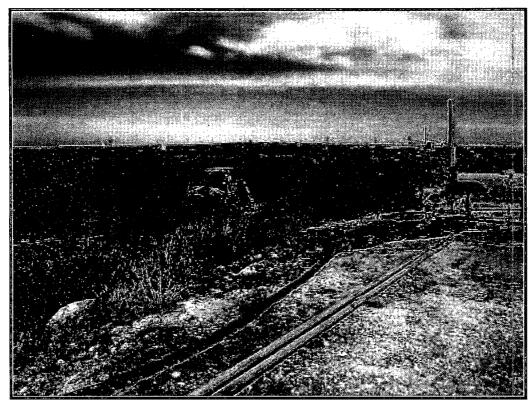
Test Trench #2 area facing north



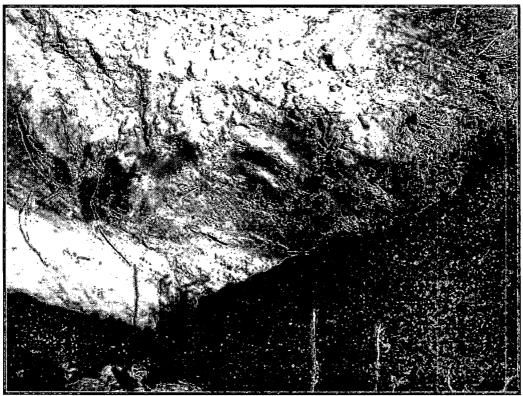
Test Trench #2 5'bgs



Test Trench #2 south wall



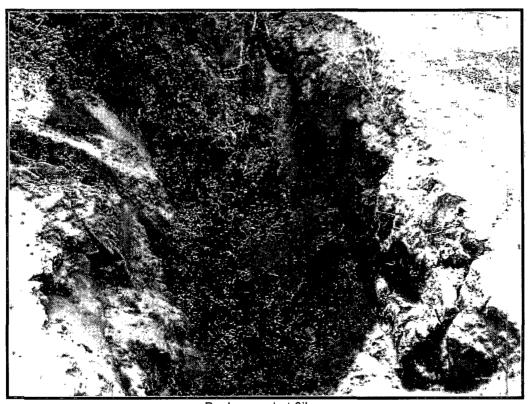
Test Trench #3 location facing northwest



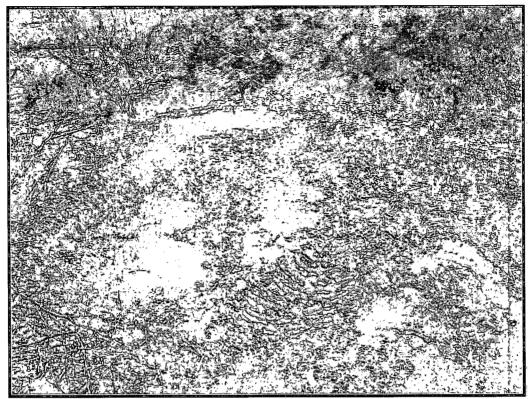
Test Trench #3 5'bgs



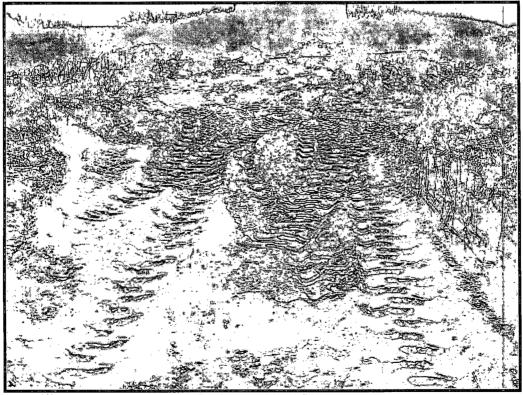
Background location facing southeast



Background at 3'bgs



Test Trench #3 backfilled



Background backfilled

Appendix C C-141

RECEIVED

APR 27 2011

NMOCD ARTERIA Form C-141

Attached

District I 1625 N. French Dr., Hobbs, NM 8824() District III
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

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

Release I	Notificatio	on and C	orrective A	ction							
	£	OPERATOR Initial Report									
Name of Company-Cimarex Energy	:	Contact-James Tinney									
Address-600 N Marienfeld Ste 600, Midland Tx 75	701		No. 575 706 009	>5							
Facility Name- Palmillo State Com # 2			e- Tank battery								
Surface Owner M	ineral Owner			1	ease N	0					
10 00 - 22 20/2	:										
30-015-22343	LOCATIO	ON OF RE	LEASE								
Unit Letter Section Township Range Feet fr 1 32 18S 29E 1796	om the Nort Sout	h/South Line h	Feet from the 1980	East/West East	Line	County - I	Eddy				
Latitude-32° 42' 07.16"	<u>:</u>	Longitude-	04° 05' 42.87"	w							
	NATURE	OF REL	EASE								
Type of Release- crude oil			Release-385 bbls			ccovered-2					
Source of Release- 2" X 4" connection on back of oil tan	k (chrrosion)	Date and F	lour of Occurrence		ite and I 30 am	lour of Dis	covery	y: 3-13-11			
Was Immediate Notice Given? ☑ Yes ☐ No ☐	Not Required	If YES, To Whom?									
By Whom? Bill Hope (pumper) James Tinney (APF)		Date and Hour 3-13-11 9:30 AM called OCD @ 12:00pm									
Was a Watercourse Reached?		If YES, Volume Impacting the Watercourse.									
☐ Yes ☒ No	İ	,									
If a Watercourse was Impacted, Describe Fully.*		,									
	÷										
	1							•			
Describe Cause of Problem and Remedial Action Taken.	' :										
Internal corrosion caused a rupture in the back of the tan.	k. Vac truck on	site to recover	standing fluid.					1			
Internal correspon caused a rapidly in the saca of the tank	K. Jac induction.	31,0 17	2.0								
	<u> </u>										
Describe Area Affected and Cleanup Action Taken. *	:										
SESI was contacted for assessment. Area will be delineat	; -d 4-d 4m 6mm-	anias suade Mi	an will be enhaite	ed to NIMO	CD						
SEST Was contacted for assessment. Area will be defined	ed and an abbro	priate work pa	M WIN DE SUDIIII	CO TO MINIO	CD.						
	<u> </u>										
I hereby certify that the information given above is true at	nd complete to	the best of my	knowledge and ur	nderstand th	at pursi	ant to NMO	OCD i	rules and			
regulations all operators are required to report and/or file public health or the environment. The acceptance of a C-	certain release t	noutications at	g periorm correct wked as "Final Re	enort" does	ror rete not relie	ve the open	ator o	f liability			
I should their operations have failed to adequately investiga	ate ánd remedia	te contaminatio	on that pose a thre	at to ground	d water.	surface war	rer, hu	iman health			
or the environment. In addition, NMOCD acceptance of	а С 141 герогі (ioes nat relieve	the operator of re	csponsibilit	y for co	mpliance w	ith an	y other			
federal, state, or local laws and/or regulations.	<u></u>	<u>,</u>									
,	-		OIL CONS	<u>SERVAT</u>	<u>ION</u>	<u> DIVISIO</u>	<u>N</u>				
Signature: James Tinney Agmis Time	ا براز										
Signature: James Tinney Homes Kinn	ug .		District Cunardisa					l			
Printed Name: James Tinney	/	Approved by	District Superviso	n							
							_	}			
Title: Assistant Production Foremon	1	Approval Date) !	Expi	ration <u>D</u>	ate:					

Approval Date:

Conditions of Approval:

Date: 3-13-11 Phone: 575-706-0095 * Attach Additional Sheets If Necessary

E-mail Address: jtinney@cimarex.com

Title: Assistant Production Foreman